FORTIETH ANNUAL

COLORADO

BUSINESS ECONOMIC OUTLOOK

2005

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

KeyBank

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

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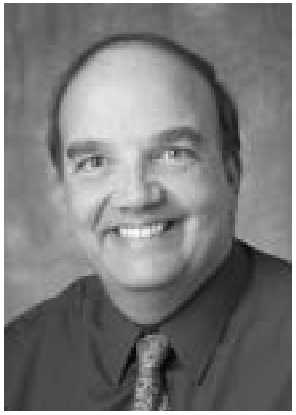
Preface



The annual Colorado Business Economic Outlook, now over the hill at 40, focuses attention on the changing structure of the Colorado economy, both past and present, and projects employment and major economic indicators for the coming year. With relevant, understandable information concerning Colorado's future, we hope to assist in advancing sound economic development decisions by policymakers throughout the state. In addition, we strive to give businesses more information about the economic reality of the environment in which they operate.

The information presented at the Fortieth 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 2005 Colorado economy as is possible given our publishing deadline.

We are extremely pleased to have concerned and committed individuals from Colorado business, education, and government organizations throughout the state join and work with us for several months, estimating and projecting the data series presented in this statistical summary, as well as providing significant portions of the narrative. The efforts of these individuals are greatly appreciated. A complete list of the 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.

I would especially 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, Marketing Analyst; Jeff Romine and Miles Light, Research Economists; Bud McGrath, Project Manager; Cindy DiPersio, Publications Coordinator; Lynn Reed, Graphic Designer; Terry Rosson, Program Assistant; Julie Arnett, Research Assistant; Brendan Hickey and Kara Southwell, Student Research Assistants; and Greg Swenson, Staff Writer with the Office of News Services, for their help in assembling and presenting the 2005 Business Economic Outlook Forum.

Introduction

The University of Colorado at Boulder Leeds School of Business is pleased to present our annual forecast of Colorado's economy. Our program analyzes changes that took place this past year and projects activity for 2005.

Work on the forecast began in July, when data collection and statistical updates were performed. Committees were formed in September with more than 80 leaders in business, education, and government, as well as economists and specialists, agreeing to participate. Members were split into 14 groups, each group representing a major economic sector.

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.

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

Richard L. Wobbekind

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

Denver and Front Range a Major "Hub" for Key

Colorado is a growing and focus market for Key. Last May, KeyCorp CEO Henry Meyer and the entire corporate executive team spent two days with us, visiting clients, area offices, and hosting "town hall" meetings with our employees. Why? Because we're investing substantially here, not only in individuals, families, small and midsize businesses, but in our communities and organizations like the Leeds School of Business.

We see opportunity and quality of life here, and have grown our operations substantially over the last decade, as the chart on this page describes. We're now among the top four banks for area small and midsize businesses. Today we operate about 50 KeyBank offices, and Denver-based Wallach Company and McDonald Financial Group offices here. Key Equipment Finance (KEF), the Key organization that I run, selected Superior for its global headquarters.

All told, we have over 800 associates on the ground here, and that number is growing.

Just last month, KEF announced our intention to acquire the American Express organization that serves small and midsize businesses with equipment leasing solutions across the United States. The acquisition will allow us to help more businesses lease equipment ranging from diagnostic medical and dental equipment to trucks and computer and telecommunications systems.

Our Outlook: Optimistic

We continue to see positive growth signs in our small business and commercial banking businesses, here and around the country. Last month when The *Wall Street Journal* wanted perspective on the borrowing activities of the nation's midsize companies for an article on signs of a turnaround in commercial loan demand, we reported moderate but steady growth that we trace to the first quarter of 2004. The *Journal* interviewed Key because we advise thousands of midsize businesses across four regions of our country. We're cautiously optimistic as we head into the new year.

Thanks for your continuing commitment to the Leeds School and this program. We're proud to join you in that support.

Paul A. Larkins
President and Chief Executive Officer
Key Equipment Finance

1993–95	Key completes acquisitions of Home Federal Savings, Bank of Greeley, Century and Omni Banks
1996	Key becomes lead bank sponsor of the Colorado Avalanche and Denver Nuggets
	Key acquires LeaseTec, now Key Equipment Finance headquartered in Superior and the nation's third largest bank-based leasing company
2000	Key establishes downtown headquarters in the World Trade Center
2001	Key's McDonald Financial Group opens Centennial office
2001	Key completes acquisition of The Wallach Company
2003	Key completes acquisition of Union Bank & Trust
2003	Key named one of Denver's "Best Places to Work"
2003/04	KeyCenters increase to 48 with addition of new offices in 11 areas
2004	Key Equipment Finance announces acquisition of American Express small business leasing unit, expanding its U.S. network and vendor leasing capabilities for small and mid-size businesses

Colorado Then and Now: 40 Years of Forecasts

In December 1965, the University of Colorado's School of Business and the State of Colorado's Division of Commerce and Development produced and hosted the first Business-Economic Outlook and Forum. At the time, 65 leading business, education, and government analysts and leaders contributed to the final outlook forecast.

During this 40-year period, the Colorado economy has changed in many ways—but some things never change. The first booklet included the following statement: "*activity in Colorado during 1966 will be influenced to a considerable extent by the strength of the national economy*." The report went on to talk about the rise in the GNP (at the time the preferred measure for national economic performance) from $665 billion to $709 billion, or a 6.6% increase.

The nation and Colorado were in the middle of an expansionary economy, but the costs related to the combined War on Poverty and the military action in Vietnam were still not fully felt in the economy. Colorado had lagged the nation through the most recent recession, and was only a year or two past the effects of it. The unemployment rate, which had recently risen to 4.3%, had fallen back to 3.2%. Inflation was running just above 3.0%, and per capita income was increasing, up nearly 5.0%.

In 1965, Colorado was just passing the 2 million population mark, with 12,000 new residents moving to the state during the previous year. Among the fastest growing counties were Pitkin, Jefferson, Boulder, and Larimer. Colorado, as a whole, was growing at a much faster rate than the nation.

The total labor force was estimated to be just over 750,000 persons living in about 625,000 households. Therefore, each household had on average 1.2 workers.

Total wage and salary nonagriculture employment in Colorado was estimated to be approximately 584,900. (The details of the employment in 1965, with forecasted growth from 1965–66 included, are shown in the chart on this page.)

TOTAL COLORADO WAGE AND SALARY NONAGRICULTURAL EMPLOYMENT IN 1965

Industry	Total	Share	Forecasted Growth 1966	Percentage Change
Mining	12,200	2.1%	300	2.5%
Construction	38,800	6.6	800	2.1
Manufacturing	86,600	14.8	2,100	2.4
Transportation and Utilities	44,400	7.6	200	0.5
Finance, Insurance, and Real Estate	30,200	5.2	700	2.3
Retail and Wholesale	138,700	23.7	2,800	2.0
Services	96,000	16.4	3,700	3.9
Government	138,000	23.6	5,500	4.0
Total	584,900		16,100	2.8%

Source: Colorado Business Economic Outlook Committee, December 1965.

Getting from then to now…

Each of us can easily think of things that did not exist or have significantly changed since that first business and economic outlook. For example, in 1965, we all saw the first live pictures from the surface of the moon from an unmanned probe. Television technology was switching from primarily black and white to color programming. Sports conversations were not about which teams would go to the Super Bowl, but rather the NFL and AFL Championships (which Green Bay and Buffalo, respectively, won). By the way, Jack Nicklaus wasn't designing golf courses; he was tearing them up on his way to being the leading money winner on the PGA Tour.

In the mid 1960s the Democrats controlled the White House (Lyndon Johnson was president) and both the U.S. Senate (88-32) and the House (295-140). Here in Colorado, Governor John Love (a Republican) was in his first term. The state was represented by two Republican U.S. senators and four Democratic congressmen.

Recognizing Colorado's history and the changes in both our general and economic lives allows each of us to reflect on the challenges that face us in the future. Since 1965, the Colorado Business Economic Outlook has attempted to provide insights into the coming year that give business owners, managers, and employees a sense of what lies ahead. With the publication of the 40th edition of this booklet, we celebrate the on-going successes of the Colorado economy and look forward to providing information about tomorrow for many years in the future. ✜

QUICK COMPARISON OF 1965 AND 2004

Measures	1965	1965 Prices Adjusted to Today	2004
U.S. Per Capita Income	$2,566[a]	$15,282	$32,431
Life Expectancy (Years)	70.2	—	77.2
Percentage of Colorado Population with College Degree	9.4	—	32.7
U.S. GDP ($ billions)	$663.9[a]	$3,953.9	$11,664.0
U.S. Government Debt ($ billions)	$322.3[a]	$1,919.5	$7,429.7
Stock Market (Dow high)	969	5,771	10,795
U.S. Inflation (Percentage)	1.6	—	2.7
Automobile (Ford Mustang)	$3,334	$19,856	$18,785
Average New Home	$21,500	$128,044	$255,100
First Class Postage	$0.05	$0.30	$0.37
Regular Gas (Gallon)	$0.31	$1.85	$1.92
Movie Ticket	$0.85	$5.06	$7.50
Eggs (Dozen)	$0.53	$3.16	$0.78
Milk (Gallon)	$0.95	$5.66	$4.25
PGA Leading Money Earners			
1965—Jack Nicklaus	$140,752	$838,256	
2004—Vijay Singh			$10,725,166

[a]1964 data.

U.S. and Colorado Economic Outlook

Output

Gross domestic product (GDP) enjoyed its strongest real growth of the past decade during the period 1996-2000, when the annual rate of growth varied between 3.7 and 4.5%. In the subsequent three years, real GDP growth was 0.8%, 1.9%, and 3.0%, respectively. In 2004, real GDP growth approached the level of the late 1990s and is expected to remain there in 2005. Projections are for GDP to increase at a rate of 4.0% in 2004 and 3.6% in 2005. The GDP deflator is anticipated to remain stable through 2005. It registered a 2.0% increase in both 2003 and 2004, and is projected to slow to 1.9%, in 2005.

Consumption

For the past three years, the consumer has supported the U.S. economy despite a lackluster employment market. Accommodative monetary and fiscal policies have provided an environment that has encouraged spending. Financial institutions have prospered in this environment by offering numerous creative financing programs. Consumers have done their part by taking advantage of these programs by further extending their debt obligations. These increased expenditures have come at the expense of the savings rate, which has experienced an extended decline.

Looking ahead to 2005, personal consumption will remain solid, but will be lower than in 2004. Stable long-term growth in consumption is typically derived from increased employment and personal disposable income, rather than increased debt or decreased savings. As a result, real personal consumption is expected to be 3.5% in 2004 and 3.1% in 2005.

These projections also point to modest appreciation in the equities markets in 2005, thus creating a rising wealth effect. As a result of the 2004 elections, it is likely that over the next four years equity markets may benefit from social security reform, revising the alternative minimum tax, and making the recent tax cuts permanent.

Retail sales nationally will remain strong in 2005; however, they will decline slightly compared to 2004. Retail sales are expected to grow 6.3% in 2004 and 5.2% in 2005. Light truck and auto sales, a key component of retail sales, will remain flat in 2005. It is apparent that the zero and low-rate financing beginning in late 2001 and lasting through early 2004 borrowed sales from the future. This so-called "spent-up" demand dampened sales in 2004 and will continue to have that effect in 2005.

Overall, the Conference Board's Consumer Confidence Survey has moved upward after dropping to 61.4 in March of 2003, when the war in Iraq began. With an end to the uncertainty associated with the election, consumer confidence should remain strong in 2005. At this time, the most likely sources of uncertainty remain the prospect of terrorist events or additional volatility in energy prices.

While there is no state indicator of consumer confidence, the Conference Board measures consumer confidence for the Mountain States region. Prior to 1991, the Mountain index for consumer confidence was consistently lower than the U.S. index value. In 1991, this trend reversed itself as consumer confidence in the Mountain States has remained higher than in the United States overall. This trend of greater optimism in the Mountain States is expected to continue in the foreseeable future.

Investment

Another component of growth is investment. During both 2001 and 2002, companies showed a decrease in real business investments of 4.2% in

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

Year	U.S. C.P.I.	U.S. C.P.I. Rate	Denver-Boulder-Greeley C.P.I.[a]	Denver-Boulder-Greeley C.P.I. Rate
1995	152.4	2.8	147.9	4.3
1996	156.9	3.0	153.1	3.5
1997	160.5	2.3	158.1	3.3
1998	163.0	1.6	161.9	2.4
1999	166.6	2.2	166.6	2.9
2000	172.2	3.4	173.2	4.0
2001	177.1	2.8	181.3	4.7
2002	179.9	1.6	184.8	1.9
2003	184.0	2.3	186.8	1.1
2004[b]	189.0	2.7	187.0	0.1
2005[c]	193.5	2.4	190.0	1.8

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

[b]Estimated.

[c]Forecast.

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

2001, followed by a steeper decline of 8.9% in 2002. This negative trend reversed itself in 2003 as firms found that they could no longer postpone certain business expenditures, and by year-end investment rose by 3.3%. The much-awaited need to address certain business expenditures took place in 2004 as real business investment grew by 10.0%. Looking forward, continued replacement investment, augmented by an increased demand for expansionary investment, will drive growth in this area. Business investments are expected to climb at a strong, but slightly lower rate of 8.9% in 2005.

Increased investment in 2004 has resulted, at least in part, in higher production levels. Industrial production will grow by a much higher than anticipated rate, 10.0%, in 2004, with a slight drop off in 2004, to 8.9%.

At this time last year the inventory-to-sales rates were at their lowest levels in history, indicating that goods needed to be replaced quickly. As foretold by these ratios, the growth in investment and employment translated to increased business inventories. The change in business inventories showed a dramatic increase in 2004, following a slight decline in 2003. Business inventories will grow by $50.5 billion in 2004, and increase further by $55.3 billion in 2005. While the inventory-to-sales ratio recently served as an accurate indicator that economic prosperity was on the horizon, investment in "just-in-time" production and other cost-saving devices could change the long-term inventory-to-sales ratio relationship. This would likely result in lower inventory to sales ratios at the peak of the cycle.

Despite strong employment levels in 2005, housing starts are expected to fall as mortgage rates continue their slow rise from 40-year lows reached in July 2003. Even with this decline, the housing market will remain better than it was in the 2000–02 period. Interest rates will be higher than in recent years, but compared to historic values they will remain low. In Colorado, housing permits are expected to continue flat in 2005, after experiencing a stronger than anticipated year in 2004. A long-term construction-related consideration for Colorado is the recent passage of FasTracks, which may bring significant changes in the future location of housing projects to meet the demands of residents who want to be located near FasTracks routes.

Overall, U.S. and Colorado exports have benefited from improved global economic conditions and a weak dollar; however, U.S. real net exports are estimated to be -$575 billion in 2004. They will increase slightly, to -$577 billion, in 2005. Although the dollar has weakened against some currencies, the fixed exchange rate of the Chinese yuan has reduced opportunities for the United States to rapidly adjust the trade deficit. China alone is responsible for 25.0-30.0% of the U.S. trade deficit. In addition, the U.S. economy continues to perform at a higher rate than many of our trading partners, thus spurring more demand for imports on the part of U.S. consumers. Finally, offshoring has

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GROSS DOMESTIC PRODUCT AND NATIONAL UNEMPLOYMENT RATE 1995–2005

Year	Gross Domestic Current Dollars (Billions)	Change Current Dollars (Billions)	Gross Domestic Chained 2000 Dollars (Billions)	Change Chained 2000 Dollars (Billions)	GDP Deflator (2000=100)	National Unemployment Rate
1995	$ 7,397.7	4.6%	$ 8,031.7	2.5%	92.1	5.6%
1996	7,816.9	5.7	8,328.9	3.7	93.9	5.4
1997	8,304.3	6.2	8,703.5	4.5	95.4	4.9
1998	8,747.0	5.3	9,066.9	4.2	96.5	4.5
1999	9,268.4	6.0	9,470.3	4.4	97.9	4.2
2000	9,817.0	5.9	9,817.0	3.7	100.0	4.0
2001	10,128.0	3.2	9,890.7	0.8	102.4	4.8
2002	10,487.0	3.5	10,074.8	1.9	104.1	5.8
2003	11,004.0	4.9	10,381.3	3.0	106.0	6.0
2004[a]	11,664.0	6.0	10,793.0	4.0	108.1	5.5
2005[b]	12,311.0	5.5	11,182.0	3.6	110.1	5.2

[a]Estimated.
[b]Forecast.
Source: U.S. Department of Commerce, Bureau of Economic Analysis; and Colorado Business Economic Outlook Committee.

U.S. and Colorado Economic Outlook

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NATIONAL ECONOMIC INDICATORS
2000–2005

Indicator	2000	2001	2002	2003	2004[a]	2005[b]
Gross Domestic Product						
Real GDP (% change)	3.7%	0.8%	1.9%	3.0%	4.0%	3.6%
Nominal GDP (% change)	5.9%	3.2%	3.5%	4.9%	6.0%	5.5%
Consumption						
Real Disposable Personal Income (% change)	4.8%	1.9%	3.1%	2.3%	3.1%	3.2%
Real Personal Consumption (% change)	4.7%	2.5%	3.1%	3.3%	3.5%	3.1%
National Consumer Confidence (December)	128.6	94.6	80.7	94.8	100.0	110.0
Rocky Mountain Consumer Confidence (December)	137.0	97.1	88.1	90.6	104.0	115.0
Consumer Credit ($ billions)	$1,692.9	$1,828.8	$1,905.0	$1,986.7	$2,076.1	$2,169.5
Auto and Light Truck Sales (million units)	17.2	17.0	16.7	16.6	16.6	16.6
Retail Sales (% change)	6.6%	3.7%	3.1%	5.4%	6.3%	5.2%
Investment						
Real Gov't. Consumption and Investment (% change)	2.1%	3.4%	4.4%	2.8%	2.2%	2.2%
Real Business Investment (% change)	8.7%	-4.2%	-8.9%	3.3%	10.0%	8.9%
Industrial Production (% change)	4.4%	-3.4%	-0.6%	0.3%	10.0%	8.9%
Housing Starts (millions units)	1.57	1.60	1.71	1.85	1.92	1.77
Change in Business Inventories ($ billions)	$56.5	-$31.7	$11.8	-$0.7	$50.5	$55.3
Prices						
Consumer Price Index (% change)	3.4%	2.8%	1.6%	2.3%	2.7%	2.4%
Producer Prices (% change)	3.9%	2.0%	-1.3%	3.2%	3.6%	1.8%
Employment Costs (% change)	4.4%	4.0%	3.8%	3.9%	3.8%	3.8%
Money and Interest						
3-Month Constant Maturities (rate)	5.9%	1.7%	1.2%	0.9%	2.2%	3.2%
10-Year Constant Maturities (rate)	5.1%	4.1%	3.8%	4.4%	4.6%	5.1%
Fed Funds Rate (year end)	6.50%	1.75%	1.24%	1.00%	2.00%	3.75%
Employment and Population						
Population (% change)	1.1%	1.1%	1.1%	1.1%	1.0%	1.0%
Unemployment Rate	4.0%	4.8%	5.8%	6.0%	5.5%	5.2%
Nonfarm Employment (% change)	2.2%	0.0%	-1.1%	-0.3%	1.2%	1.8%
Other Indicators						
Nominal Pre-Tax Profits (% change)	-3.9%	-6.2%	14.0%	16.8%	17.0%	17.6%
Current Account ($ billions)	-$413.0	-$386.0	-$474.0	-$531.0	-$640.0	-$671.0
Federal Budget Balance ($ billions for fiscal year)	$236.0	$127.0	-$158.0	-$375.0	-$425.0	-$369.0
Real Net Exports ($ billion)	-$379.0	-$399.0	-$472.0	-$518.0	-$575.0	-$577.0

[a]Estimated.

