FORTY-SECOND ANNUAL

COLORADO

BUSINESS ECONOMIC OUTLOOK

2007

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

and Compass Bank

Compass Bank

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Colorado LEEDS
School of Business
BUSINESS RESEARCH DIVISION

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Preface

As the Leeds School of Business celebrates its centennial anniversary, we are proud to showcase our efforts to advance sound economic and business information to be used by business, government, and education decision makers throughout the state.

The annual *Colorado Business Economic Outlook* is one tool we provide to policymakers to help them focus attention on the structure of the state's economy, both past and present. This forecast analyzes changes that took place during the past year and looks at the events and activities that will shape the changes in our population, employment, and major economic indicators for the coming year. The information presented at the Forty-second Annual Outlook Forum in Denver and the other forecast presentations throughout the state is reported with greater detail in this publication. It presents as complete and knowledgeable a forecast of the 2007 Colorado economy as possible given our publishing deadline.

As a means of providing business and government leaders with tools for staying up to date with relevant, understandable information concerning Colorado's economic future, we publish the *Colorado Business Review* (*CBR*) and compile the quarterly Business Leader's Confidence Index® (BLCI). Additional information about how you can participate in the BLCI or receive the *CBR* can be found on our web site at http://leeds.colorado.edu/brd. The Leeds School is grateful to have Compass Bank as a partner to help sponsor our annual forum and the BLCI.

The unique nature of the Business Economic Outlook forecast is its combined approach of using detailed statistics with extensive survey research and expert opinion as they relate to the overall state economy and each of its sectors. We believe this methodology provides additional qualitative insight that is particularly relevant to the short-term forecasting process.

Work on the forecast began in July, when data collection and statistical updates were performed. Committees were assembled in September, with more than 80 business, education, and government leaders, as well as economists and specialists agreeing to participate. Members were split into 13 groups, each representing a major economic sector or area of interest.

Forecasts for each sector were prepared by extrapolating historical trends and then modifying the results with

1. Information from extensive survey work conducted with key Colorado business and industry leaders;
2. The expert knowledge and judgment of committee members; and
3. Known or expected economic changes affecting certain industrial sectors within the state.

Beginning in 2004, the committee chairs have reassembled mid-year to review their forecasts. This session helps committee members develop an even greater understanding of their industries and the overall economy.

We are extremely pleased to have so many concerned and committed individuals from Colorado business, education, and government organizations throughout the state work with us for several months, estimating and projecting the data series presented in this statistical summary and providing significant portions of the narrative.

We would also like to recognize the efforts of several long-time committee members for their extended contributions. The following individuals have recently retired or will be retiring prior to next year's event: Jim Rubingh, Jim Coil, Jim Cappa, and Jim Leonard. A complete list of our many other contributors appears at the back of this book. If you have questions about the economic sectors or state regions, we encourage you to contact these individuals.

Finally, I would like to acknowledge the support and 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; Cindy DiPersio, Project Manager and Publications Coordinator; Lynn Reed, Graphic Designer; Kim Warner, Project Manager; Terry Rosson, Program Assistant; Brian Lewandowski, Graduate Research Assistant; John Krebs, Research Assistant; and Colin Hickey, Katie Vance, Luke Willoughby, and Ginger Wolf, Student Research Assistants, for their help in assembling and presenting the 2007 Business Economic Outlook Forum. The assistance provided by Greg Swenson, Staff Writer with the Office of News Services, and Doug Nogami, Director of Communications for the Leeds School of Business, is also greatly appreciated.

Richard L. Wobbekind

Richard L. Wobbekind, Ph.D.
Associate Dean of External Relations and Director
Business Research Division
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University of Colorado at Boulder

It is a great pleasure for Compass Bank to have the opportunity again this year to sponsor the economic forum.

Our four-year *Compass on Business* partnership with the University of Colorado's Leeds School of Business has allowed us to work together on a variety of initiatives related to evaluating and understanding the economic and business climate of Colorado. The forum is just one more way we can support the distribution of relevant and useful information and share important insights with local businesses.

One of the things that I find most valuable about the Business Economic Outlook is that it relies on more than just traditional statistical analysis in reviewing the past year's changes and predictions for the upcoming year. As Rich described, the outlook also takes into consideration the input from committee members who are business owners and industry leaders—those who are witnessing the ups and downs of sales, revenues, employment, and the market in general every day.

Compass Bank and the Leeds School of Business have, as part of our ongoing partnership, a commitment to soliciting feedback each quarter from local business leaders on their expectations for their business, as well as the local and national economy. Like the Business Economic Outlook, the Business Leaders Confidence Index® (BLCI) survey relies on the opinions and experience of business leaders with a vested interest in the growth and opportunity right here in Colorado. For more information on the BLCI, visit www.blci.com.

We have found their input to be right on target, with our BLCI respondents accurately predicting significant changes in the economy based on several key events over the last four years. The business leaders correctly noted the impact of the Iraq War, Hurricane Katrina, and the most recent economic downturn. In addition, Colorado panelists observed that the local economy was beginning to outperform the national economy before widespread coverage of this growth trend began.

Again, we are delighted to be a part of an event that aligns so closely to our goal of providing the tools and resources that help local businesses be successful. On behalf of all of us at Compass Bank, thank you for your continued commitment to the Leeds School and this very important program.

Rafael Bustillo
Colorado President
Compass Bank

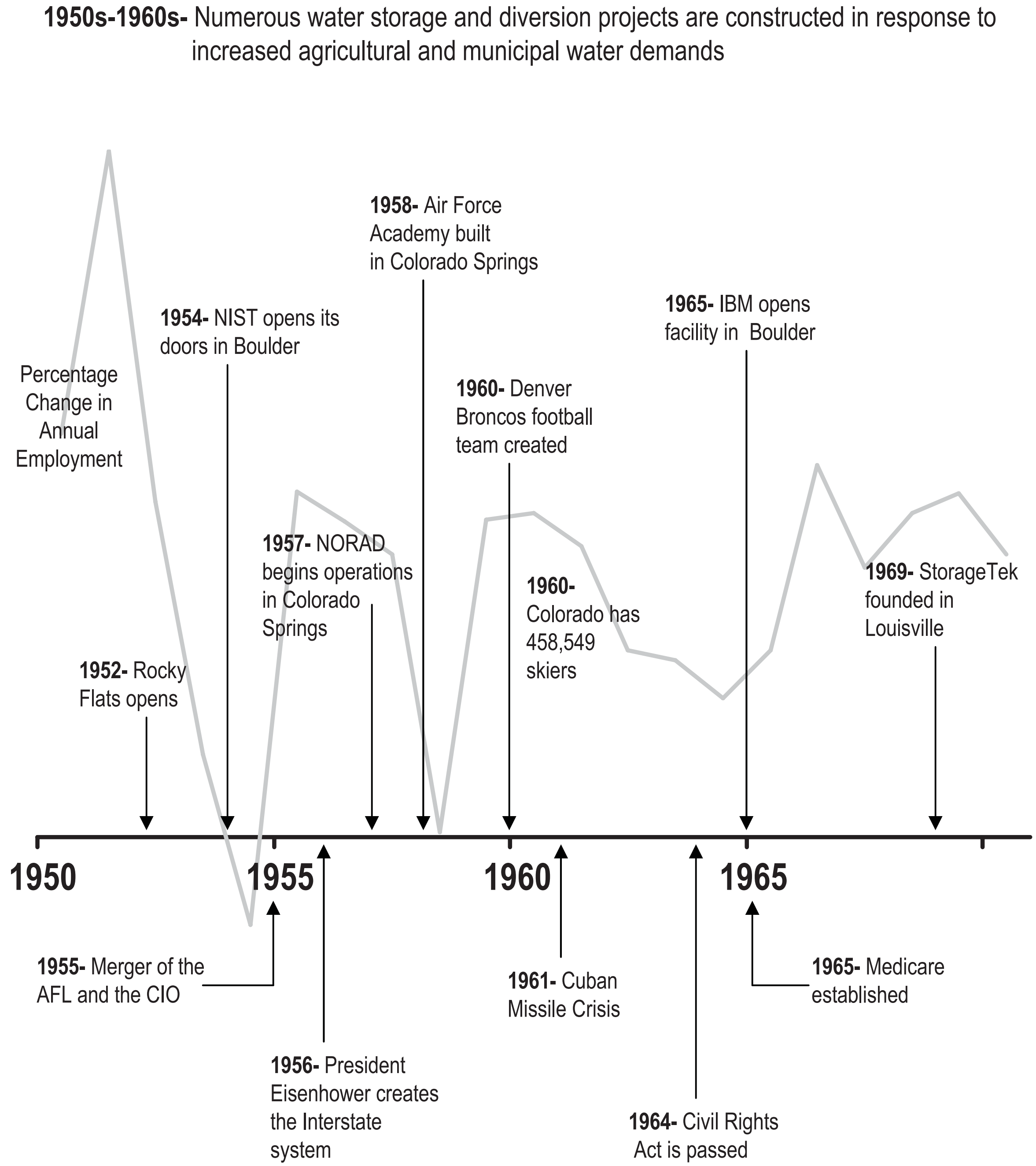
Colorado Then and Now

In 1950, 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. The population of the United States was about 151 million, and approximately 1.3 million people resided in Colorado. Since then, the U.S. population has grown to more than 300 million, while Colorado's population is nearing 5 million. 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.

Although state and national employment data are available back to 1939, the adjacent timeline provides the 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 laid 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.

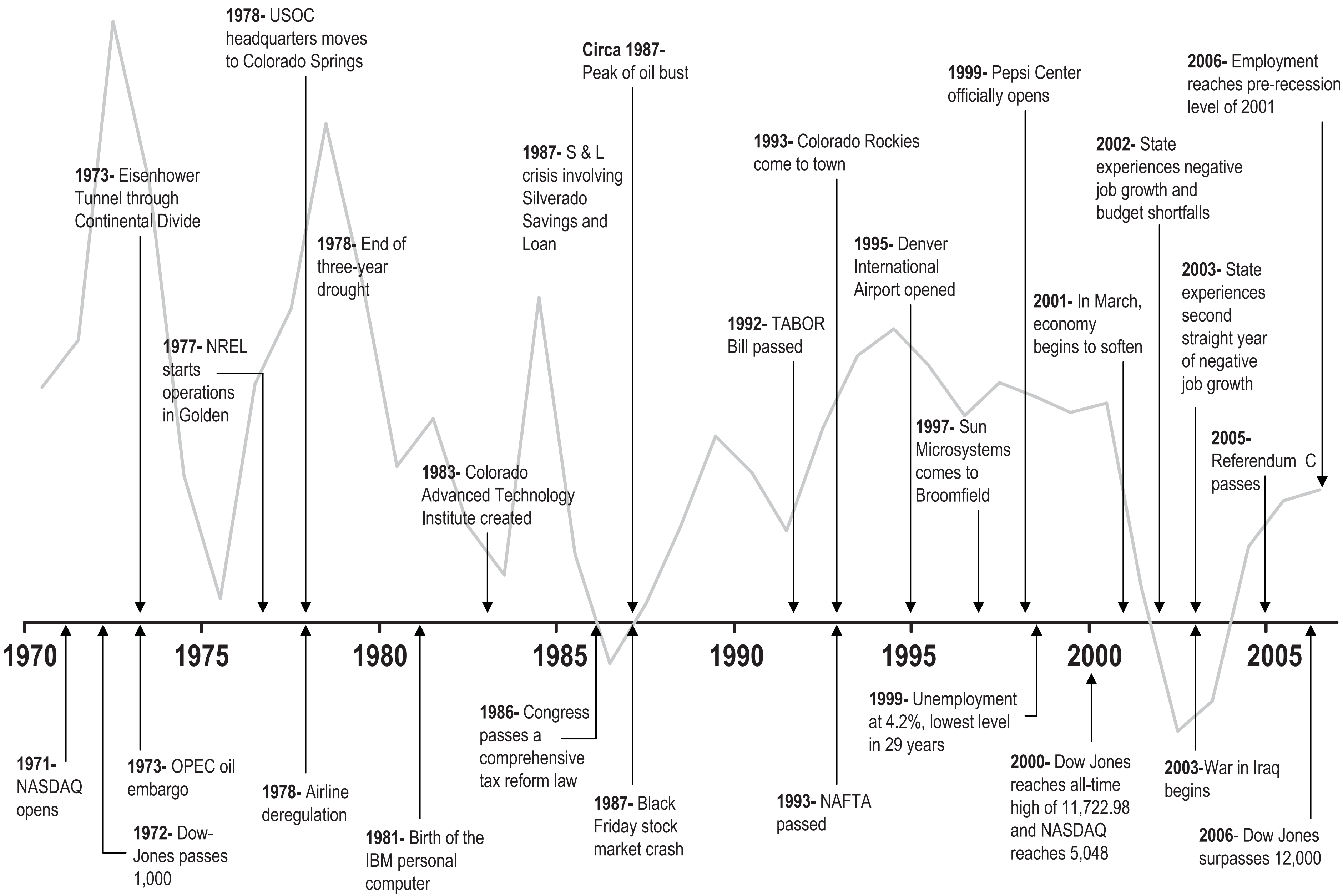
The employment downturn in 2003 marked only the sixth time since 1939 (when records were first kept) that Colorado showed negative job growth. During this same period, the United States recorded negative job growth on 11 occasions. Moreover, 2003 was the first time that Colorado recorded negative job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

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

This section highlights the fundamentals of the U.S. economy. Because the Colorado economy is closely linked to the national economy, it is important to understand how activity at the national level affects the well-being of the state.

Output

Moderate economic expansion, as measured by real GDP, is projected for 2007; however, the downward movement that began in the second half of 2006 will carry through the first half of 2007.

As a point of reference, annualized GDP growth for the years 2000–2007 (using the projections in this report) is 2.7%. This compares to an annualized rate of 3.1% for the period 1990–1999. Notably, 2007 will mark the fourth time this decade that real GDP has grown at a rate below 3%.

For the 2 1/2-year period beginning in the second quarter of 2003, the economy performed at a level comparable to the 1990s. This pattern of strong growth came to a halt in September 2005 when damage from hurricanes and flooding played havoc with the economies of several southern states. Initially, there were fears that the country's energy infrastructure had been immobilized. These concerns drove energy prices higher. Simultaneously,

NATIONAL ECONOMIC INDICATORS 2002–2007

Indicator	2002	2003	2004	2005	2006[a]	2007[b]
Prices						
Consumer Price Index (% change)	1.6%	2.3%	2.7%	3.4%	3.5%	2.5%
Consumer Price Index Colorado (% change)	1.9%	1.1%	0.1%	2.1%	3.5%	2.7%
Producer Prices (% change)	-1.3%	3.2%	3.6%	4.9%	3.5%	2.2%
Employment Costs (% change)	3.6%	3.8%	3.7%	3.3%	3.0%	3.4%
Money and Interest						
3-Month Constant Maturities (rate)	1.2%	0.9%	2.2%	4.0%	5.1%	4.0%
10-Year Constant Maturities (rate)	3.8%	4.4%	4.2%	4.4%	4.8%	4.5%
Fed Funds Rate (year end)	1.25%	1.00%	2.25%	4.25%	5.25%	5.00%
Employment and Population						
Population (% change)	1.0%	1.0%	1.0%	0.9%	1.0%	1.0%
Unemployment Rate	5.8%	6.0%	5.5%	5.1%	4.7%	5.0%
Nonfarm Employment (% change)	-1.1%	-0.3%	1.1%	1.5%	1.5%	1.4%
Other Indicators						
Current Account ($ billions)	-$472	-$528	-$665	-$792	-$855	-$847
Federal Budget Balance ($ billions for fiscal year)	-$158	-$378	-$413	-$318	-$252	-$275

[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.

the Federal Reserve marched down a path of 17 consecutive rate hikes in an effort to keep inflation in check. Between June 26, 2003, and June 29, 2006, the fed funds target rate was raised from 1.00% to 5.25%.

On a brighter note, the destruction from the hurricanes did not disrupt the U.S. energy supplies as severely as had been originally feared. While the impact from the devastation will continue to affect the economies of the region for many years to come, the national economy suffered limited long-term effects.

Nevertheless, energy prices continued to climb as 2006 progressed. These increases, combined with rising interest rates, particularly for adjustable rate loans, and a slumping housing market, began to take its toll on consumer spending and business investment during the second half of the year. Despite the fact that the United States had strong exports during 2006, the increased costs of foreign

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GDP-RELATED NATIONAL ECONOMIC INDICATORS
2002–2007

Indicator	2002	2003	2004	2005	2006[a]	2007[b]
Gross Domestic Product						
Real GDP (% change)	1.6%	2.5%	3.9%	3.2%	3.4%	2.6%
Nominal GDP (% change)	3.4%	4.7%	6.9%	6.3%	6.5%	5.1%
Consumption						
Real Disposable Personal Income (% change)	3.1%	2.2%	3.6%	1.2%	3.0%	3.3%
Real Personal Consumption (% change)	2.7%	2.8%	3.9%	3.5%	3.2%	2.8%
National Consumer Confidence (December)	80.7	94.8	102.7	103.8	103.0	105.0
Rocky Mountain Consumer Confidence (December)	88.1	105.1	121.4	114.4	110.0	114.0
Colorado Business Leaders Confidence Index (Q4)	na	na	58.7	63.8	49.1	49.9
Consumer Credit ($ billions)	$1,954.4	$2,047.0	$2,141.2	$2,240.0	$2,340.0	$2,440.0
Auto and Light Truck Sales (million units)	16.8	16.6	16.9	16.9	16.6	16.3
Retail Sales (% change)	2.2%	4.2%	6.5%	7.0%	6.8%	6.3%
Investment						
Real Business Investment (% change)	-9.2%	1.0%	5.9%	6.8%	8.0%	6.8%
Industrial Production (% change)	0.1%	0.6%	4.1%	3.2%	4.5%	3.2%
Housing Starts (millions units)	1.71	1.85	1.95	2.07	1.84	1.61
Nominal Pre-Tax Profits (% change)	15.5%	12.1%	19.1%	12.5%	19.3%	4.0%
Change in Business Inventories ($ billions)	$12.5	$14.3	$53.4	$19.7	$42.1	$35.5
Government and Exports						
Real Gov't. Consumption and Investment (% change)	4.4%	2.5%	1.9%	0.9%	2.1%	1.9%
Real Net Exports ($ billions)	-$471	-$519	-$591	-$619	-$629	-$615

[a]Estimated.

[b]Forecast.

Sources: Consensus Forecast, 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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oil drove imports and the trade deficit to record levels. The combination of all of these factors caused GDP growth to slow dramatically during the second half of 2006. The effect of these factors will carry over into 2007.

On a positive note, the Federal Open Market Committee paused raising the fed funds target rate during the second half of 2006. The overall consensus is that the committee will maintain the rate at its current level and may likely lower it 25 basis points before the end of 2007. In addition, energy costs dropped during the second half of 2006, and, with any luck, will be less volatile during 2007. A reduction in the price of a barrel of oil will have a secondary benefit of lowering the trade deficit.

Projections are for real GDP to increase at a rate of 2.6% in 2007. This is comparable to the annualized rate of growth, 2.6%, for the 2000–2005 period, but below potential GDP of 3%–3.5%. The GDP deflator is anticipated to decline to 2.5% in 2007.

Consumption

Personal consumption accounts for about 70% of the GDP. For the past five years, a combination of factors has fostered strong personal consumption. For starters, accommodative monetary and fiscal policies offered an environment that encouraged spending. In this environment, financial institutions provided consumers with a number of creative financing programs. These programs were accompanied by a strong housing market in many parts of the country. As a result, consumers treated their homes like ATM machines as they borrowed against their rapidly appreciating equity to support increased consumption.

The bottom line is that many consumers have come to the stark realization that the combination of rising interest rates (particularly on credit cards and adjustable rate mortgages), on top of higher energy, healthcare, and housing costs, has pushed them beyond reasonable spending limits. This has resulted in declining savings rates, an increase in poor credit ratings, and a greater number of foreclosures. Although real disposable personal income is projected to increase at a rate of 3.3% in 2007, consumers will exercise greater caution, and consumption will expand modestly, at 2.8%.

As a result, retail sales for 2007 are expected to grow about 6.3%, which is slower than the previous two years. This decrease will occur, in part, due to sluggish light truck and auto sales, which are projected to drop from 16.6 million to 16.3 million. This contraction is a function of reduced demand brought about by the purchase of autos through previous low-cost financing or employee discount programs.

Although e-commerce accounts for approximately 2.7% of total retail sales, annual sales are growing at a rate of about 25%. Increased high-speed access is a factor contributing to this rise.

Projections are for real GDP to increase at a rate of 2.6% in 2007.

Investment

Business investment accounts for about 17% of GDP. Throughout the decade, real business investment has experienced greater volatility than consumer spending, government spending, and net exports. As businesses exited the recent recession, they had pent-up demand for technology goods and services and capital expenditures. This demand drove spending at a rate of 5.9% in 2004, 6.8% in 2005, and 8% in 2006. During this period, a combination of strong profits, positive cash flows, and tax incentives helped foster investment.

Corporate profits are expected to drop off significantly in 2007 as companies are forced to deal with escalating business costs and a slowing national economy. All the same, real business investment will expand at about 6.8% in 2007.

Industrial production was strong in 2006. Next year, growth will decline from 4.5% to 3.2%, with businesses remaining cautious with their investments. Capacity utilization is expected to revert to its long-term averages, which, in turn, lowers the risk of inflation.

Inventory-to-sales ratios were at historic lows in 2003, indicating that goods needed to be replaced quickly. As a result, increased investment and employment translated to a $53.4 billion rise in business inventories in 2004, followed by an increase of about $19.7 billion in 2005 and an estimated $42.1 billion the following year. As business leaders approach the pending slowdown with caution, inventory growth will slide to $35.5 billion in 2007.

After peaking at 2.1 million housing starts in 2005, the housing market tapered off abruptly to 1.8 million units in 2006. Rising mortgage rates and foreclosures in pockets throughout the country have dampened housing starts. With the stabilization of mortgage rates in the short term, housing starts will total 1.6 million in 2007, comparable to the number in 2001.

Typically, U.S. home buyers spend up to one-third of their annual income on mortgage payments, while in other parts of the world they spend about half of their income. With new federal regulations on the horizon, it is unlikely that lending institutions will be able to rely on the creative financing options of the past.

Government Spending and Net Exports

Real government consumption and investment account for about 19% of GDP, while net exports account for approximately -6%.

In 2001, the federal budget showed a positive balance of $128 billion. Deficits occurred in each of the three subsequent years, topping out at $413 billion in 2004. As a result of an improved economy and higher tax revenues, the 2006 deficit is expected to drop to $252 billion; however, with an imminent slowdown in economic activity, an increase is projected, to $275 billion, in 2007. In the near term, defense and homeland security costs

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

Sector	2005	2006[a]	2007[b]	2006 New Jobs[a]	Percentage Change	2007 New Jobs[b]	Percentage Change
Natural Resources and Mining	17.1	20.7	23.0	3.6	21.1%	2.3	11.1%
Construction	160.1	167.3	170.3	7.2	4.5	3.0	1.8
Manufacturing	150.6	150.3	150.2	-0.3	-0.2	-0.1	-0.1
Trade, Transportation, and Utilities	413.5	422.4	428.2	8.9	2.2	5.8	1.4
Information	77.3	75.7	76.0	-1.6	-2.1	0.3	0.4
Financial Activities	158.1	161.5	163.8	3.4	2.2	2.3	1.4
Professional and Business Services	316.2	331.2	345.1	15.0	4.7	13.9	4.2
Educational and Health Services	224.5	229.0	233.5	4.5	2.0	4.5	2.0
Leisure and Hospitality	257.3	263.1	267.7	5.8	2.3	4.6	1.7
Other Services	88.6	89.5	90.7	0.9	1.0	1.2	1.3
Government	363.0	368.0	372.5	5.0	1.4	4.5	1.2
Total	2,226.3	2,278.7	2,321.0	52.4	2.3%	42.3	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.

U.S. Economic Outlook

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will remain high, while nondefense costs will rise because of mounting costs associated with healthcare and entitlement programs. Real government consumption and investment is projected to grow by 2.1% in 2006 and 1.9% the following year.

During 2006, U.S. exports have benefited from improved global economic conditions and increasingly free and fair trade. Double-digit export growth is expected for both 2006 and 2007.

Unfortunately, rising oil costs caused a growing trade deficit in 2006 as net exports reached -$629 billion. During the second half of 2006 prices began to taper off and will show less volatility in 2007. As a result, net exports will approach -$615 million.

Major export opportunities exist in parts of Asia Pacific, with the strongest growth rates in China, Taiwan, and South Korea. High rates of growth are also projected for Russia and select Eastern European countries. There is some risk in doing business in these markets, however, given concerns about government stability and their ability to sustain growth. Other areas of great concern are the key markets in Western Europe, where many economies are stagnant.

Prices

The monetary policy prescribed by the Fed over the past couple of years has played a role in keeping inflation in check. After reaching 3.5% in 2006, it is expected to drop to 2.5% in 2007. This will occur as a result of the slowing economy and lower energy prices, although energy is somewhat of a wildcard. Because housing is a key component in the computation of the CPI, a weaker housing market will play an important role in reducing inflation risks.

Producer prices, as measured by the Producer Price Index (PPI), have been driven up by higher energy prices and input costs. The projected PPI growth rate for 2006 is 3.5%. In 2007, it will drop back to 2.2%.

Employment costs grew at a rate of 3% in 2006. For the past couple of years, upside wage pressure has been minimal, which has helped offset increasing benefit and medical costs. The longer unemployment rates remain in the range of the natural rate (4.5% to 5%), the greater the chances that wage pressure will accelerate. As a result, employment costs will increase 3.4% in 2007.

Employment and Population

Nationally, employment will increase by 1.5% in 2006, followed by a slightly lower rate of 1.4% the next year. As a result of stronger employment in 2006, the unemployment rate dropped to 4.7%. With fewer jobs being added in 2007, the unemployment rate will again reach 5%.

In October 2006, the United States surpassed the 300 million mark in population. In 2007, population is expected to grow 1%.

The Colorado Forecast

The sections that follow build on the information about the national economy provided in this section. Each segment provides data analysis, a summary of 2006, a forecast for 2007, and industry specific insight into the significant factors influencing each of the industries. We trust this data and analysis will prove useful in your business and policy decision-making process. Various updates and releases are made throughout the year and will be available on the BRD web site (http://leeds.colorado.edu/brd) or in our quarterly publication, the *Colorado Business Review.*

In addition, the BRD compiles the Colorado Business Leaders Confidence Index®. This report measures expectations for the Colorado economy on a quarterly basis. Since its inception in early 2003, the index has correctly tracked the concern of Colorado business leaders about the nation's entry into the war in Iraq, greater confidence after the initial phases of the war were completed, improving strength of the Colorado economy relative to the national economy, recent impacts of hurricanes in the Gulf Coast, and the current slowdown. We welcome your participation in the survey. Additional information about participating on the panel and quarterly updates are available throughout the year at www.blci.com. ✤

Population, Labor Force, and Personal Income

Colorado has long been regarded as a great place to live and work because of its quality of life. The size of our state, as measured by population, is dictated by increases in the natural rate and net migration.

Population increases resulting from changes in the natural rate (the difference between resident births and deaths) occur each year in direct relationship to the size and age of the population. In 2007, projections are for 70,000 births and 29,300 deaths, for a natural rate of increase of 40,700.

For the period 1996–2005, the population increased by 552,100 people due to net migration (the difference between the number of people moving into Colorado and the number of people moving out of the state). For the same period, the state population increased by 359,700 people because of changes in the natural rate of increase. Between 1996 and 2001, net migration accounted for about two-thirds of the change in population. However, when Colorado entered the most recent recession in 2001, demands for jobs decreased and net migration accounted for less than half of the change in the state population. As the economy began to improve in early 2004, the demand for jobs increased. In turn, net migration also increased. In 2007, about 57% of the population change will be attributed to net migration. This will be the first time since 2001 that net migration has contributed more to the population growth of the state than the natural rate of increase.

In 2007, about 94,700 people will be added to the state population, bringing the total to approximately 4.9 million people. Colorado's population will increase at a rate of 2%, compared to a growth rate of about 1% for the United States.

Between 1996 and 2005, the population grew at a compound annual growth rate (CAGR) of 2.1%, while the labor force increased at a rate of 2.2%. In 2007, the population will climb at a slightly higher rate than the labor force, 2% vs. 1.9%, as net migration increases at its fastest rate since 2001.

In 2006, the increase in the labor force exceeded the absolute population growth. As a result, the unemployment rate decreased to 4.5%. In 2007, the opposite will happen and population growth will exceed the growth of the labor force. As a result, the unemployment rate will increase to 4.8%.

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COMPONENTS OF COLORADO RESIDENT POPULATION 1997–2007 (In Thousands)

Year	Births (Resident)	Deaths (Resident)	Natural Increase	Net Migration	Population Change
1997	56.3	25.9	30.4	63.1	93.5
1998	57.7	26.3	31.4	75.1	106.6
1999	60.7	26.5	34.2	79.3	113.5
2000	63.9	27.0	36.9	73.5	110.4
2001	66.5	27.9	38.6	81.9	120.5
2002	67.8	28.8	38.9	36.0	74.9
2003	69.0	29.0	40.1	24.9	65.0
2004	68.5	29.0	39.4	26.8	66.2
2005	69.0	29.0	39.9	29.5	69.5
2006[a]	69.4	29.0	40.4	32.0	72.4
2007[b]	70.0	29.3	40.7	54.0	94.7

[a]Estimated.

[b]Forecast.

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

Source: U.S. Department of Commerce, Bureau of the Census; Colorado Division of Labor and Government, Demographic Section; and Colorado Business Economic Outlook Committee.

ESTIMATED RESIDENT POPULATION, COLORADO AND UNITED STATES 1997–2007 (Base Year: 1997=100)

	Colorado		United States	
Year	Index	Resident Population (In Thousands)	Index	Resident Population (In Thousands)
1997	100.0	3,995.9	100.0	272,647
1998	102.7	4,102.5	101.2	275,854
1999	105.5	4,216.0	102.3	279,040
2000	108.3	4,326.4	103.5	282,193
2001	111.3	4,447.0	104.6	285,108
2002	113.2	4,521.9	105.6	287,985
2003	114.8	4,586.8	106.7	290,850
2004	116.4	4,653.0	107.7	293,657
2005	118.2	4,722.5	108.7	296,410
2006[a]	120.0	4,794.9	109.8	299,375
2007[b]	122.4	4,889.6	110.9	302,368

[a]Based on July 1 annual population figures.

[b]Forecast.

Source: U.S. Department of Commerce, Bureau of Economic Analysis; and Colorado Business Economic Outlook Committee.

COLORADO RESIDENT LABOR FORCE
1997–2007
(In Thousands)

Labor Force	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[a]	2007[b]
Colorado Labor Force	2,150.2	2,241.8	2,264.1	2,365.0	2,395.3	2,431.2	2,463.2	2,510.4	2,547.9	2,630.2	2,704.0
Unemployed	70.1	86.1	66.0	64.8	91.8	138.0	151.2	139.6	128.7	117.6	128.4
Unemployment Rate (%)	3.3	3.8	2.9	2.7	3.8	5.7	6.1	5.6	5.0	4.5	4.8
Total Employment	2,080.0	2,155.7	2,198.1	2,300.2	2,303.5	2,293.2	2,312.0	2,370.8	2,419.2	2,512.6	2,575.6

[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.

COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
1997–2007
(In Thousands)

Sector	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[a]	2007[b]
Natural Resources and Mining	13.2	13.4	12.3	12.2	12.9	12.9	13.2	14.4	17.1	20.7	23.0
Construction	120.5	134.6	148.5	163.6	167.7	160.4	149.9	151.3	160.1	167.3	170.3
Manufacturing	186.9	191.4	187.4	188.9	179.5	163.8	153.9	151.8	150.6	150.3	150.2
Trade, Transportation, and Utilities	381.3	392.4	404.9	418.9	423.0	412.1	404.5	406.6	413.5	422.4	428.2
Information	73.7	86.4	97.0	108.4	107.3	92.9	84.6	81.2	77.3	75.7	76.0
Financial Activities	135.2	142.8	147.4	147.0	148.3	149.5	154.1	154.6	158.1	161.5	163.8
Professional and Business Services	273.3	283.1	302.4	318.8	312.3	296.2	292.0	304.1	316.2	331.2	345.1
Educational and Health Services	178.2	182.9	186.9	192.8	200.8	208.5	213.0	218.5	224.5	229.0	233.5
Leisure and Hospitality	226.6	231.0	238.5	246.0	247.2	247.0	245.6	251.3	257.3	263.1	267.7
Other Services	75.7	77.3	79.0	80.2	83.8	85.6	85.9	87.4	88.6	89.5	90.7
Government	315.6	322.3	328.4	337.0	344.1	355.4	356.2	358.5	363.0	368.0	372.5
Total[c,d]	1,980.2	2,057.6	2,132.6	2,213.8	2,226.9	2,184.2	2,152.8	2,179.6	2,226.3	2,278.7	2,321.0

[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.