[b]Forecast.

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

become a highly politicized issue and the manner in which it is addressed could have a negative impact on trade and the establishment of new free trade agreements.

Prices

In late 2003, some economists considered deflation more of a concern than inflation. Neither inflation nor deflation appears to be an issue moving into 2005. Overall, prices have been held in check by strong competition, excess capacity in many industries, increased productivity, and consumers who are willing to aggressively bargain for better prices. Nationally, the CPI is expected to increase by 2.7% in 2004 and 2.3% in 2004. Decreased housing prices over the past year have caused the CPI-U growth rate for Colorado to drop lower than the rate for the United States. Rates for Colorado are projected at 0.1% for 2004 and 1.6% for 2005.

Producer prices, as measured by the Producer Price Index (PPI), climbed 3.6% in 2004. This was caused primarily by higher energy prices and price increases during early stages of production. The PPI is expected to increase only 1.8% in 2005 as energy prices stabilize or drop slightly.

Employment costs grew at a 3.8% rate in 2004 and are forecast to remain at that level in 2005. Slow wage appreciation, associated with an employer-friendly economy, is being offset by increasing benefit and medical costs.

Employment and Population

As 2005 begins, job creation at the national level is expected to be broad based. While most sectors are expected to increase, overall growth will likely occur at lower levels than those seen in the past. During the 1990s Colorado unemployment was typically about 1.0% below the national level. The state recorded rates similar to the nation during 2002–04 period. A small positive gap is expected to return in 2005 as unemployment in the United States is expected to be 5.2%, while the rate for Colorado is projected at 4.8%. The unemployment rate is not expected to drop rapidly during the next 18 months as a number of workers who have been inactive for over a year reenter the work force.

Nationally, population is expected to grow by 1.0% in both 2004 and 2005, while the growth of the state is expected to slow to 1.1% in 2004 and change to 1.2% in 2005. The biggest factor in the slowing of the state's population growth rate from the rates of the 1990s has been the significant decrease in net migration. Although net migration is substantially lower than in the 1990s, it is still positive. During the last Colorado economic slowdown in the 1980s, net migration turned negative, which severely impacted the housing market. During the current period, housing prices have stabilized, with most price ranges and geographic locations exhibiting stable or increasing prices.

In the sections that follow, a summary of 2004 and a forecast for 2005 is presented. The committee members have provided data analysis and insight into the key factors influencing each of these sectors. We trust this data and analysis will prove useful in your business and policy decision-making process. ✜

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

Sector	2003	2004[a]	2005[b]	2004 New Jobs[a]	Percentage Change	2005 New Jobs[b]	Percentage Change
Natural Resources and Mining	13.1	13.6	14.3	0.5	3.8%	0.7	4.9%
Construction	149.8	147.1	148.0	-2.7	-1.8	0.9	0.6
Manufacturing	156.2	154.0	155.8	-2.2	-1.4	1.8	1.2
Trade, Transportation, and Utilities	404.1	403.2	410.1	-0.9	-0.2	6.9	1.7
Information	84.9	82.0	83.3	-2.9	-3.4	1.3	1.6
Financial Activities	154.2	154.9	156.1	0.7	0.5	1.2	0.8
Professional and Business Services	286.5	295.7	310.5	9.2	3.2	14.8	4.8
Educational and Health Services	213.5	218.4	223.0	4.9	2.3	4.6	2.1
Leisure and Hospitality	245.5	248.7	253.9	3.2	1.3	5.2	2.0
Other Services	85.8	87.0	89.5	1.2	1.4	2.5	2.8
Government	356.8	355.1	358.3	-1.7	-0.5	3.2	0.9
Total	2,150.4	2,159.7	2,202.8	9.3	0.4%	43.1	2.0%

[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.

Population, Labor Force, and Personal Income

The performance of the Colorado economy is directly related to the composition of its population, labor force, and the personal income generated. Data from the U.S. Census show that the population of the state will increase by about 880,100 from 1995–2005. Over that period almost 59.4% of the state's population growth will be attributed to net migration, with the remainder attributed to natural increase. This 10-year trend will be in sharp contrast to 2005, when the reverse will be true. Approximately 65.3% of the population increase will be attributed to natural increase. Net migration is anticipated to drop from its peak of 82,500 in 2000 to 10,000 in 2004 and rise slightly, to 20, 000, in 2005. As a result of net migration and the natural increase, Colorado's population is expected to grow by 57,600 persons in 2005, to 4.69 million. This population increase of 1.2% will be slightly above the national average.

Between 1995 and 2004 the population grew at an annual growth rate of 2.1%, while the labor force grew at a rate of 1.9%. During that period, a robust rate of growth in the labor force occurred as a result of strong net migration. In 2005, our forecast calls for labor force to rise at a much stronger rate than the population because of increased labor force participation (i.e., more workers who lost their jobs and quit looking for work will be reentering the work force).

For the first time since 2001, the Colorado economy is expected to show weak yet positive job growth in 2004, posting an increase of 9,300 jobs. This growth comes after back-to-back years of deep losses, the only such occurrence since the Bureau of Labor Statistics first began tracking employment data in 1939.

The state economy turned the corner in the second quarter of 2004 as month-over-month job increases for the second quarter offset job losses during the first quarter. During the second half of the 2004, month-over-month job growth is expected to average about 18,000 positions per month, resulting in an annual average increase of 9,300 jobs. Since 1991, mining, health care, financial activities, and personal services proved to be recession proof. The

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COMPONENTS OF COLORADO RESIDENT POPULATION
1995–2005
(In Thousands)

Year	Births (Resident)	Deaths (Resident)	Natural Increase	Net Migration	Population Change
1995	53.9	24.7	29.1	70.3	99.4
1996	55.0	25.1	29.9	62.0	91.9
1997	56.3	25.9	30.4	63.5	93.9
1998	57.7	26.3	31.4	75.6	107.0
1999	60.7	26.5	34.2	79.8	114.0
2000	63.9	27.0	36.9	82.5	119.4
2001	66.4	27.8	38.6	68.4	107.0
2002	67.6	28.9	38.7	36.2	74.9
2003	69.0	28.9	40.1	24.9	65.0
2004[a]	68.4	28.9	39.5	10.0	49.5
2005[b]	66.6	29.0	37.6	20.0	57.6

[a]Estimated.
[b]Forecast.
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
1995–2005
(Base Year: 1995=100)

	Colorado		United States	
Year	Index	Resident Population (In Thousands)	Index	Resident Population (In Thousands)
1995	100.0	3,813.4	100.0	266,278
1996	102.4	3,905.2	101.2	269,394
1997	104.9	3,999.2	102.4	272,647
1998	107.7	4,106.2	103.6	275,854
1999	110.7	4,220.2	104.8	279,040
2000	113.8	4,339.5	106.0	282,188
2001	116.6	4,446.5	107.1	285,094
2002	118.6	4,521.4	108.1	287,974
2003	120.3	4,586.4	109.2	290,810
2004[a]	121.6	4,635.9	110.3	293,623
2005[b]	123.1	4,693.5	111.3	296,426

[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
1995–2005
(In Thousands)

Labor Force	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[a]	2005[b]
Colorado Labor Force	2,087.5	2,093.2	2,150.2	2,241.8	2,264.1	2,351.2	2,379.1	2,437.4	2,476.1	2,510.0	2,593.0
Unemployed	87.5	88.4	70.1	86.1	66.0	65.0	88.5	139.8	153.2	132.7	125.0
Unemployment Rate (%)	4.2	4.2	3.3	3.8	2.9	2.8	3.7	5.7	6.2	5.3	4.8
Total Employment	2,000.0	2,004.7	2,080.0	2,155.7	2,198.1	2,286.2	2,290.6	2,297.6	2,322.8	2,377.3	2,468.0
Agricultural	27.1	26.0	26.3	26.0	25.7	25.5	25.0	27.5	25.4	25.3	25.7
Nonagricultural	1,972.9	1,984.3	2,053.7	2,129.7	2,175.4	2,260.7	2,265.6	2,270.1	2,322.8	2,377.3	2,468.0

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

COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
1995–2005
(In Thousands)

Sector	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[a]	2005[b]
Natural Resources and Mining	13.3	12.6	13.2	13.4	12.3	12.2	12.9	12.9	13.1	13.6	14.3
Construction	103.7	112.2	120.5	134.6	148.5	163.6	167.7	160.4	149.8	147.1	148.0
Manufacturing	179.5	182.9	189.3	194.4	190.7	191.3	181.9	166.1	156.2	154.0	155.8
Trade, Transportation, and Utilities	360.6	372.1	381.3	392.4	404.9	418.9	423.0	412.1	404.1	403.2	410.1
Information	64.5	67.9	73.7	86.4	97.0	108.4	107.3	92.9	84.9	82.0	83.3
Financial Activities	121.1	127.9	135.2	142.8	147.4	147.0	148.3	149.5	154.2	154.9	156.1
Professional and Business Services	239.0	252.1	270.2	279.2	298.1	315.2	308.4	292.2	286.5	295.7	310.5
Educational and Health Services	165.4	171.2	178.2	182.9	186.9	192.8	200.8	208.5	213.5	218.4	223.0
Leisure and Hospitality	215.2	220.1	226.6	231.0	238.5	246.0	247.2	247.0	245.5	248.7	253.9
Other Services	68.5	72.7	75.7	77.3	79.0	80.2	83.8	85.6	85.8	87.0	89.5
Government	303.7	308.7	315.6	322.3	328.4	337.0	344.1	355.4	356.8	355.1	358.3
Total[c,d]	1,834.4	1,900.4	1,979.5	2,056.7	2,131.5	2,212.6	2,225.4	2,182.5	2,150.4	2,159.7	2,202.8

[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 and Colorado Business Economic Outlook Committee.

Population, Labor Force, and Personal Income

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current turnaround began in March of 2004 with improved employment in personal business services. By year-end, this supersector is expected to add approximately 9,200 jobs. Obviously, the strength of the above-mentioned sectors in 2004 was negated by job losses in such critical areas as manufacturing; information; trade, transportation, and utilities; and construction.

In 2005, all supersectors of the state economy are expected to record job growth, led by professional and business services; trade, transportation, and utilities; leisure and hospitality (tourism), health care, and retail trade. In 2005, Colorado will return to average job growth, with an increase of 43,100 jobs, or a 2.0% gain.

In 2002, the state's level of unemployment jumped above the natural rate of unemployment (4.5–5.0%) for the first time since 1993. The yearly average is expected to remain above the natural rate through 2004 and decline to 4.8% in 2005.

TOTAL PERSONAL AND PER CAPITA INCOME, COLORADO AND UNITED STATES 1995–2005 (Base Year: 1995=100)

	Colorado			United States		
Year	Index	Total Personal (Millions)	Per Capita[a]	Index	Total Personal (Billions)	Per Capita[a]
1995	100.0	$ 92.7	$24,226	100.0	$6,144.7	$23,076
1996	108.2	100.2	25,570	105.3	6,512.5	24,175
1997	117.0	107.9	26,846	111.6	6,907.3	25,334
1998	125.9	118.5	28,784	118.4	7,415.7	26,883
1999	138.3	128.9	30,492	127.1	7,796.1	27,939
2000	150.4	144.4	33,371	133.6	8,422.1	29,847
2001	168.5	150.6	34,003	144.4	8,718.2	30,580
2002	175.8	151.8	33,723	149.4	8,868.3	30,795
2003	177.2	156.8	34,283	152.0	9,148.7	31,459
2004[b]	183.0	160.2	35,000	156.8	9,285.9	31,510
2005[c]	187.0	168.6	36,350	159.2	9,685.2	32,431

[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.

Between 1995 and 2000, total Colorado personal income grew at an annual rate of 9.3%, compared to 6.5% for the nation. The rate of growth tapered off between 2000 and 2004, when both Colorado and the United States showed an annual growth rate of 2.6% and 2.5%, respectively. The outlook is brighter in 2005 as total personal income is projected to increase by 5.2% in Colorado and 4.6% for the United States.

Between 1995 and 2000, Colorado per capita personal income increased at a CAGR of 6.6%, compared to the national rate of 5.3%. More recently the rates of growth have dropped significantly. Between 2001 and 2004, Colorado per capita income increased at a CAGR of 1.2%, compared to 1.4% for the nation. Particularly noteworthy is the fact that 2002 Colorado per capita income actually decreased. On a more positive note, Colorado per capita income is expected to start growing at a rate greater than that of the United States again in 2004. Colorado per capita income is expected to be $36,350 in 2005, while the U.S. per capita income will be $32,431.

The recent decline in income illustrates the value of high-paying primary jobs to the state economy. More specifically it shows how the Professional Business Services Supersector led the recovery, both in terms of employment and income. While the Colorado and national economies are closely linked and have similar compositions, Colorado's concentration of higher wage industries that were severely impacted by the economic cycle slowed the state's recovery. ✜

Agriculture

High but volatile cattle prices, low cattle numbers, and rising fuel and fertilizer costs will be key driving forces behind profitability in Colorado's agricultural industry in 2005. While many were predicting the discovery of bovine spongiform encephalopathy (mad cow disease) in the United States in late 2003 would push down beef prices from the record highs experienced that year, prices remained high, and even increased, due to low cattle numbers and a strong domestic demand for beef. With long-awaited precipitation finally coming to much of Colorado in 2004, ranchers will be holding back heifers and cows in order to rebuild herds, and we will again see record high cattle prices. For the ranchers who have cattle to sell, 2005 will be another good year to be in the cattle business in Colorado.

Livestock in the state accounts for about 72.0% of all farm gate sales; cattle is expected to total $2.74 billion or 56.0% of all farm and ranch sales in 2005. This is a very strong number in light of the fact that fed cattle marketings will be down nearly half a million head from 2002 and only a little over two million head will be marketed. The driving force behind these total sales numbers will be a record average price for fed steers and heifers of around $100 per hundredweight (cwt.). Nevertheless, cattlemen should expect a great deal of price volatility next year. When the Canadian border opens (as anticipated), large numbers of feeder cattle are expected to come down to U.S. feedlots. This will likely have a dampening effect on prices; however, as our export markets open, prices will again recover. The cow-calf rancher should also expect a good year, with calf prices staying strong through the fall of 2005.

Dairy is another industry that has experienced record-high prices this past year. With an increasing number of dairy cattle in the state, high milk production per cow, the largest organic dairy industry in the nation, and $15.00/cwt. milk prices, dairy has surpassed corn and greenhouse-nursery production to become the state's second largest agricultural industry in terms of farm gate sales. Although milk prices will drop next year from all-time highs to around $12.25/cwt., dairy will still contribute some $275 million to the Colorado's farm economy.

Hogs should remain profitable through the first three quarters of 2005. Although hog exports are benefiting from the ban on the export of U.S. beef, expect average prices to drop about 13.0% in the coming year. Total Colorado hog sales next year will come in at approximately $215 million, slightly below 2004 sales.

Egg producers are also coming off an excellent year but are expecting to see average prices drop in 2005. Total poultry and egg sales in Colorado will fall about 4.0%, to $125 million. Lamb prices are anticipated to remain strong in 2005. The robust prices of the past few years have helped stabilize production, which has been decreasing every

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COLORADO CASH RECEIPTS FROM FARMING AND RANCHING
1997–2005
(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
1997	$2,956.1	$1,529.3	$4,485.4	$452.1	$175.6	$5,113.1
1998	2,807.1	1,543.4	4,350.5	547.0	260.3	5,157.8
1999	2,989.5	1,369.2	4,358.7	567.3	374.2	5,300.2
2000	3,325.3	1,229.2	4,554.5	490.5	351.1	5,396.1
2001	3,303.4	1,413.9	4,717.3	528.3	319.6	5,565.2
2002	3,212.1	1,319.1	4,531.2	684.8	188.4	5,404.4
2003	3,466.0	1,422.2	4,888.2	674.3	320.0	5,882.5
2004[c]	3,352.0	1,352.0	4,704.0	650.0	268.0	5,622.0
2005[d]	3,491.0	1,367.0	4,858.0	660.0	250.0	5,768.0

[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 Agriculture Committee.

Agriculture

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year for the past six decades. The Colorado lamb industry will again record approximately $100 million in sales.

With all other livestock (i.e., bison, elk, aquaculture, etc.) adding another $36 million, livestock sales in Colorado next year will equal nearly $3.5 billion, the state's third-highest sales level.

Total crop sales should be up slightly in 2005. Corn, the state's number one crop in sales, is looking at a record U.S. crop in 2004 of some 11.6 billion bushels. The size of this crop is astonishing and will have a definite dampening effect on corn prices moving into 2005. With Colorado plantings again expected to be at about one million acres but with prices dropping to around $2.00/bushel, corn sales next year will come in at approximately $263 million. As a side note, the first field of pharmaceutical corn was grown and harvested in Colorado in 2004. How this new industry will impact Colorado is a question on many people's minds.

The 2005 wheat crop was planted with the best soil moisture conditions in years. For this reason, the crop next year will be significantly better than that harvested in 2004. With some 2.6 million acres planted, a crop of about 80 million bushels is expected. With prices for next year's crop anticipated to be down slightly, to around $3.10/bushel, total Colorado wheat sales will total approximately $200 million.

Hay prices will remain weak throughout the state because the number of cattle being fed remains well below average. One exception in this market is high-quality alfalfa, which is in great demand by dairies throughout the West. With overall hay prices approaching $75.00/ ton, hay sales in Colorado will be down to about $153 million, the lowest sales level in more than a decade.

Potatoes remain the most important crop in Colorado's San Luis Valley. With improved moisture conditions in the region, potato acreage is anticipated to increase. With prices expected around $5.00/cwt., total potato sales should be up to around $135 million in 2005. Higher prices of dry beans this year will likely carry through into 2005 until next year's crop is harvested. Prices will likely fall when marketing of the 2005 crop begins. The higher prices for much of the year will result in crop sales of some $30 million next year. Onions, sugar beets, and fruit sales are expected to remain stable next year. Overall crop sales will be up about 1.0% next year, totaling $1.367 billion.

The value of farm services will be up marginally, to $660 million, in 2005. Current expectations suggest a slight decrease in total government support, resulting in approximately $250 million in payments. With a surge in fuel, fertilizer, and chemical prices, and the potential for a higher inflation rate, it is likely that total farm production expenses will hit a new high of $4.9 billion. This will result in 2005 net farm income for Colorado of $868 million, about 5.5% above 2004. ✜

COLORADO FARM INCOME AND PRODUCTION EXPENSES
1997–2005
(In Millions of Dollars)

Year	Gross Value of Farm Revenue	Total Farm Production Expenses	Net Farm Income
1997	$5,113.1	$4,395.2	$717.9
1998	5,157.8	4,275.0	882.8
1999	5,300.2	4,300.3	999.9
2000	5,396.1	4,685.2	710.9
2001	5,565.2	4,404.3	1,160.9
2002	5,404.4	4,706.5	697.9
2003	5,882.5	4,710.8	1,171.7
2004[a]	5,622.0	4,800.0	822.0
2005[b]	5,768.0	4,900.0	868.0

[a]Estimated.
[b]Forecast.
Source: Colorado Agricultural Statistics Service, and Colorado Business Economic Outlook Agriculture Committee.

Natural Resources and Mining

Oil, Gas, and Carbon Dioxide

The Rocky Mountain region, and in particular Colorado, is experiencing a boom in its energy sector, which is expected to continue throughout 2005. The energy markets will also undergo much greater volatility in commodity prices in the next year or two. The combination of price volatility and growing demand will adversely impact all business sectors in the state.