Population, Labor Force, and Personal Income

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In 2007, the sectors of the economy with the highest absolute growth will be Professional and Business Services; Trade, Transportation, and Utilities; Leisure and Hospitality; Educational and Health Services; and Government. Nonfarm wage and salary employment for 2007 will grow at a rate of 1.9%, reflecting an addition of 42,300 jobs. On the downside, the Information Supersector will only add 300 jobs, while Manufacturing will show a decrease of 100 jobs.

From 1997–2005, Colorado personal income grew at a CAGR of 6.2%, compared to 5% for the United States. Because the Colorado economy is projected to have population and employment increases at a rate greater than the U.S. in 2006 and 2007, the state will outpace the nation in its personal income growth rate, with increases of 6.3% and 6%, respectively.

TOTAL PERSONAL AND PER CAPITA INCOME, COLORADO AND UNITED STATES 1997–2007 (Base Year: 1997=100)

	Colorado			United States		
Year	Index	Total Personal (Billions)	Per Capita[a]	Index	Total Personal (Billions)	Per Capita[a]
1997	100.0	$107.9	$26,846	100.0	$6907.3	$25,334
1998	109.8	118.5	28,784	107.4	7,415.7	26,883
1999	119.5	128.9	30,492	112.9	7,796.1	27,939
2000	133.9	144.4	33,371	121.9	8,422.1	29,845
2001	141.6	152.7	34,493	126.2	8717.0	30,574
2002	141.9	153.1	34,027	128.5	8,872.9	30,810
2003	143.6	154.9	34,056	132.5	9,150.9	31,463
2004	152.6	164.6	35,766	140.7	9,717.2	33,090
2005	162.0	174.8	37,459	148.0	10,224.8	34,495
2006[b]	172.2	185.8	39,107	157.2	10,858.7	35,943
2007[c]	182.5	196.9	40,749	166.5	11,499.4	37,345

[a]Based on July 1 annual population figures.

[b]Estimated.

[c]Forecast, includes adjusted to account for anticipated population revisions.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Colorado Business Economic Outlook Committee.

Similarly, Colorado per capita personal income increased at a CAGR of 4.3%, compared to the national rate of 3.9% for the period 1997–2005. Colorado will grow at about the same rate in 2006 and 2007. Projected per capita income is $39,107 in 2006 and $40,750 next year.

While the Colorado and U.S. economies are closely linked, Colorado has a greater concentration of technology-based, high-wage industries. Because the recent recession centered around the tech sectors, it had a more dramatic impact on Colorado.

The following data help illustrate that point. In January of 1990, approximately 7.6% of the state's workforce was classified as technology based. At its peak in January 2001, this percentage had climbed to 9.4%. In August 2007, it had dropped to 7.4%.

From an employment perspective, the story is more dramatic. In January of 1990, technology workers in Colorado totaled 97,600. By February of 2001, the number had soared to 179,500. Technology employment bottomed out at 139,800 workers in January 2004. In August 2006, this segment of workers had increased to only 145,700 workers.

Despite this drastic decline in tech workers, in August 2006, Colorado had a location quotient of 1.42 for tech workers, which indicates a much higher concentration of tech workers than the nation. If the future is in knowledge-based, "neck up" jobs, Colorado has an existing advantage. Colorado's challenge is to continue to foster job creation, research and development, and workforce development to maintain and enhance that advantage. ✤

Agriculture

Drought was a dominant feature of Colorado agriculture in 2006. Beyond very poor dryland crop yields, irrigation water restrictions were a serious problem in some areas of the eastern plains and mountain valleys. Drought and abnormally high temperatures also caused pasture and range conditions in Colorado to deteriorate quickly during the summer. Still, rather strong livestock prices continued to underpin the agricultural economy in Colorado during 2006.

The agriculture industry also established its role as a fuel producer during 2006, expanding beyond the traditional role of providing food and fiber. Buoyed by high energy prices, ethanol production has surged, even in Colorado, which has been traditionally a feed grain deficit state. Ethanol will impact Colorado agriculture directly and indirectly. For the next few years, total receipts from the sale of Colorado's crops will increase significantly, but government program payments to crop producers will decline. Livestock producer net income will be pressured as producers face higher feedstuff costs.

Livestock prices in 2006 were generally below 2005 prices. Crop prices, however, were up compared to levels of recent years, but drought reduced total production, especially for wheat. Still, the Colorado agriculture industry will record an estimated net farm income of just under $1 billion for 2006. Cattle prices will decline some during 2007, with most of the decrease occurring in calf and yearling prices. A return to normal weather, coupled with higher grain prices, should increase receipts from crop sales by about 2% in 2007, to $1.7 billion.

Colorado net farm income is expected to dip to about $700 million in 2007—the state's lowest level since 2002. High fuel and fertilizer costs remain a concern and are having a strong negative impact on many grain farmers in the state. Livestock producers will face much higher feedstuff costs due to increased utilization of corn for ethanol production.

Livestock remains Colorado's largest agricultural sector, representing more than 70% of all farm gate sales. Cash receipts from cattle are the largest sector, and receipts for 2006 will exceed $3 billion for the third consecutive year. Although Colorado fed cattle marketings may decline slightly in 2007, the average steer and heifer price is projected to be one of the highest recorded. Drought in 2006 dramatically slowed cyclical cattle herd rebuilding in Colorado and across the nation. With normal weather in 2007, many producers will again attempt to rebuild breeding herd numbers. The biggest risk to lightweight cattle prices in 2007 will be high feedstuff prices, which will negatively impact the economics of feeding out lightweight cattle.

Dairy is becoming an increasingly important part of Colorado's agricultural economy. Dairy cattle numbers in Colorado have grown by about 3%

COLORADO CASH RECEIPTS FROM FARMING AND RANCHING 1999–2007 (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
1999	$3,015.8	$1,341.8	$4,357.6	$578.7	$374.2	$5,310.5
2000	3,325.3	1,229.2	4,554.5	559.2	351.4	5,465.1
2001	3,303.5	1,417.9	4,721.4	603.0	320.1	5,644.5
2002	3,208.1	1,319.4	4,527.5	695.4	211.0	5,433.9
2003	3,445.8	1,442.7	4,888.5	661.9	319.9	5,870.3
2004	4,237.5	1,407.8	5,645.3	633.5	221.2	6,500.0
2005	4,157.0	1,476.3	5,633.3	713.2	381.6	6,728.1
2006[c]	4,160.0	1,630.0	5,790.0	680.0	236.0	6,706.0
2007[d]	3,990.0	1,695.0	5,685.0	715.0	100.0	6,500.0

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

[b]Includes farm program payments made directly to farm producers.

[c]Estimated.

[d]Forecast.

Source: Colorado Agricultural Statistics Service and Colorado Business Economic Outlook Committee.

annually over the past five years and now are approaching 115,000 head. Colorado ranks 15th in milk production in the United States and is consistently ranked in the top three for milk production per cow. In particular, Colorado is experiencing a significant increase in organic dairy production, which is helping to drive organic hay and grain production. Dairy prices in 2007 will remain fairly flat, averaging about $12.50 per cwt. and putting the value of statewide production at some $360 million.

Lamb prices in 2006 were below expectations, especially for the first half of the year. For the year, prices were about 15% below 2005 prices and the lowest since 2002. Prices will likely hold steady for feeder lambs in 2007, while slaughter lamb prices post increases, especially in the first half of the year. Total sales of wool and lamb will be around $125 million. In 2007, hog prices will average about 3% below 2006, while U.S. production will increase 2–3%. In recent years, the U.S. pork industry has benefited from robust exports. Strong export markets have compensated for declining domestic consumer demand for pork. Total Colorado hog sales for 2007 will be off about 2%, at $210 million. Egg production and prices will remain fairly steady, with poultry and egg receipts for 2007 projected at about $120 million.

Total livestock sales will be down in 2007 from levels recorded during the past three years, coming in just under $4 billion. This is due primarily to lower cattle prices. Most of the livestock industry, however, should experience another profitable year in 2007.

The U.S. corn crop is forecast at 10.9 billion bushels. Although 2% below 2005 levels, production in 2006 is on track to be the third-largest crop on record. Colorado's production is expected to be down about 10% in 2006. It is anticipated that continued pressure on fuel and fertilizer costs combined with water supply issues will be mitigated somewhat by increased demand to support fuel production, resulting in higher crop prices. The crop is expected to remain constant in 2007. With prices anticipated to be above current levels, cash receipts from the state's corn crop are projected to total $270 million in 2007—a level consistent with 2006.

Colorado currently has three ethanol plants in operation with a capacity of 110 million gallons per year. This growth in ethanol production in the state and across the nation is responsible for the increased demand and price of corn. While this trend is positive for corn producers, it does have economic impacts on the livestock feeding sector in the form of higher feed prices. The full effect of these new ethanol facilities on Colorado's corn industry is still unknown.

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COLORADO FARM INCOME AND PRODUCTION EXPENSES 1997–2007 (In Millions of Dollars)

Year	Gross Value of Farm Revenue	Total Farm Production Expenses	Net Farm Income
1997	$5,010.4	$4,306.3	$704.1
1998	5,048.7	4,165.9	882.8
1999	5,310.5	4,362.0	948.5
2000	5,465.1	4,675.0	790.1
2001	5,644.5	4,363.9	1,280.6
2002	5,433.9	4,721.5	712.4
2003	5,870.3	4,885.6	984.7
2004	6,500.0	4,983.2	1,516.8
2005	6,728.1	5,512.0	1,216.1
2006[a]	6,706.0	5,750.0	956.0
2007[b]	6,500.0	5,800.0	700.0

[a]Estimated.

[b]Forecast.

Source: Colorado Agricultural Statistics Service and Colorado Business Economic Outlook Committee.

Agriculture

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Wheat harvests in Colorado have been disappointing in five of the last six years. Drought or abnormally hot weather has driven yields far below expected norms. U.S. wheat production of 1.8 billion bushels in 2006 was roughly 14% below the 2005 level. Colorado wheat production declined 23%, from 54 to 42 million bushels. This was driven by a combination of acreage decline and disappointing yields per harvested acre that decreased to 21.6 bushels per acre from 24.4 bushels in 2005 and 27.4 bushels in 2004. Tighter supplies have added value to the 2006 wheat crop, with spot prices approaching $5.00 per bushel. Good fall precipitation means that Colorado's 2007 crop appears to have excellent potential. Assuming the average of recent years' yields and continued strong prices of $4.10 to $4.60 per bushel, expect a crop of about 50 million bushels and sales of $215 million.

Most Colorado agriculture program payments have historically been received by crop producers, especially corn and wheat farmers. Due to higher crop prices, those payments will decline compared to 2006, and crop-specific price support payments will likely not be required. Overall, government payments to Colorado producers in 2007 will decrease by an estimated $136 million compared to 2006 and $280 million less than in 2005.

Hay remains Colorado's largest crop in terms of value ($480 million) but due to on-farm use, actual cash receipts are about one-half of that value. Colorado's alfalfa production in 2006 fell by an estimated 9%, to 2.7 million tons, largely due to a combination of winter-kill in the San Luis Valley and drought throughout Colorado. The drought conditions also limited forage production from pasture and rangeland in the state. Additionally, bordering states increased demand for supplemental feeding of hay. Hay prices during 2006 generally ranged from $100 to $135 per ton. Prices will remain strong in 2007, averaging about $120 per ton, with total cash receipts coming in at around $245 million.

Potato producers in Colorado increased 2006 planted acreage by 800 acres, to 64,000 acres and production is expected to be in the 22–25 million cwt. range. Due to a marginal increase (2.7%) in U.S. planted acreage, prices are likely to remain at or near the prior year level of $8.85 per cwt., with total cash receipts estimated at $190 million. Expect 2007 production to be on par with current year production and for prices to decline to the $8 per cwt. range, lowering cash receipts to $180 million.

Sunflower production across the United States and in Colorado is projected to decline precipitously in 2006; however, it is expected that production in the state will increase in 2007. Total U.S. production for 2006 is forecast at 2.1 billion pounds, down from 4 billion pounds in 2005. Colorado harvest acreage is down 55%, with yields expected to decrease from 1,279 pounds per acre to 1,145 pounds per acre, bringing the total production in at about 1.1 million cwt. With prices in the $12.50 per cwt. range for the 2006 crop, total cash receipts are estimated at $13.3 million. Look for Colorado production to increase to 1.6 million cwt. in 2007 as prices remain steady.

Greenhouse/nursery sales, driven mostly by growth in the turf grass and nursery industries, have been one of Colorado's fastest-growing sectors since the early 1990s. Today, these sales exceed the sales from more traditional crops such as corn and wheat. Sales in 2007 are expected to remain at about $300 million.

Other crops that have done well in recent years include specialty vegetables. Production is expected to remain steady in the Front Range area, with farmers markets and other direct marketing opportunities providing ideal venues for sales. Look for sales of specialty vegetables to be about $80 million in 2007. Expect dry beans, onions, sugar beets, and fruit receipts to remain fairly steady in 2007.

Colorado's agriculture industry is very diverse, and its profitability is subject to influences beyond our 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 in 2007 will likely revolve around development of the next Federal Farm Bill. Nonetheless, the fate of Colorado's agricultural complex will depend largely on local growing conditions. The one constant, however, is that every year will bring its own unique set of challenges and opportunities. ✜

Natural Resources and Mining

Oil, Gas, and Carbon Dioxide

Colorado and the Rocky Mountain region continue to experience a boom in the energy sector, which is expected to extend throughout 2007. As a result, energy markets are anticipated to undergo greater volatility in commodity prices for the next year or two. The combination of price volatility, growing demand, and tighter supplies will adversely impact many business sectors in the state.

The total value of oil, gas, and carbon dioxide production in 2005 was \$9.6 billion, representing a 39% rise over the 2004 value of \$6.9 billion. This increase resulted from a significant surge in both production volume and commodity price. The value of oil, gas, and carbon dioxide production for 2006 is expected to decrease to \$8.8 billion (-7.5%), primarily due to a decline in price. The value of this production is forecast at \$10 billion for 2007, assuming modest production growth and stable commodity prices.

Although oil prices have moderated somewhat from the 2006 summer peak of \$78 per barrel, the U.S. Energy Information Administration (EIA) projects that oil prices for 2006 and 2007 will continue to average around \$70 per barrel. The Colorado Oil and Gas Conservation Commission reports that oil price has averaged about \$63 per barrel for the first two quarters of 2006. Oil demand growth, particularly from the United States and China, is one factor contributing to this comparatively high forecasted price. Demand growth is projected to exceed non-OPEC (Organization of the Petroleum Exporting Countries) supply, while only limited increases in surplus production capacity from OPEC are expected during 2006 and 2007.

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PHYSICAL OUTPUT OF FOSSIL FUELS
1997–2007
(Base Year: 1997=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
1997	100.0	27.4	100.0	25.6	100.0	637.4	100.0	332.3
1998	108.0	29.6	87.5	22.4	109.2	696.3	110.7	367.7
1999	109.5	30.0	72.3	18.5	113.4	722.7	91.7	304.7
2000	106.2	29.1	72.3	18.5	118.1	753.0	93.5	310.7
2001	121.9	33.4	64.5	16.5	128.2	817.2	91.6	304.3
2002	128.1	35.1	69.1	17.7	147.1	937.3	88.8	295.0
2003	130.7	35.8	82.4	21.1	158.7	1,011.3	92.4	307.2
2004	145.3	39.8	87.1	22.3	166.6	1,062.2	102.4	340.3
2005	138.0	37.8	88.3	22.6	172.3	1,098.0	108.4	360.1
2006[a]	125.9	34.5	89.5	22.9	180.9	1,152.9	113.8	378.1
2007[b]	138.7	38.0	90.6	23.2	189.9	1,210.6	119.5	397.0

[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.

2007 Colorado Business Economic Outlook

Natural Resources and Mining

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The resulting tight supply-demand balance will continue to raise concern about potential supply disruptions and sustain current pricing patterns.

The average retail price of automotive gasoline in Colorado has fallen from its August 2006 high of $3.03 per gallon to $2.55 per gallon in early October, which is $0.04 lower than a year ago. This downward trend is expected to continue through January 2007 before rising again into the summer. Colorado prices do not respond as quickly as the national price corrections because of a lack of local refining capacity and other factors. Local prices will continue to vary seasonally in response to mandated fuel requirements.

The Colorado Oil and Gas Conservation Commission (COGCC) reported that natural gas prices averaged $6.06 per thousand cubic feet (Mcf) for the first 10 months of 2006. This is down from the $6.81 per Mcf average for the same period in 2005. The October 2006 price in Colorado has fallen to $3.22 per Mcf. Although this year's heating season is expected to begin with natural gas inventories at their highest levels since 1990, EIA projects prices will rise by about 10% in 2007 as the need for winter heating fuel grows. Natural gas consumption in 2006 is expected to fall slightly below 2005 levels due to warmer than normal weather earlier in 2006. However, a return to normal weather patterns and sustained high oil prices are expected to result in natural gas prices averaging about $6.70 per Mcf for 2007.

It is estimated that energy companies spent more than $1 billion in 2005 on drilling oil and gas wells in the Rocky Mountain region, many of which were drilled in Colorado. With energy prices reaching record highs, most companies see the gas-rich Rocky Mountains as a strategic opportunity to expand their production and reserves base. The COGCC reports 4,573 drilling permits were approved in 2005, representing nearly a 57% increase over the 2,917 permits approved in 2004. It is expected that approximately 5,500 drilling permits will be approved in 2006—a 24% increase over the previous 2005 high. If this activity level continues, it is likely that another 6,000-7,000 permits will be processed in 2007, assuming oil and gas prices remain strong and the state economy continues to expand.

Drilling on the Roan Plateau in Garfield County continues to be of strategic importance to Colorado as well as the nation. The Department of Natural Resources presented an innovative management plan to the Bureau of Land Management that strives to successfully balance the needs for energy development and preserve critical environmental areas.

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The Denver Basin located in eastern Colorado is one of the nation's most important oil and natural gas provinces. Nearly 12,000 oil and gas wells in the basin supply about 30% of the natural gas consumed by communities along the Front Range. In late 2005, COGCC amended the existing well spacing rule to enable companies to increase the number of wells drilled in the area. As a result, the 2.4 trillion cubic feet (Tcf) recoverable gas reserves previously estimated for the Denver Basin's Greater Wattenberg Area is projected to increase by an additional 1.6 Tcf or a total of 4 Tcf in recoverable gas reserves.

Although critical to meeting demand growth, development plans in both the Piceance and Denver basins will exacerbate the state's existing labor and equipment shortages, as well as tighten the supply of cement and hydraulic fracture sand used to complete oil and gas wells for production. The fast pace of energy development in Colorado has raised concerns about the potential for land-use conflicts. Public and local governments have become increasingly more concerned about issues such as noise, traffic, dust, and well site reclamation resulting from this development. This, in turn, has placed additional pressure on state agencies, such as COGCC, to educate and inform the public about the comprehensive body of rules and regulations that already exist to protect public health and safety with respect to oil and gas development in the state.

Coal

The Colorado coal industry fell short of meeting production expectations in 2005. After predicting 40 million tons, the forecast fell 5% short as the coal mines produced 37.8 million tons of coal in 2005. This resulted from several mining difficulties encountered in the mines of the North Fork Valley near Paonia. In the first quarter of 2006, a fire at West Elk Mine, geologic problems at Elk Creek Mine, and general production problems at the Bowie Mine resulted in a 2.9 million ton shortfall in production from the North Fork mines compared to the first quarter of 2005. These problems have now been resolved.

In December 2005, Peabody Energy closed two Routt County surface mines that fed the Hayden Power Station. Its Twentymile Mine, which was expected to increase production to feed the Hayden Power Station, had problems due to the replacement of aging equipment. Twentymile had a record production year in 2005, setting new state coal production records for both annual production (9.4 million tons) and monthly production (1.1 million tons in December 2005). Electricity use by the Hayden Power Station customer base has climbed 13% in the last decade. The number of customers has increased by 20%, while peak demand has soared more than 60%. To meet this demand, more base-load electrical generation from coal must be found.

The EIA reports that spot coal prices on the marketplace dropped slightly in 2006, after rising steadily for the four previous years. Colorado's coal is traded on the national market as a "low sulfur, high Btu" product. Spot coal sold at $37 per ton in 2005, whereas in late October 2006 it was selling at $36.50 per ton. Most of Colorado's coal is sold on long-term contracts with utility firms that can be anywhere from 2 to 25 years in duration. These contracts sell at lower rates than the spot price, and in 2006 the price for federally leased Colorado coal was about $22 per ton. This price has slowly increased from $12 per ton five years ago.

One bright spot in Colorado's coal industry today is the employment figures. Although the number of mines has fallen over the past few years, the number of miners has increased. According to the Colorado Division of Reclamation, Mining and Safety, as of July 2006, a total of 2,070 miners were employed at Colorado coal mines. This is the highest number of coal miners employed in Colorado since 1988. To supply the Hayden Power Plant and its long-standing customers in the Midwestern states, Peabody is installing a longwall to mine more than 10 million tons per year. This equipment will be in place by the end of 2006.

Rail transport of coal has improved. More than 31 million tons of coal were hauled through the Moffat Tunnel in 2005, although train loadings are down in 2006. The 2005 record number was achieved because the Union Pacific Railroad recently completed several new projects to handle larger volumes of coal traffic. The Union Pacific Railroad completed a by-pass rail line around the north side of Denver in 2005 that increases rail capacity by an additional seven coal trains per day. New, more efficient coal cars are being made of aluminum instead of steel, making them lighter for transport. The mile-long coal trains are also made more efficient by using distributed power (i.e., the train engines are located not just at the front of the train, but also in the middle and at the end of the line as well). This helps the coal trains move through the steep Colorado mountains easier. In 2005, about 25% of Colorado coal was consumed in state, and the remainder was shipped to 27 other states and foreign countries.

In 2005, about 25% of Colorado coal was consumed in state, and the remainder was shipped to 27 other states and foreign countries.

Another priority of the coal mining industry is safety. In response to several accidents at eastern coal mines earlier this year, the federal government passed the Miner Act of 2006, which implements important new safety laws to protect underground miners in emergency situations. Efforts have been made to ensure that Colorado coal mines are safe; the last coal mine fatality was in 2000.

The state's production capacity is approximately 40 million tons. As of September 2006, the coal mines are again operating faster than the rail transportation can haul it. Estimates for Colorado

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Natural Resources and Mining

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coal production in 2006 are 34 million tons, a 9% drop in production from last year. The Colorado Geological Survey estimates that the value of Colorado coal produced in 2006 will be $759 million. The forecast for 2007 shows the Colorado coal industry on a healthy rebound from the intermittent production year of 2006. The Colorado Geological Survey forecasts that production will be around 38 million tons in 2007. At $22.5 per ton, the value for coal produced will be approximately $855 million. Rail transportation has improved; the coal mines are operating at near full capacity as of October 2006; and demand for Colorado's low sulfur, low mercury, high Btu coal is strong. Coal prices are high but stable for the foreseeable future.

Minerals and Uranium

The mining industry has been one of the most productive sectors in both the national and Colorado economies during the last three years. Rising commodity prices have given a boost to Colorado's producers of gold, molybdenum, cement, and other raw materials. In 2005, the Colorado Geological Survey estimated a total value of nonfuel mineral production in Colorado of $1.5 billion, a 60% increase over the 2004 production value. Nonfuel mineral production and employment will increase again in 2006 and 2007 due to the continued rise in metal prices and the commensurate increases in gold and molybdenum production and value. The total value of nonfuel mineral production is expected to top $1.6 billion in 2006 and $1.7 billion in 2007, which will break the previous record of $1.5 billion set in 2005.

VALUE OF COLORADO NONFUEL MINERALS AND URANIUM PRODUCTION 1997–2007 (In Millions of Dollars)

Year	Nonfuel Minerals	Uranium	Total
1997	$523	$3.5	$526.5
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	1,522	7.0	1,529.0
2006[a]	1,600	0.0	1,600.0
2007[b]	1,675	25.0	1,700.0

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

Prices for molybdenum skyrocketed and then settled to a more stable level over the past three years. Phelps Dodge Corporation's Henderson Mine in Clear Creek County is North America's largest primary producer of molybdenum. As of early October, the average 2006 price for molybdic oxide was approximately $25 per pound, down 32% from the 2005 level of $37 per pound, but still four times the average price of $6.12 per pound in 2003. The mine and ore processing mill added a third work shift in 2004 and now employs approximately 500 people. In 2005, the mine produced 32 million pounds of molybdenum, with a production value of about $828 million. In 2006, Henderson is forecast to produce approximately 37 million pounds for an estimated value of $925 million. Production in 2007 will increase to 40 million pounds. Phelps Dodge plans to reopen its Climax Mine near Leadville by 2009. Initial plans indicate that the Climax Mine could produce up to 20 million pounds of molybdenum per year. Prices for molybdenum and other industrial metals should remain high because of increasing demand in the rapidly industrializing and populous nations of China and India.

Gold prices continued to rise in 2006. Through October, the average gold price was $600 per ounce, while the average price in 2005 was $445 per ounce. This is good news for Colorado's only major gold mine, the Cripple Creek & Victor Mine in Teller County. This world-class mine employs about 320 people and produced 330,000 ounces of gold in 2005. The Golden Wonder Mine in Hinsdale County has an annual production of about 25,000 ounces. Total gold production for 2006 and 2007 is expected to decline slightly, from 325,000 ounces to 315,000. Denver-based Newmont Mining Corporation continues to be the world's largest gold mining company. Although Newmont does not have any active mining operations in Colorado, the company employs several hundred people at its headquarters and research facilities in metro Denver. Several smaller mining and mineral exploration companies have offices in the Denver area and provide employment for geologists, engineers, financial specialists, and support personnel. All of these are benefiting from higher metal prices.

In spite of uranium prices rising from less than $10 per pound in 2002 to over $50 per pound as of October 2006, Cotter Corporation closed its four operating uranium-vanadium mines near Naturita in western Colorado's famous Uravan mineral belt in late 2005. Cotter Corporation cited high operating costs as a factor in the closure. International Uranium Corporation recently announced that it plans to reopen three uranium mines in the Uravan mineral belt in 2007. Western Colorado uranium deposits contain significant amounts of vanadium, and this ferrous metal has seen sharp price increases over the last two years, going from $2.21 per pound in 2003 to $11.70 per pound in October 2005 and settling in at approximately $8 one year later.

Construction aggregates include crushed stone, gravel, and sand. In 2005, aggregate mines in Colorado produced 60.4 million tons of construction aggregate, with a total estimated value of $327 million—8% more than in 2004. The increase is attributable to an increase in construction activity fueled by improvements in the local economy. Residential and commercial construction is forecast to remain stable for 2006 and 2007, resulting in a stable demand for aggregates (Reed Business Information).

COLORADO NATURAL RESOURCES AND MINING EMPLOYMENT 1997–2007 (In Thousands)

Year	Total Natural Resources and Mining Employment	Percentage Change
1997	13.2	4.8%
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	17.1	18.8
2006[a]	20.7	21.1
2007[b]	23.0	11.1

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

Centex Construction Product's American Gypsum operation produces gypsum from its mine in Eagle County. The gypsum is manufactured into wallboard and other products at the plant in Eagle County. Holcim (US), Inc. operates a 2 million ton per year portland cement manufacturing plant near Florence. These operations are forecast to continue steady production in 2006 and 2007. The value of Colorado's cement production is estimated to increase significantly because of higher prices for the product. Global demand for cement currently outstrips supply because of strong construction growth in China and India, and post-hurricane reconstruction in the Gulf Coast region. ✜

Construction

Although Colorado's construction industry remains very strong, a decline in the overall rate of growth is expected due to slowdowns in the residential and nonbuilding subsectors in 2006. However, growth is anticipated to rebound next year. Some retrenchment will occur in infrastructure spending and single-family housing. Nonresidential building will continue its robust activity, and multifamily housing has begun its recovery.

Within the past year, illegal immigration has been a topic of heated debate, which included a special legislative session to address the issue. Laws were passed that will put more pressure on employers who utilize entry-level, low-skilled labor. The construction industry was identified as falling into this category. It is estimated that about 20% of the Colorado's construction laborers are immigrants. Whatever the eventual "solution" agreed upon in the political arena, administrative costs in the construction industry are likely to rise.

Overall, inflationary pressures on materials and labor are starting to ameliorate. The shortage of concrete has ended and is no longer a serious concern. The cost of some inputs, such as lumber and steel, are not expected to see price jumps significantly larger than the overall inflation rate. Labor costs will move sideways. The availability of labor overall should improve as workers move out of the housing market, which is the most labor-intensive of the subsectors. It is unlikely, however, that there will be a sufficient supply of skilled workers and experienced supervisors.

The surge in hiring during early 2006 tapered off during the second half of the year. Despite this modest cutback, the average for the year should be about 167,300 workers, a 4.5% increase over the 2005 employment base. Only a small increase in 2007 is anticipated, due mostly to the drop off in the labor-intensive housing subsector. Construction firms are expected to add about 3,000 workers next year, pushing employment up for the year, to 170,300, a 1.8% increase.

Single-Family Housing

The number of new single-family residential building permits in Colorado will finish 2006 down sharply from the previous year, with the larger Front Range metro areas from Colorado Springs north to Fort Collins experiencing sharp declines. The smaller Grand Junction and Pueblo metro areas will post solid increases, and there will be little change in single-family permits from 2005 to 2006 for Colorado's resort areas and elsewhere.

COLORADO EMPLOYMENT
CONSTRUCTION AND STATE TOTAL
1997–2007
(In Thousands)
(Base Year: 1997=100)

	Construction			All Industries	
Year	Number	Index	Percentage Change	Index	Percentage Change
1997	120.5	100.0	7.4%	100.0	4.2%
1998	134.6	111.7	11.7	103.9	3.9
1999	148.5	123.2	10.3	107.7	3.6
2000	163.6	135.8	10.2	111.8	3.8
2001	167.7	139.2	2.5	112.5	0.6
2002	160.4	133.1	-4.4	110.3	-1.9
2003	149.9	124.4	-6.5	108.7	-1.4
2004	151.3	125.6	0.9	110.1	1.2
2005	160.1	132.9	5.8	112.4	2.1
2006[a]	167.3	138.8	4.5	115.1	2.3
2007[b]	170.3	141.3	1.8	117.2	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.

Mortgage interest rates rose sharply—by nearly 75 basis points from mid-2005 through mid-2006. The combination of rate increases and rising energy costs during the first half of the year provided a "shock" effect to Colorado's housing markets. These impacts have reduced discretionary income, which, in turn, has reduced new and resale demand for homes in the middle price range. These homes comprise the bulk of Colorado's housing activity. It also appears that the market boost from "creative" home financing programs, such as zero down payments, adjustable rate mortgages, and interest-only loans, has finally slowed. High numbers of foreclosures are providing a significant drag on new and resale housing activity as the number of homes listed for sale has soared.

Although average annual increases in the price of existing homes have been modest in Colorado since 2001, a growing share of the new home construction remains larger homes at higher price points. 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. This trend is expected to continue, and higher labor and material costs will push average home prices higher in 2007.

Builders generally matched construction to new home sales in 2006, so inventory levels remain manageable and will not significantly suppress new permit activity in 2007. However, the high volume of resale homes on the market will 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 has helped sustain the Colorado economy since the employment decreases in 2002 and 2003, is finally experiencing an overdue correction that will continue through 2007. Therefore, an 18% decline in new single-family construction volume for 2006 is projected, to a total of 33,000 permits. The benefits of economic and employment growth in nonhousing sectors will be offset by the drag of large numbers of resale homes for sale in most market areas. Thus, the 2007 forecast of 32,500 single-family permits reflects almost no change from 2006.

Multifamily Housing

Spurred by an expansion in condominium and townhouse construction, multifamily permit activity is expected to reach 7,800 units in 2006, up 36% from the total in 2005. Attached home sales markets in most areas performed better than the detached sector, supporting a substantial gain in new construction of multifamily units offered for sale. Apartment production also expanded in 2006 but the numbers in this sector remain small as developers await a full recovery in rental markets to bring rents up to levels needed to support rising costs of new construction.

A sustained recovery in rental markets continued throughout the state in 2006. Markets firmed up considerably in most mountain areas and the Western Slope. Seasonal workers will face some of the tightest markets in years in most resort areas. Meanwhile, rental markets in many Western Slope communities are squeezed by commuting resort employees and oil and gas industry workers looking for apartments. Along the Front Range, rental markets are firmly in recovery mode, although some surplus units remain. Growing local economies and renewed in-migration have boosted apartment absorption, while recent low levels of apartment production have facilitated restoring balance to these markets.

While detached single-family markets have stumbled recently, attached sales have remained stable or increased, supported by the search for affordable alternatives for homeownership and supplemented by investors and second home buyers. A shift in demand for maintenance-free living, particularly by the increasingly numerous mature empty-nester baby-boomer buyers, is also shifting homeownership to multifamily. For-sale housing construction accounted for almost 90% of multifamily activity during 2006 in the Denver and Colorado Springs areas.

Apartment builders have responded tentatively to the firming rental markets. Many simply cannot make their numbers work at today's rents and costs of construction. Rent concessions have become less aggressive, and many landlords are phasing in rent increases. Unfortunately, most have yet to achieve "proforma" rents on units completed in the past few years. This imbalance will delay a major resurgence in apartment construction. However, a modest increase in rental construction, coupled with another good year for condominiums and townhouses or even a small cutback in this latter sector, should result in about 9,800 multifamily units permitted in 2007, a 25% increase over the 7,800 units in 2006.

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Construction

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Nonresidential Building

This subsector saw a healthy increase in the volume of work this year. A similar strong performance is expected in 2007. Construction of commercial/industrial, institutional/educational, and other nonresidential building climbed 12% in 2006. A slightly lower, but impressive 10% increase, is forecast for next year.

Construction work is calculated by tracking permits issued for new projects. Due to the timing of many large projects, the pace of work may be understated for 2007. In other words, construction started in 2006 will continue to boost activity beyond the statistical representation.

The demand for medical facilities has historically been about 10% of this construction sector. Activity in hospitals and related work has been very robust in 2006 and will remain so in 2007. Significant construction is continuing on major facilities, including those on the Fitzsimons campus and long-term projects in Grand Junction and Colorado Springs. Another large project, the relocation and expansion of Saint Anthony's Central to Lakewood, is beyond this report's time horizon.

Fears of retail overbuilding have subsided; the retail construction subsector remained strong in 2006 and is expected to continue its current pace into next year. Although large projects such as Boulder's Twenty Ninth Street, Northfield at Stapleton, and the Bass Pro Shops have been completed, new work is beginning in Southglenn and Riverton in Denver. Smaller projects are either underway or will start soon all along the Front Range and in the resort areas.

Other portions of the commercial subsector remain busy, with the exception of speculative

BUILDING PERMITS BY TYPE
1997–2007

Year	Single Family	Multifamily	Total Housing Units
1997	31,941	11,112	43,053
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[a]	33,000	7,800	40,800
2007[b]	32,600	9,800	42,400

[a]Estimated.

[b]Forecast.

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

VALUE OF CONSTRUCTION IN COLORADO BY TYPE
1997–2007
(In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding	Total Construction
1997	$4,774.6	$3,273.7	$8,048.4	$1,145.1	$9,193.4
1998	5,486.1	2,879.7	8,365.8	1,490.9	9,859.7
1999	6,229.1	3,782.9	10,011.9	1,590.3	11,602.2
2000	7,028.6	3,476.0	10,504.6	1,835.4	12,640.0
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	2,719.9	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	3,676.0	12,479.4	1,757.8	14,237.2
2006[a]	8,019.9	4,115.0	12,134.9	1,650.0	13,784.9
2007[b]	8,557.2	4,525.0	13,082.2	1,850.0	14,932.2

[a]Estimated.

[b]Forecast.

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

development of offices. Hotels and resort work is notably in a growth mode. Projects include the new casino hotel in Black Hawk; work in Avon, Snowmass, and Winter Park; and the expected start of Aurora's High Point Conference Center.

Institutional work has comprised a large portion of nonresidential building. Large projects just completed, such as the expansion of the Denver Art Museum, the Ellie Caulkins Opera House, and CU's Wolf Law Building, were big contributors to the state's work. High schools were built in Brighton, Westminster, and Keensburg. A pause is not expected in this area as other large projects are underway, such as the addition to the Leeds School of Business, the Engineering Building at CU's Colorado Springs campus, and a new high school in Golden. The state budget will have just under $150 million available for state buildings for the fiscal year ending next June, although more than half of that is expected to be spent on controlled maintenance.

Industrial developments in this category include the $1.3 billion power plant underway in Pueblo in year two of a four-year project. Work is ongoing for a concrete plant, also in Pueblo.

Nonbuilding

The Southeast Corridor (T-REX) highway project wrapped up this year with expenditures of about $125 million, a modest amount compared to prior years. The end of that seven-year project contributed to a relatively minor pause in the pace of this subsector. The volume of infrastructure is projected to be down about 9% for 2006, to roughly $1.6 billion.

The private sector was expected to see an increase sufficient to offset the decline in work from federal and state funding. Although its performance was weakened by a decelerating housing market, it was propped up by the infrastructure demanded for the work related to nonresidential building. Overall, the anticipated increase did not occur.

The year 2007 will see a sizable infusion of highway construction funds. All Referendum C dollars cannot be used for increases in program spending (redistribution and operations). Therefore, about $440 million will be spent on one-time projects to build and repair capital assets. Within this budget, the legislature has set a guideline of two-thirds to go toward roads. In addition, a sales tax diversion to roads, known by the legislation that created it as "Senate Bill 1 moneys," will be fully funded at about $229 million during the state's current fiscal year.

More than a year ago, the federal government announced a surprisingly generous infrastructure funding as part of the highway reauthorization plan. Congress has since operated only under continuing budget resolutions, however, so those increased moneys have not yet appeared. The new Congress elected this fall will not be able to address the budget until well into 2007, and no infusion of extra highway dollars should be anticipated during the time horizon of this report.

County and city budgets are increasing as well. A considerable amount of work is still going into pipelines and water projects, including a large project by the City of Aurora. Going forward, there are no significant new airport projects to impact the forecast.

Due to the long lead times for development of land, private-sector work will proceed in busy areas along the active Front Range counties, in several resort areas, and even in the southern Front Range. The vitality of the nonresidential subsector will boost activity as well.

Overall, the nonbuilding sector is expected to rebound in 2007, reaching $1.9 billion in work.

FasTracks will eventually be a $7 billion project, but even the next line to be built, the West Corridor, is still in preliminary stages. The series of large public works projects to build mass transit lines will not have an impact on the Construction Supersector for the time horizon that this report contemplates. ✜

Manufacturing

Manufacturing in Colorado is a $14.5 billion industry, representing about 7.3% of the value of all goods and services produced in the state. Colorado's roughly 6,000 manufacturing companies employed approximately 150,600 workers in 2005, representing about 6.9% of the total employment base in the state. Most of these manufacturing companies are small businesses. Indeed, nearly 80% employ fewer than 20 workers, and only about 35 companies have 500 employees or more. These numbers take into account only those businesses with employees.

In addition, another 6,100 businesses are classified as "nonemployer businesses," which are generally 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 firms provide an important entrepreneurial base for the manufacturing industry in Colorado, it is important to note that they are not included in the employment statistics described in detail below.

Numerous indexes compiled at the national and regional level attempt to forecast future manufacturing activity. Some of the most widely cited ones are compiled by the Institute for Supply Management, including the Purchasing Managers Index (PMI) and about 10 other indexes 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 expectations of purchasing managers in the manufacturing sector for business activity in the next 12 months. According to this index, the nation's manufacturing sector expanded for the 41st consecutive month in October 2006, albeit at its slowest pace since June 2003. Eight manufacturing industries experienced growth in October, led by apparel, leather and allied products, and miscellaneous manufacturing.

Many of the Federal Reserve banks across the country produce a manufacturing index for their region. Recent results from across the country reveal a mixed outlook for manufacturing, with the Atlantic coast region boasting an improved outlook and the Midwest and southern parts of the country indicating a less bullish view.

Several indexes examine activity in Colorado and the Rocky Mountain region. These indexes reveal both positive and less encouraging economic indicators for Colorado manufacturers:

- The Front Range Purchasing Managers' Index, compiled by the University of Colorado at Denver Business School, rebounded in September 2006 to 60.5 from 43.3 the month before. The August reading was the only reading since December 2005 to fall below 50, which indicates economic contraction.
- The Creighton University Business Conditions Index for the Mountain States region decreased in October 2006 for the second consecutive month but remains in a positive growth trend. The October index slipped to 67.6 from 73.3 in September and 75.6 in August, indicating slow growth expectations for the Colorado-Wyoming-Utah region. The individual Colorado index declined for the third consecutive month in October, to 53.8 from 65.8 in September. A reading greater than 50 indicates expansionary conditions.
- The manufacturing survey by the Federal Reserve Bank of Kansas City that includes Colorado and six Midwestern states reveals that growth remained somewhat sluggish in October. Plant managers expressed less optimism about near-term output than in previous surveys. However, factory activity was still above last year's levels and capital spending plans remained solid.

These indexes point toward yet another year of decline in employment in the Colorado manufacturing industry. Indeed, employment in the manufacturing industry has declined each year starting with 2001. Still, the rate of job loss in the industry has slowed considerably, declining an average of 4.4% per year from 2000 to 2005, a loss of 38,300 jobs over the five-year period. In contrast, this forecasts calls for a total loss of just 400 jobs in 2006 and 2007 combined.

Nondurable Goods

About one-third of employment in the Manufacturing Supersector is found in the nondurable goods sector, which includes the production of goods that generally last for less than one year. Nondurable goods sector employment is expected to increase to 50,800 in 2006 and remain at that level in 2007.

The largest nondurable goods sector is food manufacturing. Approximately two-thirds of Colorado's food processing is in beef production. Employment in the beef processing industry is expected to recover during the second half of 2006 and into 2007 as a result of Japan's decision to lift its ban on beef imports from the United States. At its peak before the ban, Japan purchased one-third of all U.S. beef exports. This was approximately 700,000 tons a year, valued at approximately $1.3 billion.

Competitive pressures are expected to reduce the number of food processing firms by 4–6 firms per year through 2007. Technology and economies-of-scale advances are expected to reduce employment through 2007. Despite the good news about potential exports to Japan, gains are not expected to offset the industry's trend of fewer firms and reductions in employment. Employment is expected to be 17,100 in 2006, the same level as 2005. About 100 job losses are expected in 2007.

The recent trends in Colorado's beverage industry are unusual compared to other manufacturing sectors. Beverage firms in Colorado totaled 80 in 2005, an increase of 16 firms over the 64 firms that operated in 2001. Almost all growth in the industry seems to be taking place among small wineries on the Western Slope of Colorado. Despite the increase in the number of firms, the industry employed about 200 fewer people in 2005 than it did in 2001. Firms in the industry appear to be carving local niche markets that afford limited growth in sales and employment beyond their respective markets. Employment is expected to remain constant in 2006 and 2007, at 5,800 workers.

The printing and publishing industry underwent significant changes over the last several years. Advances in printing technology and competitive pressures brought about a decline in the number of firms from nearly 860 in 1998 to only 710 in 2005, a decline of 17.4%. During the same time, employment fell from 12,400 to 8,000, a drop of 35.5%. The contraction experienced in printing and publishing is the most severe decline of any of the manufacturing subsectors.

Most employment losses in printing and publishing took place among firms with fewer than 20 employees. It appears that the firms that did not adopt new printing technology were not able to compete. Current industry trends suggest a period of stabilization is likely to occur in the next couple of years. With a slowdown in the economy, employment in printing and related activities is expected to decline slightly by 200 positions in 2006, to 7,800, and by another 100 positions next year, for a total 7,700 jobs.

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 3,600 workers, but it continues to face stiff overseas competition. Roughly 2,400 people are employed in paper manufacturing in the state, including cardboard containers, packaging, and paper products. This sector has been contracting by about 100 workers per year during the last six years. Another 1,000 people are employed in the petroleum and coal products sector, mainly within petroleum refining operations. This area has posted increasing employment during the past year in response to rising energy costs.

The contraction experienced in printing and publishing is the most severe decline of any of the manufacturing subsectors.

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 for the Colorado economy and has been targeted in state economic development efforts. The former Fitzsimons Army Medical Center is being transformed 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. Fitzsimons is anchored by the 227-acre campus of the University of Colorado at Denver Health Sciences Center (opening in 2008), the University of Colorado Hospital, the Children's Hospital (opening in 2008), and the affiliated 160-acre Colorado Bioscience Park Aurora. The bioscience park will provide opportunities, equipment, facilities, and resources for early-stage and startup research-oriented biotechnology, drug development, and

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Manufacturing

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COLORADO MANUFACTURING EMPLOYMENT BY INDUSTRY GROUP
1997–2007
(In Thousands)

Industry Group	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[a]	2007[b]
Food	19.6	19.6	19.3	19.8	19.8	19.3	18.3	17.8	17.1	17.1	17.0
Beverage and Tobacco	6.4	6.3	5.9	5.9	6.0	5.9	5.8	5.9	5.8	5.8	5.8
Printing and Related	12.5	12.4	11.8	11.4	10.4	9.2	8.6	8.1	8.0	7.8	7.7
Other Nondurables	21.6	23.5	23.4	23.0	20.8	19.5	19.2	19.0	19.1	20.1	20.3
Subtotal, Nondurable Goods	60.1	61.8	60.4	60.1	57.0	53.9	51.9	50.8	50.0	50.8	50.8
Nonmetallic Minerals	9.1	9.7	10.3	10.8	10.4	9.8	9.1	9.1	9.5	9.8	9.6
Fabricated Metals	17.3	17.9	17.6	18.3	17.2	15.8	15.1	15.4	14.9	14.7	14.6
Computer and Electronics	42.7	45.3	44.3	46.0	45.2	38.1	33.6	31.6	30.1	28.0	27.0
Transportation Equipment	13.8	13.9	13.2	12.3	11.3	10.4	9.7	10.0	10.7	10.7	11.2
Other Durables	43.9	42.8	41.6	41.4	38.4	35.8	34.5	34.9	35.4	36.3	37.0
Subtotal, Durable Goods	126.8	129.6	127.0	128.8	122.5	109.9	102.0	101.0	100.6	99.5	99.4
Total, All Manufacturing[c]	186.9	191.4	187.4	188.9	179.5	163.8	153.9	151.8	150.6	150.3	150.2

[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.

medical device companies to grow and prosper. Chemical manufacturing employs roughly 6,900 Colorado workers.

The plastics and rubber products sector includes companies that manufacture plastic film, plastic foam products, and other miscellaneous products. Rubber companies have a limited presence in Colorado, while the plastics industry continues 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 remain at about 5,400 workers.

The other nondurable goods sector is expected to increase by 900 positions in 2006 and an additional 200 positions in 2007 due to the strength in the manufacturing sectors that are tied to the energy and bioscience industries. This brings the total nondurable goods employment forecast to 50,800 positions in 2006, an increase of 800 positions from 2005. Total employment in nondurable goods is expected to remain at this level in 2007.

Durable Goods

About 100,600 people were employed in the durable goods industry in 2005. Several of the durable goods subsectors face challenges in the coming year, especially those that work closely with the construction and computer manufacturing industries.

The nonmetallic minerals sector is closely tied to construction activity of all types—residential, commercial, industrial, and heavy construction. This sector includes everything from pottery, plumbing fixtures, and glass products to brick, tile, and concrete and stone products. These areas held up quite well in 2006 and will end the year with average employment of 9,800. A small loss of about 200 jobs is anticipated in 2007 as a result of projected slowing activity in the construction sector. Nonmetallic minerals will average 9,600 jobs in 2007.

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. Employment in this sector fluctuates with demand from other industries. Many of the firms in this category are small suppliers for producers of industrial machinery. This sector lost about 200 jobs in 2006 and will end the year with average employment of 14,700. This is in spite of higher demand for fabricated metal products from industries, such as energy exploration and production and aerospace, that drive the need for more equipment. This is a sector where productivity growth has allowed manufacturers to use less labor per unit of output in the production process. Substitution of capital for labor will help increase output with fewer workers, resulting in the loss of 100 jobs in 2007.

The largest durable goods subsector in Colorado is computer and electronics products. After peaking at 46,000 workers in 2000, this category has lost

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MANUFACTURING EMPLOYMENT, DURABLE AND NONDURABLE
1997–2007
(In Thousands)
(Base Year: 1997=100)

	Durable		Nondurable	
Year	Employment	Index	Employment	Index
1997	126.8	100.0	60.1	100.0
1998	129.6	102.2	61.8	102.8
1999	127.0	100.2	60.4	100.5
2000	128.8	101.6	60.1	100.0
2001	122.5	96.6	57.0	94.8
2002	109.9	86.7	53.9	89.7
2003	102.0	80.4	51.9	86.4
2004	101.0	79.7	50.8	84.5
2005	100.6	79.3	50.0	83.2
2006[a]	99.5	78.5	50.8	84.5
2007[b]	99.4	78.4	50.8	84.5

[a]Estimated.

[b]Forecast.

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

COLORADO EMPLOYMENT IN MANUFACTURING AND STATE TOTAL
1997–2007
(In Thousands)
(Base Year: 1997=100)

	Manufacturing			All Industries	
Year	Number	Index	Percentage Change	Index	Percentage Change
1997	186.9	100.0	3.5%	100.0	4.2%
1998	191.4	102.4	2.4	103.9	3.9
1999	187.4	100.3	-2.1	107.7	3.6
2000	188.9	101.1	0.8	111.8	3.8
2001	179.5	96.0	-5.0	112.5	0.6
2002	163.8	87.6	-8.7	110.3	-1.9
2003	153.9	82.3	-6.0	108.7	-1.4
2004	151.8	81.2	-1.4	110.1	1.2
2005	150.6	80.6	-0.8	112.4	2.1
2006[a]	150.3	80.4	-0.2	115.1	2.3
2007[b]	150.2	80.4	-0.1	117.2	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.

Manufacturing

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nearly 16,000 jobs as of 2005. Although U.S. companies are once again investing in information technology products, much of the design and manufacturing has been outsourced to Asian countries, particularly China. In addition, Colorado companies that once dominated the computer storage industry have been the targets of various mergers and acquisitions, resulting in continued job losses. Employment will decline again by 2,100 workers in 2006 and by another 1,000 in 2007.

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 has provided the state's six prime contractors (Lockheed Martin, Boeing, Raytheon, Northrop Grumman, ITT Industries, and Ball Aerospace) with new clients and contracts. A particularly notable contract came with the announcement in October that the Federal Trade Commission granted Lockheed Martin Corporation and Boeing Company's United Launch Alliance, LLC (ULA) antitrust clearance after 18 months of review. The ULA will combine the production, engineering, test, and launch operations of Boeing Delta and Lockheed Martin Atlas rockets. Jefferson County will serve as ULA's headquarters with a concentration of engineering and administrative services, while assemblage and integration operations will be housed at Boeing's facility in Decatur, Alabama. The ULA project may ultimately result in the addition of up to 1,000 new jobs in Colorado. Although the operations of these companies are classified across a variety of manufacturing and service industries, the health of these companies in general tends to stimulate transportation sector employment. Employment in the transportation sector is expected to remain steady at 10,700 workers in 2006 and then increase by about 500 next year.

The other durable goods sector includes wood products, primary metals, machinery, electrical equipment and appliances, furniture, and miscellaneous manufacturing. This diverse group faces 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 sector has increased steadily during the last couple of years and now stands at about 12,600 jobs. It is likely to experience flat conditions in 2007 as home construction declines and consumer spending levels remain more conservative.

Roughly 2,100 people are employed 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 fabricated metals. Another 8,900 people are employed in machinery manufacturing. Due to the overall sluggishness of the manufacturing industry, the primary metals and machinery sectors are expected to remain flat in 2006 and 2007.

The miscellaneous manufacturing sector is quite broad and includes several industries that are very important to Colorado's manufacturing base, 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 stood at about 10,200 in 2005 and is expected to increase by several hundred positions in both 2006 and 2007.

Despite the wide range of issues that the other durable goods industries face, employment is expected to increase from 35,400 in 2005 to 37,000 in 2007. This will bring total durable goods manufacturing employment in Colorado to 99,500 in 2006 and 99,400 in 2007.

Summary

The 6,000 manufacturing establishments in Colorado are expected to employ about 150,300 workers in 2006, a decrease of about 300 positions from 2005. Manufacturing employment will remain relatively stable in 2007, with a loss of just 100 jobs. Although employment in the sector continues to shrink in Colorado, this is consistent with the trend across the country. Manufacturing productivity has consistently outpaced productivity growth in other sectors. Between 1987 and 2005, it grew 94%, about 2.5 times the 38% increase in productivity in the rest of the business sectors. Therefore, it is quite likely that at least some of the employment losses in Colorado and across the country are due to productivity increases. ✜

Trade, Transportation, and Utilities

The Trade, Transportation, and Utilities Supersector is the largest provider of jobs in Colorado. Job growth in the sector in 2006 was driven by retail trade, wholesale trade, and transportation employment gains. The number of jobs climbed 2.2%, to 422,400. Retail sales should post slower gains in 2007, pushing supersector employment to a total of 428,200, a 1.4% increase.

Wholesale

Colorado's wholesale trade subsector employs more than 90,000 workers at a relatively high average wage. This area is dominated by merchant wholesalers, that is, firms that sell to retail outlets. These firms provide 90% of all wholesale jobs. 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 quite cyclical. The number of jobs in this subsector dropped sharply in 2002 and 2003, but has since rebounded with recovery in the state and national economies. In 2006, a total of 2,300 new wholesale jobs are expected. A modest slowdown in most sectors of the regional economy will mean smaller gains next year. Therefore, an increase of 1.7%, or 1,600 jobs, is forecast.

WHOLESALE TRADE EMPLOYMENT
1997–2007
(In Thousands)

Year	Wholesale Trade Durable Goods	Wholesale Trade Nondurable Goods	Other Wholesale	Total[a]	Percentage Change
1997	53.1	30.8	5.8	89.7	4.5%
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	52.9	32.1	8.9	93.9	2.2
2006[b]	54.4	32.7	9.1	96.2	2.4
2007[c]	55.5	33.2	9.1	97.8	1.7

[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.

Retail

Retail trade employs more people than any other subsector. More than one-tenth of the state's workforce, or over one-quarter million workers, hold jobs with retail firms. Three of the state's largest private-sector employers, including the top firm, are retailers. Overall wages in the retail sector are relatively low, and many of the jobs are part-time. The retail subsector accounts for only 6% of all nonfarm earnings. Colorado retailers account for more than $60 billion in sales annually.

The retail subsector rebounded as the state economy recovered. Nearly 5,000 new jobs are expected to be added in 2006, the largest increase since 2000. However, job gains in the retail sector fall short of those achieved during the strong growth years of the middle and late 1990s. Between 1993 and 2000 the sector averaged more than 10,000 net new jobs per year. Part of this pattern of slower job increases can be explained by more moderate overall economic growth and smaller sales gains. But it also reflects faster productivity gains. In other words, there are 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. As a result of the

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Trade, Transportation, and Utilities

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RETAIL TRADE EMPLOYMENT
1997–2007
(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[a]	Percentage Change
1997	28.4	18.3	42.8	39.0	94.9	223.4	2.9%
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	32.1	23.0	44.0	46.8	100.0	245.9	1.9
2006[b]	31.8	23.7	45.8	47.6	101.9	250.8	2.0
2007[c]	31.5	24.3	46.8	48.3	103.7	254.6	1.5

[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.

combined effects of the slower economy and changes in the industry, current employment in the retail sector today is only slightly above its pre-recession peak.

Job growth in the retail sector is expected to slow in 2007, with just under 4,000 new jobs added. Sluggish consumer spending and a somewhat tighter labor market are the main factors contributing to the slowdown. The passing of the constitutional amendment raising the state minimum wage may limit growth in some segments of the retail sector, particularly in the lower-income, lower-cost regions in the eastern and southern parts of the state.

The condition of the state's housing markets looms over the outlook for consumer spending in 2007. At the national level, concerns are being raised about the dampening impact of a softening housing market on consumer buying. Colorado is somewhat ahead of the curve as prices in much of the state flattened several years ago. During the 1990s, rising home prices in much of Colorado contributed to very strong retail sales growth. Since the early years of this decade, stagnant home prices have limited Colorado households' outlays. Increasing numbers of adjustable, interest only, and other mortgages with highly variable payment commitments raise further unease. There is no history to suggest how consumers may react to this unprecedented situation. For many homeowners, the mortgage payment, which in the past has been a stable and predictable item, is now the most variable item in the household budget. Colorado's vulnerability to such changes may be exposed earlier than much of the rest of the nation as evidenced by the state's very high foreclosure rate.

Other developments suggest a more positive outlook for consumer spending. Lower energy prices will offset at least some of the negative effect of a weak housing market. Colorado consumers will be paying less for both gasoline and home heating over the coming months. Consumer sentiment seems to have improved with declining gasoline prices. The University of Michigan Index of Consumer Sentiment posted a solid gain in September. It shows that consumers anticipate lower inflation and larger income gains. Another solid year for Colorado tourism will also boost retail sales receipts.

Motor vehicles and auto sales, which account for more than one-fifth of retail sales in Colorado, will almost certainly post a decline in 2006. Metro Denver auto dealers report that sales have fallen by 11.5 % over the past four years, while national sales are off by only 1% over the same period. The severity of the local decline can be explained by the sharper downturn in the regional economy and the greater concentration of local sales in SUVs and trucks, where the effects of higher gasoline prices are more significant. Higher interest rates have also hurt sales volume. Modest improvement is possible in 2007 if gasoline prices continue to decline and interest rates remain stable. Sluggish sales over the last four years mean an aging stock of vehicles in the state, which should result in some replacement sales.

Colorado retail spending has slowed through the early part of 2006, with sales through August up 4.5%, somewhat below the gain posted in 2005. Motor vehicle and parts sales show particular weakness, registering a 6% decline. State retail spending lags that of the nation, where sales through September rose 6.7%. Favorable effects from lower energy costs and reasonably strong holiday sales should raise the increase for the year to around 6%. Further slowing is expected in 2007, with sales growth of 4.5% forecast for the year.

RETAIL SALES
1997–2007
(In Billions of Dollars)

Year	Motor Vehicle and Parts	General Merchandise	Total Retail Trade Sales[a]	Percentage Change
1997	$10.0	$6.2	$40.4	5.7%
1998	10.0	6.2	43.1	6.7
1999	11.8	6.9	47.4	10.0
2000	13.0	7.6	52.2	10.1
2001	13.9	7.9	52.9	1.3
2002	13.5	8.2	52.9	0.0
2003	13.7	8.5	52.8	-0.2
2004	14.0	9.1	55.8	5.7
2005	13.6	9.8	58.7	5.2
2006[b]	12.9	10.4	62.3	6.1
2007[c]	13.3	11.0	65.1	4.5

[a]The two largest Retail Trade categories are included in the above table. The total also includes gas stations, and food/beverage, building materials/home improvement, furniture, clothing, electronics, and other retail stores. The total does not include food services.

[b]Estimated.

[c]Forecast.

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

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 67,200 jobs in 2006, and 67,400 jobs next year. Gains in couriers and messengers offset losses in air, truck, and warehousing

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Trade, Transportation, and Utilities

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and storage for an employment increase of 2.3% in 2006. Continued high fuel prices and efficiency improvements are expected to limit job growth in this sector in 2007.

National Air Transportation

National air transportation is dominated by the major air carriers. Air carriers continue to focus on production as related to input costs and derived revenues. The Air Transport Association (ATA) Airline Cost Index is the only metric of its kind, and tracks quarterly and annual trends of the expense of inputs to airline production. The index facilitates comparisons between the components themselves, as well as broader economic indicators. Key ratios emanating from the Airline Cost Index include: fuel efficiency, workforce productivity, average labor cost, break-even load factor, and travel agency commission rates.

Year-over-year highlights from the latest cost index include:

- The composite cost index is estimated to rise to 180.4 in 2006, up 19.5%, compared to a 4% rise in the Consumer Price Index (year 2000=100).
- The three largest cost components were fuel (25.5%), labor (23.8%), and transport-related expenses (14.7%).
- Fuel prices paid increased 31.1%, from $1.51 to $1.97 per gallon. Meanwhile, average fuel efficiency rose to 50.5 revenue passenger miles per gallon and 61.7 available seat miles per gallon.
- The average cost of employing a full-time equivalent worker dropped $248, to $72,301.
- Factoring in changes in productivity and efficiency, the overall unit operating cost per available seat mile rose 6.3%, from 11.8 cents to 12.56 cents.
- The average break-even load factor dropped 3.4%, to 76.7%.

Air Carrier Fuel Costs

For a significant number of years, only a small number of air carriers attempted to, or were capable of, hedging on fuel prices. However, in 2006 a number of the major airlines engaged in an attempt to hedge against the rising cost of petroleum. In Q3 2006, West Texas Intermediate Crude Oil dropped below $60 per barrel. It would, therefore, seem that most air carrier hedging attempts will be counterproductive.

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 2005, the Colorado Air Transportation segment employed 13,500 persons representing 2.7% of the nation's air transportation jobs (501,300).

TRANSPORTATION AND WAREHOUSING EMPLOYMENT
1997–2007
(In Thousands)

Year	Truck Transportation	Couriers and Messengers	Warehousing and Storage	Air Transportation	Other Transportation	Total[a]	Percentage Change
1997	16.8	10.2	7.2	14.5	10.9	59.6	-1.2%
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	17.7	9.4	6.9	13.5	18.2	65.7	0.3
2006[b]	17.6	9.5	6.5	13.3	20.3	67.2	2.3
2007[c]	17.5	9.6	6.5	13.0	20.8	67.4	0.3

[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.

COLORADO AIRPORT STATISTICS
1997–2005
(In Millions)

Industry Group	1997	1998	1999	2000	2001	2002	2003	2004	2005
Passenger Boardings (thousands)									
DIA Passengers	34,969.0	36,831.4	38,034.0	38,751.7	36,093.0	35,652.0	37,505.0	42,276.0	43,388.0
Colorado Springs Passengers	3,869.9	2,637.8	2,481.1	2,424.7	2,131.8	2,123.4	2,023.3	2,069.5	2,062.0
Grand Junction Passengers[a]	280.7	280.9	279.1	273.2	240.1	250.9	255.2	288.1	319.4
Total Colorado Passengers	39,119.6	39,750.1	40,794.2	41,449.6	38,464.9	38,026.3	39,783.5	44,633.6	45,769.4
DIA Cargo, Freight, & Air Mail (millions of lbs.)[b]									
Freight and Express	648.8	646.8	675.3	676.3	563.6	636.3	610.1	621.0	615.3
Air Mail	315.3	339.5	355.9	363.4	227.2	95.6	107.4	78.8	67.6
Total Cargo	964.1	986.3	1,031.2	1,039.7	790.8	731.9	717.5	699.8	682.8

[a]Estimated.
[b]Millions of pounds, in/out.
Source: Denver International Airport, Colorado Springs Airport, Grand Junction Airport, and Colorado Business Economic Outlook Committee.

Colorado's air transportation workforce dropped by an estimated 200 jobs in 2006, to 13,300, for a loss of 1.5%. At the same time, the national air transportation workforce is estimated to have fallen by 2.7%, to 487,900.

These trends are expected to continue as air carriers maintain their efforts to reduce costs in order to increase operating margins. It is estimated that the Colorado air transportation segment will lose another 300 jobs in 2007.

Airline Activity—Total Passengers

Colorado's airports were busier in 2005 as 2.5% more passengers passed through Denver International (DIA), Colorado Springs, and the Walker Field (Grand Junction) airports combined. DIA, Colorado Springs Airport, and Walker Field Airport saw 43.4 million, 2.1 million, and 0.3 million passengers in 2005, respectively. In 2006, 47.6 million passengers are expected to pass through DIA, an increase of 4% over 2005's passenger count. On a year-over-year basis, Colorado's total passengers grew by 4%, compared to a contraction of 2.8% nationally. For now, air travel to and from the state has bucked the national decrease.