The total value of oil, gas, and carbon dioxide production in 2003 was $4.8 billion, representing nearly a 75.0% increase over the 2002 value of $2.7 billion. This increase resulted from significant growth in both production volume and commodity price. Production volumes are expected to rise 1.8% for crude oil, 18.1% for natural gas, and 10.4% for carbon dioxide during the next year due to aggressive drilling programs throughout the state. Based upon price increases in 2003 and 2004, the value of oil and gas production is forecast to be at least 20.0% higher through 2005. Production value is expected to total nearly $6 billion for 2004 and $7 billion for 2005.

Oil prices for the next couple of years are anticipated to be between $40–$60 per barrel as a result of continued unrest in the Middle East and potential instability in other OPEC nations (such as Venezuela and Nigeria) and Russia. These prices might be reduced to the $30–$35 per barrel range if (1) production is temporarily diverted from filling the Strategic Petroleum Reserve; (2) interest rates continue to increase, which reduces the attractiveness of commodities as an investment vehicle; and/or (3) stability returns to the Middle East.

With higher than normal oil prices, gasoline prices are expected to remain in the $1.75–$2.00 per

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PHYSICAL OUTPUT OF FOSSIL FUELS
1995–2005
(Base Year: 1995=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
1995	100.0	25.7	100.0	28.6	100.0	539.6	100.0	299.0
1996	96.9	24.9	89.5	25.6	108.2	584.0	110.1	329.3
1997	106.6	27.4	78.7	22.5	119.8	646.7	111.1	332.3
1998	115.2	29.6	78.7	22.5	130.6	704.8	123.0	367.7
1999	116.7	30.0	67.5	19.3	135.7	732.2	101.9	304.7
2000	113.2	29.1	66.8	19.1	143.0	771.8	103.9	310.7
2001	130.0	33.4	69.2	19.8	154.0	831.0	101.8	304.3
2002	136.6	35.1	71.3	20.4	175.3	946.0	98.7	295.0
2003	139.7	35.9	74.8	21.4	191.3	1,032.0	102.7	307.2
2004[a]	155.6	40.0	76.6	21.9	203.9	1,100.0	112.0	335.0
2005[b]	155.6	40.0	78.0	22.3	240.9	1,300.0	123.7	370.0

[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.

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gallon range, with seasonal and local swings reflecting the supply of mandated "boutique" blends. This market is further complicated by the fact that the national refining segment is operating at an all-time high utilization; no capacity is available for excess demand. Gasoline imports from other countries offer some relief, although they may not be able to meet local blend requirements.

Natural gas prices will probably continue in the range of $4–$7 per thousand cubic feet (Mcf) through the end of 2005. However, natural gas prices are expected to be even more volatile than oil due to deliverability obstacles, increasing demand from electric generation, and uncertainties in the weather and oil markets. Deliverability obstacles include a distribution system already filled to capacity in many areas, and a need for more storage and distribution of liquefied natural gas.

Higher oil and gas prices in 2004 have stimulated drilling activity in Colorado and the Rocky Mountains. A record number of drilling permits (more than 2,700) will be issued in Colorado during 2004, and this activity level is expected to continue through 2005. However, the level of activity in mergers and acquisitions is of even greater interest. Several local firms sold their portfolios to larger, financially stronger firms—Evergreen Resources sold to Pioneer Natural Resources, Westport Resources sold to Kerr McGee Corporation, and Tom Brown sold to EnCana. These transactions exceeded $8 billion in asset transfers and represented a natural gas reserve value of nearly $2 per Mcf. Opportunities such as these offer an immediate and less expensive way for buyers to enter the Rockies' market. Finding and development costs for natural gas in the Rockies are about $0.50 per Mcf more than the current acquisition price for such reserves. This differential is due partially to the costs and uncertainties associated with land access, permitting, and geological risks.

In the recent mergers and acquisition market, about 50.0% of the purchase price is being paid for proved, developed, and producing reserves. The remainder of the purchase price is based on reserves in the potential and possible categories, that is, reserves that have not been booked at the time of purchase. Buyers such as Pioneer, Kerr McGee, and EnCana are attracted by strong lease positions. Data have already developed by the selling firms (Evergreen, Westport, Tom Brown), which provides a significant time advantage over raw exploration. This trend in asset transactions is expected to continue for Colorado and the Rocky Mountains through 2005.

With higher than normal oil prices, gasoline prices are expected to remain in the $1.75–$2.00 per gallon range, with seasonal and local swings reflecting the supply of mandated "boutique" blends.

Coal

Colorado's coal industry enjoyed another year of growth. All parameters have increased: employment, sales, production, and price. As of July 2004, the Colorado Division of Minerals and Geology reported the number of coal miners in the state at 1,947, a 6.0% increase over the previous year. This is due, in part, to the opening of a new mine, the Bowie No.3 Mine near Paonia. Coal production is up 15.0% over 2003. For the first half of 2004, Colorado coal mines produced more than 20 million tons of coal. Increased demand for clean-burning Colorado coal, along with dwindling minable coal reserves in the eastern United States, forces power plants to switch to low-sulfur, Colorado coal. The spot price of Colorado coal has escalated from $14 per ton in 2003 to more than $27 per ton in 2004.

The total estimated 2004 coal production in Colorado is 40 million tons at the 2004 average spot price value (according to Energy Information Agency data, compiled by the Department of Energy) of $27 per ton, or $1.08 billion. New growth will be limited by Colorado's rail system, which must expand in order for coal production to increase beyond that level. Therefore, coal production in 2005 is forecasted to remain at the same level as this year, 40 million tons.

Colorado's increasing coal production creates new problems for the transportation sector, which is operating at near maximum capacity with the large number of coal rail shipments. Colorado's coal is produced on the Western Slope, mainly in

Gunnison, Delta, Routt, and Moffat counties. Colorado's success at producing coal is hindered by the mountainous terrain of the state, which keeps the rail system from easily expanding. In fact, Colorado still hauls coal on rail lines built more than 80 years ago. The Moffat Tunnel is near its capacity and is a major choke point for Colorado Western Slope coal. Over 28 million tons of Western Slope coal is hauled through the Moffat Tunnel every year.

Most of Colorado's coal is sold on the spot market today. Spot coal sales are higher than ever as Midwest power plants demand more coal that complies with the Clean Air Act, and this increases the need for rail shipments. Colorado's coal mines produce coal faster than the train shipments can carry them. This new production level, in turn, will cause shipment delays throughout the mountainous terrain. As a result, coal mines in areas like Somerset have large stockpiles onsite.

More than 75.0% of Colorado's coal production comes from underground mines. Underground longwall mining methods and other technological improvements have increased worker productivity such that Colorado leads the nation in coal mining efficiency. The surface mines have larger capacity draglines, loaders, and scrapers than ever before. More coal can be mined today using half as many workers as 15 years ago. Safety at Colorado's coal mines is at its highest level as no fatalities have occurred in more than five years.

Eastern U.S. coal companies have expressed renewed interest in Colorado coal supplies by purchasing two of the state's existing coal mines. In the last year Central Appalachian Mining purchased the McClane Canyon Mine near Loma, and Appalachian Fuel took over the Horizon Natural Resources Company, including the Bowie No. 2 and 3 Mines near Paonia. These Kentucky-based coal producers are new to the Colorado mining industry but bring much experience. This shows interest in Colorado coal from outside the state, a trend that is expected to continue as eastern U.S. coal resources diminish.

Another key factor of Colorado's coal industry growth is that Xcel Energy plans to build the first new coal-fired power plant in the state in more than 20 years. To meet increasing demand for electricity, this new plant near Pueblo will burn coal from Wyoming and Colorado. Coal remains the lowest cost, most reliable fuel for electricity generation, particularly for meeting base load generation requirements.

International sales of metallurgical coal have increased this year as large developing nations such as China and India increase steel production. China was a net exporter of metallurgical coal until last year. This year it is importing metallurgical coal and is helping to rekindle a specific coal industry in the United States that has dwindled for more than 30 years. Colorado does not currently produce metallurgical coal, but has extensive reserves near Trinidad, Crested Butte, and Somerset. Perhaps a new market is on the horizon for Colorado coal.

Over 28 million tons of Western Slope coal is hauled through the Moffat Tunnel every year.

Nonfuel Minerals

The mining industry has been one of the positive sectors in the national and Colorado economies during the last two years. Rising commodity prices have given a boost to Colorado's producers of gold, molybdenum, cement, uranium, and other raw materials. Nonfuel mineral production and employment is forecast to increase slightly in 2005. Colorado will continue to be an important U.S. producer of molybdenum, gold, construction aggregate, gypsum, and cement.

In 2003 (the most recent annual data available), the Colorado Geological Survey estimated a total value of nonfuel mineral production in Colorado of $702 million, a 12.0% rise over the 2002 production value. The value of nonfuel minerals production is expected to increase again in 2004 and 2005 due to continued growth in metal prices and escalation in gold and molybdenum production. These increases will be partly offset by the 2004 closure of a nahcolite mine in western Colorado and forecasted declines in aggregate production. The total value of nonfuel mineral production is expected to top $800 million in 2004 and 2005.

Gold prices increased significantly in 2004. As of mid-October, the average 2004 gold price (London PM Fix) was $402 per ounce, while the average

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Natural Resources and Mining

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gold price in 2003 was $363 per ounce. This is good news for Colorado's only major operating gold mine, the Cripple Creek & Victor Mine in Teller County. This world-class mine employs about 300 people and produced 284,000 ounces of gold in 2003, which was a 27.0% production increase compared to 2002. Total gold production for 2004 is expected to increase again, to around 310,000 ounces.

Prices for molybdenum metal have skyrocketed for the past two years. Climax Molybdenum Company's Henderson Mine in Clear Creek County continues to be North America's largest primary producer of molybdenum, and is benefiting from the higher prices. As of early October, the average 2004 price for molybdic oxide was approximately $14 per pound and was still rising. The average price was $6.12 per pound in 2003, and $3.75 per pound in 2002. The mine and ore processing mill employ approximately 320 people. In 2003, the mine produced 21.7 million pounds of molybdenum metal, an increase of 6.0% over the 20.5 million pounds produced in 2002. Production and employment have been expanding at Henderson in 2004, and are expected to grow further in 2005. Prices for molybdenum should remain high because China, a major molybdenum producer, will continue to cut back exports because of increasing internal demand.

Construction aggregates include crushed stone, gravel, and sand. In 2003 (the most recent year for production statistics), aggregate mines in Colorado produced 55.8 million tons of construction aggregate, with a total estimated value of $292 million. This decline of approximately 9.0% compared to 2002 is attributable to the reduction in construction activity because of the slowed overall economy.

COLORADO NATURAL RESOURCES AND MINING EMPLOYMENT 1995–2005 (In Thousands)

Year	Total Natural Resources and Mining Employment	Percentage Change
1995	13.3	
1996	12.6	5.3%
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	13.1	1.6
2004[a]	13.6	3.8
2005[b]	14.3	5.1

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

Several other important nonfuel mineral commodities are produced in Colorado. 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, Colorado. These operations are forecast to continue steady production in 2005.

Denver-based Newmont Mining Corp. remains 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 headquarter and research facilities in metro Denver. Several smaller mining and mineral exploration companies also have offices in the Denver area and provide employment for geologists, engineers, financial specialists, and support personnel.

In 2004, American Soda LLP shut down the large nahcolite solution mine in Rio Blanco County and "mothballed" the soda ash plant at Parachute. According to American Soda, the shutdown was necessary because higher than anticipated energy costs contributed to continued losses. The door has been left open for the operation to start up again in the future, if market conditions improve. American Soda is a wholly owned subsidiary of Solvay Chemicals Inc. of Houston. Approximately 50 jobs were eliminated because of the shutdown.

Employment

The Natural Resources and Mining Supersector continues to make its largest contribution to the Colorado economy through production rather than employment. About one-third of the employees work in each of the following areas: oil and gas extraction, mining, and support activities. Approximately 150 to 200 workers are employed in the logging industry. Employment in the supersector is expected to increase by 700 jobs, or 5.1%, in 2005, to a total of 14,300 workers. ✜

Construction

The construction industry in Colorado is experiencing an increase in activity, led by the housing sector. It is expected that final 2004 permit numbers will be up modestly, but the more influential change will be the increase in the value of each unit. The infrastructure sector, called nonbuilding, has already seen a recent apex as the T-REX project is entering its final phases. The nonresidential building sector is up sharply, pushed by the expansion of health-care facilities. The increase in activity in 2004 has not yet translated to growth in employment. After losing 7,300 jobs in 2002 and 10,600 in 2003, construction employment is expected to drop by another 2,700 in 2004. Employment in the supersector is expected to rebound slightly in 2005, with an addition of 900 jobs.

Single-Family Housing

After three years of declines, new construction of single-family homes will increase in 2004, up 10.8% from 2003. The Front Range corridor is experiencing the greatest increases, and these areas account for more than 75.0% of the single-family permit activity in Colorado.

Low mortgage interest rates were responsible for the strong performance in 2004, aided by other home financing programs, such as zero-down payments, adjustable rate mortgages, and interest-only loans.

Larger homes, at higher prices, made up an increasing share of new construction in 2004. The more affluent buyers returned to the market to purchase more expensive new homes. People with accumulated wealth and significant disposable income, particularly in the baby-boomer age group, were least affected by the poor economy of the early 2000s and were also most confident about the region's recovery. New homes are now bigger in size even for small families and have many upgrades, such as finished basements. The demand of move-up buyers lifted the total value of new home construction.

Builders carefully matched construction to new home sales in 2004, so there is no significant excess inventory to act as a drag on the market in 2005. In contrast, the number of resale homes on the market reached a new peak in 2004, and this excess inventory will slow demand as move-up buyers will need more time to sell their homes before buying a new one.

Employment and consumer confidence are expected to improve and encourage new home buying. On the other hand, the activity of the Federal Reserve is likely to result in higher mortgage interest rates. With these forces off-setting

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EMPLOYMENT IN CONSTRUCTION, COLORADO AND UNITED STATES
1995–2005
(In Thousands)
(Base Year: 1995=100)

	Colorado			United States		
Year	Index	Number	Percentage Change	Index	Number	Percentage Change
1995	100.0	103.7	5.9%	100.0	5,274.0	3.5%
1996	108.2	112.2	8.2	105.0	5,536.0	5.0
1997	116.2	120.5	7.4	110.2	5,813.0	5.0
1998	129.8	134.6	11.7	116.6	6,149.0	5.8
1999	143.2	148.5	10.3	124.1	6,545.0	6.4
2000	157.8	163.6	10.2	128.7	6,787.0	3.7
2001	161.7	167.7	2.5	129.4	6,826.0	0.6
2002	154.7	160.4	-4.4	127.3	6,716.0	-1.6
2003	144.5	149.8	-6.6	127.5	6,722.0	0.1
2004[a]	141.9	147.1	-1.8	131.0	6,910.0	2.8
2005[b]	142.7	148.0	0.6	132.7	7,000.0	1.3

[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.

Construction

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each other, we forecast stable new single-family permit volume next year. Moreover, as the market improves across middle and lower home price ranges in 2005, the sharp increase in the value of new home construction will moderate.

Multifamily Housing

Apartment markets throughout much of the state remain in the doldrums. Concessions are still necessary to attract tenants but most markets appeared to have bottomed out in the current cycle. While a modest recovery is under way, rental markets in the state will not support a major resurgence in apartment production in 2005.

The weakening of the rental market has been reflected in recent building permit statistics for the multifamily sector (which also includes attached units for sale). Multifamily building was severely cut back in 2003. Total multifamily permits issued that year dropped below 6,000 units, less than half the total for 2002 and well below the boom years of 2000 and 2001. The construction of attached, for-sale units continues to prop up total multifamily production and now accounts for three-fourths of new multifamily activity in the Denver area.

While apartment construction has come to a virtual halt in many areas, condominium and townhome construction has continued at moderately high levels. This sector continues to benefit from low mortgage interest rates but an increasing inventory of existing condominium units for sale has limited expansion in this portion of the multifamily sector.

Following the cutback in 2003, multifamily permit activity is headed for a small gain in 2004, supported primarily by ongoing condominium construction and an increase in apartments built under the Low Income Housing Tax Credit Program. Units aimed at the lowest income levels in this program have been less affected by the recent cycle than those intended for the moderate income group. This modest gain in permits for 2004 is almost exclusively in the metro areas of the Front Range. Multifamily production in the remainder of Colorado remains limited; activity in resort counties has been dropping for several years.

The year 2004 should finish with a total of 6,500 multifamily starts, a small increase over 2003. The nascent recovery in the apartment market will not support a production increase in 2005 and attached, for-sale construction activity will be limited by gradually increasing interest rates and the inventory of existing units. Look for little change in 2005; permits should equal the 6,500 units issued in 2004.

Nonresidential Building

Several bright spots energize this sector of the economy. Construction of hospital and health-care facilities, in particular, is very active across the state. Significant work under way in the Memorial and Penrose systems in Colorado Springs, a new facility in Montrose, and the move of Children's Hospital from near downtown Denver to Fitzsimons will add $600 million in activity.

New or expanded hospitals are planned next year in the north Denver area and for the St. Anthony's system. Permitting may begin and ground may break on a new Jefferson County hospital. Construction of any major facility also creates demand for new medical offices and related buildings nearby.

The forecast would be higher to reflect more work at Fitzsimons, except for a lawsuit over the legislature's attempt to avoid a $200 million bond issue by financing with certificates of participation. For the present, the Fitzsimons complex will see the start of the Research II building and the campus library.

Retail activity is picking up after several years during which developers, concerned with overbuilding, pursued only select projects. Activity is currently under way on Brighton Pavilions and Thornton's Larkridge. More work will start next year in the C-470 corridor, along 136th Avenue, and at Boulder's Crossroads Mall redevelopment. Robust activity continues in other areas of the Front Range, including north of Denver and in Colorado Springs.

The election saw $974 million in school bonds pass. Although a good part of that work will not be done until 2006, beyond the planning horizon of this report, notable activity will take place in 2005 as plans in advanced stages of completion are implemented. The CSU Invasive Species laboratory will start in 2005. The University of Colorado Boulder campus is beginning construction of a new law school building and a multipurpose technology center.

Military bases are already experiencing higher construction levels. Both Peterson and Buckley Air Force Bases are busy in 2004, and more activity is expected in 2005. The Air Force Academy is also increasing its construction budget.

The office vacancy rate is still too high to generate interest in more development. The construction of a new office for the Environmental Protection Agency is a bright spot in 2005. The communications and technology sectors are quiet, with no new demand coming from that part of the economy.

Nonbuilding Construction

Much of the work has been completed on Denver's southeast corridor highway project, and commuters were recently treated to the opening of a large segment of the new roadway. Two bridges and other T-REX work still need to be completed, but the volume will be down from last year.

The state budget will see no increases in highway construction and maintenance. The last of the Referendum A moneys will allow construction of the $50 million Trinidad Bridge to proceed. Cities and counties are not expected to increase their road budgets, with the exception of Colorado Springs, which passed Measure 1A to spend $60 million in new local dollars each year. Denver delayed expenditure of road funds ($100 million) in 2004, which should add to the work next year.