Air Cargo, and Freight and Express

In 2005, the Colorado air transportation system processed more than 151 million pounds of cargo, and freight and express; approximately 159 million pounds are estimated to be handled through Colorado's major airports in 2006, an increase of 5.2%. From 2000 to 2005, Colorado's air cargo, and freight and express has decreased 24.5 %.

Air Mail

Nationally, air mail activity has been decreasing since 2000. That year, a total of 1,916 billion pounds of air mail were processed. In contrast, 682 billion pounds were processed in 2005, an average decline of 19.3% per year. In 2006, air mail activity is expected to drop to 384 billion pounds (-43.7%). No air mail is processed on Colorado's Western Slope; all air mail in the state is processed through

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Trade, Transportation, and Utilities

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DIA or Jefferson County Airport. The Colorado airports and their air carriers have fully participated in the downward trend. Air mail activity processed through Colorado airports is expected to decrease in 2006 by 15.7%.

Denver International Airport

The City and County of Denver owns and operates DIA. Approximately 1,000 people are employed by the City's Department of Aviation.

In 2005, DIA served more than 43 million passengers, ranking it the 6th-busiest airport in the United States and the 11th-busiest in the world. Passenger traffic increased 2.6% in 2005 compared with 2004, which was the first year in Denver aviation history that the airport served more than 40 million passengers. DIA appears headed for a third straight record in 2006, with more than 32 million passengers recorded through August.

DIA's major carrier, United Airlines, accounts for approximately 55% 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 22% of the airport's passengers.

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

DIA has several capital improvement projects scheduled during the next two years:

- New regional jet facility on the east end of Concourse B (to be finished in April 2007)
- Construction of eight new jet gates on the east end of Concourse B (to be finished within three years)
- New aircraft deicing pad (to be finished in December 2006)
- Mod 4 West parking structure (2,000+ spaces, complete in late 2007)
- E-470 to Jackson Gap, phased, complete in 2007
- Phase 1 of Landscape Master Plan
- First phase of commercial-use development program at Peña and Gun Club Road to provide retail and services to passengers and employees

DIA has been profitable every year since it opened, even during the recent difficult years in the aviation industry. Each year, DIA shares its revenue

TRADE, TRANSPORTATION, AND UTILITIES EMPLOYMENT
1997–2007
(In Thousands)

Year	Wholesale Trade	Retail Trade	Total Trade	Transportation and Warehousing	Utilities	Total TTU[a]	Percentage Change
1997	89.7	223.4	313.1	59.6	8.6	381.3	2.5%
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	93.9	245.9	339.8	65.7	8.0	413.5	1.7
2006[b]	96.2	250.8	347.0	67.2	8.2	422.4	2.2
2007[c]	97.8	254.6	352.4	67.4	8.4	428.2	1.4

[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.

with the airport's signatory carriers. In addition, 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."

Trucking and Distribution

The past three years have seen a major increase in truck tonnage. This is reflects an improving economy.

The trucking and distribution industry has realized capacity problems with demand in many sectors outstripping supply. These capacity problems are primarily the result of a shortage of qualified drivers and technicians both within Colorado and throughout the country. In addition, the rapid rise in fuel prices has adversely affected almost all trucking and distribution companies within the state. While many companies have been able to pass on a fuel surcharge, the amount recovered in the case of many smaller companies and independent contractors has not been adequate to cover these higher costs. In turn, this has led to the demise of many independent contractors and small firms. In addition, liability insurance requirements and financing are high barriers to entry and add to capacity problems within the industry.

In particular, the driver and technician shortage has created a substantial problem for trucking and distribution centers within Colorado. This problem has become exacerbated due to an aging driving and technician population and limited success in drawing new people into these industries. A recent national study reflected a current shortage of 20,000 drivers, which is expected to increase to 111,000 by 2014. The net result has been a significant rise in driver wages and benefits as companies seek to recruit and retain drivers and technicians.

In the case of truck and trailer dealerships, there has been a surge in large truck sales. For the most part, those sales are to replace older vehicles within fleets. Additionally, many carriers, at least those that can afford it, are accelerating their replacement cycle prior to January 2007 when a new Environmental Protection Agency (EPA) regulation will be implemented on new diesel engines. Many fleets are very concerned that the new engines may have more service issues and potentially poorer fuel economy than current models.

There is no reason to believe the capacity crunch will decline in the immediate future. While this may allow carriers to increase shipping rates, carriers will be hard-pressed by higher driver wages, expensive fuel, increased insurance premiums, costlier equipment, and higher maintenance costs. It is believed that driver wages will continue to outperform wage increases in many other industries as companies compete to recruit and retain individuals from a limited pool of drivers and technicians.

Colorado has not seen the growth in the trucking and distribution area that other states have experienced. In fact, Colorado has seen a drop in interstate trucking registrations. A primary reason has been a tax environment that makes it one of the highest-cost states in the country in regard to motor carrier taxes and fees. This has led many companies to leave the state for adjoining states or other areas of the country that offer a more competitive tax environment. This is particularly evident when one realizes that Colorado is home to only 1 of the top 100 trucking companies, while surrounding states are home to many large trucking companies.

COLORADO NATURAL GAS CONSUMPTION 1997–2007 (In Billions of Cubic Feet)

Year	Total Gas Consumption	Percentage Change
1997	314.5	4.8%
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	439.3	0.7
2005	473.4	7.8
2006[a]	465.5	-1.7
2007[b]	465.5	0.0

[a]Estimated.

[b]Forecast.

Source: Colorado Business Economic Outlook Committee.

Utilities

Falling wholesale natural gas prices dropped retail natural gas and electricity rates in 2006. Utility rates are expected to remain volatile in 2007, driven by wholesale energy price fluctuations. The state is on track to add significant renewable and coal-

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fired generation, reducing electricity rate volatility.

Natural gas prices have fallen significantly since 2005, although they remain high by historical standards. Wholesale natural gas prices averaged $5.51 through the first 10 months of 2006, down $1.43 from the same period last year. As a significant producer far away from most major markets, the state enjoys among the lowest natural gas prices in the country. Local prices averaged more than $1 lower than national hub prices in 2006, and improvements in appliance efficiency and increased conservation dropped natural gas retail sales by 1.7%. Continued economic growth should offset declining use per customer in 2007, holding prices near current levels.

Utilities are making a concerted effort to reduce the role of natural gas in electricity generation because of the high and volatile prices in recent years. Along with Xcel Energy's new 750-megawatt coal-fired plant in Pueblo, slated to come online in the fall of 2009, Tri State has announced a 700-megawatt coal-based power plant to be developed in southeast Colorado by 2020.

Xcel Energy is adding both wind and solar resources to meet the renewable energy standard requirements enacted through Amendment 37. The company plans to add 775 megawatts of wind energy and have the nation's largest photovoltaic central solar power plant constructed by the end of 2007. These efforts and significant on-site solar will allow Amendment 37's goal of generating 10% of the energy customers use through renewable resources to be met eight years earlier than targeted.

Lower prices and a growing economy boosted electricity consumption in 2006. Electricity consumption in Colorado grew from 48,000 million Kwh in 2005 to an estimated 49,000 million Kwh the following year. Consumption is forecast to increase next year with continued economic growth.

Electric, gas, and water utilities look for productivity gains while growing to meet local demand. Like the rest of corporate America, the industry is faced with a shortage of well-trained younger workers. As a result, the utilities sector added just 200 jobs in

COLORADO ELECTRIC POWER CONSUMPTION
1997–2007
(In Millions of Kilowatt Hours)

Year	Non-residential	Residential	Total	Percentage Change
1997	25,808	12,261	38,069	2.7%
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	31,567	16,473	48,040	2.8
2006[a]	32,125	16,886	49,011	2.0
2007[b]	32,780	17,231	50,011	2.0

[a]Estimated.
[b]Forecast.
Source: Edison Electrical Institute Statistical Yearbook, Xcel Energy, and Colorado Business Economic Outlook Committee.

Information

Overview

Companies in the Information Supersector produce and distribute products and services that inform, entertain, drive our culture, and direct decisions that affect the entire economy. More specifically, the supersector includes telecommunications and newspaper and software publishing, Internet service providers (ISPs), broadcasting, and entertainment industries. Very broad in terms of the services provided, work skills, and size of companies involved, the area is known for innovative ideas and life-changing technologies.

Nationwide, the Information Supersector represented 1.7% of all establishments, 2.8% of total employment, 4.3% of earnings, and 4.7% of GDP in 2005. In Colorado, it represented 2.1% of establishments, 4.2% of employment, 6.9% of earnings, and 8.6% of GSP. More than 70% of output in Colorado's Information Supersector is from the telecommunications and broadcasting industries, 23% in the publishing industry, 6% in the information and data processing industries, and 1% in the motion picture and sound recording industries.

Rapid technological advances have and will continue to fashion the Information Supersector into a vibrant and growing combination of industries that feeds America's seemingly insatiable appetite for media content and improved methods for sharing that content. These technological advances have resulted in large productivity gains, reducing the need for employment. The average employee in the Information Supersector contributes more than twice as much to Colorado's GSP as the average employee statewide. Not only that, the gap has widened in recent years.

While the number of jobs in the Information Supersector decreased by nearly 28% between 2001 and

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2005 INFORMATION EMPLOYMENT, WAGES, AND ESTABLISHMENTS

Category	Percentage of Total Info Employees	Percentage of Total Info Firms	2004 Average Annual Wages	2005 Average Annual Wages	Percentage Change in Wages
Telecommunications	38.7%	23.8%	$73,754	$77,163	4.6%
Publishing Industries, except Internet	37.3	35.5	64,010	67,374	5.3
ISPs, Search Portals, and Data Processing	8.9	16.5	68,951	77,075	11.8
Broadcasting, except Internet	8.2	5.8	57,569	55,345	-3.9
Motion Picture and Sound Recording	5.3	13.7	21,340	22,295	4.5
Internet Publishing and Broadcasting	1.4	3.7	73,001	70,016	-4.1
Other Information Services	0.2	1.0	51,981	49,136	-5.5
Total Information	100.0%	100.0%	$65,770	$68,642	4.4%
Information in Denver Metro Area	62.5%	51.6%	$71,131	$73,847	3.8%
Information in Rest of State	37.5	48.4	56,579	59,954	6.0
Total All Industries			$40,296	$41,601	3.2%

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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2005, the supersector's contribution to GSP climbed 5.6% and the amount each employee contributed to GSP grew more than 46%. In addition, the average annual wage in the Information Supersector was 65% higher than that for all industries statewide in 2005.

The U.S. Department of Labor estimates that, nationwide, employment in the Information Supersector will increase 11.6% between 2004 and 2014—slightly slower than the expected growth for all U.S. employment of 14.8%. After decreasing 4.8% in 2005, Colorado employment in the Information Supersector will continue to decline slightly in 2006, but will grow again at a relatively modest pace in 2007. Meanwhile, the contribution this supersector makes to GSP will continue to expand at healthy rates.

Publishing

Publishing is the second-largest industry in the Information Supersector, represented by newspapers, periodicals, books, directories, greeting cards, software, and Internet material. Employment in Colorado's publishing sector contracted by more than 7,000 jobs after reaching a peak in 2000, but it is expected to be more stable in 2007. While employment has been decreasing, the sector's contribution to Colorado's GSP has been increasing, topping $4.2 billion in 2004. The paradox is a clear representation of the changing dynamics of the industry, with firms adapting and exploiting new technological opportunities, including online publications and digital productions, such as online newspapers and information CDs.

Newspaper, Book, and Directory Publishers

One clear example of a changing industry is newspaper publishers, which have been dramatically affected by the Internet. Daily circulation is decreasing but online visits have increased. In 2004, total circulation at the *Denver Post* and the *Rocky Mountain News* was 572,261, falling to 535,035 in 2005 and 511,550 in 2006 (*Denver Business Journal* and *Denver Post*). Daily circulation at the papers was down 3.2% and 2.9%, respectively, from 2005. This trend has is not unique to the Colorado region. According to the *Denver Post*, national newspapers are reporting a similar trend, with 770 newspapers reporting a 2.8% slide in daily circulation and a 4.3% decrease in Sunday circulation in 2006. However, downward circulation numbers have been heavily compensated by increases in online visits—the *Denver Post* and the *Rocky Mountain News* reported a 33.9% "total brand audience" increase between 2001 and 2006 (*Rocky Mountain News*).

The publishing portion of GSP is expected to increase to $4.8 billion in 2006, with employment contracting by less than 100 jobs. Roughly 45% of Colorado publishing companies have sales less than $1 million, 49% of companies generate sales between $1 million and $10 million, and 6% have sales greater than $10 million.

Software Publishing

Companies in the software publishing industry offer software packaging; software protection; installation, including license agreements; and distribution, support, maintenance, and license renewal services. In 2005, a total of 561 companies were classified in this subsector, employing approximately 12,800 workers. After declining 27.6% from 2000 to 2005, employment in this segment is expected to stabilize in 2006 and 2007, losing 321 jobs in 2006 and 125 jobs next year.

Telecommunications

Telecommunication firms nationwide and in Colorado are facing great uncertainty and change, and will continue to do so for many years. Technological improvements in the quality, reach, and capacity of broadband networks has dramatically altered the market landscape, catapulting the traditionally separate fixed-line telephone, Internet-access, and cable television distribution industries into competition against and consolidation with each other. Although the technology is still emerging (e.g., WiFi, WiMax, and 3G), convergence is occurring between the cell phone and fixed-line telephone industries, both seeking to provide broadband services.

The primary source of revenue in the telecommunications industry is shifting away from fixed-line telephone service toward broadband access. The traditional business model that relied on charging for telephone calls based on time and distance has been rendered obsolete by the cell phone industry and Voice over Internet Protocol (VoIP). According to the Federal Communications Commission (FCC), revenue to U.S. firms from fixed-line international voice calls slid steadily from $1 per minute in 1993 to $0.21 per minute a decade later. Cable distribution companies have capitalized on technological advances in broadband networks, expanding into the fixed-line telephone and Internet-access markets.

Traditional telecommunications firms are responding in grand fashion with the goal of protecting their core voice business and capitalizing on demand for broadband and related services. Earlier concerns about excess network capacity have dissipated as demand has increased globally for services requiring larger amounts of bandwidth, especially video. Verizon purchased MCI and is investing vast amounts of capital into a new network, FiOS (fiber optic services), that will have the capability to deliver high-quality voice, data, and television transmission directly to each consumer. In addition, FiOS will allow Verizon to control which service providers operate on the network. SBC purchased AT&T, took its name, and is currently in the processing of acquiring Bell South. AT&T is in the process of upgrading its network to allow customers to purchase video services using Internet protocol (IPTV), in addition to fixed-line telephone and Internet access. Qwest, headquartered in Colorado, has the ability to offer DSL Internet access along with its fixed-line telephone service. It also has pilot projects under way to provide video services over existing telephone lines in Phoenix, Arizona, and Highlands Ranch, Colorado. Rather than upgrading its network along the same lines as AT&T and Verizon, however, Qwest is reselling video services from other providers, mainly via satellite.

Furthermore, Level 3, also headquartered in Colorado, is emerging as a major player in the industry on the basis of its vast network and its rapid acquisition of smaller firms over the last few years.

INFORMATION EMPLOYMENT
1997–2007
(In Thousands)

Year	Publishing	Telecommunications	Other	Total
1997	25.3	29.6	18.8	73.7
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	28.8	29.9	18.5	77.3
2006[a]	28.4	28.4	18.9	75.7
2007[b]	28.7	27.9	19.4	76.0

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

While providing for a vibrant and growing industry, convergence has not created ideal conditions for employment growth. Labor-saving technological improvements, regulatory changes, and consolidation have reduced employment in the telecommunications industry considerably. Still, this segment of the Information Supersector, which is the largest, cut 21,100 jobs in Colorado since early 2001, more than half of the jobs lost in the supersector during that period. The trend has accelerated during the last two years; more than three-quarters of the jobs lost in the Information Supersector were lost in telecommunications since January 2005. Employment has decreased 5.2% year-to-date through September.

While some of the jobs lost over the last two years were the result of long-run trends, much of it was due to regulatory changes. Beginning in 1996, Congress and the FCC required incumbent Bell companies to lease, at wholesale rates, portions of their legacy networks to competing local exchange carriers (CLECs). Pursuant to a court order, the FCC began allowing incumbents to charge CLECs market-based prices and to discontinue offering certain wholesale services in March 2005. Many

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observers believe this change continues to cause difficulty for many CLECs.

Employment opportunities will remain limited through 2007 due to labor-saving technological improvements and consolidation. Employment in the telecommunications industry will fall 5.1% in 2006 and another 1.8% in 2007. The types of job surviving the cuts since 2001 have been increasingly high-skilled and high-paid, and average wages have increased. This trend will continue through 2007.

Information Technology

Information Technology (IT) is one of the most pervasive business technologies, having applications in every industry. Companies are continually realizing IT is an integral marketing component to meet changing customer and business needs, and are adapting their businesses to incorporate IT for e-commerce and for better information gathering and dissemination. Colorado boasts IT as a major component of the Colorado economy, providing high-tech jobs and above average wages. The Colorado Department of Labor and Employment lists more than 78,300 IT-related jobs in the state, with an average wage of $36.55 per hour. However, in 2005 the Bureau of Labor Statistics reported 20,790 employees in specific IT fields. The variation is due to differing classifications for IT employment—an employee utilizing IT within a company, or an employee working specifically in the IT sector. Both metrics make an impressive statement about the technological prowess of the Colorado residents and businesses.

COLORADO INFORMATION TECHNOLOGY LABOR MARKET BY OCCUPATIONAL TITLE, 2005

Occupational Title	Employment Estimates	Average Hourly Wage
Computer and information systems managers	4,900	$50.71
Computer and information scientists, research	380	41.11
Computer programmers	7,270	32.97
Computer software engineers, applications	14,760	38.91
Computer software engineers, systems software	11,210	39.28
Computer specialists, all other	3,420	32.52
Computer support specialists	12,370	22.79
Computer systems analysts	12,920	34.63
Database administrators	2,650	30.65
Network and computer systems administrators	5,580	31.18
Computer hardware engineers	2,300	47.25
Computer science teachers, postsecondary	590	NA
Total	78,350	NA

Source: Colorado Department of Labor and Employment.

The Information Supersector includes three segments of IT: (1) ISPs, search portals, and data processing; (2) software publication (as part of the publishing industry); and (3) Internet publishing and broadcasting. In 2005, these three sectors represented 27% of Information Supersector employment and nearly $1.8 million in compensation. While employment decreased 5.9% in these industries overall in 2005, total wages increased 2%. These segments are expected to add growth to GSP in 2007, while employment in the software publication segment will decline slightly.

Other

Motion Picture and Television Industry

The motion picture, television, and commercial production industry is evolving as a global industry. It has been growing recently in Colorado, which should continue through 2007.

The reemergence of the Colorado Film Commission is creating a stabilizing influence in the statewide production community. The commission is fostering better communication with communities about production opportunities and other resources across the state. The infrastructure provided by the commission is leading to a more proactive response to feature, television, and commercial producers, and is resulting in productions being filmed in Colorado.

In addition, after almost a decade of proposals to create a film incentive in the state, the Colorado Legislature passed Colorado's first-ever film incentive legislation in 2006. This is already resulting in production companies looking at Colorado as a film destination again, especially for low- to mid-budget productions. The incentive program will lead to more feature film production in Colorado in 2007 than in prior years. The continued growth of cable and satellite television production and related services will also lead to additional job growth.

Internet Publishing and Broadcasting

In 2005, a total of 130 companies, employing approximately 1,050 workers in Colorado, were classified in the Internet publishing and broadcasting subsector. Employment growth is expected to be less than 100 jobs in both 2006 and 2007.

ISPs, Search Portals, and Data Processing

This subsector includes companies that provide the following Internet services: access, searching, hosting data management, security, data processing, content delivery, shared use of data, and navigation. Consolidation in this subsector has stabilized and slightly increased, with the number of establishments climbing back to 2003 levels. More than 600 companies were classified in this category in Q1 2006, with total employment of about 7,000. The number of ISPs has increased, with 201 establishments in 2005, 9 more than the previous year. Most firms are located in the Denver/Boulder area. Colorado employment in this industry has been contracting for several years, but started growing again in 2006 after hitting a low of 6,796 employees in June 2005 following industry consolidations. Given the innovation and transformation in this industry, growth is expected through 2007, with 200 jobs added in 2006 and in 2007.

Summary

After decreasing by an estimated 1,600 jobs in 2006, employment in Colorado's Information Supersector is expected to remain fairly stable in 2007, increasing by about 300 jobs. GSP in the supersector, however, is expected to continue showing healthy growth. Rapid technological evolution has thrown Colorado's information firms into direct competition with firms throughout the nation and the world. GSP earned in the Colorado Information Supersector represents just 3.3% of the amount earned in this area nationwide. Whether this ratio increases in the future will depend on how skillfully the state's firms compete globally in the midst of constant and rapid change. ✤

COLORADO INFORMATION SECTOR GROSS STATE PRODUCT
1997–2005
(In Millions of Current Dollars)

Sector	1997	1998	1999	2000	2001	2002	2003	2004	2005
Information Sector Total	$10,183	$12,971	$15,845	$18,222	$17,737	$17,547	$17,709	$17,943	$18,729
Publishing	2,217	2,866	3,474	3,777	3,793	3,835	3,788	4,040	NA
Motion Picture/Sound Recording	169	184	353	637	763	256	246	226	NA
Broadcasting/Telecommunications	7,243	9,546	11,533	12,937	12,261	12,491	12,718	12,674	NA
Information/Data Processing Services	553	375	485	870	920	965	957	1,003	NA
Colorado Total GSP (All Industries)	132,881	$143,160	$156,284	$171,862	$178,078	$182,154	$188,873	$201,392	$216,537
Information as Percentage of Colorado Total	7.7%	9.1%	10.1%	10.6%	10.0%	9.6%	9.4%	8.9%	8.6%

[a]Estimated.

[b]Forecast.

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

Financial Activities

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

More than half 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. About 40% of the workers in this sector are employed at insurance carriers, and the remainder work at securities or investment firms. The most noteworthy financial organization is the Denver Branch of the Kansas City Federal Reserve.

The Real Estate and Rental and Leasing Sector includes real estate-related payroll jobs. In addition, the sector includes rental and leasing services. This category consists of companies that lease anything from real estate to equipment to formal wear.

Between 1996 and 2005, the Financial Activities Supersector grew at a compound annual growth rate (CAGR) of 2.4%, with the strongest employment growth occurring in credit intermediation (3.8%). Employment in the Insurance and Securities Sectors increased at a CAGR of 1.8%. Real estate employment climbed 2.9%, and rental and leasing employment grew 2.1%.

In 2006, the Finance and Insurance Sector is expected to add approximately 2,100 jobs, while the Real Estate and Rental and Leasing Sector should grow by 1,300 positions. In 2007, the Finance and Insurance Sector will experience slower growth, yet it is still anticipated to add 900 jobs, while the Real Estate and Rental and Leasing Sector should add roughly 1,400 jobs.

Finance and Insurance

Commercial Banking

Many of the trends spawned by deregulation in the 80s and 90s still impact commercial banking today. High levels of consolidation persist, and banks continue to dramatically expand their service offerings. While the general sentiment of "bigger is better" remains, smaller community banks are not extinct just yet. In fact, by establishing a niche focus, many have been able to not only survive, but thrive.

Computerization and automation are also radically altering the business of banking. Between ATMs and online offerings, banking can now be conducted anytime, anywhere.

While the forces of technology may ultimately threaten the traditional brick and mortar institution, of much more immediate concern is the current interest rate environment. An inverted yield curve is putting pressure on net interest margins. This is especially troublesome at smaller banks,

FINANCIAL ACTIVITIES EMPLOYMENT
1997–2007
(In Thousands)

Year	Finance and Insurance	Real Estate and Rental and Leasing	Total[a]
1997	93.9	41.2	135.2
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	109.8	48.3	158.1
2006[b]	111.9	49.6	161.5
2007[c]	112.8	51.0	163.8

[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.

which are less diversified and thus more exposed to changing interest rate term structures. These struggles are further exacerbated by the slowdown in the housing market and the continued erosion of consumer credit. New home construction is down significantly, and delinquency rates on first mortgage loans have risen steeply. While larger institutions have business lending to fall back on, smaller banks rely heavily on commercial lending, with mortgages typically representing upwards of 50% of their assets. A bank's ability to diversify its assets and augment interest income with revenue from fees and other nontraditional sources will be the determinant factor in its performance during the year to come.

Savings and Loans

The importance of the savings and loans (S&L) institutions in the U.S. financial sector has diminished steadily since the crisis in the late 1980s. Currently, S&L employment in Colorado totals just 1,500—representing less than 1% of all jobs in the Financial Activities Supersector. Nationwide, S&L institutions are impacted by many of the same trends affecting their commercial banking counterparts. In Colorado, the recent announcement of Washington Mutual's plans to close nine Colorado branches, predominantly in the northern part of the state, indicates further contraction of the industry.

FINANCIAL MARKETS INTEREST RATES 2000–2007

Month End	3-Month Treasury (Monthly Rates)	10-Year Treasury (Monthly Data)	Spread[a]
December 2000	6.00%	5.24%	-0.76%
June 2001	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[b]	5.10	4.80	-0.30
June 2007[b]	4.75	4.35	-0.40
December 2007[b]	4.00	4.50	0.50

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

[b]Forecast.

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

Credit Unions

Overall, credit union growth in Colorado is expected to be moderate in 2007. Although total assets should increase, it is anticipated that little will come from new members. Loan demand should improve, but given that many potential borrowers already have large amounts of outstanding debt, decreasing equity in homes, and less than stellar credit histories, finding credit-worthy borrowers could be challenging. Thin net interest margins will lead to a continued focus on interest rate risk management and the need to control costs.

In 2007, consolidation of credit unions is expected to continue. With more stringent demands of regulatory compliance, pressure to add and maintain technology, increased competition for member loans from Internet and indirect programs, and the higher expense of providing benefits to employees, credit unions must look for ways to achieve more favorable economies of scale. Nonetheless, credit unions of all sizes will remain financially sound with strong capital as they continue to focus on member service in an effort to create a competitive advantage over other types of financial institutions.

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Financial Activities

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Financial Markets

If the price action in the financial markets foreshadow future expectations, then what are the markets saying now? The Dow rose to a new all-time high, above 12,000, which is an impressive feat, albeit at the time of this writing, the NASDAQ was still trading at less than half its lifetime high of more than 5,000 that was reached in 2000. Crude oil has traded upward of $80 per barrel this year only to fall below $60 per barrel. At press time, it was hovering around OPEC's target of $60 per barrel. Similarly, gold has traded at more than $700 per ounce, then dropped to below $600 per ounce. As of the end of October 2006, it was hovering around $600 per ounce.

Concurrent with this almost schizophrenic price action, the Federal Open Market Committee (FOMC) has completed 17 rate hikes of 25 basis points each, driving the Fed Funds target rate to 5.25% at the June 29 meeting. The FOMC has maintained steady policy through the August, September, and October meetings, and the market currently expects unchanged policy at the December 12, 2006, meeting.

Fed Funds Futures were at one point pricing in odds of an ease in monetary policy as early as Q4 2006. Now those same Fed Fund Futures suggest that there might be a chance of further policy tightening in the first half of 2007. The yield curve, which is also viewed as a predictor of economic expectations, has been more consistent in its story. Over the last 15 years, the yield curve, as measured by the difference in yield between the Treasury note that matures in 2 years and the 30-year Treasury bond, is usually positively sloped to the tune of 140 basis points. In 2006, however, the yield curve

FINANCIAL MARKETS
STOCKS
1996–2005
(Year-End Close)

	Value				Index (1996=100)			
Year	S&P 500	Dow Jones	NASDAQ	Bloomberg Colorado Index	S&P 500	Dow Jones	NASDAQ	Bloomberg Colorado Index
1996	740.7	6,448.3	1,291.0	136.4	100.0	100.0	100.0	100.0
1997	970.4	7,908.3	1,570.4	148.0	131.0	122.6	121.6	108.5
1998	1,229.2	9,181.4	2,192.7	143.7	165.9	142.4	169.8	105.3
1999	1,469.3	11,497.1	4,069.3	230.6	198.3	178.3	315.2	169.1
2000	1,320.3	10,788.0	2,470.5	228.2	178.2	167.3	191.4	167.4
2001	1,148.8	10,021.6	1,950.4	204.4	155.1	155.4	151.1	149.9
2002	879.8	8,341.6	1,335.5	167.2	118.8	129.4	103.4	122.6
2003	1,111.9	10,453.9	2,003.4	237.0	150.1	162.1	155.2	173.8
2004	1,211.9	10,783.0	2,175.4	278.9	163.6	167.2	168.5	204.5
2005	1,248.3	10,717.5	2,205.3	326.0	168.5	161.9	170.8	239.1

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

FINANCE AND INSURANCE EMPLOYMENT
1997–2007
(In Thousands)

Year	Credit Intermediation and Related Activities	Securities, Commodities, and Other Activities	Insurance Carriers and Related Activities	Other Finance and Insurance Activities	Total[a]
1997	40.4	13.0	36.4	4.1	93.9
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	39.4	2.9	107.3
2005	52.8	13.7	40.1	2.3	109.7
2006[b]	53.6	13.9	40.9	3.5	111.9
2007[c]	54.1	14.1	41.1	3.5	112.8

[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.

hinted at a risk of recession, but more than likely it just reduced economic activity. The curve has inverted as much as -22 basis points, which suggests a potential recession, to a positive slope of as much as 31 basis points, which points to marginal economic growth. At the time of this writing, the curve is extremely flat, with a slope of less than 10 basis points.

The wildcard concerning future FOMC policy action lies with the core inflation rate. Rising energy costs and a high rate of capacity utilization served to push the inflation rate above the comfort zone of the FOMC. Moving into Q4 2006, various members of the Federal Reserve System have voiced the inflation vigilance mantra. Consequently, the financial markets have had to adjust to the possibility that further tightening of monetary policy may be deemed necessary.

An easing of prices in the energy complex, most notably oil, reduces inflationary pressure and relieves strain placed on consumer discretionary spending. Rising long-term and short-term interest rates slow the housing market. The FOMC is constantly battling a push-pull effect. A devaluation in the housing market depletes the piggy bank from which the consumer has been withdrawing equity to make purchases. However, as economic data hint at a slowing, the market anticipates the next move and long-term rates come down, effectively reinvigorating the housing market and providing a new lifeline to the consumer. How dramatic the housing correction is and the propensity of the American consumer to spend, coupled with the inflationary nature of rising oil prices, are the issues fundamental to understanding the struggle both the FOMC and the financial markets are grappling to discount.

Many of the themes mentioned in this section of the 2006 edition of this book are playing themselves out now, while others, such as the underfunded pension issue, are of a longer term nature. Interest rates did rise, and this made home ownership less affordable. The weakness of the housing market has been evident in the foreclosure rate in Colorado. If the expectation for an ease in monetary policy does occur in the second half of 2007, which would lead to further declines in long-term interest rates, then one could expect housing to stabilize and excess inventory to be absorbed. Given the magnitude of foreclosures already experienced in Colorado, it is hoped that we are at the leading edge of this cycle and will show signs of recovering ahead of the rest of the nation.

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Financial Activities

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REAL ESTATE AND RENTAL AND LEASING EMPLOYMENT
1997–2007
(In Thousands)

Year	Real Estate	Rental and Leasing	Total[a]
1997	27.0	14.2	41.2
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	34.3	14.0	48.3
2006[b]	35.3	14.3	49.6
2007[c]	36.3	14.7	51.0

[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.

INSURANCE

While 2006 has seen a significant increase in the number of jobs added in the Insurance Sector, this area will stabilize in 2007. Employing just over 40,000 people in Colorado, the sector is comprised of two main categories: life/health and property/casualty. Fueled by a more favorable litigation environment, and with the effects of the now superseded property/casualty no-fault statute, we have seen new entrants into the Colorado market, accounting for the increase in jobs in 2006.

Technology continues to impact most areas of insurance on the carrier side, including underwriting, claims, and rating. However, the need for sales professionals, brokers, and agents remains strong.