Colorado's airports do not have plans for major expansions, but the nonbuilding sector will continue to be busy with water projects, notably the Reuter-Hesse reservoir in Parker. The passage of RTD's $4.7 billion FasTracks program promises significant work in both the building and nonbuilding sectors. The construction will not begin for at least a couple of years and therefore does not affect this forecast. ✣

BUILDING PERMITS BY TYPE
1995–2005

Year	Single Family	Multifamily	Total Housing Units
1995	28,404	10,218	38,622
1996	30,361	10,774	41,135
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[a]	37,500	6,500	44,000
2005[b]	37,500	6,500	44,000

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

VALUE OF CONSTRUCTION IN COLORADO BY TYPE
1995–2005
(In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding	Total Construction
1995	$3,858.8	$1,957.2	$5,816.0	$878.8	$6,694.8
1996	4,274.9	2,544.2	6,819.1	833.7	7,652.8
1997	4,658.6	3,273.7	7,932.3	1,145.1	9,077.4
1998	5,776.5	2,553.5	8,330.0	1,376.9	9,706.9
1999	6,036.0	3,602.2	9,638.2	1,575.5	11,213.7
2000	6,822.1	3,244.2	10,066.3	1,712.2	11,778.5
2001	6,593.3	3,456.3	10,049.6	1,596.1	11,645.7
2002	6,357.3	2,770.1	9,127.4	2,138.7	11,266.1
2003	6,258.2	2,593.2	8,851.4	1,733.7	10,585.1
2004[a]	7,700.0	2,750.0	10,450.0	1,400.0	11,850.0
2005[b]	7,900.0	3,050.0	10,950.0	1,250.0	12,200.0

[a]Estimated.
[b]Forecast.
Source: F.W. Dodge Company, Division of McGraw-Hill, the Colorado Contractors Association, and Colorado Business Economic Outlook Committee.

Manufacturing

The state's battered manufacturing industry finally received a small reprieve in 2004. This means that only 2,200 positions were lost in 2004 compared to the brutal losses of the 2001–03 period. Colorado's manufacturing employment base shrunk by 35,100 positions during those three years alone, resulting in an 18.0% contraction of the industry. Manufacturing jobs now account for only about 7.1% of the state's total employment base, down from 9.8% in 1994 and 1995.

As national and international economic conditions continue to improve, manufacturing employment is expected to increase by 1,800 jobs in 2005, the first employment increase since 2000. Two main themes that emerged in 2003 will continue to dominate the manufacturing outlook in 2005. First, offshoring of manufacturing operations has increased, with most industry experts expecting that these jobs are lost to the U.S. economy forever. Second, enhanced production processes and technological change have advanced global productivity at an astonishing rate. This means that manufacturers are able to do more with fewer employees due to these productivity increases. While there are advantages to both offshoring and productivity gains, they each have their downside. Despite increasing orders and improving economic conditions, manufacturing employment in the United States and Colorado will grow slowly.

Survey Results

For the 14th consecutive year, the manufacturing committee conducted a survey of Colorado manufacturers. Companies responding to the survey represent roughly 1,800 employees, or about 1.2% of total sector employment. While this is a small sample size, the results lend some insight into the current state and future outlook of the industry.

Overall, survey participants were cautiously optimistic about the future of the industry. Most respondents expected employment at their companies to remain relatively flat over the next two years. When asked about their facility expansion plans, the majority of the respondents stated that they would not expand their current facilities over the next three years. The respondents who do plan to expand said they would expand in Colorado only. On average, respondents expected 10.0–20.0% domestic sales growth over the next 18 months.

When asked about their company's performance in 2004, roughly 40.0% of respondents said they performed better or much better than anticipated, and 40.0% said they had performed as expected. Furthermore, 20.0% of firms indicated they had performed worse than expected, down from last year's results of 38.0%. Survey participants were also generally positive about the overall business climate in Colorado, with the majority rating it as "favorably."

Offshoring of manufacturing operations has increased, with most industry experts expecting that these jobs are lost to the U.S. economy forever.

Nearly all of the survey participants export their products outside of the United States, with some receiving a large majority of their sales from overseas customers. The majority of these companies expect their export sales to grow over the next 18 months. The largest export market for survey participants was Europe, followed by Canada, Japan, and Mexico. The largest growth markets identified were in Asia, along with Europe and Canada. As there were limited responses to this survey, it is important to note that the experience of the survey respondents may be different than state exporters as a whole. According to the latest export statistics, Colorado's largest export markets include Canada, Mexico, and Japan. The strongest export trade growth has occurred between Colorado and Mexico, South Korea, and Malaysia.

In terms of outsourcing, survey results indicate that companies outsourced to domestic locations more frequently than foreign ones, and that manufacturing was outsourced much more frequently than product design or development. The respondents expected outsourcing at their companies to increase slightly in 2005.

Some level of outsourcing of manufacturing, product design, and product development is necessary to remain cost competitive, provide production flexibility, tap new sources of innovation, and create a presence in emerging markets. However, if companies outsource excessively, they begin to give up their sources of tacit knowledge generation and intellectual property. Without continuous product innovation, companies can quickly lose their new product development capabilities. In one or two product lifecycles these companies can relinquish control of their processes, technologies, and products, and end up as marketing shells. Manufacturing companies should use caution in their outsourcing operations, making sure that they are not substituting short-term financial results for long-term strategic competitive advantage.

Survey participants were also asked to rate both the hourly and professional work force in Colorado in terms of availability, skill level, work ethic, productivity, and willingness to learn. Professional employees were rated very high in both skill level and willingness to learn. Ratings were lower in productivity and work ethic, with the lowest rating in availability. Hourly workers were rated significantly lower in all of the above categories. The hourly work force received the most favorable ratings in work ethic and the least favorable ratings in productivity.

Finally, the survey asked manufacturers about the possible impacts of a number of global, national, and local issues. Of the global/national issues, the areas of greatest concern were the cost/availability of raw materials and foreign labor costs. Participants also frequently cited foreign competition, government regulation (both domestic and international), offshoring, and outsourcing as having negative impacts on their companies. Most respondents expect general economic conditions to have a positive impact on their companies. In terms of local factors, respondents were most concerned about health-care, energy, and labor costs having a negative impact on their companies. Availability and cost of financing received the most optimistic rating.

Employment Forecast

Colorado manufacturers will experience another year of job losses in 2004 following the loss of about 10,000 positions in 2003, a 6.0% drop. A decline of 2,200 jobs is expected in 2004, representing a decrease of just 1.3%. The picture is brighter for 2005 as national and international economies improve, leading to a 1.2% increase in manufacturing employment.

Nondurable Goods

According to the U.S. Department of Labor, wage and salary employment in food manufacturing is expected to increase by 5.0% over the 2002–12 period. This growth rate is much lower than the 16.0% employment growth projected for the entire economy. The demand for manufactured food products continues to rise as the population increases and people look for convenience. Consumers continue to demand high-quality, highly processed convenience foods. Whether it is a bag of fresh salad, drinkable yogurt, or microwaveable ready-to-eat foods, people want convenience. This change in the eating patterns of Americans will contribute to the demand for more food manufacturing workers over the next 10 years.

Consumers continue to demand high-quality, highly processed convenience foods. This change in the eating patterns of Americans will contribute to the demand for more food manufacturing workers over the next 10 years.

However, automation in the industry and the resulting increase in productivity will limit employment growth. *Food Engineering Magazine*'s annual survey of food manufacturers found that spending on automation increased in 2004 compared to 2003. More than one-third of the respondents in the survey indicated that budgets for production, packaging, and process control equipment will climb by an average of 23.0% over 2003. A similar pattern was reported for plant improvements and upgrades for 2004. Automation is expected to dramatically impact the industry and greatly affect employment trends.

Two other trends are causing shifts in the food and beverage industry. The first is the trend toward low-carb foods, which is causing a shift in the foods we eat. Carb-conscious consumers are eating more meat and protein and fewer grain-based foods. Should this trend continue, meat processors will benefit and employment will grow, while bakeries and other grain-based processors will be hurt, and their employment numbers will decline.

Outsourcing is another trend that appears to be gaining strength in the food and beverage industry.

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Manufacturing

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COLORADO MANUFACTURING EMPLOYMENT BY INDUSTRY GROUPS
1995–2005
(In Thousands)

Industry Group	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[a]	2005[b]
Food	19.6	19.3	19.6	19.6	19.3	19.8	19.8	19.3	18.5	18.0	17.9
Beverage and Tobacco	6.9	6.7	6.4	6.3	5.9	5.9	6.0	5.9	5.9	5.9	5.9
Printing and Related	12.7	12.3	12.5	12.4	11.8	11.4	10.4	9.2	8.6	8.2	8.1
Other Nondurables	21.6	21.4	21.6	23.5	23.4	23.0	20.8	19.5	19.0	19.3	19.7
Subtotal, Nondurable Goods	60.8	59.7	60.1	61.8	60.4	60.1	57.0	53.9	52.0	51.4	51.6
Nonmetallic Minerals	8.1	8.7	9.1	9.7	10.3	10.8	10.4	9.8	9.1	9.0	9.1
Fabricated Metals	16.0	16.5	17.3	17.9	17.6	18.3	17.2	15.8	15.1	15.1	15.5
Computer and Electronics	41.6	43.2	45.1	48.3	47.5	48.3	47.6	40.4	36.0	34.3	33.9
Transportation Equipment	11.8	12.4	13.8	13.9	13.2	12.3	11.3	10.4	9.6	9.4	9.9
Other Durables	41.2	42.4	43.9	42.8	41.6	41.5	38.3	35.9	34.4	34.8	35.8
Subtotal, Durable Goods	118.7	123.2	129.2	132.6	130.2	131.2	124.9	112.3	104.2	102.6	104.2
Total, All Manufacturing[c]	179.5	182.9	189.3	194.4	190.7	191.3	181.9	166.1	156.2	154.0	155.8

[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.

Outsourcing in this case is the movement of jobs from within the industry to others outside the industry. The *Food Engineering Magazine* survey reported that 17.0% of the respondents were involved in outsourcing this year, up from 13.0% last year. In 2001, only 9.0% of the respondents reported any outsourcing activity. Jobs that are being outsourced in these industries include engineering, copacking, sanitation services, and maintenance. Finally, the survey reported that some manufacturing is moving offshore. Given the changes taking place in the food industry, the manufacturing committee forecasts that employment in this sector will decline by 500 jobs, to 18,000, in 2004 and by another 100 jobs, to 17,900, next year. The beverage industry will remain constant, at 5,900 jobs, in 2004 and 2005.

The printing and publishing industry continues to innovate with new technology. The new digital equipment is less expensive to operate, produces more finished work per hour, and significantly reduces waste and/or overruns compared to the industry's previous mainstay printing platform-sheet fed, photo offset equipment. This trend has resulted in a continued decline in the need for workers in printing and publishing.

While the need for workers has declined, existing workers and new employees in printing and publishing have found themselves in need of additional skills. Knowledge of current and future software releases from Adobe to Quark will involve ongoing staff training in the publishing industry. Skill-set development in these essential areas will provide long-term employability among the industry's workers.

As some workers manage to develop a portfolio of skills essential to publishing, other workers are expected to become displaced as the productivity of digital hardware and software continues to decrease the number of employees needed in the industry. Competition among printers and publishers will be Darwinian. The fittest will survive and increase market share. Marginal and inefficient firms will be driven out of business. Colorado employment in printing and publishing is expected to decrease by 400 workers in 2004. An additional reduction of 100 jobs is expected in 2005.

The other nondurable goods subsectors include 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 subsectors have a small, yet stable, presence in Colorado. The textiles and apparel and leather goods subsector employs about 3,100 people, but it continues to face stiff overseas competition. Roughly 2,600 people are employed in paper manufacturing in the state, including cardboard containers, packaging, and paper products. Another 700 employees work in the petroleum and coal products subsector, mainly within petroleum refining operations. Flat to slightly increasing employment is expected within all of these subsectors in 2004 and 2005.

The chemical manufacturing subsector includes petrochemical manufacturing, industrial gases, biotechnology, pharmaceuticals, household chemicals, and related industries. This is a very volatile subsector, 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 subsector for the Colorado economy and has been targeted in state economic development efforts. The continued development of the Bioscience Park Center at the former Fitzsimons Army Medical Center and the transformation of this site to an educational medical complex present long-term opportunities for the industry, although employment is expected to grow by only 200 jobs in 2005. Chemical manufacturing employs roughly 7,100 Colorado workers.

The plastics and rubber products subsector includes companies producing plastic film, plastic foam products, and other miscellaneous products. Rubber companies have a limited presence in Colorado, while the plastics industry has continued to grow. This subsector includes injection-molding firms, which are closely tied to the biotech and

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MANUFACTURING EMPLOYMENT, COLORADO AND UNITED STATES
1995–2005
(In Thousands)
(Base Year: 1995=100)

	Colorado			United States		
Year	Index	Number	Percentage Change	Index	Number	Percentage Change
1995	100.0	179.5	4.1%	100.0	17,241	1.3%
1996	101.9	182.9	1.9	100.0	17,237	0.0
1997	105.5	189.3	3.5	101.0	17,419	1.1
1998	108.3	194.4	2.7	101.9	17,560	0.8
1999	106.2	190.7	-1.9	100.5	17,322	-1.4
2000	106.6	191.3	0.3	100.1	17,263	-0.3
2001	101.3	181.9	-4.9	95.4	16,441	-4.8
2002	92.5	166.1	-8.7	88.5	15,259	-7.2
2003	87.0	156.2	-6.0	84.2	14,525	-4.8
2004[a]	85.8	154.0	-1.4	83.3	14,370	-1.1
2005[b]	86.8	155.8	1.2	84.1	14,500	0.9

[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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electronics industries. In 2005 employment in the rubber and plastics subsector will increase from 5,200 workers to 5,300 workers, still down from the 2002 employment base of 5,400 workers.

The other nondurable goods subsectors are expected to increase by 300 positions in 2004 and an additional 400 positions in 2005. This brings the total nondurable goods employment forecast to 51,400 positions in 2004, down from 52,000 jobs in 2003. Slight employment gains in the other nondurable goods subsectors, particularly chemical manufacturing, will lead to an increase of 200 positions in the total Nondurable Goods Sector in 2005. Nondurable goods employment continues to represent about one-third of Colorado's total manufacturing employment base.

MANUFACTURING EMPLOYMENT DURABLE AND NONDURABLE 1995–2005 (In Thousands) (Base Year: 1995=100)

	Durable		Nondurable	
Year	Employment	Index	Employment	Index
1995	118.7	100.0	60.8	100.0
1996	123.2	103.8	59.7	98.2
1997	129.2	108.8	60.1	98.8
1998	132.6	111.7	61.8	101.6
1999	130.2	109.7	60.4	99.3
2000	131.2	110.5	60.1	98.8
2001	124.9	105.2	57.0	93.8
2002	112.3	94.6	53.9	88.7
2003	104.2	87.8	52.0	85.5
2004[a]	102.6	86.4	51.4	84.5
2005[b]	104.2	87.8	51.6	84.9

[a]Estimated.
[b]Forecast.
Source: U.S. Department of Labor, Colorado Department of Labor and Employment, *Statistical Abstract of the United States*, Bureau of Labor Statistics, and Colorado Business Economic Outlook Committee.

Durable Goods

Outputs of the nonmetallic minerals subsector are closely tied to construction activity of all types—residential, commercial and industrial, and heavy construction. This group includes everything from pottery, plumbing fixtures, and glass products to brick and tile to concrete and stone products. This subsector will lose an estimated 100 jobs in 2004 in spite of construction activity rebounding slightly, the year will end with average employment of 9,000. The T-REX transportation expansion project is continuing, although some of the larger segments have been completed. Other infrastructure projects are also under way, but residential and nonresidential construction activity is not projected to increase significantly in 2005. Nevertheless, the diversity of products in this group, the opening of a glass container plant in Weld County in 2005, and the general improvement in both the Colorado and national economies lead to a projected gain of 100 jobs in this subsector for 2005. Nonmetallic minerals will average 9,100 jobs in 2005.

The fabricated metals subsector provides materials for many other areas, everything from steel beams for construction to component parts for a myriad of other products—virtually anything with metal content. Employment in this industry fluctuates with demand from other industries. Many of the firms in this category are small suppliers to producers of industrial machinery. This subsector stabilized in 2004 and should end the year with average employment of 15,100 positions. As capital investment has bounced back after several years of "wait and see," this should translate into higher demand for fabricated metal products in spite of productivity gains tempering demand for new workers. Continuing strength in factory orders will help this subsector recoup about 400 jobs in 2005, with employment rising to 15,500.

The largest durable goods subsector in Colorado is computers and electronics products. Employment in this manufacturing subsector peaked at 48,300 workers in 2000. Following the dot-com crash in 2000 and the 9/11 terrorist attacks in 2001, capital spending on information technology equipment by U.S. companies decreased by more than 50.0%. Adding to the drop in manufacturing activity caused by the 2001 recession, the accelerating trend of outsourcing manufacturing, product design, and product development to contract companies has transferred numerous U.S. manufacturing jobs to Asian countries. All of these events have led to a decline in computer and electronics manufacturing in Colorado, with 2004 employment totaling only 34,300 positions. Despite the steep decline in employment, this subsector remains a key industry for Colorado due to its high wage base and high value-added export market.

The slide in manufacturing employment in the computer and electronics products subsector will continue into 2004 and 2005. Although U.S. companies started to invest in information technology products again in 2004, much of the manufacturing has been outsourced to Asian countries, particularly China. This trend is also occurring in Colorado, causing several state-of-the-art printed circuit board assembly plants and final assembly plants to close since 2002. Layoffs continued during 2004 at Agilent, Hewlett Packard, Maxtor, StorageTek, and other firms. One bright spot is Intel's plant expansion in Colorado Springs, which is expected to create several hundred jobs by 2008. Colorado employment in this subsector will decline by 1,700 positions in 2004 and another 400 jobs in 2005.

Lockheed Martin dominates the diverse transportation subsector, which also includes Yeti mountain bike frames and many other modes of transportation. Increased defense and aerospace spending in 2003 and 2004 provided Lockheed Martin and Ball Aerospace with several new contracts. Adam Aircraft, Aviation Technology Group, and other new, small companies are growing and adding manufacturing capacity and employment. The transportation equipment subsector employment is expected to fall by about 200 positions in 2004 before rebounding by 500 positions in 2005.

The Other Durable Goods Sectors include wood products, primary metals, machinery, electrical equipment and appliances, furniture, and miscellaneous manufacturing. This is a diverse group of subsectors, within which employment is expected to increase by 1,000 jobs from 2004 to 2005.

Employment in the wood products and furniture subsectors increased by about 300 positions between 2003 and 2004. With decreased home construction but improving consumer demand, the net impact is expected to be an increase of another 300 positions in 2004.

Approximately 2,000 people are employed in the primary metals subsector, 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. Due to the overall sluggishness of the manufacturing industry, the primary metals subsector is also expected to remain flat in 2004 and 2005.

Demand is strengthening for a wide array of goods, with companies starting to see increases in orders for machinery, electrical equipment, and appliances. Employment within these subsectors increased by 200 workers in 2004 and is expected to gain another 400 workers in 2005.

The miscellaneous manufacturing subsector 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. Employment in the miscellaneous categories increased by about 100 positions in 2004 and is expected to gain 200 jobs in 2005, growing to 10,200 workers.

One bright spot is Intel's plant expansion in Colorado Springs, which is expected to create several hundred jobs by 2008.

In total, durable goods manufacturing in Colorado will lose an estimated 1,600 jobs in 2004. Conditions will improve in 2005 as companies start to receive new orders, erasing the job losses that occurred in 2004. It is expected that the net job gain will be 1,600 positions in 2005, bringing total durable goods employment back to the 2003 level of 104,200 positions.

Summary

The nearly 5,900 manufacturing establishments in Colorado are expected to employ about 154,000 workers in 2004, representing approximately 7.1% of the state's total employment base. This is a decline of roughly 2,200 positions in 2004, a significant improvement compared to the nearly 10,000 positions lost in 2003. Still, the slow national recovery and rapidly rising productivity gains have created an environment of continued manufacturing employment losses. Most subsectors should experience increasing orders in 2005, leading to the addition of 1,800 positions, the first growth in manufacturing employment since 2000. ✜

Trade, Transportation, and Utilities

The Trade, Transportation, and Utilities Supersector is the largest provider of jobs in Colorado. All three sectors are expected to show employment gains in 2004 owing to higher retail sales and growth in transportation. The number of jobs increased by 0.7%, to 407,000. Sales should post stronger gains in 2005, pushing employment up by 1.7%, to 414,000.