The overall impact of slower economic growth in other sectors that the insurance industry depends on, including residential and commercial construction, combined with slower migration into the state and lower premiums in many areas, may stabilize growth to rates experienced prior to 2006.

Real Estate and Rental and Leasing

COMMERCIAL REAL ESTATE

Colorado's Commercial real estate (CRE) industry is benefiting from a revitalized state economy. Diverse industries such as defense, manufacturing, energy, tourism, information, and agriculture are attracting new levels of capital not seen since the last decade. Following the capital are businesses, jobs, and in-migration, so expect new construction.

Metro Denver CRE, in general, has seen very positive trends during the past couple of years, mainly due to market discipline, investor and consumer confidence, and renewed business activity. According to CB Richard Ellis, the office market is exhibiting strong fundamentals. Talk of speculative construction has even been overheard. Year-over-year overall office vacancy fell from 20.5% in 2005 to 14.2%. The metro retail market rebounded, too, with year-over-year positive absorption, rising lease rates, and overall retail vacancy dropping to 5.7% from 7.5%. This is particularly impressive as 5.6 million square feet has come online through September 30, 2006. Grubb & Ellis reports that the metro industrial market activity has been inconsistent, but on a positive note, large space availability is shrinking due to local expansions and new tenants entering the market. Booming construction along the I-70 corridor has actually pushed overall vacancy up to 9.4% from 8.31%. Job growth and local and national business activity are primary drivers pushing CRE activity in 2007.

Development in Northern Colorado is moving at a brisk pace. In the last five years, more than 3.5 million square feet of new retail space was constructed, and another 4 million is planned in the next five years. Realtec notes that industrial, retail, and office vacancy rates have increased year-over-year from 2005 to 2006. Activity in Fort Collins may slow in 2007, but expect Loveland to remain strong.

Southern Colorado continues to be the recipient of defense spending. Substantial investment by the federal government attracts ancillary business and population. Population projections for 2010 call for a 24% increase over 2000. Of course, the Colorado Springs MSA is a major beneficiary as CRE activity is reaching the record absorption and investment highs of 2000. Turner Commercial Research notes that office vacancy now stands at 7.8% compared with 11.8% in 2005, and lease rates continue their upward momentum. Retail and industrial vacancy rates have improved to 6.6%, and lease rates are rising, too, as supply has been slowly absorbed. Single-digit vacancy rates portend speculative construction opportunities in southern Colorado.

Strong CRE activity along the Western Slope is a direct result of the revitalization of the energy business. It could get even better if Shell Corporation puts its Rio Blanco County oil-shale operation into full production. Although it has been reported that foreclosure rates for the state are among the highest in the nation, First American Heritage Title Company notes that residential foreclosures in 2006 have continued to drop year-over-year. Expect increased demand for commercial and industrial building permits as vacancy rates are at very low levels and laborers continue moving to the area.

A look around the state might suggest that CRE activity is strong and poised to reach even higher levels. The strength of the CRE industry, however, is strongly tied to economic vitality and job growth. The increased activity could imply that companies in 2007 are intending to fill properties with employees.

Real Estate Employment

Overall employment in the real estate sector will reach 35,300 jobs in 2006, an increase of 1,000 from last year. Similar growth is expected in the sector in 2007.

Employment growth will be driven by a balance of growth in office, industrial, retail, and residential markets. Strong growth in the residential market will occur along the Western Slope and as a result of low and relatively stable interest rates. In addition, some of the 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 North American Industry Classification System (NAICS) structure. Because NAICS categories are defined by process, it includes an array of companies tied together by their renting or leasing function, but often totally unrelated. The sector is consumer-driven and tends to pattern 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 300 jobs this year, and an additional 400 in 2007. ✜

VACANCY RATES IN COLORADO COMMERCIAL REAL ESTATE MARKETS

	2005[a]	2006[a]
Metro Denver		
Industrial	8.3%	9.4%
Retail	7.5	5.7
Office	20.5	14.2
Southern Colorado		
Industrial	11.8	6.6
Retail	7.6	6.6
Office	11.8	7.8
Fort Collins		
Industrial	4.7	4.9
Retail	5.4	5.9
Office	12.4	12.5
Loveland		
Industrial	2.9	3.7
Retail	1.9	3.2
Office	7.7	6.4
Greeley		
Industrial	8.0	9.1
Retail	6.0	6.0
Office	20.9	13.0

[a]As of Q3.

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

Professional and Business Services

Overview of Service Industries

Between 1996 and 2005, the Professional and Business Services (PBS) Supersector was the leading growth sector in the state, with a net increase of almost 62,000 jobs. This represents 19% of the total jobs gained during that period. The supersector led the state economy out of the recession in the second quarter of 2004 and is expected to continue in that leadership role in 2007. This supersector is anticipated to add over 15,000 jobs in 2006 and 13,900 next year.

Several factors affect the long-term outlook for employment in the PBS Supersector: the continued globalization of markets for labor, goods, and services; the pace of technological change; the growth of the Asian economies; global labor force migration; and changes in demographics. The PBS Committee believes that there are three points relevant to these factors.

First, demand will be increasing for the expertise and support provided by companies in the PBS Supersector.

Second, the fastest-growing occupations typically occur in the services areas. Nationally, the Bureau of Labor Statistics employment projections for 2002–2012 identified the following five occupations as having the highest annual growth rates: software publishers (5.3%); management, scientific, and technical consulting services (4.5%); community service facilities for the elderly (4.5%); computer systems design (4.5%); and employment services (4.4%). Approximately 2.8 million jobs will be added in the services sector nationally.

Third, the supply of high-quality labor must be sustained by the educational systems of the United States and of the rest of world.

Service industries continue to grow significantly and often pay higher than average wages. In fact, Colorado wages have remained above the national average because the high-paying jobs that have been lost in manufacturing and telecommunications have been replaced by high wage jobs in this supersector.

2005 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	70.2%	49.3%	6	$10,541	61.8%	$67,569
Management of Companies and Enterprises	3.5	7.9	20	2,483	14.6	99,729
Admin & Support and Waste Management	26.3	42.8	14	4,030	23.6	29,792
Total PBS Supersector	100.0%	100.0%	9	$17,054	100.0%	$53,939
Total State (Private)			11	$76,678		$41,238
PBS as Percentage of State Total	21.5%	17.0%		22.2%		

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

PBS is important to the Colorado economy because of its size and because of its average wages. In terms of employment, PBS the third-largest supersector in Colorado, following Trade, Transportation, and Utilities, and Government. It accounts for about 17% of total nonagriculture wage and salary employment.

The PBS Supersector is divided into three NAICS sectors, based on the fundamental processes of the companies: Professional, Scientific, and Technical Services; Management of Companies and Enterprises (MCE); and Administrative and Support and Waste Management and Remediation Services (ASWMRS). They each make significantly different contributions to the economy in terms of job and wage opportunities.

Overall, there are about 36,000 PBS business establishments in Colorado, with an average firm size of approximately 10 employees. Firms in the PST are slightly smaller, with an average size of 6 employees and average annual wages of $67,569. The second sector, MCE, includes 1,249 companies. These firms average approximately 20 employees with average annual wages above $99,729. Finally, ASWMRS includes approximately 9,411 establishments with an average size of 14 workers and average annual wages of $29,792.

Employment Outlook

Even though a forecast has been made of the entire supersector, a few chosen sectors will be discussed in detail because of their importance to the Colorado economy.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR EMPLOYMENT 1997–2007 (In Thousands)

Year	Legal Services	Engineering and Architectural Services	Computer Systems Design Services	Other Professional, Scientific, and Technical Services	Total[a]	Percentage Change
1997	14.5	29.4	30.7	53.3	127.9	7.6%
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	17.4	38.8	35.6	64.0	155.8	5.2
2006[b]	18.0	42.2	37.0	66.9	164.1	5.3
2007[c]	18.6	45.1	38.0	69.8	171.5	4.5

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

[b]Estimated.

[c]Forecast.

Professional, Scientific, and Technical Services Sector

The major subsector classifications for the Professional, Scientific, and Technical Services Sector are legal; accounting; tax preparation, bookkeeping and payroll services; architectural, engineering and related services; computer systems design services; scientific research and management, and technical consulting services, scientific research and development services; and advertising and related services. A number of companies in this category are closely tied to the entrepreneurial, high-tech economy that is important to the state economy. This sector is expected to grow by 5.3% in 2006 and 4.5% in 2007.

Legal Services

This subsector provides an example of the diversity of jobs within the professions of the PBS Supersector. Nationally, less than one-third of the employees in legal services are attorneys. Legal secretaries fill about 20% of the jobs, paralegals make up 13%

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Professional and Business Services

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of the workforce, and the remainder is spread across 129 other legal occupations.

The legal services industry grew, albeit slowly, through the expansionary and contractionary economic cycles of the 1990s and into the mid 2000s. Demand for law school graduates is strong and is expected to continue in both the private and public sectors, particularly in the areas related to real estate, intellectual property, environmental, antitrust, financial services, and general commercial litigation.

The business practices of legal firms are moving toward more competitive corporate modes, complete with marketing departments and business development directors. Several years ago, the big accounting firms opened legal service subsidiaries. Employment is expected to grow at a rate of 3.4% in 2006 and 3.3% next year.

Architectural, Engineering, and Related Services Sector

The Architectural, Engineering, and Related Services Sector (A&E) is expected to experience another healthy increase in employment in 2006. With employment losses in 2001 through 2003, the sector rebounded with an increase of 5.4% in 2005. The committee anticipates a strong 8.8% growth in 2006 and 6.9% the following year.

Several factors affect this job forecast. Engineers and architects are involved in the planning and construction of capital infrastructure. Government capital spending on infrastructure has increased this past year as a result of the passage of Referendum C, which provides a temporary, five-year "timeout" from TABOR, allowing state government to keep and spend the revenues from existing taxes. Pent-up demand for the services of engineers and architects will continue for several years as a result of the backlog of deferred maintenance projects.

In addition, A&E services will be required for the construction of FasTracks and various projects resulting from the passage of recent school bond elections. Demand for A&E services will also be needed in the residential housing market on the Western Slope, commercial markets, the construction of tourist destinations, the remodeling of medical facilities, and the design of new biofuels plants. Moreover, new mining facilities are being planned to accommodate growing global demand for raw materials, and military infrastructure spending in Colorado is increasing, particularly in El Paso and Pueblo counties.

Finally, space exploration, defense, and homeland security are other sources of demand for engineering talent, particularly in El Paso County. Among the large projects in the near future is the development of Crew Exploration Vehicle. Furthermore, engineers and scientists, especially those with experience in energy efficiency, provide essential services in making the transition to new technologies as a means of allowing organizations to operate more efficiently. To help offset the effect of rapidly rising fuel costs in recent months, several public agencies are investing in energy-saving devices to avoid reducing other expenditures in order to stay within budget. For example, one group has replaced traffic signal bulbs with more efficient LCDs. Others are replacing office lighting with more efficient fixtures and bulbs. The energy-saving payoff for these capital costs is in the range of three to seven years. One metro agency that replaced all of its traffic signal bulbs with LCDs experienced a decrease in electricity costs from $80,000 to $18,000 per year.

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Though the demand for engineering and architectural services will increase, the supply of engineers and architects may not. According to Science & Engineering Indicators 2006, a report from the National Science Board, the total number of science and engineering degrees earned in the United States from 1980 to 2000 grew at an annual rate of 1.4%. Yet this is far below the 4.2% growth of science and engineering jobs. The gap has been filled by foreign employees, or the work has been sent abroad. Finally, demographic change is stressing the job market. Nearly 30% of all science and engineering degree holders currently in the labor force are age 50 or older. Their retirement will create a significant brain drain in this sector, or it will lead firms to creatively engage the services of employees on flex schedules or through part-time employment after they retire.

Computer Systems Design and Related Services Sector

One of the fastest-growing sectors in the late 1990s was Computer Systems Design and Related Services, with employment growing at a CAGR of 13.9% from 1997 to 2000. However, it was one of the fastest-declining sectors from 2001 to 2003, contracting 12% CAGR. In 2004 and 2005, the sector grew by 3% and 4.4%, respectively, and is anticipated to increase 3.9% in 2006 and 2% next year.

Several factors have stimulated the rebound in Computer Systems Design and Related Services employment. As networks have become more sophisticated, computer applications companies have become more aggressive in forcing software upgrades in order to accommodate increased security needs and processing power. This has resulted in the replacement of the vast majority of remaining pre-Y2K computer systems. As with engineers and architects, demand for services has not been met with a supply of new talent. Increasingly, this work is outsourced.

ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT SERVICES SECTOR
1997–2007
(In Thousands)

Year	Employment Services	Services to Buildings and Dwellings	Other Adm. Services and Waste Mgmt.	Total[a]	Percentage Change
1997	48.0	28.1	54.0	130.1	9.9%
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	4.7
2005	40.4	38.1	57.0	135.5	1.3
2006[b]	42.3	39.8	59.2	141.3	4.3
2007[c]	44.1	41.5	61.5	147.1	4.1

[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.

Management of Companies and Enterprises

The Management of Companies and Enterprises sector is among the most diverse in our supersector. The North American Industry Classification System defines this sector as:

1. Establishments that hold the securities or other equity interests in companies and enterprises for the purpose influencing management decisions.
2. Establishments that administer, oversee, and manage the strategic or organizational planning and decision-making role of the company or enterprise.
3. Establishments that consolidate essential managerial activities resulting in economies of scale.

In Colorado, companies in this sector include headquarters of companies such as MDC Holdings, the Anschutz Corporation, Big O Tires, and Wild Oats Markets, along with regional headquarters of food, retail, and financial companies. The sector has grown every year during the period 1996–2005, increasing employment at an annualized rate of 5.6%. The PBS Committee believes that the “outsourcing of management” is a wave of the future and that Colorado is an appealing place to locate a national or regional headquarters. Employment is expected to climb 3.6% in 2006 and 2.7% next year.

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Professional and Business Services

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Administrative and Support and Waste Management and Remediation Sector

The major subsector classifications for the Administrative and Support Services portion of this sector are employment services; professional employer organizations; services to buildings and dwellings; document preparation services; telephone call centers; collection agencies; credit bureaus, travel agencies; investigation and security services; convention and trade show organizers; solid and hazardous waste collection; landfill operations; materials recovery facilities; and other remediation services. Employment growth of 4.3% is expected for this sector in 2006, followed by a 4.1% increase next year.

More stringent environmental regulations should stimulate the need for jobs in remediation of hazardous waste, and for the control of greenhouse gases. Newer regulations demand more environmental evaluation of land prior to development. The recycling of construction materials is expected to increase as the global demand for these materials grows. In particular, the demand for recycled steel will remain high. The structural and reinforcing steel taken from the demolition of several large buildings in Colorado ended up overseas where it

TOTAL PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT 1997–2007 (In Thousands)

Year	Professional, Scientific, and Technical Services	Management of Companies and Enterprises	Administrative and Support and Waste Management Services	Total[a]	Percentage Change
1997	127.9	15.4	130.1	273.3	7.5%
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	4.2
2005	155.8	24.9	135.5	316.2	3.9
2006[b]	164.1	25.8	141.3	331.2	4.7
2007[c]	171.5	26.5	147.1	345.1	4.2

[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.

was smelted into new steel for new buildings. With increases in energy prices and the resulting rise in the cost of asphalt, old asphalt is being recycled in greater amounts to be used for feedstock for paving new roads and highways.

Vacancy rates for buildings in Colorado are declining, and building owners continue to look for ways to consolidate cleaning and maintenance services. Employment growth in the services to buildings and dwellings subsector is expected to remain strong, with growth of 4.3% in 2007.

Employment Services Sector

The employment services subsector is recognized as a leading indicator of employment growth, particularly for service professions. Employers use employment services for a variety of reasons: to hire temporary employees for peak times, to locate workers for temp-to-hire situations, and as a recruiting agency to find candidates for permanent employment. With increasing health premiums and employee liability costs, some companies look to contract with workers who are trained in specific tasks without having to pay benefits, or incur the cost of training, such as healthcare professionals, scientists, and technicians. The demand for administrative positions to support these positions is also increasing.

Even though the economy is expected to grow at a slower rate during 2007, many companies will focus on their core specialties and choose to outsource financial, human resources, and administrative functions as a way of not overextending themselves. As long as the cost to outsource these positions is less than permanent placement, this trend will continue.

Demographic change is important as well. As the maturing workforce selects flexibility in working hours and locations, it opens opportunities for employment services companies to manage and match employee skills and employment needs. Individuals increasingly will be selective with their time and talents.

It will be interesting to observe the impact that future energy costs will have on the workforce and housing patterns. One likely scenario is that increasing energy costs will cause people to want to work closer to home. Jobs will be restructured to encourage telecommuting and possibly the use of more temporary workers. Other business functions that can be performed remotely may be outsourced. This transition will have many operational implications. For example, office mentoring and on-site training may be more difficult when jobs are performed remotely.

These various factors will impact the number of workers hired through employment agencies and related services. The bottom line is that employment in this category will increase by 4.3% in 2007. The fact that this is the third consecutive year of slowing growth points to sluggish growth in the overall economy.

Conclusions

The PBS Supersector will continue to lead both the state and national economy in absolute job creation. Concerns about inflation, the national economy, operational cost containment, including benefits costs, will be important issues that will cause businesses in other sectors to use the services of companies in this supersector. PBS firms offer expertise in the use of new, cutting-edge technologies, which provides companies in other sectors the opportunity to remain focused on their core competencies. The trend of offshoring will continue to affect the PBS Supersector. Although many first attempts to offshore services met with mixed results, it is expected to increase as local businesses become more experienced with this concept.

The United States still has the best-educated workforce among the major economies. This drives our competitive global advantage in innovation and technical research. However, the number of U.S. engineering and science graduates fell to about 70,000 last year, while 900,000 graduated from colleges in India and China. Over the last 10 years, Mexico has built up enrollment in two- and four-year degree programs in engineering. Currently, 451,000 Mexican students are enrolled in full-time undergraduate programs. In the United States, this number is just over 370,000.

Employment growth in the PBS Supersector is expected to remain robust in both the short and long term. Whether these jobs are filled in the United States or in other parts of the world depends on the quality of educational systems here and around the world. ✜

Educational and Health Services

This NAICS supersector includes private sector educational and healthcare companies and organizations. Total employment growth will increase by 2% in both 2006 and 2007, with 3,800 workers added in 2006 and an increase of 3,900 workers projected for 2007.

Educational Services (Private)

The education sector includes about 2,100 private organizations that employ approximately 28,000 employees. (It should be noted that public sector education employment is recorded as government employment, and totals 165,000.) The top 28 organizations employ about 11,000 workers and include the University of Denver, Regis University, Colorado College, the University of Phoenix, Naropa Institute, and Colorado Christian University. Among other organizations are companies that provide instruction for tennis and horseback riding, driver training institutes, and flight training, for example.

Much of the growth in private education is from increased state population, higher demand during expansionary cycles, outsourcing resulting from recessionary cycles, and funding cuts to public education. Moreover, growth in the sector has been driven by demand for continuing education programs; retraining in new areas; and technical, computer, and management training. Approximately 600 jobs will be added in private education in both 2006 and 2007.

Healthcare and Social Assistance Services

The larger healthcare sector is important to the Colorado economy because of the absolute number of jobs and the fast, steady year-over-year growth in employment (even during recent economic downturns). Furthermore, the sector is an essential component of the economic and social infrastructure in terms of the quality of life and the health of the state's population, the productivity of its workforce, and the costs associated these factors. The healthcare sector is composed of four subsectors: ambulatory care, hospitals, nursing care, and social assistance.

The ambulatory care subsector includes approximately 76% of total healthcare companies and 41% of employees. About two-thirds of the employees are medical professionals or those who work in physician offices, dental offices, or in home health agencies. The remainder of this subsector includes such medical services as medical labs, blood banks, and dialysis centers.

Approximately 90 private general 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. Psychiatric and specialty hospitals are also included in this category.

Roughly 18% of employees work in the nursing care subsector, which consists of nursing homes and other residential care facilities.

The final subsector is social assistance, which encompasses childcare centers and community food and housing groups; it accounts for 17% of the total workers in the healthcare sector.

Health Insurance Premiums and Coverage

Employer-sponsored healthcare premium trends continue to outpace overall inflation. According to a 2006 report by the Kaiser Family Foundation, average premium increases were 7.7%. The national average cost for a family policy has now topped $11,000 annually. In the past six years, health insurance premiums have risen 87%, more than four times the increase in wages and consumer prices. The study found that 61% of companies offer health benefits to at least some of their workers, a decrease from 69% in 2000. According to a survey conducted by the Mountain States Employers Council, healthcare premium rates in Colorado are expected to increase an average of about 11% in 2007. For workers with coverage, U.S. employers are expected to cover 78% of the premium expense in 2007; this percentage is unchanged since 2000.

Frequently cited cost drivers include the aging population, the cost of new technology, hospital and pharmacy reimbursement rate increases, and the cost of litigation and "defensive medicine." Additionally, 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. The authors of a Families USA study in 2005 suggest that 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 drives increased demand and spending for services.

According to the Colorado Health Institute's (CHI) analysis of the Census Bureau's Current Population Survey, an average of 768,000 Coloradans were without insurance in 2004–05. Roughly 14% of children and 20% of adults were without any form of health insurance during this period. With an overall uninsurance rate of 17%, Colorado currently ranks 38th among states in insurance coverage. While uninsurance rates have been relatively stable for the last few years, the number of uninsured has grown along with population growth. Without recent substantial increases in the number of children covered by Medicaid, Colorado's uninsurance rate would have increased. In 2002–04, 56% of the working uninsured had full-time, year-round jobs.

HEALTHCARE SERVICES EMPLOYMENT
1997–2007
(In Thousands)

Year	Ambulatory Care	Hospitals	Nursing Care	Social Assistance	Total[a]	Percentage Change
1997	65.6	39.2	29.8	24.2	158.8	3.8%
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	80.8	48.9	35.0	32.3	197.0	2.4
2006[b]	83.0	49.1	35.5	33.3	200.9	1.9
2007[c]	85.2	49.5	36.0	34.1	204.8	1.9

[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.

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 in 2006 suggests that health maintenance organizations (HMOs) are slowly increasing their market share after a decade of erosion. Nationally, 74 million people are in traditional HMOs, compared to 67.7 million people in 2005 when traditional HMOs had 23% of the market. Coverage in traditional HMO plans in Colorado has fallen from nearly 1.5 million members in 2002 to just over 1.05 million in June 2005, with a census of just less than 1.05 million in 2006, according to the *Colorado Managed Care Newsletter.*

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. The 2006 Kaiser Family Foundation report cites that 4% of firms currently offering benefits, but not offering the high deductible plan option, are very likely to do so in 2007, while another 19% are somewhat likely to do so.

Colorado insurers are rolling out health plans with creative plan design options targeting small business, part-time workers, and the uninsured

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Educational and Health Services

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population. These include hospital-only plans, preventive benefit-only plans, and so-called "schedule of benefits' plans" that reimburse the patient a flat amount per doctor visit or per hospital day. Both Anthem and Rocky Mountain Health Plans have introduced medically underwritten plans in the individual market that appeal to a younger, healthier population. Because they are medically underwritten, they may not be offered or may be too expensive for individuals with preexisting conditions.

One critique is that these plans with fewer benefits or higher cost-sharing expose individuals to greater financial risk. More than half of those who filed the personal bankruptcies in the United States cite the cause as "health care costs," with many mentioning they had been struck by catastrophic illness or injury. Yet several of these individuals have or did have some level of health insurance. The adverse impact is also concerning Colorado providers. Colorado hospital respondents report a 21% increase in patient bad debt over the past three years, largely attributable to these new "affordable" plan designs. These plans are forcing hospitals and physicians to invest resources to collect directly from patients, increasing healthcare overhead costs.

COLORADO EDUCATIONAL AND HEALTHCARE SERVICES EMPLOYMENT 1997–2007 (In Thousands)

Year	Educational Services	Healthcare Services	Total[a]	Percentage Change
1997	19.4	158.8	178.2	4.1%
1998	20.4	162.6	182.9	2.7
1999	21.3	165.6	186.9	2.1
2000	22.7	170.1	192.8	3.2
2001	23.7	177.2	200.8	4.2
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	197.0	224.5	2.8
2006[b]	28.1	200.9	229.0	2.0
2007[c]	28.7	204.8	233.5	2.0

[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.

Small Group Coverage in Colorado

The impact of rising healthcare costs on small group employers (50 or fewer employees) is especially challenging. For the fifth consecutive year, the number of Colorado small businesses that offer health insurance and employees who enroll in health insurance continues to decline, according to data provided by the Colorado Division of Insurance in April 2006. The decline in the small group market corresponds to a national trend of an increasing number of employers not offering health insurance due to increasing costs. Only about 37% of small group employers offer health insurance. Small businesses in Colorado that tend to offer healthcare coverage 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.

In 2005, carriers operating in the small group market reported a 5.4% (46,500 groups) decrease from the 49,000 groups reported the previous year. However, "business group-of-one" policies saw a small rebound in 2005, accounting for 12,844 small group policies. This is an increase compared to the 11,374 policies in effect on December 31, 2004, but is still in sharp contrast to 28,805 policies in effect in 2003. Colorado remains one of the few states to offer limited guaranteed issue to business groups-of-one. From 2000 to year-end 2005, the Division of Insurance reported a decline in covered lives in the small group market from nearly 538,000 to 340,000. Many of these policies were lost when Aetna left the small group market three years ago. Aetna has recently reentered this market in Colorado.

The small group marketplace continues to migrate toward lower benefited, higher deductible, and catastrophic products. The market perception of low-cost products has shifted. Where once the HMO dominated the low price segment, carriers have built larger product portfolios to offer plans at much lower price points, and these plans have become extremely popular. Carriers such as Anthem/WellPoint, Humana, and Aetna are targeting the small group market through their focus on new low-cost benefit design options and investment in technology-based services. A recent, national survey performed by Morgan Stanley for small group employers found greater use of benefit design changes; health savings accounts (HSAs); and in some markets, a slow shift back to HMO plan designs.

The Colorado legislature continues to focus on the small group market to make it easier for small businesses to offer, and continue offering, healthcare coverage. Recent enacted legislation has allowed carriers to vary the application of minimum participation requirements and minimum employer contribution requirements by the size of the group and by product.

Other Legislative Initiatives

Legislative efforts in 2005 include implementing voter approval of the revenue raised by the increase in tobacco taxes to expand access to Medicaid coverage to more children and families; providing for prevention, early detection, and treatment of cancer; and underwriting smoking education, prevention, and cessation programs. The legislature also provided poor women access to prenatal care pending their Medicaid eligibility processing and restored Medicaid eligibility to legal immigrants. To combat Colorado's low immunization rate, the legislature authorized the creation of an immunization tracking system and authorized the voluntary reporting of immunizations throughout the state. Medicaid expansions might result in the reduction of persons without insurance in 2006, assuming that businesses do not continue to drop coverage and offset this small gain.

The 2003 replacement of a no-fault auto insurance system with a tort system continues to generate controversy. With the change, consumers no longer had mandatory medical and rehabilitation services in their policies. Thus, Coloradans without health insurance do not have protection if injured in an automobile accident. In response to a contentious debate on the impact of this change on consumers and healthcare providers, the 2005 General Assembly created an interim committee to study the issue. As a result, lawmakers introduced six auto insurance reform bills in the 2006 legislative session. They were crafted after a summer's worth of testimony and brainstorming, and were intended to correct the two-year-old tort system's worst problems. No changes passed. Early reports of savings are being disputed, and hospitals, physicians, and ambulance companies now report significant increases in unreimbursed accounts from auto trauma victims.

The [Colorado] legislature provided poor women access to prenatal care pending their Medicaid eligibility processing and restored Medicaid eligibility to legal immigrants.

The 2006 General Assembly created a blue-ribbon commission for healthcare reform. 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 healthcare reform fail to sufficiently involve the citizens who pay for and are dependent on the health care system," Rep. McGihon said. "The Blue Ribbon Commission shifts course and aims to lower and contain healthcare costs by consulting consumers, businesses, and other members of the community." The committee's recommendations to the legislature are due November 2007.

For 2007, it is expected that the General Assembly will continue to wrestle with the rising numbers of uninsured, increasing premiums, and strong demand and increased costs for public insurance programs.

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Educational and Health Services

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Employment and Workforce Issues

Employment in the health industry continues to be limited by the supply side: there is a national desperation for healthcare workers, particularly nurses and other allied health professionals. 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 account for 25% of the entire healthcare workforce, but only 7% are age 30 or younger. According to the Colorado Center for Nursing Excellence, the 2003 shortage of nurses in Colorado was 11%, and the projected shortfall is 30% by 2020. The shortage of nursing faculty was 15–25% in 2004.

Significant barriers to the expansion of nursing and health professions workforce include severe financial constraints within Colorado's higher education system, wage gaps between faculty and practice settings (especially for nurses), and high rates of nursing faculty retirements. According to findings from the Colorado Health Institute's first Colorado Registered Nurse Workforce Survey, significant discrepancies exist in wages and education attainment levels between urban and rural areas. The longevity of the nursing workforce is most influenced by personal and family factors, as well as by age and retirements. A collaborative effort among Colorado's public and private sectors (including nursing constituents, the state workforce development system, and the healthcare industry) is looking to take advantage of existing resources and private-sector investments to target development of education capacity and faculty supply and to address retention and professional development issues. These endeavors show short-term promise but are part of a sustained long-term strategy in Colorado.

Healthcare Drives Spending in Other Sectors: Construction and Information Technology

Construction of new hospitals and renovation projects of existing institutions continue to boom at an unprecedented rate. An informal sampling of projects include 7 new facilities built within the last three years, 12 new facilities in progress, and 2 new facilities planned in the next three years. Eleven expansion projects have been completed within the last three years, and six projects are in progress. While there are significant costs to new construction, it is important for hospitals to upgrade facilities and technology to provide 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 45 Colorado hospitals reporting, about half (22) are classified as being in the preferred strategic planning phase of updating medical technology and facilities used in providing medical services. Planned new facilities include a new community sponsored hospital in Woodland Park and the move of St. Anthony's Central Hospital to Lakewood. Hospital, medical, and biotechnology-related capital construction continues at the Fitzsimmons campus, featuring the University of Colorado Health Sciences Center, The Children's Hospital, and the planned Veterans Administration Hospital. New hospital facilities for Memorial and Centura Penrose/St. Francis are underway in Colorado Springs.

According to the Colorado Center for Nursing Excellence, the 2003 shortage of nurses in Colorado was 11%, and the projected shortfall is 30% by 2020.

Unlike the hospital facility sector, the Colorado Department of Public Health and Environment reports continuing flat to very low rates of new licenses for long-term care facilities (nursing homes) and assisted living facilities. This is consistent with the overall small increase of new jobs being created in this sector.

Adopting of health information technology and developing the capacity for interoperable health information exchange (HIE) to allow patients' healthcare data to flow between different providers and healthcare organizations electronically continue to be priorities at the national and local levels. Federal agencies, with leadership from the Secretary of Health and Human Services; the Office of National Coordinator; the public-private commission, the American Health Information Community; the Agency for Healthcare Research and Quality (AHRQ); and most recently, the Centers for Medicare and Medicaid Services, are driving numerous 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 health information technology (HIT) adoption, setting up leadership and oversight entities, and, in some cases, providing resources and incentives for HIT and HIE adoption. In 2006, Colorado participated in a national steering committee of state level HIE initiatives to inform the national agenda and emerging state level interest, especially among policy makers.

Colorado's efforts to develop statewide interoperability continue through numerous avenues. These include the $5 million AHRQ-funded Colorado Health Information Exchange project (COHIE) that is developing technical architecture. There are numerous local HIE "nodes," including healthcare providers in Mesa, El Paso, and Weld counties. A multistakeholder coalition has been working to incorporate a new 501(c) nonprofit organization by 2007, called the Colorado Regional Health Information Organization (CORHIO). CORHIO will provide web-based shared HIE services and leadership to support a statewide HIE network. Adequate funding and the nature of investments required by various sectors remain core issues at national and state levels. While there are promising examples of sustainable HIE services and quality and cost improvements, launching and sustaining a critical mass of statewide HIE requires a viable business case for diverse users of the network. A newly established CORHIO will work to solicit investments, determine a start up business plan, and begin statewide HIE in Colorado.