Wholesale

Colorado's wholesale trade subsector currently provides 90,000 jobs. More than 90.0% of these are with merchant wholesalers (i.e., firms that sell to retail outlets). The remaining 7,000 workers are employed by business-to-business sellers, electronic marketers, and agents and broker. Almost 60.0% of state's wholesale jobs are with firms specializing in durable goods. Computers, peripherals, and electronic equipment account for the greatest number of such jobs. Groceries and related product firms are the largest employers among nondurable wholesalers.

Nearly 7,000 wholesale jobs have been lost since early 2001, most of them in the durables area. With recovery in electronics and computer sales, job declines have slowed this year, and no further losses are expected in 2005. Stronger retail sales should mean modest job growth for nondurable wholesalers. The bulk of new jobs will be in the other wholesale category. In 2005, a net gain of 1,200 jobs is expected in the wholesale subsector. This would represent a marked improvement after three years of job losses. If this forecast is borne out, total wholesale employment in Colorado next year will be at the same level as in 1998.

WHOLESALE TRADE EMPLOYMENT
1995–2005
(In Thousands)

Year	Wholesale Trade Durable Goods	Wholesale Trade Nondurable Goods	Other Wholesale	Total[a]	Percentage Change
1995	48.8	29.2	5.9	83.9	4.2%
1996	50.6	29.8	5.4	85.8	2.3
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	53.3	32.3	6.6	92.2	-3.0
2004[b]	53.1	32.1	6.1	91.3	-1.0
2005[c]	53.6	32.3	6.6	92.5	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.

Retail

Some 240,000 workers are currently employed in retail trade. Colorado retailers account for $55 billion in sales. Colorado's retail trade subsector includes the state's largest private sector employer, Wal-Mart, and three of the largest five national chain retailers. Over the past three years, retail growth slowed as the state economy slumped. Few new jobs were added in this decade, following an average of 16,000 jobs per year during the 1990s. Total sales increased less than the rate of inflation over the last three years.

As the economy improved in early 2004, job growth picked up. Through the first nine months of the year, the number of retail jobs is slightly ahead of last year. Most of the job growth has occurred in the other retail, which includes drugstores, gas stations, electronics and appliance stores, and sporting goods, along with several other types of stores. The remaining segments of this subsector have seen little job gains. Food and beverage stores and traditional department stores have come under increasing competitive pressure from the discount super stores. Wal-Mart announced plans to open seven new super stores in Colorado. These pressures led to a more aggressive stance by the state's major grocery chains in their negotiations with United Food and Commercial Workers International Union.

The sales outlook has brightened. Colorado retail store sales through August 2004 were up 4.6% over last year. Most of the gain was accounted for by building materials and nurseries, gas stations, and general merchandise and warehouse stores. Sales by auto and auto parts retailers are up only 1.0%, although this small gain represents an improvement over 2003's decline of 5.2%.

Strong Christmas sales are critical in many retail areas, particularly electronics and appliances, and clothing and accessories. State retailers express optimism about Christmas sales due to an improving state economy and solid consumer confidence. However, high gasoline prices and increasing consumer debt may limit sales. In Colorado, Christmas sales are expected to be about 4.5% above last year. This is a marked improvement over Christmas 2003, which posted a meager 1.2% gain.

With improved sales, the market for retail space strengthened in 2004. In the first six months of the year, 1.8 million square feet of new space was completed in metropolitan Denver and 1.5 million square feet was occupied by new tenants. Both new construction and absorption in the first half of the year exceeded that in the entire year of 2003. The bulk of expansion will be accounted for by super stores and discounters. Competitive pressures and several years of slow growth make national retailers less eager to open new stores in Colorado.

The retail outlook for 2005 is fraught with potential hazards. Consumer debt is at record levels. An increase in interest rates and weak housing markets, both definite possibilities next year, will make it much more difficult for households to manage their debt. Low rates and the ability to tap home equity for financing have enabled most households, especially homeowners, to continue to service their debt. The strong U.S. housing market has meant that increases in debt were largely matched by rising asset values. In Colorado, where the housing market has softened over the past two years, household balance sheets may be more precarious, although no firm statistics are available about Colorado households' assets and liabilities. Concerns about possible terrorist attacks, job insecurity, and affordability of

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RETAIL TRADE EMPLOYMENT 1995–2005 (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
1995	28.0	16.2	41.8	31.4	90.2	207.6	6.2%
1996	29.2	17.4	42.6	36.2	91.6	217.0	4.5
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	32.5	21.5	42.1	44.2	98.7	239.0	-1.5
2004[b]	32.1	21.4	41.5	43.3	103.5	241.8	1.2
2005[c]	32.3	21.5	41.7	43.5	107.7	246.7	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.

RETAIL SALES 1995–2005 (In Billions of Dollars)

Year	Retail Trade Sales[a]	Percentage Change	Motor Vehicle and Parts	General Merchandise
1995	$35.7	na	$8.0	$4.8
1996	38.2	7.0%	8.7	5.2
1997	40.4	5.8	9.2	5.6
1998	43.1	6.7	10.0	6.2
1999	47.4	10.0	11.8	6.9
2000	52.2	10.1	13.0	7.6
2001	52.9	1.3	13.9	7.9
2002	52.9	0.0	14.4	8.2
2003	53.4	0.9	13.7	8.5
2004[b]	56.1	6.0	13.8	9.2
2005[c]	59.3	5.7	14.0	10.1

[a]Retail sales excludes food service.
[b]Estimated.
[c]Forecast.
Source: Colorado Department of Revenue and Colorado Business Economic Outlook Committee.

Trade, Transportation, and Utilities

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health care may make consumers less willing to borrow and to commit to large purchases. September's sharp drop in the U.S. consumer confidence index (University of Michigan) may be a harbinger of consumer retrenchment. Rising costs for gasoline and natural gas will cut into households' funds for discretionary purchases. For these reasons, most national forecasters expect consumer spending, which has largely carried the national economy for the last three years, to slow in 2005.

Retail store sales in Colorado are expected to post a gain of nearly 6.0% this year. This would be the strongest gain since 2000. With a healthier job market and another year of rising real income, almost 5.7% growth is forecast for 2005. Colorado sales are forecast to improve in the face of slower national sales because the state economy is expected to enjoy a delayed turnaround and because Coloradans may have deferred major purchases to a greater extent than did their counterparts elsewhere.

Retail job growth will also strengthen. Nearly 3,000 new jobs are expected in the current year and almost 5,000 in 2005. But job growth will fall well short of that during the 1990s. Competition from super stores and discounters will put pressure on Colorado retailers to keep employee costs down. This will mean slower job growth than in the late 1990s, as well as smaller wage and benefit increases.

TRANSPORTATION AND WAREHOUSING EMPLOYMENT
1995–2005
(In Thousands)

Year	Truck Transportation	Couriers and Messengers	Warehousing and Storage	Air Transportation	Other Transportation	Total[a]	Percentage Change
1995	17.1	8.8	6.7	12.9	14.2	59.7	4.7%
1996	17.2	9.4	6.9	13.5	13.3	60.3	1.0
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	16.8	66.2	-4.7
2003	16.6	9.6	7.9	13.9	16.9	64.9	-2.0
2004[b]	16.4	9.5	7.6	14.1	14.5	62.1	-4.3
2005[c]	16.4	9.5	7.6	14.2	15.0	62.7	1.0

[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.

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 74,000 jobs in 2004 and 74,800 in 2005. Gains in air transportation and motor freight and trucking led the sector higher in 2005, with employment growing by 1.2%. An improving economy should boost these subsectors in 2005, although higher fuel costs will remain a drag on profitability.

National Air Transportation

Despite the potential for several national air carrier bankruptcies, the National Commercial Air Transportation System continues to rebound from the 2001 dip by posting a reasonable growth rate in enplanements of 2.89%. Air carriers and cargo carriers continue to be subject to increased operating costs, such as petroleum and security. Those carriers currently in bankruptcy have been forced to cut operating costs and to negotiate long-term concessions by employee groups. Those air carriers anticipating bankruptcy have recently made failed attempts to increase operating margins through fare increases, and continue to face financial shortcomings in an otherwise expanding market.

Regional Air Transportation

Air Carrier Airports

The health of Colorado commercial airport economies continues to be subject to concerns related to airline service level issues that facilitate passenger growth. In 2004, Colorado's commercial passenger growth is expected to total 9.87%, which is 6.98% above the national growth rate of 2.89%. The estimates for 2005 reflect increasing concerns that passenger growth will decrease to slightly less than 1.0% for the state. Recent trends in air mail and cargo are estimated to post 22.1% and 2.0% decreases, respectively, for 2004. However, it is thought that the loss that is entirely attributed to decreases in air mail at Denver International Airport (DIA) has merely been shifted to Jefferson County Airport. DIA is therefore projecting that 2005 air mail activity will remain flat. The state's cargo activities are projected to grow less than 0.5% in 2005.

General Aviation and Resort Airports

General aviation (GA) activity on a national scale continues to decrease. Centennial Airport, perennially the nation's busiest GA airport, posted markedly reduced operations in 2003 (–14.56%). This trend is expected to reverse in 2004, with Centennial Airport projected to record a slight increase in activity, but less than 0.14%. Issues for GA include a proposal for the application of airline type security measures, and requirements for the Federal Aviation Administration to reissue pilots' licenses with a photograph within six months. Contributing to the decline in activity are high fuel prices (now averaging above $2.79 per gallon for aviation fuel and $3.09 for Jet A), and reluctance to operate corporate aircraft resources due to recent corporate scandals. These trends are expected to continue in 2005 and beyond.

Colorado resort airports are expected to continue a recovery from the 2001–02 dip of 10.6%. Eagle County Airport activity in 2004 is expected to increase by 10.79% over the 2003 level. In addition, the airport's activity is projected to outperform the nation's growth rate by 7.89%.

Denver International Airport

Denver International Airport (DIA) is owned and operated by the City and County of Denver. Approximately 850 people are employed by the city's Department of Aviation.

DIA has set record numbers for passenger traffic for 10 consecutive months (December 2003 through September 2004), and ranks as one of the fastest growing major hub airports in the United States. DIA is on track to have its busiest year ever in 2004, and is projected to surpass 40 million passengers for the first time in the history of aviation in Denver.

In 2003, DIA served more than 37.5 million passengers, ranking it as the fifth-busiest airport in North America and the 10th busiest in the world. A total of 29 airlines, including regional carriers, provide service to 135 nonstop destinations—121 domestic destinations in 40 U.S. states and 14 international destinations in Canada, Europe, and Mexico.

DIA's major carrier is United, which accounts for 60.0% of the airport's passenger traffic. The carrier filed for bankruptcy protection in December 2002, but continues normal operations at DIA, United's second-largest hub. A major trend at the airport has been the increased passenger market share of low-cost carriers. These carriers, which include AirTran, America West, ATA, Frontier, and JetBlue, now account for more than 20.0% of passengers carried at DIA. This, in turn, has put significant downward pressure on the average fare at DIA.

DENVER INTERNATIONAL AIRPORT PASSENGERS 1997–2004 (In Millions)

Year	Enplanements	Deplanements	Total Passengers[a]
1997	17.5	17.4	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	18.5	18.5	37.5
2004[b]	19.6	19.6	42.5

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

Several construction projects are planned at DIA for 2005, including:

- Concourse B regional airline facility reconstruction/expansion
  - Will add up to 38 positions for regional jets and turboprops
  - Cost: $45-$50 million, complete by late 2005
- New aircraft de-icing pad
  - Will add up to six additional aircraft positions
  - Cost: $26-$27 million, complete by fall 2005

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Trade, Transportation, and Utilities

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

DIA will celebrate its 10th year of operation on February 28, 2005.

Rail Transportation

There are 13 freight railroads operating more than 3,593 miles of track in Colorado. The Burlington Northern Santa Fe (BNSF) and Union Pacific railroads dominate, with almost 84.0% of this total trackage or 1,206 miles and 1,799 miles, respectively. Over 145 million tons of freight is carried via railroads annually in Colorado, with approximately 37 million tons originating in the state, 29 million tons terminating here, and the remainder passing through. The relative magnitude of rail shipped commodities originating and terminating in Colorado are illustrated above.

The economic impacts of railroads are significant in Colorado. Altogether, more than 3,400 rail employees live in Colorado, with total wages exceeding $208 million. In addition, there are approximately 7,800 railroad retirement beneficiaries in the state, receiving more than $98 million annually.

Rail shipments have reached all-time highs both nationally and in Colorado as rising values for transportation services and increased demand continue. The BNSF recently reported all-time third quarter revenues and record volumes for the quarter ending September 30, 2004. This is the fifth straight quarter of record volume increases for BNSF.

RAIL SHIPMENT PRODUCTS

Originating in Colorado		Terminating in Colorado	
Coal	77%	Coal	51%
Food Products	6	Glass and Stone Products	8
Nonmetallic Minerals	3	Nonmetallic Minerals	7
Farm Products	3	Lumber and Wood Products	5
Waste and Scrap	2	Food Products	4
All Other	9	All Other	25
Total	100%	Total	100%

Rail freight growth is expected to continue increasing nationally and in Colorado through 2005 and beyond. The primary threat to this growth is the constraint of the existing rail infrastructure to handle ever increasing volumes.

Motor Freight Transportation and Warehousing

The outlook for the trucking industry has improved significantly in 2004 compared to 2003. Freight shipments and tonnage have grown on a national and regional basis. Demand has outstripped capacity, which has allowed carriers to obtain increases in shipping rates and improved the bottom line for many trucking companies.

Key factors that will determine how trucking will fare in 2005 include how well state and regional shippers continue to recover fuel costs and insurance rates. Other concerns include hours of service rule changes, urban congestion and travel time reliability, and new emissions and fuel standards.

The recent state recovery has been strong enough to allow the trucking industry to increase rates and absorb the rise in diesel fuel price. This is surprising as fuel price variability has traditionally been associated with trucking firm bankruptcy. Larger motor carriers have employed a number of strategies to hedge against changes in fuel price, including the use of swaps and options.

The increase in insurance costs associated with property and casualty was a major concern after 9/11 when rates climbed about 70.0%. Rates have stabilized in 2004 at the higher level, with only modest increases. A terrorist attack in the freight sector, however, could change this situation.

Colorado has a disproportionate flow of freight into the state versus out of the state. To a large extent, this reflects the lack of major manufacturing within Colorado, as well as distribution centers and other business activities that traditionally generate truck activity.

Growth in the trucking subsector has been hampered by a state tax climate that provides a less than competitive environment. The state has some of the highest transportation taxes and fees in the country, placing Colorado-based companies at a substantial cost disadvantage to trucking operations in surrounding states.

The sale of heavy-duty trucks suffered because of the concerns related to the 2002 engines required by the Environmental Protection Agency. These requirements came about because of attempts by the engine manufacturers to bypass congressionally mandated emissions control equipment. Trucker concerns with lower fuel economy, horsepower, and engine maintenance have made them reluctant to buy new equipment. It is too soon to determine how the new emissions standards have affected fuel economy. However, it appears the industry's fears about fuel and maintenance problems with the new engines have been exaggerated. The emissions standards are scheduled to be tightened again in 2007, which is leading to higher truck sales in the near term.

The performance of the highway system has a direct bearing on the effectiveness and efficiency of truck transport. Reliable travel times are critical to truckers who serve the new just-in-time manufacturing and distribution processes. Over the last year, the regional recession has reduced auto travel slightly (about 2.0-3.0%) and hence congestion. This is expected to reverse over the next year or two as the economy recovers, leading to higher congestion levels.

The impact of hours of service rule changes is unknown at this time. While the rule changes will likely increase highway safety, more restrictive rules make vehicle and driver scheduling less flexible. This may raise the cost or low productivity, leading to some increased hiring to maintain the same level of service.

Overview of the Trucking Industry in Colorado

- The trucking industry and associated activity were estimated to provide 127,791 (1 out of 16 of all jobs in Colorado) in 2000.
- Total trucking industry wages paid in Colorado in 2000 exceeded $4 billion, with an average trucking salary of $31,526.
- An estimated 75.0% share of Colorado's manufactured freight moves by truck.
- Trucking serves every community in Colorado. Nearly 80.0% of all communities depend exclusively on trucking to supply their goods.

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TRADE, TRANSPORTATION, AND UTILITIES EMPLOYMENT
1995–2005
(In Thousands)

Year	Wholesale Trade	Retail Trade	Total Trade	Transportation and Warehousing	Utilities	Total TTU[a]	Percentage Change
1995	83.9	207.6	291.5	59.7	9.4	360.6	5.0%
1996	85.8	217.0	302.8	60.3	8.9	372.1	3.2
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	8.2	412.1	-2.6
2003	92.2	239.0	331.2	64.9	8.0	404.1	-1.9
2004[b]	91.3	241.8	333.1	62.1	8.0	403.2	-0.2
2005[c]	92.5	246.7	339.2	62.7	8.2	410.1	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.

Trade, Transportation, and Utilities

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Utilities

Electric, gas, and water utilities faced continued challenges in 2004. Low snow pack led to a second year of water utility restrictions. At the same time, natural gas prices continued to climb further, pushing up the cost of heating homes and producing electricity.

In 2004, wholesale natural gas prices continued to climb in Colorado and throughout the nation. Consumers and businesses are reacting to continued high natural gas prices, and demand for natural gas fell as a result. Colorado retail natural gas sales declined by 2.0% in 2004 with warm weather and higher prices. Customers are reducing demand through conservation and by switching to alternative fuels. Population growth and more normal weather are expected to push up natural gas demand in 2005.

In recent years, all new electricity generation in Colorado has been fueled by natural gas. As a result, higher natural gas prices continue to push up the price of electricity. Utilities across the country are becoming increasingly concerned about the high and unstable electricity rates that have resulted from the increased dependence on natural gas. Many are looking at alternatives. Xcel Energy has proposed building a 750 mega watt coal-fired power plant in Pueblo to meet new demand for electricity and to serve as a hedge against natural gas price increases.

Cool weather and higher prices dropped electricity consumption in 2004 despite continued household growth. Electricity consumption in Colorado fell from 46,800 million Kwh in 2003 to an estimated 41,400 million Kwh in 2004. Consumption is forecast to increase in 2005 with an improving economy and more favorable weather.

Most electric and gas utilities have largely decided to focus again on the core business. As a result, nontraditional businesses are being curtailed or spun-off. A major effort in the utility industry and the rest of corporate America in 2004 has been the increased focus on compliance with new reporting regulations. There are currently no active efforts to bring retail electricity competition to Colorado. In 2004, the focus on core business held utility jobs flat in Colorado. Gains of just 200 jobs are expected in 2005. ✜

COLORADO NATURAL GAS CONSUMPTION 1998–2005 (In Billions of Cubic Feet)

Year	Total	Percentage Change
1998	330.3	na
1999	333.1	0.8%
2000	367.9	10.4
2001	463.2	25.9
2002	461.1	-0.5
2003	424.2	-8.0
2004[a]	419.6	-1.1
2005[b]	435.8	3.9

[a]Estimated.
[b]Forecast.
Source: Colorado Business Economic Outlook Committee.

COLORADO ELECTRIC POWER CONSUMPTION 1995–2005 (In Millions of Kilowatt Hours)

Year	Non-residential	Residential	Total	Percentage Change
1995	23,598	11,271	34,869	3.7%
1996	25,182	11,891	37,073	6.3
1997	25,807	12,261	38,068	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	2.7
2003	30,906	15,933	46,839	0.7
2004[a]	25,790	15,631	41,421	0.7
2005[b]	32,259	16,392	48,651	1.5

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

Information

Overview

The Information Supersector focuses on providing customers and businesses ways to connect and obtain information. This includes newspapers, television and radio, entertainment, software, and entertainment.