Colorado consumers now have available 11 risk-adjusted mortality (death) indicators and four volume indicators to gauge Colorado full-service hospitals.

In some quarters, it is contended that these systems have a positive return on investment in improved resource management and reduction of errors. Early adopters of electronic health records (EHRs) report 92% improvement in overall efficiency, and 70% report cost savings. However, there is a growing body of evidence suggesting EHRs increase healthcare costs by declines in provider productivity and higher billings to payers and consumers. Additionally, error reduction is inconsistent and has yet to be linked to savings or reductions in malpractice premiums. Over time, as the healthcare system becomes "more wired," other systems enhancements in the delivery and payment schemes will be required to attain overall better performance or reduced medical cost trends.

Consumerism and Consumer Engagement in Healthcare

Many industry watchers claim that consumers have too long been insulated 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 better consumer behavior. It is hoped that high-deductible plans, HSAs, and changes to rollover provisions of flexible spending accounts may compel individuals to look for comparative cost and quality among providers of services. Studies have indicated that access to information, motivation, and education are required before an aggressive consumer attitude takes hold. However, information to enable this level of informed decision making is not necessarily readily available. In one positive development 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 (death) indicators and four volume indicators to gauge Colorado full-service hospitals. More information will be available in 2007 due to enacted Colorado legislation requiring a "hospital report card" and hospital infection rate reports. A Presidential Executive Order issued in 2006 will require 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 two years, Medicare has required participating hospitals, nursing homes, renal dialysis centers, and home health agencies to post quality of care data on the web.

In pay for performance, an incentive strategy adopted by Medicare, private purchasers and payers will pay financial rewards to hospitals and

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physicians whose data reflect 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. Only St. Mary's Hospital in Grand Junction is participating. Two other nonprofit groups, "Bridges to Excellence" and "The Leapfrog Group," are engaging employers, employer coalitions, and health plans in physician and hospital initiatives. Locally, pay-for-performance activities are in place by Anthem, Rocky Mountain Health Plans, and the Colorado Business Group on Health.

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, we ballooned 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 rates of obesity at 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, 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, identify specialists, translate "doctorese," and negotiate insurance claims for patients. Disease management programs are felt 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. However, disease management programs do not offer quick and substantial savings, especially when poorly implemented. Taken together, effective programs that are well managed will allow employers to successfully oversee their human capital and allow them to get in front of healthcare trends, as well as long- and short-term disability, productivity, and absenteeism costs.

Healthcare and Social Assistance Employment

Between 1996 and 2005, Colorado's population increased at a compound annual growth rate (CAGR) of 2.1%, and wage, and salary employment grew 1.8%. During this period, healthcare and social assistance employment expanded at a CAGR of 3.1%, with ambulatory healthcare increasing 2.5% and hospital employment rising 3.5%. The smaller subsectors also grew faster than the state population as nursing care employment increased 2.2% and social assistance employment rose 3.6%.

Growth rates for 2006 and 2007 remain solid and well above the rate of population growth for the state. Healthcare and social assistance employment will grow by 1.9%, or 4,500 jobs, in 2007. The supply of physicians, dentists, and other trained employees in the ambulatory healthcare subsector will not be able to meet demand, and employment will rise by 2,200 employees. Growth in the hospital and nursing care sectors will be constrained by the supply of trained employees; 400 and 500 workers will be added in these sectors, respectively. Social assistance will climb by 800 employees. ✜

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. Furthermore, 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 major 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. Moreover, several major outdoor recreation equipment and clothing manufacturers are headquartered in Colorado because of recreational opportunities and the environment. 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 2006:

- The Colorado Tourism Office received increased funding to promote tourism. This $19 million investment will make the state competitive with other states for the first time in over a decade.
- On January 3, 2006, Southwest Airlines started service at Denver International Airport (DIA), which has helped increase traffic.
- The 1,100-room Hyatt Regency hotel, which opened in late December 2005, now complements the expanded Colorado Convention Center.
- On October 7, 2006, the dramatic new Frederic C. Hamilton Building opened, providing a beautiful new addition to the Denver Art Museum and Colorado's cultural community.
- Denver voters approved an increase in the lodging tax in November 2005, which provided the Denver Metro Convention and Visitors Bureau with additional funding of more than $4 million to promote the city as a top-tier tourist and meeting destination.
- Finally, with 2005–06 setting a new record for skier visits and DIA traffic hitting an all-time high in August 2006, the year is shaping up to top the record number of visitors to the state set in 2005.

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LEISURE AND HOSPITALITY EMPLOYMENT
1997–2007
(In Thousands)

Year	Arts, Entertainment, and Recreation	Accommodations	Food Service	Total Accommodations and Food Service[a]	Total Leisure and Hospitality[a]
1997	37.6	39.5	149.6	189.0	226.6
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	43.0	40.0	174.3	214.3	257.3
2006[b]	44.0	40.6	178.5	219.1	263.1
2007[c]	44.4	41.2	182.1	223.3	267.7

[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 Boca Raton, Florida, in mid-October indicate that 2006 was a year of healthy growth and expansion. Total travel spending in the United States by both domestic and international visitors is projected to exceed $702 billion in 2006, which is up about 7.5% over the previous year. Expenditures are forecast to grow another 5.3% in 2007, to $740 billion. However, during the next few years travel spending growth is expected to be sluggish; this will reflect more stable travel prices, softer demand, and a general slowdown in consumer spending. However, the good news is that growth is continuing.

Leisure travel continues to be the bright spot in the travel picture. The outlook for domestic leisure travel is generally positive but reflects the current growth situation. A gain of 2% in domestic leisure travel is expected in 2006, and similar growth is anticipated in 2007. Business travel is forecast to be flat in 2006 and up by 1–2% next year.

International travel to the United States is projected to increase about 4% in 2006, to 51.4 million arrivals, finally eclipsing the record set in 2000. A 5% gain is forecast for 2007, with arrivals expected to exceed 54 million.

Air traffic is back, but with fundamental shifts. Low-cost carriers have grown their collective market share from 12% in 2001 to an expected 28% by year-end 2006. They establish a price ceiling for the entire industry. For 2007, the Air Transport Association (ATA) is projecting continued slow growth in domestic airline traffic. Airlines are expected to boost capacity a bit more in 2007 as available seat miles (ASMs) rise by 1.5–2%. Again, the action will be on international routes, where traffic should increase 5–5.5%, with a similar gain in capacity as airlines continue to shift to their more profitable routes.

COLORADO LODGING OCCUPANCY AND AVERAGE DAILY ROOM RATES 2005–2006

	Occupancy Rate Percentage		Average Daily Rate Dollars	
	2005	2006	2005	2006
January	52.9%	55.7%	$111.7	$120.7
February	58.7	61.2	123.5	130.8
March	59.9	65.4	124.2	129.8
April	54.9	55.6	89.6	99.0
May	56.1	58.4	91.6	99.1
June	70.6	72.5	100.4	109.2
July	75.4	75.4	106.3	113.9
August	71.5	72.0	105.7	113.7
September	64.6	67.8	100.7	109.3
Year to Date	62.8%	64.8%	$105.7	$114.0

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

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 6.7% in 2006, producing revenue per available room (RevPAR) gains of 7.9%. These trends will continue in 2007. Supply will rise 1.6%, and demand will climb 1.7%, resulting in relatively flat occupancy gains. Room rates are forecast to be up 6.5%, producing RevPAR gains of 6.7%. Lodging will enjoy increased profitability, totaling $25.8 billion in 2006 and $28.1 billion next year.

In summary, TIA expects to see modest growth in travel during 2007 as the economy slows and consumers become more cautious with their spending. Colorado's tourism economy has reflected many of these trends, and will continue to mirror them in the future. With slower economic growth and more cautious consumers, it is predicted that receipts in Colorado's travel, tourism, outdoor recreation, leisure, and hospitality economy will grow by a modest 4% in 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.

COLORADO LODGING AND HOSPITALITY FORECASTS

	2006			2007		
	Occupancy	Average Daily Rate	Revenue per Available Room	Occupancy	Average Daily Rate	Revenue per Available Room
Denver Metro Area						
South and SE	62%	$93.0	$57.7	63%	$97.0	$61.1
Midtown	61	75.5	46.1	60	79.0	47.4
Downtown	69	140.0	96.6	70	144.0	100.8
Northeast	73	84.0	61.3	72	89.0	64.1
West	64	83.0	53.1	65	86.0	55.9
North	57	68.0	38.8	60	70.0	42.0
Hwy 36 Corridor	66	99.0	65.3	68	102.0	69.4
Boulder	67	115.0	77.1	69	120.0	82.8
Subtotal	66	101.0	66.7	68	106.0	72.1
Colorado Springs	58	77.0	44.7	59	80.0	47.2
Resort Areas						
Vail	54	233.0	125.8	55	250.0	137.5
Aspen	62	314.0	194.7	60	345.0	207.0
Steamboat	61	132.5	80.8	59	140.0	82.6
Winter Park	53	108.0	57.2	54	110.0	59.4
Other resorts	51	194.0	98.9	53	195.0	103.4
Subtotal	60	203.0	127.9	63	230.0	144.9
Other Colorado Cities						
Durango	57	93.0	53.0	60	95.0	57.0
Grand Junction	70	64.5	45.2	69	68.0	46.9
Glenwood Springs	69	97.0	66.9	70	100.0	70.0
Estes Park	49	128.5	63.0	50	131.0	65.5
Montrose	38	76.0	28.9	45	88.0	39.6
Fort Collins	55	82.5	45.4	56	87.0	48.7
Other Colorado Areas	59	74.0	43.7	58	77.0	44.7
Colorado Total	62%	$104.5	$64.8	63%	$110.0	$69.3

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

Employment

While receipts are expected to grow by 4% in 2007, employment will increase by a smaller percentage. Leisure and Hospitality Supersector employment is forecast to climb by 1.7%, or approximately 4,600 employees.

Food service dominates the employment picture. While the number of food service employees will rise by 3,600, the percentage increase is relatively small, owing to the large base of this field.

Accommodations

According to the *Rocky Mountain Lodging Report,* statewide lodging occupancies are up 2 percentage points from 2005 (64.8% compared to 62.8%), and ADRs increased 7.9% ($114 from $105.7) through September 2006. The data show good improvement in 2006, which is consistent with national trends. Both the leisure and business travel segments have grown, and most segments of the lodging market have shown occupancy gains year-to-date. A closer examination of the data shows that in-depth increases have been accompanied by room rate growth in the Denver metro market, the resort market, and higher-end properties. Thus, the outlook is quite promising for these segments and not-so-promising for the economy sectors of the lodging market.

The Colorado lodging and hospitality forecast table shows data for many areas in the state by the key lodging variables of occupancy, ADR, and RevPAR. Slow, but steady, growth is anticipated in most

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regions. For the state as a whole, occupancy rates are expected to increase slightly, ADR will rise 5.3%, from $104.50 to $110, and RevPAR will increase 7%, from $64.79 to $69.30.

Thus, Colorado's lodging market fundamentals are expected to remain strong through at least the first three quarters of 2007. Demand in the primary segments of leisure, individual commercial, and group travelers is anticipated to remain strong. With supply growth limited by construction costs, demand growth is projected to continue outpacing it. 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.

Increase in capital availability for the hospitality industry is expected 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

Business travel in the United States, which includes meetings and conventions, has outpaced Colorado business travel, with a 1% increase compared to a 4% decline in the state in 2005. U.S. business travel represents 17% of all overnight trips; this percentage is 13% for Colorado. Colorado trails the nation in the percentage of people traveling to attend conventions and conferences, 23% to 21%. However, Colorado outperforms the United States in the percentage of business travelers attending business meetings, 42% compared with 36%.

As predicted at the 2006 Colorado Business Economic Outlook Forum, 2007 will be a strong growth year for meetings and conventions in the state. The primary reason is a maturing of new facilities, such as the Colorado Convention Center Expansion and Hyatt Regency Convention Center Hotel in Denver, as well as the expanded facilities at the Broadmoor in Colorado Springs and others across the state. A strong national economy is also a contributing factor.

Reports from convention and visitor bureaus across the state show 2007 meeting and convention business ranging from flat to more than 100% growth. Based on these reports, Colorado is anticipated to experience an average increase of 10–12% in revenue (based on room nights already booked) from meetings and conventions in 2007. This growth will be experienced by both conference and convention centers, as well as hotels.

The future looks bright for continued growth in the state's meeting and conventions sector of the economy. As in the recent past, Denver will lead the growth until its booking capacity is reached. The recent and current investment by public and private sector organizations in new and expanded meeting facilities will also drive this projected growth.

COLORADO CASINOS
1997–2007

Year	Colorado Casinos Open	Colorado Devices (000s)	Adjusted Gross Proceeds[a] (In Millions)			
			Black Hawk	Central City	Cripple Creek	Total
1997	54	13.4	$234.6	$87.4	$108.6	$430.7
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	677.5
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[b]	47	17.3	562.7	72.5	153.7	788.9
2007[c]	47	17.5	579.6	73.2	156.5	809.3

[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.

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), which is all sums wagered by players less payments to players, increased $27.6 million in 2004 over 2003 and $29.6 million in 2005 compared to 2004, and are projected to climb $33.4 million in 2006.

Black Hawk continues to dominate the Colorado casino sector. It is clearly the leader, with 21 casinos, more than 10,000 gaming devices, and over 71% of the industry's AGP.

With the completion of the new road from I-70 to Central City in 2005, casino revenues in the city rose 36.5%. In 2006, though, the revenues have been relatively flat. Cripple Creek, on the other hand, is continuing to have steady, consistent growth. It is anticipated that the Colorado gaming industry will remain strong in 2007, with adjusted gross revenue increasing 2.6%, to $809.3 million.

In addition to the state-regulated casinos, Colorado has Indian tribe casinos in southwest Colorado. The Sky Ute Casino in Ignacio and the Ute Mountain Casino in Towaoc make imortant contributions to this sector, although their data are not available.

Restaurants

The food service sector has been one of the strongest-performing sectors of the Colorado economy. Colorado restaurants are estimated to generate more than $7.5 billion in sales and $470 million in state and local taxes, while employing over 178,400 workers in approximately 9,500 establishments in 2006. Colorado restaurant sales are expected to grow 6.8% in 2006, according to the Colorado Restaurant Association, ranking Colorado fourth in the nation in restaurant sales growth.

"These figures are a bright spot for Colorado's economy as they indicate the state is on a healthy economic course after being rocked in the years following 9/11 when many industries, including tourism, faced an economic downturn," said Pete Meersman, president and CEO of the 4,500-member Colorado Restaurant Association, which represents more than 9,500 restaurants statewide.

"Coloradans will spend nearly half of their food dollar in restaurants in 2006," said Meersman. "Our tourists and many of our dual-income families would rather spend time on the slopes or engaging in our wonderful outdoor activities than in their home kitchens. The figures show Colorado is clearly a dine-out state."

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COLORADO PARKS VISITS
1997–2006
(In Thousands)

Parks	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[a]
Bent's Old Fort NHS	38.8	41.1	36.8	30.5	31.0	29.8	31.2	31.0	27.8	26.2
Black Canyon of the Gunnison NP	209.9	193.5	200.1	191.5	181.0	173.7	167.2	175.6	180.8	152.2
Colorado NM	307.1	291.7	297.1	269.3	237.6	294.0	336.6	352.6	347.1	329.4
Curecanti NRA	966.7	973.7	1,044.5	1,022.3	879.8	732.7	1,008.8	1,006.1	882.8	926.9
Dinosaur NM[b]	330.5	311.0	303.9	293.8	241.5	221.4	214.5	240.7	266.8	202.3
Florissant Fossil Beds NM	86.5	79.8	81.5	82.1	79.7	62.5	67.5	61.3	59.5	58.5
Great Sand Dunes NM	309.9	279.8	286.7	260.8	277.5	234.8	251.4	267.2	279.6	262.5
Hovenweep NM[b]	10.8	10.4	20.9	19.1	16.5	13.6	13.1	11.8	11.7	11.7
Mesa Verde NP	627.7	604.6	635.7	452.3	513.4	406.4	438.6	446.8	498.3	553.2
Rocky Mountain NP	2,965.4	3,035.4	3,186.3	3,185.4	3,139.7	2,988.5	3,067.3	2,781.9	2,798.4	2,788.4
Total Visitors to Parks and Sites	5,853.1	5,820.9	6,093.8	5,807.0	5,597.6	5,157.4	5,596.3	5,374.9	5,352.8	5,311.3

[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.

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COLORADO SKIER VISITS BY TYPE OF SKI AREA
1996–2007
(In Millions)

Season	Destination Resorts[a]	Front Range Destination Resorts[b]	Gems/Front Range[c]	Total
1996-97	3.89	6.82	1.14	11.85
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[d]	3.79	7.61	1.36	12.76

[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.

Colorado consumers will spend $20.7 million per day on food away from home in 2006, but the industry's trickle-down effect on Colorado's economy reaches far beyond that. "Every $1 spent dining out generates $1.36 in sales in other industries," said Meersman. "The forecast for Colorado's restaurant industry is flourishing, despite such challenges as higher energy and food costs."

Colorado restaurants will continue to show growth in 2007, with sales projected to increase 5.5% and employment to grow to 182,000 workers.

Parks and Outdoor Recreation

Visitation to state parks, national forests, Bureau of Land Management lands, and various county park and open space areas exceeds visitation to National Park Service (NPS) facilities. Indeed, NPS visitation is a small component of the overall outdoor recreation system in Colorado, and NPS visits have been declining.

In contrast, Colorado state park visits are increasing. 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. Their registration program has registered more that 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 recreation in Colorado occurs on privately owned lands. Unfortunately, reliable visitation data for these other various outdoor recreation areas are unavailable. Given this lack of data, the forecast is therefore based on these limited data points. Moreover, the outdoor recreation sector, both summer and winter, is extremely sensitive to weather and natural hazards, particularly wildfires and floods. Taking all of 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 4% in 2007.

Skiing Industry

Colorado's 26 ski areas soared to a record 12.53 million skier visits in the 2005–06 ski season. This eclipsed the previous record of 11.98 million set in 1997–98 by over half a million, and is an increase of more than 700,000 over the 2004–05 winter season. 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.

Colorado Ski Country USA reports and distributes skier visit numbers in three overall categories: destination resorts, Front Range destination resorts, and gems/Front Range resorts. All categories reported gains over the 2004-05 season for a total increase of 6%. Front Range destination resorts posted the largest overall growth, recording an increase of 560,927 skier visits for an impressive 8.1% gain. The gems/Front Range resorts also saw solid gains of 5.6%. The destination resorts ended the season with a 2.3% rise.

According to numbers released by the National Ski Areas Association, the country also posted its best season ever by hosting more than 58 million skiers during the 2005-06 winter season. Colorado once again maintained its top position in the ski industry as market share leader, accounting for more than 21% of the nation's ski business.

Colorado continues to be the nation's premier winter ski destination, with nearly 39,000 acres of skiing, 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 American ski resorts. Six Colorado resorts were in the top 10—led by Vail, which ranked #1. The top 10 resorts, according to *SKI Magazine's* readers, are:

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

The 2006–07 ski season will be helped by the investment of millions of dollars in on- and off-mountain improvements by the resorts. The enhancements include new restaurants, gondolas, terrain, villages, snowmaking equipment, high-speed lifts, grooming machines, children's centers, expanded air service, and guest service initiatives. Events will also help boost ski visits. Some of the notable ones for the upcoming season are:

- FIS Women's Ski World Cup, and ESPN Winter X Games 11 at Aspen
- FIS Men's Tour World Cup, World's Best Chocolate Chip Cookie Competition, and the Culinary Classic at Beaver Creek
- The Hartford Ski Spectacular and U.S. Snowboard Grand Prix at Breckenridge
- The 33rd Annual Bud Light Cowboy Downhill, Fourth Annual Ski Jam, Winter Carnival, National Brotherhood of Skiers Summit, and Freestyle Junior Olympics at Steamboat
- Snow Daze, the Honda snowboard competition session, Junior Olympics, the Taste of Vail, Film Festival, and the American Ski Classic at Vail
- USSA Chevrolet Superseries NorAm Cup Women's Slalom/Giant Slalom, Rocky Mountain Freestyle Mogul Competition, 32nd Annual Wells Fargo Bank Cup, Coca-Cola Spring Splash at Winter Park
- Jeep's U.S. Freeskiing Open and Special Olympics Colorado at Copper Mountain
- Subaru Freeskiing Open at Telluride
- 16th Annual U.S. Extreme Freeskiing Championships at Crested Butte

With the momentum of the record-breaking 2005–06 season, multimillion-dollar resort improvements, key events, a solid economy, excellent early reservations, and a strong international market, it is projected that skier visits will increase by 1.9% and set a new record if Mother Nature cooperates and produces the needed snow.

Air Travel

Air travel is very important to the Leisure and Hospitality Supersector. DIA posted its second consecutive record year in 2005 with 43.4 million passengers. A total of 4.3 million passengers used DIA in August, making it the busiest August ever and the 16th straight month that DIA has set a monthly passenger record. The August total was 5.1% higher than the 4.1 million travelers who passed through DIA in the same month of last year. Through the first eight months of the year, DIA has recorded 32.4 million passengers, a 9.6% increase

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over the 29.5 million travelers who used the facility in the same period in 2005.

August was DIA's third-busiest month. In the three months of summer, a total of 12.3 million passengers used DIA, making it the busiest summer ever at the Denver airport.

Through the first eight months of 2006, DIA is on track to set another passenger record. A 10% increase for the entire year would move DIA's 2006 passenger mark close to 48 million.

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 the next few years as 48.6 million passengers are expected in 2007.

Colorado Springs Municipal Airport enplaned just over 1 million passengers in 2005—about the same number as 2004. Figures available for 2006 show that enplanements are basically flat or down slightly for the year, and are expected to be flat in 2007.

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

DENVER INTERNATIONAL AIRPORT PASSENGERS
1997–2007
(In Millions)

Year	Enplanements	Deplanements	Total Passengers[a]
1997	17.4	17.5	35.0
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	42.3
2005	21.6	21.7	43.4
2006[b]	23.8	23.8	47.6
2007[c]	24.3	24.3	48.6

[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.

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 influence that volatile energy prices have on discretionary income may affect funds available for travel expenditures.

Another concern is the high level of debt that is currently carried by consumers and its impact on their ability to travel.

Increased competition from in-home entertainment providers is another challenge. U.S. households spend $125 billion annually on home electronics. Computers, HD and flat-screen LCD televisions, high-tech audio systems, CDs, DVDs, cable services, and NetFlix provide a multitude of entertainment alternatives, making it less expensive to stay at home than 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 a growing challenge for travel marketers to convince the consumer to spend their discretionary income on travel rather than on competing products. ✜

Other Services

The Other Services Supersector consists of three main sectors: Repair and Maintenance; Personal and Laundry Services; and Religious, Grantmaking, Civic, Professional, and Similar Organizations. It is comprised of a large array of companies in many different industries. While there are some large, recognizable firms in the supersector (Jiffy Lube, Young Life, and the Western Stock Show Association), the majority of businesses are small-scale local shops. Some of the more obscure members of this sector include Woody's Welding Service, Custom Kentucky Rifles Inc., U Needa Haircut Inc., Suds Your Duds Laundromat, Poor Boys Inc., and the Fraternal Order of Eagles.

Nationally, this supersector only employs about 5.4 million people, or approximately 4% of total employment. Because many companies in this supersector provide personal and consumer services, employment growth is driven largely by population expansion and is more resilient to economic downturns. As long as our hair continues to grow, our cars continue to break down, and our clothes continue to get dirty; there will be a solid demand for the barbers, mechanics, and dry-cleaners that make up this supersector. In the period from 1996 to 2005, national employment in the supersector grew at a compound annual growth rate (CAGR) of 1.5%, compared to 1.2% for total employment. Over the same period, the national population grew at a CAGR of 1.1%.

In Colorado, 88,700 people were employed in the Other Services Supersector in 2005, accounting for

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OTHER SERVICES EMPLOYMENT
1997–2007
(In Thousands)

Year	Repair and Maintenance Services	Personal and Laundry Services	Religious, Grantmaking, Civic, Professional, and Similar Organizations	Total[a]	Percentage Change
1997	21.4	18.8	35.5	75.7	4.1%
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	22.6	21.9	44.2	88.6	1.4
2006[b]	22.4	22.1	45.0	89.5	1.0
2007[c]	22.4	22.4	45.9	90.7	1.3

[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.

Other Services

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approximately 4% of total state employment. The majority of the roughly 12,400 companies in the supersector are small businesses—average employment was just over five. Average annual wages at these companies were slightly more than $28,800, compared to the state average of $41,600.

In Colorado, this supersector grew at a CAGR of 2.2% between 1996 and 2005, compared to state population growth of 2.1%. Employment growth is typically very stable—the supersector has posted job gains in every year since 1990. Growth slowed significantly in 2003, picked up in 2004, and again slowed in 2005. This reduced rate of growth is expected to continue in 2006 as employment is projected to be up just 1% (or 900 jobs), to 89,600. The supersector is projected to grow slightly in 2007, adding 1,100 positions.

The largest subsector comprising Other Services is the Religious, Grantmaking, Civic, Professional, and Similar Organizations category. This subsector, which accounts for about 49.8% of total supersector employment, is comprised of an array of nonprofit organizations—grant and scholarship foundations; environmental and wildlife conservation, social advocacy, business, professional, civic, political, and religious organizations; chambers of commerce; and homeowners' associations. With a CAGR of 3.1% since 1996, employment growth in this subsector is the highest of the three Other Services categories, and is in line with the national trend for this subsector. In 2006, employment is expected to increase by 800, reaching a total 45,000 jobs. The largest component of this growth comes from the professional, business, and social advocacy groups. Religious and civic organizations have been in slight decline during the past few years. Another 900 jobs are expected to be added in the Religious, Grantmaking, Civic, Professional, and Similar Organizations area in 2007.

Average annual wages at these companies were slightly more than $28,800, compared to the state average of $41,600.

The next largest sector is Repair and Maintenance Services. The major employers in this category provide automotive services, but also included are furniture, clothing, and appliance repair and maintenance businesses. Since 1996, the sector has posted a CAGR of 1%, yet it has been consistently losing jobs since 2003. This lack of growth may be attributed to several things, one of which may be Americans becoming a more disposable society. For instance, a broken laptop or iPod may be easier, or even cheaper, to replace than to have it fixed at a repair shop. As a result, demand may be less for individuals who do repair work. Additionally, the purchase of service contracts may hurt independent repair and maintenance businesses not associated with the manufacturer.

Nationally, this subsector has seen a CAGR of 1%, yet it is projected to be up 11,400 jobs in 2006. However, on a state level, the subsector is projected to lose an additional 200 jobs. This employment level of 22,400 is expected to hold through 2007.

The Personal and Laundry Services subsector is comprised of a wide and often unusual combination of businesses. Beauty and tanning salons, barbershops, dry-cleaning and Laundromats, pet care, photo processing, parking lots and garages, and funeral services are all classified in this group. The subsector has grown at a CAGR of 2% since 1996. In 2006, it is expected to increase by 200 jobs, reaching 22,100. On a national scale, this sector is projected to be down about 2,000 overall. An additional gain of 300 positions is expected in 2007 for the state. ✜

Government

Employment in the Government Supersector includes a wide variety of activities and several levels of government, including federal civilian, state, and local government employment. Governmental activities comprise executive, legislative, and other governmental 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.

Total Colorado government employment grew at an average annual rate of 1.5% from 2000 to 2005. In 2005, government employment in Colorado rose 1.3%, compared with the national government sector employment increase of 0.8%. Employment growth in the government sector is estimated to remain positive in 2006, with total payrolls increasing 1.4%, to 368,000 positions. In 2007, the forecast calls for the sector to increase at a slightly slower rate of 1.2%, bringing total government employment to 372,500 positions.

Federal Government

The level of federal government employment in Colorado has generally been on a downward trend since 1994, with the exception of the year 2000 when it increased 1.3% due to the 2000 Census release. Small increases also occurred in both 2002 and 2003 as a result of the September 11 attacks. From 2000 to 2005, federal government employment grew at an average annual rate of -0.8%. Federal government employment at the national level has also exhibited similar trends since peaking in 1990. In 2005, Colorado's federal government payrolls fell 0.4% compared to a 0.2% decline at the national level. The decrease in federal employment in Colorado is expected to continue in 2006, with a 0.5% drop followed by a slightly softer decline of 0.2% in 2007.

Federal government job losses in Colorado are currently being driven by the state's two largest federal employers. The U.S. Postal Service, which employs almost 11,000 workers in Colorado, is experiencing employment reductions due to

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GOVERNMENT EMPLOYMENT IN COLORADO
1997–2007
(In Thousands)

Industry Group	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[a]	2007[b]
Total Government	315.6	322.3	328.4	337.0	344.1	355.4	356.2	358.5	363.0	368.0	372.5
Federal	54.3	54.5	54.1	54.8	52.9	53.2	53.5	52.9	52.7	52.4	52.3
State	74.5	75.9	77.1	78.6	80.0	81.9	80.3	81.5	82.3	82.8	83.6
General	27.8	28.6	29.5	30.6	31.3	31.9	30.1	29.7	30.0	30.1	30.4
Education	46.7	47.3	47.6	48.0	48.7	50.0	50.2	51.8	52.3	52.7	53.2
Local	186.8	191.9	197.1	203.6	211.2	220.3	222.4	224.2	228.0	232.8	236.6
General	89.1	91.7	94.6	98.4	102.3	106.5	107.2	108.4	110.4	113.1	115.0
Education	97.7	100.2	102.5	105.2	108.9	113.8	115.2	115.8	117.6	119.7	121.6

[a]Estimated.

[b]Forecast.

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

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increasing productivity from the automation of mail processing and attrition. Employment reductions at the U.S. Postal Service in the Colorado/Wyoming district reflect national patterns.

The Department of Defense, Colorado's second largest federal employer, with about 10,300 employees across the state, announced the impending closure of the Buckley Annex at Lowry as part of the 2005 Base Realignment and Closure process that will combine 26 facilities nationwide into just five facilities. The Buckley Annex currently houses the Defense Finance and Accounting Service and the Air Reserve Personnel Center. In total, the Buckley Annex currently employs approximately 2,000 workers, down from about 3,000 employees 10 years earlier. The majority of job losses are expected to occur in 2008–2010, although some cuts will likely be made in 2007, particularly through attrition.

The Department of Interior (DOI), the nation's principal conservation agency, is the state's third-largest federal employer, with about 6,700 workers in Colorado or roughly 8.4% of the DOI's total workforce of 80,000. In fact, the DOI has more employees in Colorado than in Washington, D.C., partly because so much of the land under DOI management is located in the western United States. The National Park Service, the Bureau of Land Management, the U.S. Geological Survey, and the Minerals Management Service are among the DOI's eight bureaus. Together, the three largest federal employers in Colorado represent more than half (53%) of total federal employment in the state.

Federal spending levels for nondefense and defense expenditures provide insight into the expansion or contraction of U.S. government employment. In support of the 2003 invasion of Iraq, national defense spending increased 11.3% in 2002 and 13.7% the following year. By 2005, national defense spending had slowed moderately, to a 6.9% annual increase, and through Q3 2006, national defense spending was up just 6.9% compared to the same three-month period in 2005.

Federal spending related to nondefense projects has also increased in recent years amid rising healthcare costs and increasingly expensive entitlement programs, such as Social Security, Medicare, Medicaid, and unemployment compensation. Between 2002 and 2005, federal nondefense spending increased 6%, which was similar to the 6.9% year-to-date gain reported through the third quarter of 2006. The Bureau of Economic Analysis also estimates that state and local government spending is up 7.3% through Q3 2006, compared to a 5.3% average annual increase between 2002 and 2005. It is expected that increases in federal defense spending will not gain momentum in 2007, but that expenditures will grow at a pace similar to 2006. Nondefense spending, on the other hand, will increase at a faster rate. These changes in federal spending will not likely impact the Colorado economy in a significant manner, although the regional impact of this spending will help maintain federal government payrolls in the state.

Federal spending related to nondefense projects has increased in recent years amid rising healthcare costs and increasingly expensive entitlement programs.

State Government

Between 2000 and 2005, state government employment grew at an average annual growth rate of 0.9%. When state revenues fell 13% in the state fiscal year beginning in 2001, state government employment (noneducation) began to decrease, falling 5.6% in 2003 and 1.3% in 2004. These declines, coupled with flat growth in state education employment, which accounts for approximately 64% of state government employment, led to an overall decrease of 2% in 2003 and tepid growth of 1.5% the following year. After increasing 1% in 2005, the forecast calls for total state government employment to grow 0.6% in 2006 and 1% next year.