The firms in this supersector range in size from some of the largest and most recognized companies in the state to hundreds of single-employee firms. In addition, many firms in the motion picture sector expand during the actual filming of an event or project, and then contract to just a few year-round employees. In short, industries in the Information Supersector have more dissimilarities than similarities.

During 2005, it is anticipated that this supersector will add about 1,300 employees. Nearly all of this growth will occur within the software segment of publishing. In addition, due to the strength of the national economy and the improving state and local economies, newspapers, periodicals, and other forms of printed media will provide a means by which firms will be able to reach existing and new customers with information and advertising.

In most cases, the sectors within this area are returning to the activity and employment levels of 1999. However, one of the primary sectors in the Information Supersector is telecommunications, which continues to have very weak employment prospects. After the telecom bust in 2001, the level of competition in this industry has remained quite high, with an overbuilding of physical infrastructure and an abundance of skilled and knowledgeable potential workers. The resulting outcome has been continued reductions in the employment levels for the past four years. This pattern is expected to remain over the next year or two, with the forecast showing a slower, yet continued negative change in employment in 2005. A loss of at least 200 additional jobs is projected in 2005.

2003 INFORMATION EMPLOYMENT, WAGES, AND ESTABLISHMENTS

Category	Percentage of Total Employees	Percentage of Total Firms	2002 Average Weekly Wages	2003 Average Weekly Wages	Percentage Change in Wages
Telecommunications	40.9%	25.3%	$1,305	$1,486	13.9%
Publishing Industries, except Internet	35.5	37.0	1,169	1,196	2.3
ISPs, Search Portals, and Data Processing	9.3	16.5	1,213	1,210	-0.2
Broadcasting, except Internet	8.0	5.8	1,339	1,175	-12.2
Motion Picture and Sound Recording	5.0	12.5	516	485	-6.0
Internet Publishing and Broadcasting	1.1	2.3	1,296	1,315	1.5
Other Information Services	0.2	0.8	1,045	1,086	3.9
Total Information	100.0%	100.0%	$1,215	$1,364	12.3%
Total All Industries			$731	$749	2.5%

[a]Estimated.

[b]Forecast.

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

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

Earnings in the Information Sector

Employees in this supersector of the state's economy tend to have significantly better than average earnings. So while some of the most dramatic effects of the recent recession were felt by firms and employees in this area, the underlying strength of these services is still apparent and is likely to continue into the future.

The two highest-paying industries in the Information Services Supersector are telecommunications and Internet publishing. In both cases, the firms in these fields are paying nearly twice the average weekly wage of all employees in Colorado. This translates into an average annual salary of $77,250 in telecom compared to $38,950 for the average worker in the state. Wages have remained high, given that telecom has experienced a 33.0% reduction in total employment since 2001.

It is important to keep in mind that a portion of the employment growth in this industry was the laying of the fiber-optic cable and associated infrastructure for the product. The maintenance of the cable obviously requires a much smaller work force. While many of these jobs were not telecom engineers, the employment numbers fell into these categories. Thus, the paring of the work force over

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the past four years resulted in a lower employment level and a comparative rise in average wages paid. Those employees who remained tended to be in higher compensated occupations, and some of the lower paying jobs were eliminated.

Telecommunications

Telecommunications is the largest industry in the Information Supersector, accounting for 40.0% of total employment. However, it was responsible for more than 60.0% of the job loss in the supersector and about 15.0% of the total employment loss in Colorado during the recent downturn.

This field has been transformed into an industry that includes concentrations of various types of service. For example, 20 years ago, the telephone industry existed as a monopoly. Today, many firms provide several types of service. All indications suggest the array of services will continue to evolve. As an example, VoIP (voice-over Internet protocol) is currently being explored as an alternative to traditional long-distance service.

This evolution in services has led to a rapid expansion in total telecom service usage.

The employment and market outlook for firms in this sector vary by type of service. In some senses, this is both the slowest- and fastest-growing segment of the Colorado economy. This sector lost more than 14,000 jobs during the past four years, and the prospects for a rebound to the previous employment level is quite dim. Now that the infrastructure is largely in place along the Front Range and in other parts of Colorado, most of the focus has switched to quality and changes in service. While some additional telecom infrastructure still needs to be completed, primarily in rural parts of Colorado, the leading economic reality is merger and consolidation. The Multi-Use Network Project will provide great assistance to rural Colorado businesses and consumers.

Traditional wired telephone service firms are expected to experience stable market growth and little or no employment growth in 2005. Customers tend to be embracing additional service and have only to a limited degree eliminated traditional service. Furthermore, Qwest (the largest telecom provider in Colorado) continues to branch out in the emerging markets. Public perception of Qwest continues to improve as measured by various public and private surveys of customer satisfaction.

The mobile phone service companies are experiencing a trend of consolidation as evidenced by the recent merger of ATT Wireless and Cingular. The result is increased market power for the new firm; however, the negative effect is a reduction in employment. Within Colorado, it is expected that some employment growth will be created as mobile phone service usage expands. However, part of this growth will be offset by job losses with merger activities continuing in the coming year.

The new emerging areas of competitive local exchange carriers (CLEC), interexchange carriers (IXC) and fiber-to-the-premise (FTTP) firms, are expected to experience the largest growth. In all cases, the focus is on firms and to a limited extent residential markets (especially high-density residential). In addition, VoIP has received significant press as firms are beginning to market this type of service. In all these cases, service providers are linking two or more technologies to produce a new, innovative product. The downside is that these services are still a number of years away from taking niche market share from Qwest and the mobile phone companies. It should be noted that these the new telecom services tend to focus on the key service needs of small to medium-size businesses that tend to be a profitable customer for Qwest and others.

In general, telecommunication firms are expected to experience stronger revenues and increased profits in the coming year. Prospects for employment growth in telecommunication are flat.

Newspaper, Periodicals, and Other Publications

This sector includes both newspaper publishing and software publishing. The number of workers is distributed equally between the two sectors.

Newspaper Publishing

This subsector includes daily newspapers, general interest and speciality magazines, and similar publications. As the state-wide economy and the tourism industry softened, firms in these areas experienced a reduction in advertising space and made cuts in both editorial and advertising staffs. At the same time, continued incorporation of advanced technology techniques and equipment allowed firms to take advantage of labor and cost savings in maintaining their products and services.

With an improved outlook for tourism and the statewide economy, firms in the newspaper publishing sector are expected to hire a total of 300 additional employees in 2005. The overall impact on the economy will also be higher as additional freelance writers are expected to contract with these publications to produce the needed copy. The net result is an increase of 2.0% in regular employment and an increase in the freelance writing market.

Software Publication

In 2001 the software publishing category peaked at 17,700 employees. By the end of 2004 the subsector is expected to employ 13,900 workers. Despite this sharp decline of 3,800 positions, the subsector turned around in the second quarter of 2004 and is projected to add approximately 1,000 jobs in 2005. Discussions with local industry leaders suggest that many companies cautiously dedicated the first half of the year to securing contracts. Once these were signed, the companies added employees and contract workers, and outsourced portions of its work to complete these contracts. This pattern was reflected in the *Denver Business Journal* High Tech Index, which showed that first quarter sales and marketing expenditures were up.

Measuring the performance of this subsector is a challenge because software, software development, and system design can cross over into most industries. In addition, much of the growth may actually be recorded in the services sector under employment services. Software companies often hire temporary or contract workers to fill specific short-term project needs. Unlike other industries, it should be noted that many software workers prefer temporary or contract status; hence, such an agreement serves both parties well.

There are a number of reasons to think that this projected increase is conservative. The following discussion, while more macro in nature, is intended to point out the value of the software industry to Colorado and why it is poised for strong growth in 2005 and beyond.

First and foremost, many companies incurred significant expenditures for preventive Y2K hardware and software. With the subsequent downturn in the economy, many companies postponed budgeting funds for capital expenditures to update their equipment and software. These companies have subsequently discovered that they have fallen behind in utilizing newer technology. In some cases, their closest competitors have improved their productivity through increased technology expenditures, which have put them at a competitive disadvantage.

The macho-bravado business model and mindset of the dot.com era have been replaced with a business model based on strategy and business savvy. Not only are companies looking for people with strong programming and technical knowledge, they are also looking for employees who have strong business knowledge and project management skills. As the industry matures, employees are expected to have greater business sophistication.

Along these same lines, access to capital has become more strategic. Funding in the 2005 market will be based more on what is working, rather than on what is cool or sexy.

While a number of successful business models are used in the industry, more companies are building for the long run, as opposed to building to sell in four or five years. This has many benefits to the Colorado economy. As companies develop reputations of good products and good services, they strengthen their business base. To this point, numerous software companies quietly conduct business in Colorado because they typically work in the less visible business-to-business marketplace, where broad exposure is not as critical. A portion of these companies have started out with a small local market. As they have increased their ability to deliver their products and services, they have expanded into regional and global markets.

Access to capital has become more strategic. Funding in the 2005 market will be based more on what is working, rather than on what is cool or sexy.

Software is closely tied to the growth of the defense and aerospace markets. In addition, it has numerous applications in photonics, nanotechnology, biotech, and a host of other technology industries. Software is expected to grow along with these targeted industries in 2005 and beyond.

The structure of the Colorado economy is one that makes it appealing to the segment of software companies that want to work with small to medium-size companies. Of the 157,480 companies in Colorado, 73 have 1,000 or more employees, 137 have 500–999 employees, and 420 have 250–499 employees. In other words, there are more than

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150,000 potential customers in Colorado for software companies that want to work with small and medium-size businesses.

Despite the recent downturn, Colorado remains a hotbed for software publishers, system designers, and programmers. This is particularly true in the metro area, because of the close proximity to the state's major universities and top technology-based companies.

A final comment is appropriate regarding the controversial topic of outsourcing. Outsourcing is a critical part of the software industry. An informal polling of Colorado company leaders suggests that they would prefer using local workers, but because of the technical nature of their business, their primary goal is to hire the best employees or contract workers to complete the work. Sometimes those people reside in Colorado, sometimes they reside in the United States, and sometimes they reside overseas. There is some concern within the industry that some of the misrepresentations associated with recent discussions have discouraged college students from entering the profession.

Motion Picture and Television Industry

The independent film and video industry within Colorado continued to grow in 2004, a result of several ongoing factors. New technologies make it easier and less expensive to produce a project, and an increasing number of film students in-state have access to professional training, such as that offered by the Colorado Film School. Filmmakers also have a variety of venues that regularly exhibit Colorado-produced projects, including the unique nonprofit Starz FilmCenter in Denver, a number of micro-cinemas, and more than 30 film festivals statewide. The membership of the Colorado Film and Video Association grew for the fourth straight year, from 190 members in January 2001 to more than 600 in 2004.

In addition to commercials, Colorado filmmakers are producing an increasing number of other types of projects. While this is not a new phenomenon, the increased quantity and quality of these films is notable. Among the Denver-produced features in the past year were *Human Error* from New Deal Pictures, West End Entertainment's *Ichabod!*, and *E5* from E5 Productions. In addition, Littleton-based Rocket Pictures/Great Divide/High Noon has produced 14 shows currently airing on cable networks. Colorado is also home to a growing pool of talented, award-winning documentary filmmakers. While the infrastructure and talent in Colorado are strong, one missing link for the film and video industry is access to financing from within the state. Colorado bankers and investors need to be educated about the many opportunities within this industry.

The *Denver Post* printed a front-page article by Lisa Kennedy on October 21, 2004, titled, "Colorado lands a leading role in filmmaking industry." Kennedy found that the 2004 Starz Denver International Film Festival received submissions from

CHANGES IN INFORMATION EMPLOYMENT
(In Thousands)

Sector	2003	2004[a]	2005[b]	2004 New Jobs[a]	Percentage Change	2005 New Jobs[b]	Percentage Change
Publishing Industries	30.3	29.9	31.2	-0.4	-1.3%	1.3	4.3%
Newpaper, Periodical, Books	15.8	16.0	16.3	0.2	1.3	0.3	1.9
Software Publishers	14.5	13.9	14.9	-0.6	-4.1	1.0	7.2
Motion Picture and Sound Recording	4.3	4.1	4.1	-0.2	-4.7	0.0	0.0
Broadcasting, Except Internet	6.7	6.7	6.7	0.0	0.0	0.0	0.0
Internet Publishing and Broadcasting	0.9	0.9	1.0	0.0	0.0	0.1	11.1
Telecommunications	34.6	32.3	32.1	-2.3	-6.6	-0.2	-0.6
Internet Service Providers	7.9	8.0	8.1	0.1	1.3	0.1	1.3
Other Information Services	0.2	0.1	0.1	-0.1	-50.0	0.0	0.0
Total Information	84.9	82.0	83.3	-2.9	-3.4%	1.3	1.6%

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

more Colorado filmmakers than in any other year; 19 were accepted and screened during the festival. She further reported, "There is no central agency tracking all films, TV shows and commercials made in the state, but numbers from the federal Bureau of Labor Statistics bolster the notion that the industry is growing here. According to the bureau, Colorado is No. 1 in projected job growth among the states in directors, producers, actors and composers, and musicians; No. 2 in designers (in the visual and audio domains); and No. 4 in artists, and TV movie, video and audio production."

On a global scale, industry-wide changes, as well as the downturn in the world economy, continued to negatively affect the employment of freelance production crews throughout the United States (but it is believed that production in Colorado increased in 2004 over the previous year). In addition to Canada—the major competitor for the past several years due to a favorable exchange rate and considerable tax incentives—Australia and New Zealand have continued as important players in this arena. Mexico, Eastern Europe, South Africa, China, and other Asian countries are also competing for and attracting U.S. production dollars. An interesting result is that the role location filming plays in tourism development has taken on a new significance worldwide.

The *Monitor Report* estimated that "runaway productions," cost the United States $10.3 billion in 1998, and the figure has increased since then. In response, several states have instituted financial incentives in order to keep these production dollars in the United States. New Mexico and Louisiana are leaders in this movement, with Illinois, New Jersey, Oregon, Pennsylvania, Mississippi, New York, and others also passing film incentive legislation in the past two years. Such inducements are not available in Colorado and that continues to be a hurdle in attracting location filming.

However, producers of low-budget independent films were recently granted tax breaks for movies shot in the United States. Susan Crabtree and Ian Mohr reported in the October 24, 2004, issue of *Variety* that "After years of lobbying, independent filmmakers scored a major victory Friday when President Bush signed a bill that gives a sweeping tax break to movies made in the United States. Producers believe the measure may draw substantial fresh funds into indie filmmaking. . . . Independent producers now may write off a movie in a single year if it has a budget of $1 million-$15 million and 75% of that budget is spent in the U.S. The expensing limit increases to $20 million if the movie is made in a low-income area of the U.S." This tax break could stimulate investment in the production of low-budget features in Colorado.

Technology is rapidly changing the industry, and the move toward high-definition production and distribution could present an opportunity for Colorado.

The potential for growth is evident. PriceWaterhouseCoopers projects in its *Global Entertainment and Media Outlook: 2003–2007* that the industry will reach $1.4 trillion in 2007 from $1.1 trillion in 2002, a 4.8% average annual growth rate. Expected growth is especially high in the following areas: filmed entertainment; TV networks: broadcast and cable; video games; and educational and professional books and training.

The International Intellectual Property Alliance (IIPA) reports that the copyright industries (movies, TV programs, home videos, books, music, computer games, and software) represent about 5.0% of the GDP of the United States in 2001, and unlike virtually any other industry, have a positive effect on foreign trade throughout the world. In addition, this study suggests that job creation in this industry was three times as fast as the general economy.

These data indicate an increasing global demand for entertainment. In addition, technology is rapidly changing the industry, and the move toward high-definition production and distribution could present an opportunity for Colorado. Video game production has grown dramatically in the past two years, and the state's high-tech industry and film and digital training programs could position Colorado to take advantage of this sector.

In the 2003 study conducted by the University of Colorado at Boulder, Leeds School of Business, *The Impact of the Film Industry on Colorado*, it was stated that Colorado "has one of the highest concentrations of computer, communications, and technology companies in the country, it is positioned to jump on the digital bandwagon and climb to the top of the film industry. If Colorado undertakes efforts to stimulate the growth of the digital media segment, it has the potential to be a leader in this field."

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One factor negatively affecting the state's industry was the loss of support for the Colorado Film Commission (CFC). Since it was established by legislation in 1969 (making it the first such entity in the world), the CFC served as the primary agency providing centralized services, marketing, and networking for film and video producers instate and out of state. In March 2003, dedicated funding and staff were eliminated due to the state budget deficit. Services continued at a minimal level through the Colorado Tourism Office.

However, in August 2004, entertainment was recognized as a targeted growth industry in the state, and the Colorado Film Commission was accepted as the first tenant in the newly established Advance-Colorado Center, a joint project of the Colorado Office of Economic Development and International Trade and the University of Colorado at Denver and Health Sciences Center. The AdvanceColorado Center offers an opportunity to establish a new model for the funding and operation of a film commission.

Motion Pictures and broadcasting account for about 13.0% of the employment in Information Services, and the impacts extend beyond into other parts of the economy. As an example, almost 90,000 people attend one of the many film festivals held in Colorado on an annual basis. Between the patronage and workers in the this field, additional economic activity is created in the Accommodations and Food Services Sector.

The University of Colorado at Boulder study affirmed the IIPA study, reporting that the motion picture and broadcasting industries grew faster in the past 10 years than the Colorado economy. This study also discussed the important role the film industry plays in promoting and fostering economic activity through exposure to national and local audiences. In addition, the report examined film activities taking place in almost two-thirds of the counties in Colorado. Moreover, this industry plays an important role in encouraging tourism. If it snows in the fall during a nationally televised football game, the resort association telephones begin to ring with people from the around country making reservations to visit Colorado during the ski year.

INFORMATION EMPLOYMENT
1995–2005
(In Thousands)

Year	Publishing	Telecommunications	Other	Total
1995	20.0	28.3	16.2	64.5
1996	21.0	29.6	17.3	67.9
1997	22.2	29.6	21.9	73.7
1998	24.4	38.5	23.5	86.4
1999	27.3	42.9	26.8	97.0
2000	29.7	46.0	32.7	108.4
2001	34.8	46.8	25.7	107.3
2002	31.1	39.1	22.6	92.9
2003	30.3	34.6	20.1	84.9
2004[a]	29.9	32.3	19.8	82.0
2005[b]	31.2	32.1	20.0	83.3

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

Summary

The Information Services sector will experience net job growth during the coming year. It is anticipated that the growth will be about 1.6%, and focused primarily in software and newspaper/periodicals publishing. Due to the continued evolution within the telecommunications area, further technological advances and mergers are expected to result in a small job loss. ✜

Financial Activities

The Financial Activities Supersector is comprised of the Finance and Insurance Sector and the Real Estate and Rental and Leasing Services Sector.

The Finance and Insurance Sector includes monetary authorities—central bank; credit intermediation and related activities; securities, commodity contracts, and other financial investments and related activities; insurance carriers and related activities; and funds, trusts, and other financial vehicles. The Real Estate Sector obviously includes real estate jobs. In addition, it includes rental and leasing services and lessors of nonfinancial intangible assets (except copyrighted works).

Between 1993 and 2003, the Financial Activities Supersector grew at a compound annual growth rate (CAGR) of 3.0%, with the strongest employment growth occurring in securities, 5.2%, and credit organizations, 4.0%. Insurance employment increased at a CAGR of 2.9%, and real estate employment increased at 3.1%.

In 2004, employment in the Finance and Insurance Sector is expected to add approximately 600 jobs, while the Real Estate and Rental and Leasing Services Sector is projected to remain flat. In 2005, employment in the Finance and Insurance Sector is anticipated gain to an additional 800 jobs, while the Real Estate and Rental and Leasing Services Sector will add roughly 400 jobs.

Finance and Insurance Sector

Commercial Banking Outlook

The banking industry will experience changing trends in 2005. Loan growth continued to benefit from robust consumer loan demand (primarily mortgage and home equity) in 2004, while demand for commercial credit began to turn around after almost four years of lackluster demand. Mixed loan trends in 2005 are expected as consumer growth slows and commercial growth continues its rebound. The size of the rebound, however, will depend on the pace of economic recovery. Net interest margins should post a modest upward bias in the first half of 2005 as variable rate assets continue to reprice, reflecting Federal Reserve monetary policy, and deposit rate increases lag. Margins will stabilize when the Federal Reserve completes its tightening.

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FINANCIAL ACTIVITIES EMPLOYMENT 1995–2005 (In Thousands)

Year	Finance and Insurance	Real Estate and Rental and Leasing	Total[a]
1995	82.4	38.6	121.1
1996	87.9	40.0	127.9
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	107.0	47.3	154.2
2004[b]	107.6	47.3	154.9
2005[c]	108.4	47.7	156.1

[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.

Financial Activities

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In the second half of 2005, any pressure on margins from slowing deposit growth or changing deposit mix (deposit movement from checking, savings, and money market accounts into certificates of deposit) should be offset by the positive impact of loan growth. Fee income growth should continue to transition in 2005, away from mortgage and deposit fees (reflecting slowing mortgage originations and deposit growth) and toward capital markets and asset management fees with a better market and higher insurance revenues. Expense growth in 2005 should be moderately higher than in 2004, reflecting an increased use of variable rate compensation (especially in the capital markets businesses) and the expensing of stock options. Credit quality should be stable in 2005 as it is already at its cyclical best. Overall, the industry remains well capitalized and fundamentally sound.

Savings and Loans

In the late 1990s, the general trend of consolidation and decreased regulation in the financial services industry decreased the importance of savings and loan institutions. Recent volatility in real estate and stock markets has been somewhat of a mitigating factor, but the subsector continues to play a relatively minor role in the U.S. financial market.

In 2003, several S&Ls opened their doors in Colorado, which resulted in significant employment gains. Nevertheless, the subsector employs fewer than 1,500 employees, only 1.4% of total employment in the Financial Activities Supersector.

Credit Union Trends

As the economy continues to improve and inflationary concerns are present, it is anticipated that the Federal Reserve Board will cautiously increase the Fed Funds rate during the remainder of 2004 and throughout 2005. A rising rate scenario usually means a decrease in net interest margin for credit unions as higher rates on savings will affect return on assets faster than the repricing of loans. Recent indications are that members are very rate sensitive, are shopping for the best rates, and will move their savings to another institution or the stock market if their current financial institution does not have competitive rates. On the lending side, there has been a steady decrease in yield since the rates started their sharp decline in 2001. Members have refinanced to take advantage of the lower rates or made new purchases and obtained a low rate loan, and will be reluctant to “give up” these low rate loans as rates increase. This squeeze on net interest margin is normal in this interest rate environment and will temporarily decrease return on assets. Interest rate risk management will be a primary focus as the rates move up.

With the above stated interest and earnings scenario, asset growth is expected to be in the 3.0–4.0% range for 2004, increasing to the 5.0% range for 2005. Loan demand should remain strong, with around 10.0% growth expected for 2005. While the number of personal bankruptcies has been decreasing in 2004 on a national basis, they have been increasing through September in Colorado. Steady growth in the economy may reduce bankruptcies and associated charge-offs into the new year. Any decrease in bankruptcy filings in 2005 will hinge on improvements in the labor market, tax cuts, mortgage refinancing, and a continued low interest rate market. The proposed bankruptcy reform bill remains stalled in Congress.

It is anticipated that the Federal Reserve Board will cautiously increase the Fed Funds rate during the remainder of 2004 and throughout 2005.

Consolidation of credit unions continues as small shops feel the pressure from new technology and regulations that add to operational costs. Shifts in consumer preference toward debit card instruments, security of member information, increasing competition for member loans through the Internet and indirect programs, and an inability to offer mortgage loans due to their size are making it difficult for small credit unions to maintain market share. Another increasing cost issue is employee training to maintain high-quality, high-functioning employees. Nonetheless, small credit unions can survive by picking their niche and offering high-quality member service. Service is still the key to success, and credit unions continue to get high marks in this area.

Financial Market Trends

For the first three quarters of 2004, the performance of the overall stock market has been mediocre. The Dow Jones Industrial Average is down 4.0% since the beginning of the year. The NASDAQ Composite Index has declined 1.4% for the first nine months of this year. The Standard & Poor's 500 Index has recorded a nine-month gain of only 1.5% and actually declined in the third quarter of 2004 by 1.9%. The price of crude oil has increased more than 50.0% in the first nine months of this year. Thus, the best-performing stocks have been oil and energy companies.

Despite the less than stellar performance of the stock market, the securities industry outlook remains positive. The financial results reported for brokerage firms doing public business in the United States were positive for the six-month period ending September 30, 2004. Profits were $2.9 billion during that time. In addition, the securities industry has added 24,000 jobs nationwide since the beginning of the year.

As of September 30, 2004, approximately 128,500 individuals were licensed to do business as stockbrokers in Colorado. This represents an increase of 3,650 stockbrokers over last year. Of that number, approximately 14,035 actually reside in Colorado. In addition, of the 2,402 brokerage firms licensed to conduct business in Colorado, 102 have offices here. Moreover, about 6,330 investment adviser representatives are licensed in Colorado, which is an increase of 700 compared to last year. The growth in the number of licensed stockbrokers is expected to remain steady in 2005.

With regard to mutual funds, the trading scandals and bear market have had an adverse impact on investor sentiment. Although investors still retain a positive view of mutual funds, overall favorable impressions have declined. Still, inflows to mutual funds have been positive through 2004. The combined assets of the nation's mutual funds stood at $7.55 trillion as of September 30, 2004.

If the economy continues to improve and corporate profits remain steady, the securities industry should perform well in 2005. At the time of this writing, it is not known how a sustained high price of oil, fears of terrorism, or the outcome of the presidential election will impact the market.

Insurance

The insurance industry employs about 39,500 employees in Colorado and is comprised of two main categories: life and health insurance, and property and casualty insurance. Nationally, the insurance subsector employs roughly 2.3 million people, which is about 28.0% of total financial activities employment. The concentration of in-state insurance employees is about the same as the U.S. average; however, Colorado has more insurance employees relative to other financial activities as approximately 39.0% of the state's financial employees work in insurance.

If the economy continues to improve and corporate profits remain steady, the securities industry should perform well in 2005.

Technology increases in the past decade have allowed insurance companies to serve larger populations more efficiently with fewer employees. From 1993 to 2003, Colorado insurance employment increased at a CAGR of 2.9% compared to 0.9% at the national level. The subsector grew relatively quickly during the 1990s, but since 2000 employment growth has tapered off.

Real Estate and Rental and Leasing

Commercial Real Estate

Colorado is one of the last states to emerge from the national recession. A strong correlation exists between the economy and commercial real estate activity. Looking ahead, the outlook should be positive as Colorado's job growth in the sector finally gained traction in Q2 2004, and absorption and occupancies improved as well.

The value of nonresidential construction contracts appeared to rise through mid-2004. Not contributing to this rise was commercial product types, such as retail and industrial. Retail, public buildings, amusement, industrial, and office contracts all experienced large declines. However, hospital construction contracts were up 392%, accounting for 37.0% of contracts issued, while schools and colleges accounted for another 15.0%. Remove these sectors, though, and nonresidential construction was actually down 25.0%. Higher interest rates and sated demand will keep new development in check during 2005.

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Financial Activities

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FINANCE AND INSURANCE EMPLOYMENT
1995–2005
(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]
1995	35.9	10.3	31.5	4.7	82.4
1996	37.6	11.7	34.2	4.4	87.9
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	50.6	14.0	39.5	2.9	107.0
2004[b]	51.6	13.5	39.9	2.6	107.6
2005[c]	51.9	13.8	40.1	2.6	108.4

[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.

Jobs lost in metro Denver from the technology and manufacturing sectors are being replaced by jobs in construction, trade, and business services. A "flight to quality" trend continues as tenants absorb more Class A than Class B space. Ross Research reports that Q3 2004 office vacancy rates declined to 22.36%. Industrial, and especially retail properties, realized steady gains. Vacancies were 9.0% and 9.39%, respectively. Clayton Lane in Cherry Creek and Belmar in Lakewood delivered 260,000 square feet of new retail space to the market. Rental rates remain below their high-water mark as landlords negotiate concessions. Positive absorption and brisk investment activity will occur in 2005, while retail supply will be selectively added to strategic new locations.

Northern Colorado has been mildly affected by the national recession. Developable land in that area has become a "sought after" commodity. Values are greatly impacted by water rights, accessibility to utilities, and proximity to annexation. RealTec reports the following improved Q3 2004 industrial, retail, and office vacancy rates, respectively: Ft. Collins (6.19%, 6.57%, 11.13%), Loveland (5.61%, 5.92%, 16.86%), and Greeley (8.0%, 6.0%, 13.0%). National retailers are looking to these markets as the next "land of opportunity." Noteworthy projects include Interchange Business Park and Harmony Market in Ft. Collins; Centerra in Loveland, a 3,000-acre master-planned community; and Promontory in Greeley, the headquarters of ConAgra and State Farm Insurance. Given the area's desirability, expect development to continue along the I-25 corridor.

Mesa County is still attracting the attention of large national retailers. First American Heritage Title reports that demand for residential and affordable housing stretches from Fruita to Palisade. The average home price rose 7.73%, to $167,610, by mid-year 2004, with homes priced between $120,000 and $200,000 in high demand. The real estate dollar sales volume at Q3 2004 is up 2.8%, to $319.8 million, over the same period in 2003. If mortgage rates remain below 6.0% in 2005, residential and commercial real estate will remain active on the Western Slope.

Ft. Carson deployments and the loss of high-tech and other manufacturing jobs have impacted southern Colorado's commercial real estate market. Turner Commercial Research reports weak demand in year-to-date 2004 for office and industrial space. Yet, when compared to 2003, office vacancies have improved to 9.4%; industrial, 10.2%; and retail,

REAL ESTATE AND RENTAL AND LEASING EMPLOYMENT 1995–2005 (In Thousands)

Year	Real Estate	Rental and Leasing	Total[a]
1995	25.9	12.7	38.6
1996	26.6	13.4	40.0
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	14.4	47.3
2004[b]	32.6	14.7	47.3
2005[c]	32.5	15.2	47.7

[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.

7.6%. Southern Colorado needs to attract businesses and jobs. For 2005, expect residential and commercial real estate activity to be flat.

An educated labor force, reasonable cost of doing business, and cost of living are features that attract businesses to Colorado. Job and population growth, coupled with a low interest rate environment, will generate brisk commercial real estate market activity. If lenders remain prudent and developers exercise restraint, Colorado's economic momentum will positively impact commercial real estate markets.

Real Estate Employment

Real estate employment for 2004 will be down about 300 jobs from 2003, ending the year with approximately 32,600 workers. This downward trend is expected to continue into next year. The main reason for this is the generally lethargic office space market, which is going nowhere fast without job growth. As interest rates rise, the compression on the expense side will continue.

Retail, industrial, and the hotel components are similarly stagnant and perhaps not as overbuilt as the office space market. The apartment segment is quixotic! On the cusp of overbuilt yesterday, today is the salvation if interest rates continue to rise. The conversion of many units to condominiums has helped immensely. Although concessions are still readily available for apartment products, the vacancies are reasonably low.

One long-term potential cure for the malady is the recognition of the "new" FasTracks products. Companies are going to reorganize into divisions and departments that concentrate on transit-oriented development. With a new product in the arsenal, relocation prospects will grow, and the outlook for new jobs will increase. This assumes that we take advantage of smart growth and plan sustainable developments that look ahead, not backward.

Rental and Leasing Trends and Employment

The Rental and Leasing Services Sector includes a hodgepodge of companies that initially appear to be unrelated. This is a result of the NAICS classification system, which categorizes companies based on their process (i.e., rental and leasing). As a result, companies in this sector include everything from video rentals to tuxedo rentals, car or heavy machinery rentals, or apartment rentals. The sector, which is heavily consumer-driven, tends to pattern general economic and population growth trends. Employment decreased during the economic downturn, but is expected to pick up again as the overall economy gains momentum. The sector is expected to add 300 jobs this year and another 500 jobs in 2005. ✜

Professional and Business Services

Overview of Service Industries

The Professional and Business Services Supersector is important for three reasons. First, it is the second largest supersector in terms of employment. Second, service industries are growing and often pay higher than average wages. Four million U.S. jobs disappeared from manufacturing, utilities, mining, and agriculture in the past decade, but 10 million new jobs were created in service industries alone. Third, the fastest-growing occupations typically occur in the services area. Between 1994 and 2003, the Professional and Business Services Supersector was the leading employment sector in the state as it showed a net increase of 62,400 jobs. This represents 15.8% of the total jobs gained.

The Bureau of Labor Statistics employment projections for 2002–12 identified the following five industries as having the fastest annual rates of growth: 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 3.4 million jobs are projected to be added in these five industries in this 10-year period, of which 2.8 million jobs will be added in services.

Composition of Professional and Business Services Supersector

For many years, the services steering committee has been troubled by two questions. First, exactly what kinds of firms make up the huge services sector? Second, what types of employees work for these firms? Are these mostly low-paid, menial occupations in giant corporations, as conventional wisdom tells us? The new NAICS industry classification finally makes it possible to answer these questions. The formerly huge services sector is now divided into three more manageable components falling within the supersector called Professional and Business Services:

1. Professional, Scientific, and Technical Services
2. Management of Companies and Enterprises
3. Administrative and Support and Waste Management and Remediation Services

Overall, service establishments total about 33,000 in Colorado, with an average firm size of approximately nine employees. Firms in the Professional, Scientific, and Technical Services Sector are slightly smaller, with an average size of six employees and average annual wages of greater than $62,000. The second sector, Management of Companies and Enterprises, includes only about 1,000 companies; however, these firms average approximately 20 employees with average annual wages above $75,000. Finally, the Administrative and Support and Waste Management and Remediation Services,

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR EMPLOYMENT 1995–2005 (In Thousands)

Year	Legal Services	Engineering and Architectural Services	Computer Systems Design Services	Other Professional, Scientific, and Technical Services	Total[a]	Percentage Change
1995	14.4	26.9	25.2	46.5	113.0	9.4%
1996	14.3	27.5	29.1	48.0	118.9	5.2
1997	14.5	29.4	30.7	50.9	125.5	5.6
1998	14.6	31.0	33.1	52.4	131.1	4.5
1999	14.8	33.2	39.0	54.8	141.8	8.2
2000	15.1	34.3	45.4	56.6	151.4	6.8
2001	15.5	37.5	42.7	55.9	151.6	0.1
2002	15.8	36.0	35.9	54.5	142.2	-6.2
2003	16.4	35.3	32.9	53.9	138.5	-2.6
2004[b]	16.9	36.2	30.9	57.2	141.2	1.9
2005[c]	17.3	36.9	32.4	61.1	147.7	4.6

[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.

the third category, comprises approximately 9,000 establishments with an average size of 14 employees and average annual wages of about $30,000.

Example of Professional and Business Services Employment: Legal Services

To answer the question "what kind of jobs are there in the services sector," it is instructive to look at the example of legal services to understand the diversity of jobs within that profession. Nationally, less than one-third of the employees in legal services firms are lawyers. Legal secretaries fill about 20.0% of the jobs, paralegals make up 13.0% of the work force, and the remainder is spread across 129 occupations.

Because of the size and complexity of the Professional and Business Services Supersector, the committee cannot comment on all of the subsectors under its purview. A forecast has been made of the entire supersector, although a small number of sectors are discussed because of their importance to the Colorado economy.

ADMINISTRATIVE AND SUPPORT SERVICES SECTOR EMPLOYMENT 1995–2005 (In Thousands)

Year	Employment Services	Services to Buildings and Dwellings	Other Adm. Services	Total[a]	Percentage Change
1995	39.9	25.1	37.3	102.3	7.1%
1996	43.0	26.2	40.4	109.6	7.1
1997	48.0	28.1	45.3	121.4	10.8
1998	48.2	29.3	46.8	124.3	2.4
1999	51.2	31.4	48.3	130.9	5.3
2000	54.5	33.0	49.6	137.1	4.7
2001	46.9	34.4	48.5	129.8	-5.3
2002	39.0	34.1	49.0	122.1	-5.9
2003	36.3	34.6	48.3	119.2	-2.4
2004[b]	36.1	35.6	52.7	124.4	4.4
2005[c]	36.5	37.0	58.1	131.6	5.8

[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.

Employment Outlooks

Employment Services Sector

The employment services industry, by its nature, has its finger on the pulse of the job market. As such, it is subject to the regional business cycle, and is a leading indicator of employment growth or decline. At the end of the 1990s, employment services had a backlog of job requests. Firms sought workers from both the low- and high-end of the pay scale. This backlog disappeared abruptly when the high-tech bubble burst.

There are now signs that the backlog is beginning to build again. Local firms that place medical professionals and scientists now report brisk business. Medical paraprofessionals, such as registered nurses and technicians, are in high demand. In the sciences, chemists and microbiologists are needed. Local bio-tech firms are in a growth mode again, and are looking for scientists for product development, testing, and quality control. The development of the Fitzsimons Medical Complex provides another venue for scientific professionals. Anecdotal information suggests that the United States is simply not graduating enough people in these professions. As a result, overseas graduates are filling the gaps.

Employers use employment services for a variety of reasons: (1) to find candidates for long-term employment, (2) to locate workers for "temp-to-hire" situations, and (3) to hire purely temporary employees. The latter allows firms to use workers who are already trained in specific areas without taking on the cost of health benefits or insurance, and incurring the risk of litigation if the employee is laid off or fired. As one manager said, "Anymore,

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ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT SERVICES SECTOR EMPLOYMENT 1995–2005 (In Thousands)

Year	Administrative and Support Services	Other Adm. Services	Total[a]	Percentage Change
1995	102.3	9.7	112.0	5.3%
1996	109.6	8.8	118.4	5.7
1997	121.4	8.7	130.1	9.9
1998	124.3	8.5	132.8	2.1
1999	130.9	8.8	139.7	5.2
2000	137.1	8.8	145.9	4.4
2001	129.8	8.7	138.5	-5.1
2002	122.1	8.8	130.8	-5.6
2003	119.2	8.5	127.7	-2.4
2004[b]	124.4	9.0	133.4	4.5
2005[c]	131.6	9.2	140.8	5.5

[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.

employees are getting to be more of a liability and less of an asset."

Engineering and Architectural Services Sector

The Engineering and Architectural Services Sector is expected to experience an increase in employment in 2004, which is welcome news after job losses in 2002 and 2003. Decreased state and local agency capital spending on infrastructure is still the preferred and quick method to balance public agency budgets. Future general fund annual increases for state and local agencies are expected to be 3.0-4.0% per year. Yet, the demand for public services will increase faster than the anticipated tax revenues. This, in turn, will affect the demand for engineering and architectural services.

Many visible building and transportation projects managed to provide a certain level of employment through construction engineering services. A large number of jobs were lost due to the substantial completion of the T-REX design in early 2003, followed by a delay in the commencement of the design of many public and private projects until later in 2003. This significantly contributed to the employment level of the subsector in first quarter 2003 being the lowest level experienced for many years.

Starting with the second quarter of 2003, the employment figures began a steady rise. Some of this can be attributed to increasing demand for geotechnical, environmental, and surveying services, which are used at the initiation of land development projects. Most of these projects are identified as being residential and light commercial in nature. The design of new facilities and the expansion of existing plants are not expected to commence in the near future due to existing excess plant capacity, along with many new plants being built overseas for competitive product cost reasons.