The 2001 slowdown in state government employment and the decline experienced in 2004 can be attributed to weaknesses in Colorado's economy and the stock market, which significantly reduced the state's sales tax and capital gains income tax collections. During the same period, state employees took advantage of a relatively low rate of service credits and purchased years to add to their pension. Consequently, the purchasing of years led to a higher than average number of retires in both 2002 and 2003. Many of the vacancies left by these retirees remained open as a number of state departments implemented a voluntary hiring freeze in an effort to minimize personnel expenditures. To a lesser effect, this trend continued into 2004.

Since Colorado's economic recovery began in 2004, tax revenue collections have been strengthening and, in fiscal year 2006, revenue collections finally surpassed their pre-recession levels. State sales and use tax revenues will continue to rise for the foreseeable future as Colorado payrolls strengthen and consumers and corporations have more disposable income available to spend on goods and services. Additionally, individual income tax receipts are forecast to remain relatively flat in fiscal year 2007 after climbing 17.9% in fiscal year 2006. Corporate income tax receipts will increase a staggering 42% in fiscal year 2006, but decline 8.9% in 2007. Typically, this type of news would correlate to an expansion in state government employment. However, the additional revenues collected by the state as a result of Referendum C will be used to restore previous budget cuts and fund existing projects that were placed on hold as a result of the recession.

The Tax Payers Bill of Rights (TABOR) is a state constitutional provision that limits state revenue growth to the sum of inflation, plus population growth in the previous calendar year and appropriations growth to 6%. Due to the 2001 recession and an exceptionally low rate of inflation in 2004, paired with low in-migration, state government growth was limited in 2005. On November 1, 2005, Colorado citizens passed Referendum C, authorizing the state to retain and appropriate all revenues collected during the period between July 1, 2005, and June 30, 2010. As the state must still maintain appropriations under the 6% Arvescough-Bird limit, they will have a minimal impact on state government payrolls. The governor's budget request starting July 2007 contains a 6% general fund increase; however, this is primarily to support the natural increases for state correctional facilities, K–12 education, and Medicaid. Prior to the 2001 recession, state expenditures increased at an average of 6%.

The State of Colorado retained $437.7 million in unbudgeted general fund surplus per Referendum C in fiscal year 2005–2006, which will be split between transportation (two-thirds) and capital construction projects (one-third). In total, the passage of Referendum C allowed the state government to retain $1.116 billion in tax revenue for fiscal year 2005–2006 that otherwise would have been returned to taxpayers according to TABOR.

Beginning in July 2004, the University of Colorado became an enterprise, and in July 2005, the remaining state institutions of higher education became enterprises. Because of their enterprise status, all tuition and fee collections from the state institutions of higher education do not count as TABOR revenue. The impact of enterprise status on employment growth at the state's institutions of higher education is uncertain; however, the forecast allows the higher education sector to grow more liberally than the remaining sector of the state government.

Higher education in Colorado is comprised of 12 four-year public institutions and 16 two-year public institutions. In addition, approximately 100 accredited private institutions and numerous private occupational schools play significant roles in Colorado's higher education success, although only employees of public institutions are accounted for under the Government Supersector. Colorado's 28 public higher education institutions awarded 39,918 degrees and certificates in the 2005–2006 school year, up from 1.9% from the previous school year. Baccalaureate degrees accounted for about half of the total degrees and certificates awarded, followed by 17.6% for certificates, 15.2% for associate degrees, and 14.1% for master's degrees.

Colorado ranks third behind only the District of Columbia and Massachusetts in the percentage of residents with at least a bachelor's degree, according to the 2005 American Community Survey from the U.S. Census Bureau. About 35.5% of Colorado residents had earned at least a bachelor's degree in 2005, up from 33.7% in 2004, which was the fifth highest rate in 2004.

Local Government

Local government is comprised of municipalities, counties, school districts, and special districts. As of September 2006, there were 2,578 active local governments in Colorado, including 64 counties and 271 municipalities. Special districts range from fire districts to urban drainage and flood districts to metropolitan districts.

From 2000 through 2005, local government employment in Colorado increased at an average annual rate of 2.3%. Total local government grew 1.7% in 2005 after posting only a 0.8% gain the prior year. Local government at the national level increased 1.1% from 2004 to 2005. A closer look at local government employment in Colorado reveals

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that noneducational employment increased 1.8% in 2005, while local educational services employment, which accounts for 52% of local government employment, rose 1.6%. Overall, local government employment is expected to increase at a stronger clip of 2.1% in 2006 and then slow to a 1.6% gain in 2007. The forecast has both noneducational and educational local government employment in Colorado growing at a faster rate in 2006 than in either the year prior or the year after.

County and municipal government employment is driven by tax and fee revenues. Counties tend to rely heavily on property tax revenue, whereas cities in Colorado depend greatly on sales tax collections. Building permits and other development fees also generate revenue for local governments in Colorado. Strong retail sales tax receipts and strong residential construction activity propped up 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 2006, municipalities are reporting increases in overall employment, while county employment is generally flat. Still, each region is experiencing varying revenue and subsequent employment impacts, depending on the retail environment, strength of the residential market, and other factors. The City and County of Denver, for example, will expand its payrolls by 2.6% in 2007 primarily due to increased sales tax and lodger's tax revenue as reflected in record passenger traffic at Denver International Airport and increased visitors for business and leisure travel. The new positions will effectively restore the jobs lost during the recent downturn despite hiring constraints such as the rising cost of medical benefits. Jefferson County, on the other hand, is adding only a handful of new positions because revenue collections are trailing off. Meanwhile, Douglas County is only maintaining current staffing patterns. Voters in Longmont approved Issue 2A in November 2006 that increases the city's sales and use tax from 2.95% to 3.275% and creates $5.3 million in additional annual revenue. The city will use a portion of the new funds to add at least six new positions to combat local public safety issues.

In 2006, municipalities are reporting increases in overall employment, while county employment is generally flat.

Changes in the local education subsector employment are estimated using information on school district enrollment. The Colorado Legislative Council is estimating a 1.2% enrollment increase from the 2005–2006 school year to the 2006–2007 school year, a difference of 8,770 full-time-equivalent (FTE) students that will bring total enrollment to 734,740 FTE students. The 2006–2007 enrollment gain is slightly higher than the 1% growth average over the 2000–2005 period.

Budgeted staffing changes for the coming school year and projected population changes also impact the Government Supersector employment forecast. A fall 2006 survey of budgeted staff changes in Colorado's school districts with student enrollment of greater than 5,000 suggests that total employment will increase about 1.5% in 2007. Sixteen of the 29 surveyed districts responded. Denver Public Schools, Adams County 14, Jeffco Public Schools, Boulder Valley, Poudre School District, and Colorado Springs 11 are among Colorado's school districts facing declining enrollment. Metro Denver, Colorado Springs, and northern Colorado account for the majority of student enrollment in the state. In the fall of 2005, total enrollment at Colorado school districts exceeded 766,600 students. The Colorado state demographer is forecasting a 2% overall population increase in 2007 and an increase in net migration from 32,000 in 2006 to 54,000 the following year. Net migration has slowed significantly in recent years, from 81,900 residents in 2001, but has posted annual gains since 2004.

Overall enrollment in Colorado's traditional school districts is generally flat, although analysts note that stalled or declining enrollment in traditional schools may be answered partly by the growing popularity of charter schools, as well as stricter enforcement of immigration policies. Charter school enrollment has been increasing and is expected to continue to grow over the next several years, implying consequential employment growth. During the 2004–2005 school year, Colorado was home to 107 charter schools that served 36,900 students. The total number of charter schools rose to 120 in the 2005–2006 school year, while enrollment climbed 20%, to about 44,300 students. The increase in enrollment is due to both a rise in enrollment at existing schools and the addition of new schools. About 135 currently exist in Colorado as of the fall of 2006 but enrollment totals were not yet available at the time of this writing. Charter school employees are public employees by law and included in the local government education subsector.

In November 2006, Colorado voters approved a record $1.1 billion for building and repairing schools in 13 school districts across the state. The Boulder Valley School District will use the $296.8 million in bonded revenues to upgrade all of its 54 schools, while new schools will be added in at least the following school districts: Douglas County, Westminster 50 (Adams County), Brighton 27J (Adams County), Commerce City 14 (Adams County), Eagle County RE-1, and Lewis-Palmer 38 (El Paso County). Voters also approved school-related bond measures in Arapahoe, Garfield, Grand, Larimer, and Routt counties. In addition, 21 school districts sought a total of $24.9 million in mill levy overrides to fund regular operating expenses.

Colorado ranked 13th in the nation in the percentage of residents with a high school degree (including equivalency), according to the U.S. Census Bureau's 2005 American Community Survey. About 88.7% of Colorado residents had earned at least a high school diploma in 2005, up from 87.4% in 2004, which ranked 17th highest that year.

According to the National Center for Education Statistics' Projections for Education Statistics through 2015, total enrollment in elementary and secondary schools across the nation is expected to increase 7% between 2003 and 2015, compared to 12.7% growth projected for Colorado. Colorado ranks ninth for the largest projected gain among the 32 states with projected enrollment increases between 2003 and 2015. ✜

International Trade

Prospects for Colorado Exports in 2007

The global economy had considerable momentum in the first half of 2006, which led to strong increases in the growth of U.S. and Colorado exports during the first eight months of the year. However, global growth is set to slow mildly through the rest of 2006 and into 2007 as the softening of the U.S. economy, primarily from the slowing housing market, weighs on the world economy.

The weak U.S. housing market is a factor being closely watched by international investors and will likely have an effect on trade. With direct effects on employment in the construction sector and a secondary impact of lower consumer spending, the softening U.S. housing market will likely cause global growth to slow in 2007. During previous years, as housing prices grew rapidly, consumer spending increased in response. With the current housing slump, consumer spending is expected to contract. Countries where manufacturing activities dominate, especially China, will be most affected.

In contrast to the negative effects that the U.S. housing market will likely have on the global economy, declining oil prices are predicted to partially offset the impact. Lower oil prices will benefit consumers as transportation costs drop and individual households spend less at the pump. International trade is expected to benefit as a result of lower transportation costs, especially for exporters of heavy manufactured goods.

Another factor affecting the global economy is China's trade surplus with the rest of the world, which reached a record $18.8 billion in August 2006 and has intensified the debate about whether China's currency, the yuan, is undervalued. Some of China's trading partners, especially the United States, have argued that China keeps the yuan low to boost exports. The United States is likely to step up its pressure on China to let the yuan rise. The yuan has increased by less than 2% since being revalued in July 2005 after being tied to the dollar. Since April 2006, China has raised interest rates twice, as well as demanded higher reserves for banks, in a move to control the expanding economy and stem inflation.

With the WTO Doha round of negotiations at a stalemate, the United States continues to negotiate new bilateral free trade agreements in an effort to open markets for American exporters. Although the general public equates these agreements with the elimination of duties on the export and import of goods, the agreements also include sections on trade in services like banking and insurance, as well as agreements on the protection of intellectual property rights, investments, and the provision of "national (equal) treatment" on government procurement contracts at the federal and state levels. These expanded agreements open new opportunities for U.S. businesses and simplify doing business internationally.

Through August 2006, Colorado exports to seven of the state's nine free trade partners increased over the same time period in 2005. Canada, Mexico, Australia, Singapore, Israel, Chile, and Bahrain all bought more from Colorado in 2006, with only Jordan and Morocco showing declines. Colorado exports to the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR) countries as a group increased 5%, with only Nicaragua and the Dominican Republic decreasing. New agreements with Oman, Korea, Thailand, Panama, Peru, and Colombia are in various stages of discussion, but Trade Promotion Authority for the President expires in July 2007 and may not be reinstated by a new Congress.

The Colorado General Assembly passed legislation during the 2006 session that could have removed Colorado from the government procurement rules of international trade agreements; however, the governor vetoed the bill. Although the intent of the legislation was to limit foreign companies from

VALUE OF COLORADO EXPORTS FISCAL YEARS 2001–2007 (In Millions of Dollars)

Year	Total Exports	Percentage Change
2001	$6,125.5	7.1%
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[a]	8,004.6	18.0
2007[b]	8,885.1	11.0

[a]Estimated.

[b]Forecast.

Source: World Institute for Strategic Economic Research and Colorado Business Economic Outlook Committee.

bidding on state contracts, the legislation could have eliminated Colorado-based companies from receiving "national treatment" on many foreign government procurement contracts. There are signs that other states in the Rocky Mountain region are using the passage of this bill to argue against international companies selecting a Colorado location on the basis that similar legislation might someday become law.

Taking all of these global growth factors into consideration, the International Trade Committee is projecting acceleration in the growth of Colorado exports through the end of 2006, with year-end growth at 18%. The committee is forecasting an 11% increase in 2007 based on a mild slowdown in the U.S. and global economies.

Colorado's Manufactured Exports

Colorado exports of manufactured, mineral, and agricultural products rose 2% in 2005, to a record $6.8 billion. Although exports set a new high, a 33% drop in international sales of semiconductors inhibited more dramatic growth. During 2006, the dip in semiconductors has reversed, leading to an increase of almost 91% through August over the same period last year. With this growth in what is now Colorado's largest export category, plus an overall 12% increase in other Colorado exports, state exports have risen 20% over last year. In 2006, advanced technology products again dominated Colorado's top export commodities. In addition to semiconductors, major manufactured export categories included computers and peripherals, computer components, telecommunications equipment, medical instruments, scientific/measuring equipment, photographic film and plates, machine tools for material removal by laser, and aviation related products.

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

Country	2002	2003	2004	2005	Percentage of Total
Canada	$1,425.5	$1,431.7	$1,660.4	$1,807.5	26.6%
Mexico	370.3	570.4	689.4	849.0	12.5
Japan	320.4	443.1	411.3	384.3	5.7
China (Mainland)	436.8	213.2	356.2	355.7	5.2
Germany	180.9	282.0	272.1	277.9	4.1
Korea, Republic of	281.5	424.6	341.9	273.8	4.1
Malaysia	237.3	302.0	309.5	246.1	3.6
Netherlands	288.2	245.6	236.7	243.5	3.6
United Kingdom	290.2	237.3	253.5	240.5	3.5
France	209.0	267.1	250.1	224.9	3.3
Australia	200.4	112.7	140.8	222.8	3.2
China (Taiwan)	235.9	237.0	255.1	205.7	3.0
Hong Kong	153.1	202.4	228.0	204.5	3.0
Singapore	117.5	236.7	187.2	156.1	2.3
Brazil	77.9	57.2	57.9	82.9	1.2
All Other Countries	696.8	2,277.8	2,661.2	2,815.8	41.5
Total All Countries	$5,521.7	$6,109.1	$6,651.0	$6,783.6	100.0%

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

Top Export Markets by Region in 2006

Asia Pacific

The largest recipients of Colorado's semiconductor exports were the Asian Pacific Rim countries, particularly Taiwan and Malaysia. With these and other sales, exports through August 2006 climbed 42% compared to the same period last year. At almost 39% of Colorado exports, the countries of the Pacific Rim and South Asia made up Colorado's largest regional export market, displacing the countries of the Western Hemisphere, which held that position in 2005.

Real GDP growth in Asia Pacific is projected to be 5.3% in 2006, and drop to 4.6% in 2007 (as defined

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INTERNATIONAL REAL GDP PERCENTAGE INCREASE 2000–2007

	2000	2001	2002	2003	2004	2005	2006[a]	2007[b]
Asia Pacific	3.9%	1.6%	2.3%	3.0%	4.5%	5.1%	5.3%	4.6%
Australia	3.3	2.7	3.6	3.3	3.5	2.7	2.8	3.3
China	8.0	7.3	9.1	10.0	10.1	9.9	10.3	9.0
Japan	2.8	0.4	0.1	1.8	2.3	2.6	2.9	2.2
South Korea	9.3	3.8	7.0	3.1	4.7	4.0	5.1	4.6
Taiwan	5.9	-2.2	4.2	3.4	6.1	4.1	4.1	4.1
Eastern Europe	6.3	1.7	4.6	5.7	7.2	6.0	6.2	5.4
Russia	10.0	5.1	4.7	7.3	7.2	6.4	6.3	6.0
Western Europe	3.3	1.5	1.1	0.9	2.3	1.6	2.6	2.0
France	4.2	2.1	1.1	1.1	2.0	1.2	2.1	1.9
Germany	2.9	0.8	0.1	-0.2	1.6	1.0	1.9	1.1
Italy	3.3	1.7	0.3	0.1	0.9	0.1	1.4	1.2
United Kingdom	3.8	2.3	2.1	2.7	3.3	1.9	2.5	2.4
North America	4.1	0.4	2.5	2.9	4.1	3.2	3.3	2.6
Canada	5.3	1.8	2.9	1.8	3.3	2.9	3.1	2.8
Mexico	6.6	-0.1	0.8	1.4	4.2	3.0	4.1	3.4
United States	3.7	0.8	1.6	2.5	3.9	3.0	3.4	2.6

[a]Estimate current as of October 2006.

[b]Forecast current as of October 2006.

Source: Consensus Forecasts and Colorado Business Economic Outlook Committee.

by *Consensus Forecasts*). This projected growth in Asia could increase opportunities for Colorado exporters and strengthen the overall global economy.

Japan is shifting onto a moderate growth path. The impetus should come from private sector spending and foreign trade, with the government remaining focused on spending restraint. While the Japanese administration is preoccupied with extending the recovery, the Chinese government is attempting to shift the source of growth from capital expenditures to consumer spending, and is giving greater emphasis to rural development. Nevertheless, Beijing is proceeding cautiously as it is determined to avoid any marked slowdown in overall economic activity that might in turn lead to increased joblessness and social unrest. India is now in the top ranks of the global growth charts with the economy poised to continue to expand by close to 8% over the next two years. Elsewhere in Asia growth prospects remain favorable, though not exceptional.

The Americas

Shipments to Canada, Latin America, and the Caribbean made up nearly 38% of all Colorado exports through August of 2006. At more than $2 billion, exports to the countries of the Western

Hemisphere grew 10% from the same period last year. The dominant markets in this group were Canada, with over $1.2 billion in Colorado exports, and Mexico, at $657 million. Other countries in the region also showed strong growth, with the next largest market, Brazil, up 15%, to $59 million.

U.S. exports to Canada are expected to remain competitive thanks to the appreciation of the Canadian dollar relative to the U.S. dollar, and overall imports are expected to grow at 3.5% in 2007. In Latin America, 2006 has been a year of uncertainty and change, with at least 21 presidential and legislative elections scheduled over the course of the year, including the region's largest economies and Colorado's top two trading partners, Mexico and Brazil. Most elections have occurred without significant market disruptions, which is a positive sign for investors. With real GDP growth expectations for 2007 at around 3.6% on average throughout Latin America, and similar growth predicted for Canada, Colorado exports throughout the Americas should continue to see steady growth.

Europe

Exports to Europe rose almost 7% through August, to more than $1 billion. However, Europe's overall percentage as a regional market for Colorado exports declined from 22% in August of 2005 to 19% in 2006. Most major export categories, such as medical equipment, semiconductors, and telecom equipment, showed strong, double-digit growth of 30% or more, but the largest category, computers and peripherals, fell by almost 17%.

Europe should remain an important export market for Colorado companies in 2007, although GDP in the eurozone is projected to grow. Europe's three largest economies, Germany, France, and Italy, are leading the economic recovery. The combination of higher interest rates, an appreciating euro, and fiscal deficit reduction may, however, have a dampening impact on Europe's growth in 2007. Employment is gradually increasing, but household income gains will be limited by higher taxes and by ongoing restraint in wage settlements.

Australia and Oceania

After more than 58% growth in 2005, the first year of the U.S.-Australia Free Trade Agreement, exports to Australia were up 6% through August of 2006. The Australian market dominated Colorado's trade with this region, with $156 million of the $168 million total. However, decreased exports to the other countries of the region resulted in an overall growth rate of less than 2%. Together, sales to Australia and Oceania made up just over 3% of Colorado exports in 2006.

Solid gains in consumer spending and business investment should help to keep the Australian economy growing at about a 3% annual pace through 2007.

Exports to the Middle East rose 34% in 2006, to $105 million through August.

The Middle East and Africa

Exports to the Middle East rose 34% in 2006, to $105 million through August. Israel was Colorado's largest market in the region at $40 million, an increase of 41%. Colorado companies sold $25 million to Africa during the same period—a decrease of 6%. Colorado's largest African market was the Republic of South Africa, at $14 million. Combined sales to the Middle East and Africa made up over 2% of Colorado's exports.

Strong commodity prices, including oil, continue to feed economic growth throughout much of the Middle East and Africa. Even with decreasing oil prices, oil exporting countries are forecasted to grow at around 5-6% through 2007. Non-oil exporting economies, including Egypt and South Africa, are also expecting positive growth. Export potential for Colorado companies is expected to continue throughout the Middle East, although economic problems due to armed conflict and political tensions persist for certain areas, including Israel, Lebanon, and Iraq.

Prospects for Colorado Agricultural Exports

Colorado's agricultural exports were down 3% in 2005 from 2004 levels and continue to be below 2003 export levels. The impact of the closure of world markets to Colorado and U.S. beef due to the December 23, 2003, discovery of a cow with bovine spongiform encephalopathy (BSE) continues to be felt by Colorado's beef industry. While

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Colorado beef exports grew in 2005 versus 2004 due to strong markets in Canada and Mexico, Colorado's reduced grain harvest translated to lower exports for grains, offsetting the gains in Colorado's beef exports.

Colorado's 2005 exports were lower than recent historical levels due to the continued closure of the Japanese and Korean beef markets and a continuing drought, which has reduced the state's grain harvest and exports. With the opening of the Japanese market in July of 2006, and the Korean market in September, Colorado's beef industry is poised to begin a multiyear effort to rebuild and regain its markets in Asia. In 2005, Taiwan opened its market to Colorado and U.S. beef and purchased more U.S. beef that year than in pre-BSE (2003) market periods.

The primary challenge facing the U.S. beef industry is how to regain consumer confidence in international markets. In Japan, consumer surveys indicate reluctance in purchasing U.S. beef products; however, recent U.S. beef industry promotions have provided promising consumer responses when offered U.S. beef in cooperation with Japanese meat industry representatives. Key to opening the Japanese and other Asian markets is building acceptance by the consumer and the food service provider.

Colorado's top agricultural export markets continue to be influenced by Colorado beef export trends. Colorado's largest export market is Mexico, led by beef imports, which were almost equal to pre-2003 levels. Mexican beef imports in 2006 continue to grow, with increases from the United States exceeding 50% in the first seven months of 2006 compared to 2005 purchases. Canada's beef imports continue to rise and should reach pre-BSE levels in 2006.

Japan's imports from Colorado continue to lag due to the previously closed market. The U.S. beef industry is anticipating that aggressive marketing and promotion is required to grow this market,

AGRICULTURAL EXPORTS FROM THE STATE OF COLORADO
FISCAL YEARS 2003–2007
(In Millions of Dollars)

Commodity	2003	2004	2005	2006[a]	2007[b]
Beef and Meat Products	$431.4	$225.9	$294.4	$350.9	$426.0
Hides and Furs	135.8	138.1	121.8	114.6	125.5
Course Grains/Feed/Fodder	130.7	160.7	151.7	166.9	188.3
Wheat, Flour and Products	119.9	200.6	121.9	131.9	131.9
Fruit, Vegetables	74.0	74.0	79.7	85.0	88.9
Misc. Processed Foods and Ag. Products	46.9	59.0	62.0	64.8	67.5
Dairy	13.0	16.9	23.0	23.2	23.2
Animal Fats/Oils	36.8	36.5	27.1	29.8	31.1
Total[c]	$988.5	$911.7	$881.6	$967.1	$1,082.4

[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 Forum.

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

	Exports		
Region	2003	2004	2005
EU 25	$27.5	$26.7	$23.0
Canada	143.8	128.3	153.3
China	39.7	62.2	46.4
Hong Kong	39.8	24.5	18.4
Japan	157.8	74.5	78.4
Korea	108.3	45.3	33.7
Mexico	236.4	232.6	263.1
Taiwan	59.1	51.9	49.7

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

and a return to pre-BSE import levels could be several years in development. Korea's drop is also beef related. With the opening of the Korean market, the industry will initiate market promotions to rebuild this market as well.

Colorado's 2006 exports will benefit from the continued market acceptance of beef in Mexico, where U.S. exports have surged more than 50% in the first seven months of 2006 compared to 2005. U.S. beef producers are starting to see orders from Japan, and while growth will probably not be significant in 2006, the industry is aggressively working to begin regaining the consumer and trade confidence, which could lead to appreciable export growth to Japan in 2007. Japan and Korea beef imports represented more than $168 million in exports from Colorado in 2003, and the industry will work to regain these exports in 2006 and 2007.

Trends in International Education in Colorado

During the 2004–2005 academic year, the number of international students enrolled in U.S. higher education institutions remained fairly steady at 565,039, down about 1% from the previous year's total. Colorado had 5,496 international students during this period, a decline of 7.5%, according to the Institute of International Education's annual report on international academic mobility. International students' expenditures in Colorado totaled an estimated $128.7 million for 2004–2005.

The University of Colorado at Boulder was the only school in Colorado that had more than 1,000 students from foreign countries, with 1,086 international students out of a total of 27,000. This number ranks the Boulder Campus at 131st on the list of U.S. schools with international students.

The leading countries of origin for international students in Colorado were India, with 638 students (11.6% of total); Korea, 606 students (11%); China, 496 students (9%); Japan, 409 students (7.5%); and Taiwan, 399 students (7.3%).

International students brought around $13.3 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. Department of Commerce data continue to rank U.S. higher education as among the five largest service sector exports.

The slight overall decline in international students enrolled in U.S. colleges and universities has been 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 and other regional host 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.

This past year "Study Colorado" was created to bring the admissions offices across the state together to cooperate in their international efforts. The goal of "Study Colorado" is to promote and increase awareness of Colorado to the international student. ✜

Summary

The consensus of the 2007 outlook committee members is that employment growth in Colorado will be moderate, similar to the soft landing experienced by the national economy. The slower growth rates that began in mid-2006 are expected to continue through the first half of the year, followed by a stronger performance as the presidential election draws near. As in the past, Colorado and other western states are anticipated to be at the forefront of employment growth in 2007. The outlook is for employment to increase at a rate of 1.9% compared to 1.4% for the United States. This will translate into 42,300 additional jobs in 2007. This projected growth is above the 10-year average of 36,200 jobs per year.

From an employment perspective, the current decade has seen much slower growth than in the 1990s when the annualized rate of employment growth was 3.8%. By comparison, the state has experienced employment growth greater than 2% on two occasions this decade, in both 2005 and 2006.

The state's current economic expansion began near the end of Q1 2004. In November 2000, Colorado employment reached a record 2.27 million workers. The ensuing downturn and recovery spanned 56 months; the monthly record for state employment was finally surpassed in June of 2006.

There has been concern throughout the recovery about the types of jobs that would replace the primary jobs or those jobs with higher than average

NEW JOBS CREATED IN NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT SECTORS

Industry	Jobs Added 2006[a]	Jobs Added 2007[b]	Total Jobs Added 1996-2005	Percentage of Total Jobs Added 1996-2005
Natural Resources and Mining	3,600	2,300	4,500	1.4%
Construction	7,200	3,000	47,900	14.7
Manufacturing	-300	-100	-30,500	-9.4
Durable Goods	800	0	-20,900	-6.4
Nondurable Goods	-1,100	-100	-9,700	-3.0
Trade, Transportation, and Utilities	8,900	5,800	41,400	12.7
Wholesale Trade	2,300	1,600	8,100	2.5
Retail Trade	4,900	3,800	30,800	9.5
Transportation and Utilities	1,700	400	2,300	0.7
Information	-1,600	300	9,400	2.9
Financial Activities	3,400	2,300	30,200	9.3
Professional and Business Services	15,000	13,900	61,900	19.0
Educational and Health Services	4,500	4,500	53,300	16.4
Leisure and Hospitality	5,800	4,600	37,200	11.4
Other Services	900	1,200	15,900	4.9
Government	5,000	4,500	54,300	16.7
Total[c]	52,400	42,300	325,500	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.

wages or multiplier effects that were lost. This concern still exists today, particularly in light of reports that companies have begun to outsource and offshore analytical and management positions in an effort to reduce costs. In addition, there has been significant consolidation through mergers and acquisitions. On a positive note, an analysis of the data suggests that some of the high-paying jobs that were lost are being replaced by comparable paying positions. Indeed, Boulder is ranked 7th and Denver 13th among 361 MSAs in terms of per capita personal income.

Five years after the downturn began, the manufacturing and telecommunications tailspin has yet to hit bottom. There were 30,500 fewer manufacturing workers in Colorado in 2005 as compared to 1996. The decline in the number of telecommunications workers is equally as dramatic, with more than 16,000 telecom jobs shed since 2000.

On a more positive note, Professional and Business Services has added almost 62,000 net jobs between 1996 and 2005. Many of these jobs are high paying as can be seen by the fact that workers in the Professional, Scientific, and Technical Services Sector earned an average annual wage of about $68,000 in 2005, while those in the Management of Companies and Enterprises Sector earned approximately $100,000 per year. This supersector will add roughly 13,900 jobs during 2007.

In 2006, the three goods-producing sectors, Natural Resources and Mining (NRM), Construction, and Manufacturing, are expected to add 10,500 jobs. Despite the fact that the Natural Resources and Mining Sector is forecast to increase employment by 10% in 2007, the three goods-producing sectors will add only 5,200 jobs. About 2,300 jobs will be added in NRM, while 3,000 construction workers will be added. The Manufacturing Sector is expected to shed 100 jobs in 2007.

Overall, the service-producing sectors will add 37,100 jobs in 2007. About 23,000 jobs, or 55%, will be in retail and professional, financial, and healthcare services. A total of 3,800 retail jobs will be added in 2007.

More robust job growth since 2004 has caused Colorado's population to rise at a more rapid pace. The state's higher than average rate of job growth will help increase the rate of net migration in 2007. The state's population is expected to climb 2% compared to 1% for the nation. Colorado's population will grow by 94,700 persons, to almost 4.9 million. Net migration will account for about 54,000 people.

Looking forward, committee members believe the following events will shape future growth and prosperity of Colorado's economy:

Nationally and Internationally

- Overall, the global economy will record solid but slower GDP growth, driven down in part by sluggish growth in the United States. Bright spots include China, Australia, Taiwan, South Korea, and parts of Eastern Europe. The greatest area of concern is weak growth, a high jobless rate, and stagnant economies in key western European countries.
- As a result of the November election, the Democrats have gained control of Congress. Time will tell whether this will result in increased bipartisan cooperation or create political gridlock driven by partisan differences. In addition, the electorate used this opportunity to display their dissatisfaction with President Bush's foreign policy, in particular the war in Iraq. The removal of Donald Rumsfeld as Secretary of Defense is likely the first of many changes that may or may not improve the U.S. position in the Middle East.
- Curtailing inflation will continue to be a concern of the Federal Reserve. The most likely scenario is that the target federal funds rate will remain stable or decrease slightly in the months ahead.
- Real GDP growth will be lower in 2007, resulting in solid, but slower personal consumption, business investment, and government spending.
- Highly volatile energy prices played havoc with the trade deficit, industry profits, and consumer debt levels during 2006. While energy costs are expected to remain high in 2007, it is likely that their volatility will have less impact on the economy.
- Mortgage rates will stay relatively stable, and from a historical perspective, they will remain low. The fact that the rates are higher than several years ago will decrease the amount of disposable income for individuals participating in alternative financing or adjustable rate programs.

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Summary

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Colorado

- In the November elections, the political pendulum shifted in favor of the Democrats. Although the transition team includes key leaders from both sides of the aisle, it remains to be seen whether bipartisan efforts will truly be part of the policy-making process.
- With TABOR restrictions on hold, the legislature is expected to be able to continue providing more and better services as state tax revenues are projected to improve. The state legislature will continue to face difficult fiscal decisions, despite the passage of Referendum C.
- Top issues facing the state and the legislature are immigration legislation, water availability and drought, education funding, maintenance of transportation infrastructure, and sustained and controlled economic growth.
- The top issues facing Colorado businesses are energy, healthcare, and wage costs. There will be more signs of upward pressure on wages the longer the state unemployment rate remains in the range of natural unemployment (4.5–5.0%).
- Retail sales will show moderate, but slower growth. Despite the increase of major retail expansion in the state, it appears that the Colorado market is not saturated at this point. However, the combination of increased competition, both locally and from higher e-commerce options, and a slowing housing market will moderate growth.
- And last, but not least…The Buffs will again post a winning season in 2007. ✜

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, which is related to tourism's impact on the local economy. Although there is significant winter tourism associated with winter sports, most tourism in the county occurs during the summer. This summer concentration of tourism causes a third quarter seasonal upswing in economic indicators, such as retail sales and employment, each year.

However, La Plata County is the home of Fort Lewis College, which provides both long- and short-term, or seasonal, stability to the local economy. Seasonal stability occurs because most college's students are attending 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 annual unemployment rate, 3.9%, than both the United States (5.1%) and Colorado (5%) in 2005. La Plata County's unemployment rate continues to remain below both the national and state unemployment rates in 2006 (U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov/cps/home.htm, and Colorado Department of Labor and Employment, Labor Market Information, http://www.coworkforce.com/lmi/ali/2003laus.htm).

The La Plata County labor force averaged 28,591 persons during 2005, an increase of 2.2% compared to 2004. Similarly, average employment for 2005 was 2.4% above the 2003 average (http://www.coworkforce.com/lmi/ali/2004Final.xls).

Interestingly, employment patterns within La Plata County are somewhat different from those found in the national and state economies. Employment in La Plata County is less concentrated in manufacturing than are the United States and Colorado. Construction and mining (especially natural gas extraction) are somewhat more significant in the county, while transportation and public utilities; wholesale trade; and finance, insurance, and real estate are less significant. Services, retail trade, and government are relatively more important providers of employment in the county than in Colorado or the nation.

Therefore, a close examination of La Plata County employment shows that the three major industries providing the bulk of employment: service industries, retail trade, and government. Together, these three sectors accounted for 78.7% of nonagricultural employment in the county during 2005. If construction is added, the percentage increases to 89.2%. The sector with the largest number of employees is services, followed by government and retail trade (http://www.coworkforce.com/lmi/es202/2004PDF/2004Annual.pdf).

Income

Per capita income in La Plata County has improved over the last few years, both absolutely and relative to national per capita personal income. With a 2004 (the most recent data available) per capita personal income of $31,887, La Plata has a lower per capita personal income than Colorado (at $36,113), but has the highest per capita personal income of surrounding counties. The county's per capita personal income increased 7.4% from 2003 to 2004 and recorded an average annual growth rate of 10.1% from 1969 to 2004—one percentage point higher than Colorado's average annual growth rate of 9.1% during the same period.

Recent and Future Trends

The most recent indicators of La Plata County show continued growth. A comparison of the 2006 second and third quarter data, on a year-over-year basis, illustrates that most of the sectors of the La Plata County economy improved. For example, inflation-adjusted banking deposits as of June 30, 2006, increased by 12.3% over the same time period in 2005. All of the economic indicators for tourism in the county either increased or stayed fairly constant from year to year. During the first three quarters of 2006, passengers flying in and out of the county increased 10.6%, and visitors to Mesa Verde National Park climbed 20.5% relative to the corresponding period in 2005. Although Mesa Verde National Park is in Montezuma County, many tourists who visit the park stay in La Plata County. Furthermore, inflation-adjusted retail sales

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in La Plata County increased by 9.7% in the first half of 2006 compared with the same period in the previous year.

Population growth in La Plata County continues at around 3%, which is similar to the average growth rate for the last nine years and above the rate for the state. This growth will continue to fuel the construction and real estate sectors of the economy. It appears that the housing market in La Plata County is cooling off from recent years, but is still relatively strong. The median home price in the third quarter of 2006 was $341,500, up from a median price of $325,000 in the third quarter of the previous year. Adjusting for inflation, this shows an increase of around 1.6%.

Energy (in particular, natural gas) remains a strong contributor to the local economy despite a recent drop in energy prices. Most recently, the federal government's energy price index, adjusted for inflation, decreased. A comparison of the third quarter of 2006 to the same period in 2005 shows a drop of about 9.8%. Even with the volatility in energy prices, rents and royalties, as well as 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

After weathering the downturn in the first part of the decade better than other regions in Colorado due to increasing economic diversity, Mesa County has been experiencing significant economic growth. According to Global Insight, from 1994–2004 the Grand Junction MSA had the ninth-fastest annual rate of growth in Gross Metropolitan Product (GMP) in the nation, 7.7%. During that time period, the area's GMP grew from $2.3 billion to $4.8 billion. GMP per capita climbed from $22,243 to $37,786.

Energy and Construction Leading the Way

The energy and construction sectors are driving much of the region's growth. In percentage terms, mining and extraction employment is the fastest-growing sector of the county's workforce, surging 160% from 1994 to 2005. Most of the growth has occurred since 2002 as the natural gas industry is basing many of its operations in Mesa County. The higher-paying jobs in these industry sectors are beginning to drive increases in average wages. While the 2005 average wage in Mesa County ($31,611) remains significantly lower than the state ($41,601), the county's rate of growth is greater, 5.5% compared to 3.2%.

Total construction permits through September 2006 indicate $375 million in activity, on pace to match the $460 million for calendar year 2005 and significantly more than the $300 million in 2004. Construction activity in 2005 and 2006 is double the total activity in 2000. As a result, construction industry employment is expected to grow nearly 50% through 2014, adding more than 2,000 positions. Current examples support these projections. St. Mary's Hospital recently unveiled a $260 million expansion, called the Century Project, which alone is expected to demand 350 workers through 2010.

Other Growing Sectors

Other services, retail, healthcare, and government—the bulk of Mesa County's economy—are expected to grow in lock step with the energy and construction industries. While the rates of growth in these sectors will not be as significant due to their larger bases, they will continue to grow as the county's and region's population grows. Mesa County is a regional medical, service, and retail hub serving approximately 500,000 people in western Colorado and eastern Utah.

Future Trends and the Unknowns

Continued growth in the energy sector will depend on oil and natural gas prices. Industry representatives continue to indicate that natural gas drilling activity in western Colorado will remain strong for several years, with the maintenance phase continuing for decades. The Colorado Department of Labor and Employment is conducting an in-depth analysis of the energy industry in western Colorado to determine potential long-term impacts. For now, the industry's growth is pumping significant new wealth into the region. Housing demand continues to rise, and prices are following. In 2005–2006, Mesa County saw the largest increase in housing prices (12–14%) compared to the statewide average of approximately 6%. The pressure in the housing market is making housing less affordable for the service and retail sector workforce. In 2001, the median home price in Mesa County was $122,000. Five years later it was $174,900, a 43% increase.

The largest unknown for Mesa County and western Colorado is the future of oil shale as a source of domestic oil. The companies engaging in research and development of new technologies to extract oil from shale continue to indicate that it will be several years before commercial-scale production decisions are made. If the economics of the oil industry favor oil shale development, and the technology proves itself technically and economically viable, the potential workforce and economic impacts in the regional could be substantial. ✜

From Around the State: Northern Colorado

The northern Colorado economy (Larimer and Weld counties) continues its steady recovery from the 2001 recession. Data from the Colorado Department of Labor and Employment show the region added 5,643 jobs between the first quarters of 2005 and 2006, a gain of 2.9%. This growth built on the 2.6% increase for the same period in the previous year. Job growth in the region outpaced both the Colorado and U.S. economies between 2004 and 2006.

In September 2006 the unemployment rate reached 3.7%, its average in the late 1990s. There is some concern, however, that underemployment (i.e., workers not employed to their full capacity) in the region is increasing as laid-off high-tech workers turn to alternative employment opportunities in other local industries rather than migrate out of the region. Although this phenomenon helps maintain the latent quality of the local labor force, it can lead to real wage stagnation and reduced consumer spending.

Growth in services continues to drive the regional economy. For 2005-06, the top five growth sectors in the region were accommodations and food services (883 new jobs), finance and insurance (640 new jobs), healthcare and social assistance (625 new jobs), retail trade (624 new jobs), and construction (618 new jobs). This continues long-term trends as these sectors have accounted for about 85% of the net new jobs in the region since 2001.

But not all sectors are expanding. Manufacturing—which lost 7,667 jobs (-26%) between 2001 and 2005—continues to shed jobs, losing 201 positions (-1%) between the first quarters of 2005 and 2006. This decline, however, was notably smaller than in previous years, indicating that the sector may have bottomed out or be poised to rebound. One important ramification of recent trends is the projection that the healthcare and social assistance sector will employ more workers than manufacturing in 2007.

Disaggregating the data, some notable differences emerge between Larimer and Weld counties. Since 2001, Larimer County employment grew by a total of 4,157 workers, a 3.5% increase. More recently, Larimer County added 2,457 jobs between the first quarters of 2005 and 2006, a 2% increase. By comparison, Colorado's employment has climbed only 0.3% since 2001, and U.S. employment has grown by 1.6%.

Larimer County's leading growth sectors in terms of jobs added between 2005 and 2006 were specialty trade contractors (334 jobs), clothing and clothing accessories stores (323 jobs), food services and drinking places (264 jobs), performing arts and spectator sports (252 jobs), and hospitals (250 jobs).

Although very few sectors in Larimer County lost jobs between 2005 and 2006, the county did experience a significant decline in computer and electronic product manufacturing, losing 826 jobs (-15.9%). Overall, the industry employed 4,366 workers in the first quarter of 2006, 43% less than the industry's 2001 level. The losses in this sector are especially significant, given that in Larimer County annual average earnings per worker in this industry were more than $76,000 in 2005.

Employment in Weld County actually grew at a faster rate than in Larimer County, although fewer jobs were added. Since 2001, Weld County's workforce has grown by 9,050 positions, resulting in a 13% gain. Between the first quarters of 2005 and 2006, it rose by 3,185 jobs, a 4.2% increase. Key industries driving employment growth in the county include food services and drinking places (552 jobs), support activities for mining (452 jobs), administrative and support services (398 jobs), insurance carriers and related activities (357 jobs), and local government (275 jobs).

After five years of stagnant wages, a comparison of the first quarters of 2005 and 2006 shows that real earnings per worker grew substantially. Overall, average earnings per worker totaled $36,217, an 8.4% increase in nominal earnings over 2005. Larimer County's average earnings per worker in the first quarter of 2006 were $37,199 (a 7.8% increase), while Weld County's per worker earnings were $34,660 a 10.1% increase.

Despite relatively similar earnings per worker, per capita incomes in the two counties are notably different. Data from the U.S. Department of Commerce reveal that 2005 per capita income averaged $34,219 in Larimer County, compared to $24,687 in Weld County. By comparison, the Colorado average was $37,946, and the U.S. average was $34,586. Regional poverty rates remain relatively low. In 2003 (the most recent year for which data are available), Larimer County's poverty rate was 9.3%. This percentage was 10.3% for Weld County, 10% for Colorado, and 12.5% for the nation.

Regional population growth continues at a robust rate. Estimates from the Colorado Department of Local Affairs indicate the area's population exceeded one-half million people (500,870) for the first time in 2005. This marks a 15.8% gain since 2000, and a 2.4% increase from 2004. In contrast, Colorado has grown 7.8% since 2000, and the United States, 5.0%.

Reflecting population trends, residential construction grew substantially in northern Colorado between 2000 and 2005. Building permit data from the U.S. Department of Census indicates that Larimer County issued 2,271 single-unit new residential building permits in 2005, down from the annual average of 2,528 from 2000–2004. Comparatively, Weld County new residential permits totaled 4,100 in 2005, up from the 2000–2004 average of 3,826. In 2006, however, new residential construction in the region has slowed substantially, mirroring national trends. As of September, new single-family residential permits totaled 1,177 in Larimer County and 2,251 in Weld County.

Regional Outlook

What does 2007 have in store for northern Colorado? While several of the region's economic drivers, notably healthcare and social assistance, and professional and technical services, are expected to continue to grow, concerns remain about some of the economy's fundamentals. For example, recent increases in interest rates have helped reduce housing demand, putting a damper on residential construction. A significant uptick is not expected in the short run.

Rising interest rates have also impacted households holding adjustable rate mortgages through increased monthly payments. The reduction in disposable income could slow growth of retail, automotive, and other consumer services. Given the recent development of new commercial properties, especially the new Promenade Shops at Centerra, it will be interesting to see whether regional consumer demand will keep up with supply.

Manufacturing trends will also have important local effects. In particular, regional fortunes are still heavily tied to computer and electronic product manufacturing. While national forecasts predict the sector will expand in 2007, northern Colorado remains at risk, due to the relative importance of a few large employers.

Although increased energy prices played havoc with the national economy in 2006, the energy market offers a number of positives for the region. Weld County has enjoyed significant growth in this area due to increase in demand for oil and natural gas. But the regional economy also is poised to take advantage of alternative energy delivery through such efforts as the Northern Colorado Clean Energy Cluster, which focuses on smart grid technologies, renewable energy and energy efficiency, and cleaner and more efficient engines. ✜

From Around the State: Pueblo County

Amid concerns of an impending economic slowdown nationally, a contracting housing market, and rising levels of inflation, construction projects and stable job growth seem to ensure that Pueblo will weather the tumult in fairly good shape. Within the last few years, Pueblo's economic growth has been fueled by a combination of growth in residential construction, expanded employment, and completion of several large construction projects, all of which appear likely to continue through 2007.

Housing growth in Pueblo County for the 2006 January–September period has shown about a 16% increase in valuation and an approximately 11% rise in valuation compared to the same period in 2005. Data for the third quarter show a relatively flat performance, however, with single-family residential gain posting only a 4.1% increase in permits. Within the last few years, multifamily construction has grown negligibly, due primarily to high apartment vacancy rates locally. Some absorption of vacancies may make multifamily construction more economically feasible.

Moderate increases in interest rates should not have too great an impact on residential construction in Pueblo due to several developments. Over the next two years, Fort Carson is slated to see an increase of 8,000 military personnel. A substantial number of these redeployed troops and their families could relocate in Pueblo County. The location of military personnel in Pueblo is already beginning to have an effect. A sales associate for Premier Homes estimates that 60% of the buyers of homes in the Westridge subdivision, located north of U.S. Highway 50 and west of I-25, are Fort Carson personnel. Units in the $130,000–$200,000 price range are particularly attractive. McCulloch Ranch, a large subdivision planned for northern Pueblo County, is ideally situated to experience some of the spin-off from Fort Carson's expanded mission. The developers have entered into preliminary discussions with the City of Pueblo, which could lead to eventual annexation or some other arrangement providing them with city utilities.

Several large commercial projects in Pueblo should ensure continued employment for Pueblo's 3,600 construction workers. Construction of the $20 million Cingular Call Center, located in downtown Pueblo continues, with anticipated opening slated for December. The initial 136 hires will begin work while additional construction work is finished. The facility will eventually have spaces for 550 workers, plus an additional 75–100 support staff. Meanwhile, work on the $7 million Professional Bull Riders headquarters, also located downtown, progresses. Completion is scheduled for May 2007. Within the last several years, downtown investment has become an increasingly viable prospect with commercial investors. The "First and Main Project" currently under construction will be the future home of Community Banks and will provide office space for lease.

Construction of the $1.3 billion Xcel power plant is underway, and the first stage of construction of the chemical weapons demilitarization facility, located 20 miles east of Pueblo, has commenced. Recent concerns about cost overruns that require a review of funding should not adversely affect work. In July, GCC America obtained a building permit to begin construction of its $225 million cement plant south of Pueblo.

Job growth in Pueblo for the first nine months of 2006 has been slower than growth statewide. The average number employed in Pueblo during January-September, using nonagricultural wage and salary employment data, was 1.5% above the same period in 2005. Statewide job growth was 2.2%. Recently released data from the Census Bureau suggest that more Pueblo workers are commuting to jobs located outside the county. In 2000, 9.7% of workers who resided in Pueblo County worked elsewhere. By 2005, the percentage had increased to 13.3%. In numeric terms, this translates to 8,415 workers in 2005 compared with 5,691 workers in 2001. The availability of higher paying jobs outside Pueblo, coupled with very inexpensive housing costs within the Pueblo community, provides an incentive to commute outside of the area. ✜

2007 Colorado Business Economic Outlook

From Around the State: Southern Colorado

The Slowing Economy

The southern Colorado economy showed significant slowing during 2006. The decline was led by weakness in residential construction, new car sales, enplanements, and consumer sentiment, and increases in foreclosures. On the positive side, wages and retail sales were higher, gains were made in employment, and unemployment fell. However, these positives were not enough to offset the weaknesses and, thus, the economy slowed.

A mix of four national and local factors contributed to the slowdown in the El Paso County region. Increases in inflation and energy costs, higher interest rates resulting from a tightening of monetary policy, along with the decline in housing permits and starts, worked together to temper growth.

Core inflation increases were spearheaded by sharp increases in the cost of basic materials, especially construction materials. From June 2004, the start of the Fed's 17 interest rate hikes, to June 2006, core components of the CPI increased by 15.8%, while metals surged 53.1%. Energy costs climbed 34.4%. Tighter monetary policy by the Federal Reserve increased the target fed funds rate from 1% in May 2004 to 5.3% by June 2006.

Homebuyers followed the mortgage lender's credo "drive until you qualify." New residential construction patterns emerged outside the City of Colorado Springs. By 2005, close to 55% of all new residential building permits were being taken out in areas other than the city. Traditionally, the City of Colorado Springs has captured more than 70% of all new single-family residential permits.

The Cost of Funds Index (COFI) is normally used as the base for adjustable rate mortgages. In June 2004, COFI was 2.3%. By September 2006, it had doubled, to 4.6%. Homeowners who have held a variable rate mortgage since 2004 saw a significant increase in their monthly mortgage bill. For a typical variable mortgagee in El Paso County, the annual mortgage payment increased by \$5,000–\$7,000 a year. Household budgets were further stressed when minimum credit card payments were doubled in 2005 and the price of a gallon of gasoline went from \$1.50 to \$3.00 a gallon.

Evidence gathered in fall 2006 suggests that these factors contributed to a rapid increase in the number of foreclosures in El Paso County. Currently, the rate is approximately 15.5 foreclosures per 1,000 single-family dwelling units. The Colorado Springs market had the 15th highest mortgage foreclosure rate in the country in 2006.

Increases in interest rates, gasoline prices, declines in consumer sentiment, and a large hike in the number of homes for sale, many of which are foreclosure units, hurt new residential construction. Approximately 30% fewer detached, single-family residential permits are expected in 2006 compared to the previous year.

There is good news on employment. A total of 4,087 new jobs were added in 2005.

Slowing economic activity resulted in a 14% decline in the Southern Colorado Economic Forum's Business Condition Index for El Paso County through July 2006 compared to December 2005.

Employment and Unemployment

There is good news on employment in El Paso County. A total of 4,087 new jobs were added in 2005, for a 1.7% increase. This was the second consecutive year for strong job growth. The largest employment gains were professional and technical services (1,478 jobs), construction (933 jobs), finance and insurance (673 jobs), healthcare (605 jobs), administrative and waste services (550 jobs), transportation and wholesale (409 jobs), accommodations (384 jobs), and local government (370 jobs).

The unemployment rate continues its downward trend, albeit at a slower rate. The average unemployment rate in El Paso County fell to 5.4% in 2005, compared to 5.6% the previous year. The rate is expected to be 5.1% in 2006 and 4.9% the following year.

Three employment patterns emerged in El Paso County when compared to Colorado. First, labor force and employment growth are slightly lower for El Paso County. As of fall 2006, labor force growth was 1.4% for the county, compared to 1.5% for the state. Employment growth, as measured by the Local Area Unemployment Statistics data from the Bureau of Labor Statistics (BLS), is 1.8% for El Paso County and 2% for Colorado.

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Second, the number of firms in El Paso County also grew at a noticeably faster rate than in Colorado in 2005. Most of the new firm growth was in the professional and technical areas. Growth in these sectors was healthy, since professional and technical services tend to be more stable compared to manufacturing and information processing. Moreover, the average wages in this sector were 80% higher than the average annual wage in El Paso County.

Third, unemployment in El Paso County is slightly higher in 2006, registering 5.4%, compared to 5% for the state.

Wages and Income

Nineteen of the 20 North American Industry Classification System's two-digit classifications in El Paso County had wage increases in 2005. Manufacturing was the only sector that declined, a modest -0.5%. Significant wage gains were realized in management of companies, 13.9%; performing arts, 11.7%; mining, 9.9%; and information, 8.7%.

The average wage in El Paso County grew in 2005 and stood at $37,492, an increase of $936, or 2.6%, over 2004. This follows growth of 3.3% in 2004 and a 2.1% in 2003.

Despite the gains in wages, El Paso County remains well below the state average wage. The figures for 2005 indicate that the average wage in the county is 9.9% below the average wage in Colorado. This is consistent with previous average wage data for El Paso County relative to the state.

Retail and Wholesale Trade

Retail trade sales in El Paso County rose 6.6% in 2005 compared to much stronger 10.1% growth the previous year. After adjusting for inflation and population growth in El Paso County, real retail trade sales increased 2% in 2005, down from a 9.1% increase in 2004. Given population growth patterns and new retail centers, stronger growth was observed in areas outside of Colorado Springs' city limits.

El Paso County's wholesale trade declined 8.1% in 2005, compared to a 21.9% gain in 2004. It appears that the loss of manufacturing firms in El Paso County affected wholesale trade activity in 2005.

Residential and Commercial Construction

New single-family, detached residential construction continued its record-setting trend with 5,314 new building permits in 2005, a 5% rise from 2004. Townhome construction also set a record, with 931 new permits, an increase of 217 units over the previous record of 714 set in 2004. Detached single-family permits are projected to total 3,700 units in 2006. A modest decline is expected in 2007.

Commercial permits are expected to total $337 million in 2006, up from $309 million the year before.

Multifamily permit activity declined to 527 units in 2005, 27% lower than the previous year. The decline reflects investor reluctance to get into a market that averaged approximately 11.2% vacancy during 2005. Average rents were soft, at $603 per month.

Commercial construction from January 2005 through July 2006 was boosted by the construction of Memorial and St. Francis hospitals. Together, the hospitals represented 37% of the value of all commercial permits. Commercial permits are expected to total $337 million in 2006, up from $309 million the year before. Continued slowing of the economy and rising construction costs are anticipated to reduce commercial construction, to $250 million, in 2007.

BRAC05 and the Military Community

When BRAC05 realignments are completed, Fort Carson is expected to have 25,000 troops, an increase of 10,000. All indications are that BRAC05 will not have its expected impact on the El Paso County region until 2008. Ongoing deployments of 7,000–8,000 troops and the delayed arrival of new troops at Fort Carson muted economic benefits that were expected in 2006 and 2007.

The likely economic benefits of the eventual troop arrivals are projected to include approximately $1.1 billion in increased income and 8,000 local resident service jobs. The largest employment gains are expected among food services and restaurants, education, and medical care.

All indications show that El Paso County hit the BRAC05 lottery. However, it will have to wait a little longer to see the benefits of the arrival of the extra troops at Fort Carson.

Where Is the Southern Colorado Economy Headed in 2007?

According to the latest Quarterly Census of Employment and Wages (QCEW) data from BLS, El Paso County's economic base is moving toward a more varied group of small employers than in the past. The QCEW data indicate 1,907 more firms in El Paso County in 2005 than in 2001, 75% of which were firms with fewer than 12 employees. Employment among these firms has grown by 6,743 positions since 2001. By comparison, employment among large firms has declined by 10,308 jobs. The greatest growth among small firms took place among professional and technical services, with 466 new firms and 1,503 new positions. The average annual wage among professional services workers is $65,416.

Regional and economic base studies suggest that the move toward a variety of small firms adds diversification to the economic base. This should provide reduced sensitivity to economic downturns. The likelihood that the El Paso County economy will do better in the next slowdown is bolstered with an expected arrival of 10,000 more troops and their families at Fort Carson in 2008.

At the current time, continued sluggish growth is expected through 2007. Should a national downturn take place, its effects on the El Paso County economy are not expected to be as serious as were seen in 2001–2003. The ability to weather the storm is attributed to a more diverse local economy, and the expected large infusion of military personnel and their families by 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 is more relevant to the modern economy, and will allow the United States to directly compare its economic data with that of other NAFTA members, 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.

Supersectors

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); Internet publishing and broadcasting; telecommunications; Internet service providers, web search portals, and data processing services; and other information services.

Financial Activities

Monetary authorities—central bank; credit intermediation and related activities; securities, commodity contracts, and other

2005 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%	0.7%	0.5%	0.71	0.77	0.79
Mining	0.7	0.8	1.6	2.06	1.82	2.04
Construction	12.9	7.3	8.7	1.26	1.32	1.27
Manufacturing	3.6	6.9	10.5	0.82	0.64	0.68
Wholesale Trade	7.5	4.3	7.1	1.07	0.98	1.19
Retail Trade	11.4	11.2	8.1	0.94	0.97	1.15
Transportation and Warehousing	2.2	2.8	3.1	0.88	0.89	1.02
Utilities	0.2	0.4	0.7	1.17	0.87	0.81
Information	2.1	3.5	6.9	1.23	1.52	1.62
Finance and Insurance	6.6	4.9	8.6	1.19	1.08	0.89
Real Estate and Rental and Leasing	5.9	2.1	2.4	1.40	1.32	1.27
Professional and Technical Services	15.1	7.1	13.7	1.39	1.33	1.34
Management of Companies and Enterprises	0.8	1.1	3.2	1.44	0.86	0.98
Administrative and Waste Services	5.7	6.2	5.3	1.10	1.00	1.04
Educational Services	1.2	1.1	1.0	1.27	0.69	0.59
Health Care and Social Assistance	7.2	9.0	10.0	0.87	0.83	0.83
Arts, Entertainment, and Recreation	1.5	2.0	1.5	1.06	1.39	1.29
Accommodation and Food Services	7.1	9.8	4.2	1.03	1.18	1.14
Other Services	7.4	3.0	2.4	0.56	0.90	0.98

[a]Total private industries were used as the base for LQ calculations.

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics.

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; private households; professional, scientific, and technical services; management of companies and enterprises; administrative and support services; waste management and remediation services; repair and maintenance; personal and laundry services; religious, grantmaking, civic, professional, and similar organizations; and private households.

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

The Other Services Supersector consists of three main sectors: Repair and Maintenance; Personal and Laundry Services; and Religious, Grantmaking, Civic, Professional, and Similar Organizations. The supersector includes an eclectic mix of companies in a variety of different industries.

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 Concentrations/ Location Quotients

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, 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. ✜

AVERAGE ANNUAL WAGES BY SECTOR COLORADO AND UNITED STATES 2005

Industry	Colorado	United States
Agriculture, Forestry, Fishing, Hunting	$24,440	$23,118
Mining	83,210	72,226
Construction	41,488	42,100
Manufacturing	53,692	49,286
Wholesale Trade	57,969	55,266
Retail Trade	25,395	24,930
Transportation and Warehousing	38,841	39,511
Utilities	71,787	75,211
Information	68,642	62,832
Finance and Insurance	62,091	73,368
Real Estate and Rental and Leasing	38,896	39,386
Professional and Technical Services	67,569	65,274
Management of Companies and Enterprises	99,729	85,262
Administrative and Waste Services	29,792	28,111
Educational Services	31,579	36,447
Health Care and Social Assistance	38,870	37,829
Arts, Entertainment, and Recreation	26,947	28,113
Accommodation and Food Services	15,039	15,165
Other Services	28,762	25,884
Government	41,645	41,580
Total All Industries	$41,601	$40,671

Source: Colorado Department of Labor and Employment, Bureau of Labor Statistics.

CONCENTRATION OF SELECT SUBSECTORS IN COLORADO 2005

Industry	Location Quotient		
	Firms	Employment	Wages
Food Manufacturing	0.89	0.70	0.67
Beverage and Tobacco Product Mfg	0.92	1.79	2.26
Chemical Manufacturing	0.67	0.46	0.37
Computer and Electronic Product Mfg	1.24	1.38	1.42
Transportation Equipment Mfg	0.61	0.36	0.46
Software Publishers	2.81	3.25	2.90
Telecommunications	0.98	1.81	2.10
Scientific Research and Development Services	1.37	1.41	1.51

[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 nearly 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 manufacturing issues and trends, the impact of government and government policy, the role and impact of technology in Colorado, 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. 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 members of the business community in finding relevant information from U.S. Census reports by obtaining and using statistical data, summary tape files, 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 providing 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 the following areas:

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Business Research Division

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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

Technology

- Prepared overview of technology 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

Health Care

- 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

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

- In addition to the outlook forum kickoff event in Denver, targeted presentations of the business economic forecast are typically made to more than 50 local, regional, and national organizations.

Staff

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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, policy makers, 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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Center for Sustainable Tourism

The Center for Sustainable Tourism is the management unit for the tourism research and service functions of the Leeds School of Business. It also serves as a "virtual think tank," where students, faculty, tourism industry representatives, community leaders, and government officials, committed to the intelligent and orderly growth of tourism, can come together to share their thoughts, concerns, ideas, research, and solutions.

The focus of sustainable tourism fits the state, national, and international tourism industry experience, where the limelight is regularly focused on balancing an expanding economy with social, cultural, and environmental integrity.

The ultimate goal of the CU Center for Sustainable Tourism is to provide students with the technical and industry knowledge for their eventual role as leaders in the tourism industry. Students participating in the center's activities will be significantly better prepared to deal with current and future issues facing development resulting from tourism.

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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 300 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.

Additionally, 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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Services to Business and Industry

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The Robert H. and Beverly A. Deming Center for Entrepreneurship

Recent national recognitions affirm the quality of the Deming Center for Entrepreneurship's Program and its continued success creating innovative new areas of entrepreneurial opportunity. The center's work in sustainable venturing and other new initiatives will keep it at the forefront of entrepreneurship education.

Collaborations with the campus, community, and 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 entrepreneurial, venture capital, and business community.

Cross-campus collaborations include the Entrepreneurship Center for Music, which bridges traditional performance-based music education and career-related instruction, and the Entrepreneurial Law Center, which conducts educational, research, and service activities on legal matters relevant to entrepreneurs, venture capitalists, and the lawyers who serve them.

The Boulder Innovation Center, Boulder TechStars, CTEK Venture Centers, the National Renewable Energy Laboratory, the National Center for Atmospheric Research, and the National Oceanic and Atmospheric Administration are among the center's entrepreneurial incubator, innovation center, and government lab partners.

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 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, and the annual Evening with Entrepreneurs event. At the MBA level, the Graduate Entrepreneurs Association supports a number of activities to encourage and promote student activity in entrepreneurship: Learn from the Best Speaker Series, and the annual Entrepreneurship Retreat. MBAs also continue the legacy of Entrepreneurial Solutions, the Deming Center Venture Fund, and Net Impact Case Competition. And finally, three new students have begun the Ph.D. program in Strategic, Organizational, and Entrepreneurial Studies.

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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) provides a collaborative forum designed to unite programs supporting manufacturing across the state. CAMT hosts myriad programs to achieve its goal of supporting Colorado manufacturers:

- Boosting the competitiveness of Colorado manufacturers through technical assistance offered under the Colorado Manufacturing Extension Partnership (CMEP). We are experienced engineers and business professionals with skills in manufacturing, management, process, and technology. We work closely with manufacturers to provide company assessments, customized training and workshops, and hands-on facilitation and implementation.
- Strengthening the supply chain through the development of a web portal that will enable 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).
- Partnering with Colorado universities and national laboratories that goes beyond conventional technology transfer. CAMT helps manufacturers look for technology that is available to integrate with their product development.
- Providing assistance to manufacturers interested in exporting. Gaining foreign customers often requires different marketing strategies, changes to existing products, training and guidance in compliance issues like CE for the European Union, and additional requirements in packaging and labeling. This information will be consolidated to help Colorado companies penetrate foreign markets quickly, efficiently, and profitably working in partnership with existing federal and state programs.
- Providing workforce development on-site training and workshops to provide employees with education in world-class manufacturing. In addition, we offer programs to high school students to foster greater awareness of, and appreciation for, career opportunities in manufacturing.
- Making research and policy recommendations on policy issues such as OSHA, environmental, and healthcare that have a significant impact on manufacturing costs. This will be accomplished through a partnership with entities such as CACI (Colorado Association for Commerce and Industry).

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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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Notes