Two November 2004 election initiatives passed that will increase the demand for engineering and architectural services. The RTD FasTracks initiative passed by the citizens in the Denver metro area and the Initiative 1A-Regional Transportation Authority passed by residents in the El Paso County/Colorado Springs area will boost spending for numerous projects over multiple years. These two successful initiatives are expected to strengthen the demand for engineering and architectural services starting in 2005 and beyond. Employment levels in this sector are expected to rise about 2.0% next year.

Computer Systems and Design Services Sector

One of the fastest growing sectors in the 1990s was Computer Systems Services. With several years of employment growth in the 16.0-18.0% range, peaking at about 45,400 workers in 2000, this sector is expected to experience a loss of jobs in 2004, but will rebound with 5.0% growth in 2005. One big question to be answered is when will businesses really be forced to replace their pre-Y2K computer systems? The update of Microsoft's latest Windows operating system for computers and servers created a need to replace some older systems. Several high-end applications were also updated in 2002; however, many businesses chose not to upgrade for reasons ranging from cost control to the lack of useful features in the upgrades. In 2004 operating system and application software upgrades have again been offered, but this time the upgrades have been forced on businesses by various methods. These upgrades are also expected to cause the majority of the computer hardware purchased for Y2K to be replaced due to the upgrades' significant demand for processing and extremely larger application sizes.

Administrative and Support and Waste Management and Remediation Services Sector

The major subsector classifications for the Administrative and Support Services portion of this sector are employment services (discussed above); professional employer organizations; and services to buildings and dwellings, which includes pest control, janitorial services, landscaping services, and carpet cleaning services. Other subsectors are document preparation services, telephone call centers, collection agencies, credit bureaus, travel agencies and tour operators, investigation and security services, convention and trade show organizers, solid and hazardous waste collection, landfill operations, materials recovery facilities, and other remediation services.

This sector's rate of decline in average yearly employment slowed through 2003, but is showing signs of recovery. The demand for these services is expected to gradually increase through next year, reflecting the general improvement in business activity.

The services to buildings and dwellings subsector has exhibited steady average employment growth of 5.0% per year over the last 10 years. The committee expects growth to occur at this level in 2005.

Legal Services

The legal services industry did not ride the roller coaster of the 1990s and early 2000s; instead, it grew slowly, with minimal volatility. According to the University of Colorado Law School's Career Services Office, demand for law school graduates is strong once again as shown by job placement announcements and annual on-campus interview events. Growth is robust in both the private and public sectors. The late 1990s were difficult for young lawyers as firms in that era preferred lateral hiring to new-graduate hiring. The business practice of law firms is currently in transition, gradually moving away from the gentlemanly profit-sharing partnership mode to the competitive corporate mode, complete with marketing departments and business development directors. Several years ago the big five accounting firms opened legal service subsidiaries. Employment is expected to grow at a rate of 2.5% in 2005.

In 2004 operating system and application software upgrades have again been offered, but this time the upgrades have been forced on businesses by various methods.

The Forecast and Conclusions

The recovery of the state's economy began in the second quarter of 2004, and the leader of this recovery has been the Professional and Business Services Supersector. The state showed an increase of 3,500 jobs in the first half of the year compared to the same months of the previous year. Moving into the second half of the year, this positive change rose to 15,000. Furthermore, the Professional Business Services Supersector is anticipated to add 9,200 jobs in 2005.

Businesses and government will continue to outsource professional and business services. In fact, the business of the future may be little more than a general contractor for subcontracted professional and business services. In the background, a lack of labor force mobility is caused by the constant increasing cost of health and worker compensation insurance. This makes employers reluctant to hire and workers hesitant to leave current employment.

In addition, the trend of sending service jobs overseas is also affecting this supersector. Businesses are using the cheaper overseas labor markets to stay competitive. This trend, which has been happening for many years for manufacturing goods, is relatively

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new for services. Nevertheless, it is a trend that is increasing rapidly. The United States still has the best-educated work force among the major economies. This drives our competitive global advantage in innovation. However, the number of students graduating in the math and science fields is decreasing, while the number of students graduating in these fields overseas is increasing. India and China now award more natural science and engineering degrees than the United States. The United States needs to maintain its focus on a better-educated work force in order to prevent the country from being overtaken as skill and education levels rise elsewhere.

The practices of private-sector law, banking, management consulting, engineering and architecture, medicine, telecommunications, and accounting were once tradition-bound "gentlemanly" businesses. No more. One by one, each of these professions have entered the world of competition, technology, firm restructuring, and even marketing. Competition is forcing firms to look very hard at overhead structure, especially since most of it is labor driven. Employment in the Professional and Business Services Supersector is expected to grow by 5.0% in 2005. ✜

TOTAL PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT
1995–2005
(In Thousands)

Year	Professional, Scientific, and Technical Services	Management of Companies and Enterprises	Administration and Support and Waste Management Services	Total[a]	Percentage Change
1995	113.0	14.0	112.0	239.0	6.6%
1996	118.9	14.8	118.4	252.1	5.5
1997	125.5	14.7	130.1	270.2	7.2
1998	131.1	15.3	132.8	279.2	3.3
1999	141.8	16.6	139.7	298.1	6.8
2000	151.4	17.9	145.9	315.2	5.7
2001	151.6	18.3	138.5	308.4	-2.2
2002	142.2	19.3	130.8	292.2	-5.3
2003	138.5	20.3	127.7	286.5	-2.0
2004[b]	141.2	21.1	133.4	295.7	3.2
2005[c]	147.7	22.0	140.8	310.5	5.0

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

Educational and Health Services

This NAICS supersector, which includes private sector educational and health-care companies and organizations, showed strong growth during the recent economic downturn and has been the fastest growing sector in Colorado over the past decade. Overall growth will be 4,900 jobs in 2004 and 4,600 jobs in 2005.

The private education sector accounts for approximately one out of every nine employees in this supersector. (It should be noted that public sector education employment is recorded as government employment, and totals 165,000.) About one-fourth of private education employees work at the University of Denver, Regis University, Colorado College, the University of Phoenix, Naropa Institute, and Colorado Christian University, while others are employed in categories that range from instruction for beauticians to flight training.

The much larger health-care sector is composed of four subsectors: ambulatory care, nursing, hospitals, and social assistance. The ambulatory care subsector includes about 75.0% of the health-care companies and 41.0% of employees. About two-thirds of the employees work as doctors, dentists, or in home health care. The remainder of the subsector includes such medical services as specialists, medical labs, blood banks, and dialysis centers.

Approximately 80 private hospitals are located in Colorado. These represent less than 1.0% of the companies in the health-care subsector, but about 25.0% of the subsector's employees.

Approximately 28.0% of the companies and 58.0% of the employees are included in the nursing care subsector, while about 28.0% of the companies and 13.0% of the employees are employed in homes for the elderly. About 10.0% of the employees work in the area of mental care and substance abuse.

Private Education

Much of the growth in private education has come as a result of increased population, the expansion of the economy, and funding cuts to public education. Growth in the sector has been driven by demand for continuing education programs; retraining in new areas; and technical, computer, and management training. Approximately 300 jobs will be added in private education in both 2004 and 2005.

Health-Care and Social Assistance Services

The Colorado marketplace continues to be afflicted by double-digit health insurance premium increases, bringing economic hardships to both employers and employees. The National Federation of Independent Businesses reports that two-thirds of Colorado small businesses saw premium increases of more than 20.0% in 2003 and nearly half are reporting increases of greater than 20.0% again this year. The 2004 survey conducted by the Mountain States Employer Council (MSEC) cites an overall 14.0% premium hike. Employers continue to pick up a sizeable share of premium, paying on average 85.0% of single coverage and 69.0% of family coverage (which is slightly less than the national average), but are shifting the rest of these increases to employees in the form of higher deductibles and increasing copayments according to MSEC. In 2003, Colorado employees saw an increase of 10.0% in their premium contributions, while pay raises averaged only 3.2%. It is estimated that 17.0% of Coloradans have no health insurance.

Efforts by the State of Colorado to curtail these rising costs include amending regulations to increase Multiple Employer Welfare Association participation and introducing opportunities to rate band premiums under certain conditions. The State also enacted a one-time reentry exemption to the waiting period for health insurance carriers that left the Colorado small-group market and would like to reenter, changing the wait period from five to four years. While it is too soon to fairly judge this impact, early indications do not suggest that more Coloradans are now insured as a result of these initiatives.

Employment in the health industry continues to be limited by the supply side: there is a national desperation for health-care workers, particularly nurses and other allied health professionals. Major factors behind the increasing demand for health-care workers include: population growth, aging of the population, increased per capita demand for health-care services, and trends in health-care financing. According to the 2002 National Center for Health Care Work force Analysis, Colorado is expected to continue experiencing a shortage of full-time equivalent registered nurses. This shortage could climb as high as 12.0% in 2005. If not addressed and if current trends continue, this percentage is projected to grow to 17.0% by 2010. For this reason, demand is expected to remain strong

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but only modest growth in health employment overall is forecast.

With the completion of three new hospitals in the Denver metropolitan area and two more in progress, it is reasonable to expect some influx of new employees as these institutions offer attractive signing bonuses and options to encourage relocation. However, the "rotation" of current employees from one institution to another is likely, which will depress overall hiring in this sector. Competition for available labor is expected to further increase costs to consumers. Significant barriers to expansion of the nursing and health professions work force include severe financial constraints within Colorado's higher education system and wage gaps between faculty and practice settings, especially for nurses. A collaborative effort among Colorado's public and private sectors, including nursing constituents, the state Work force Development System, and the health-care industry, is looking to take advantage of existing resources and private-sector investments to target development of education capacity and faculty supply. At the federal level, two bills have been introduced in Congress to improve funding for recruitment, student scholarships, and student loans.

According to the Colorado Health and Hospital Association, Colorado hospitals report a total margin of $620 million in 2002, and the preliminary figure for 2003 is higher yet. Despite this, there are fears that the growing number of uninsured Americans, underfunding by government programs such as Medicaid, insurance policies featuring high deductibles, and Colorado's shift from an auto no-fault to tort system are expected to increase the amount of uncompensated care in hospitals. This impact will not be evenly felt among all institutions, and will have a disproportionate effect on safety net and rural institutions.

A factor that may impact revenue for certain institutions may be "boutique hospitals." Boutique, or specialty, hospitals concentrate their services on one or two particular procedures that are quite profitable. As full service, general hospitals lose out on these profitable procedures, they no longer have the ability to use this margin to offset the care for which they receive inadequate compensation. A moratorium on building new facilities was recently enacted via the Medicare Modernization Act; however, this issue will continue to be contentious.

Organizations that are able to adapt and use newer information technologies to streamline their processes may be able to realize economic efficiencies over their competitors. The lack of electronic data standards and patient privacy issues has provided barriers to the widespread introduction of electronic and web-based solutions. Due to the cost

HEALTH-CARE SERVICES EMPLOYMENT
1995–2005
(In Thousands)

Year	Ambulatory Care	Hospitals	Nursing Care	Social Assistance	Total[a]	Percentage Change
1995	62.5	34.6	27.7	23.7	148.4	4.8%
1996	64.8	35.9	28.8	23.5	153.0	3.1
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	77.7	46.4	34.0	30.4	188.4	2.4
2004[b]	80.7	47.4	34.2	30.7	193.0	2.4
2005[c]	83.8	48.4	34.4	31.0	197.6	2.4

[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.

and expertise involved in this type of technology, most initiatives are limited to individual institutions and large medical practices. The costs associated with updating the health-care information infrastructure are significant, and it is estimated that conversion from paper records to digital hospital clinical information systems will cost $100 billion over the next decade. Yet, these systems will pay for themselves over time in improved resource management and reduction of errors. Adequate funding remains the difficulty according to one-quarter of hospital chief information officers. Lack of standardized platforms and integrated data management also impede the transformation of the ambulatory care sector. In spite of many skeptics, however, early adopters of electronic medical records report 92.0% improvement in overall efficiency and 70.0% report cost savings.

Locally, a coalition that includes University Hospital, Children's Hospital, Denver Health, and Kaiser Permanente was recently awarded a $5 million grant to expressly examine information infrastructure for the purpose of speeding up the adoption of these new technologies. Capitalizing on technologies such as telemedicine will allow rural communities to benefit from advances in medicine that are often initially limited to urban centers.

Many industry watchers claim that consumers have too long been insulated from the actual costs of visits, procedures, and medicines, leading to inappropriate utilization. "Consumerism" is viewed as a potential solution to the health-care cost predicament, and employers are introducing a range of plan designs to promote more cost sharing and less "first dollar coverage." This may compel individuals to look for comparative cost and quality among providers of services. However, information to enable this level of informed decision making is not always readily available. Ideally, such a model would limit unnecessary trips to the doctor, but others have argued these increased costs pushed onto consumers may result in decisions to forego needed medical treatment, which can ultimately mean greater costs to the health-care system down the road.

It is estimated that lifestyle behaviors contribute up to 50.0% of an individual's health status. For example, the epidemic of obesity leads to diabetes and smoking leads to heart disease. Changing the behavior of the population will be one of the only options to combat the costs and complications of early or avoidable chronic diseases. According to a 2004 Towers Perrin survey on aligning employer and employee interests, three-fourths of employees indicated that they would join a health plan that offered financial incentives for healthy behavior. Disease management programs will become a focal

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COLORADO EDUCATIONAL AND HEALTH-CARE SERVICES EMPLOYMENT
1995–2005
(In Thousands)

Year	Education Services	Health-Care Services	Total[a]	Percentage Change
1995	17.0	148.4	165.4	5.1%
1996	18.2	153.0	171.2	3.5
1997	19.4	158.8	178.2	4.1
1998	20.4	162.6	182.9	2.6
1999	21.3	165.6	186.9	2.2
2000	22.7	170.1	192.8	3.2
2001	23.7	177.2	200.8	4.2
2002	24.6	183.9	208.5	3.8
2003	25.1	188.4	213.5	2.4
2004[b]	25.4	193.0	218.4	2.3
2005[c]	25.7	197.3	223.0	2.1

[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.

Educational and Health Services

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point for patient education, coordination between patients and physicians, and coaching for adherence to recommended treatment goals such as control of blood pressure and cholesterol. Yet disease management programs do not necessarily offer quick and substantial savings but rather provide a way to manage long-term cost, productivity, and absenteeism trends.

The ongoing expansion of the Fitzsimons campus has provided Colorado with an excellent opportunity for growth and leadership in the health-care and biotech arena. The campus has been designed to allow for industry growth and collaboration, and is actively recruiting new organizations. Employment has nearly doubled from 2,800 in 2003 to 5,310 by the end of 2004. The newly formed Colorado BioScience Association, headquartered at Fitzsimons, already boasts 134 members and 17,000 employees involving pharmaceutical, biotechnology, and medical device innovators. With the presence and support of the University of Colorado educational system, this industrial project is expected to attract a highly educated work force.

Health-Care Employment

Between 1993 and 2003, Colorado's population increased at a CAGR of 2.4%. Growth in health-care employment rose at a compound annual growth rate (CAGR) of 3.4%, with ambulatory health-care increasing at a CAGR of 3.2% and hospital employment rising at a rate of 3.9%. The smaller subsectors also enjoyed growth greater than that of the state population as nursing care employment increased by a CAGR of 2.7% and social assistance employment grew by 3.7%.

In 2004, health-care employment will rise by 2.7%, or 5,100 jobs. Approximately 3,300 jobs will be added in ambulatory care and 1,000 jobs in hospitals. Nursing care employment is expected to finish 2004 with an increase of 300 jobs, while social assistance will climb by 400 employees.

Growth is expected to continue at a similar pace in 2005, with another increase of 5,100 jobs. The supply of physicians, dentists, and other trained employees in the ambulatory health-care subsector will not meet demand, and employment will rise 4.1%, or 3,300 employees. With the addition of several new hospitals, employment in the hospital subsector will expand by 1,100 jobs. While this subsector faces the same supply and demand issues that the ambulatory subsector confronts, growth will occur as a result of increases in hospital support staff. Gains in the nursing care subsector will also be constrained by the supply of trained employees, although the subsector is still expected to grow by 1.2%, or 400 jobs. Within the nursing home and assisted living industry, construction of new facilities is anticipated to be flat. However, occupancy rates remain very high, in the 95.0% range. Finally, social assistance employment will rise by 300 jobs. While there is a definite need for the services provided in this subsector, it is thought that the recent downturn has reduced the resources that provide assistance to many of these organizations .✜

Leisure and Hospitality

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. Perhaps the greatest economic contribution 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, Coloradans tend to forget that shopping is by far the most popular tourist activity. Numerous Colorado shopping and outlet store malls depend heavily on tourism. For many years, the Cherry Creek Mall was consistently ranked as one of the most popular tourism destinations in Colorado. Thus, the state has a diverse leisure and hospitality economy that directly involves a great variety of businesses and indirectly affects the very core of the Colorado economy. The sections that follow examine the direct components of this industry from the perspective of many different sources of data.

Overall, most of the industry's diverse segments are posting small, reasonably consistent increases. Overnight visitor spending in Colorado grew by 1.0%, to $7.1 billion, between 2002 and 2003. According to the *Rocky Mountain Lodging Report*, statewide lodging occupancies are up 1.6% from 2003 levels (60.4% compared to 58.8%), and average daily rates (ADRs) are up 0.8% ($96.87 compared to $96.11) through September 2004. While these differences are statistically insignificant, this pattern of small increases seems consistent; through September 2004, both occupancy rates and average daily rates have been marginally higher in 2004 compared to 2003 for for seven of the nine months.

Similarly, employment in the Leisure and Hospitality Supersector has grown marginally from 245,200 in September 2003 to 246,600 in September 2004, an increase of 0.6%. While total skier days at Colorado ski resorts declined 3.4% from the 2002–03 season, the valuable destination skier market increased for the first time in seven years. The destination ski resorts in Colorado (defined as areas two or more hours' drive from Denver with a bed base) saw a 1.74% increase in skier volume. The various national parks, national monuments, and national historic sites in Colorado appear to be experiencing approximately a 2.5% decline in visitation in 2004 compared to 2003. However, Colorado state parks largely recovered from the 2002 season when visitation was so heavily affected by drought and wildfire, and posted a significant increase in 2003 visitation.

Finally, Colorado casinos have seen their adjusted gross profits return to 2002 levels. After experiencing a $15 million adjusted gross proceeds decline from

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COLORADO LODGING OCCUPANCY AND AVERAGE DAILY ROOM RATES 2003–2004

	Occupancy Rate Percentage		Average Daily Rate Dollars	
	2003	2004	2003	2004
January	48.6%	50.8%	$102.2	$104.9
February	56.1	54.8	108.0	110.6
March	57.0	60.1	110.8	111.8
April	48.2	51.2	83.1	83.7
May	54.4	53.9	86.4	84.5
June	65.8	66.9	92.8	91.8
July	71.0	73.5	96.4	97.0
August	69.1	69.5	96.4	96.8
September	58.0	61.6	89.4	90.7
Year to Date	58.8	60.4	96.1	96.9

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

Leisure and Hospitality

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2002 to 2003, the casinos have recorded a $16 million increase for 2004 (comparing year-to-date results for September 2002, 2003, and 2004).

Importantly, in most areas of the Leisure and Hospitality Supersector, participant volumes, sales, and employment are all still below the levels recorded in 2000. Thus, it is the leisure and hospitality committee's conclusion that this supersector of the Colorado economy is continuing a slow and erratic recovery from the 2001–03 economic recession and 9/11 terror attacks. This slow recovery is forecast to continue in conjunction with the ongoing improvement in the Colorado and national economies.

The Travel Industry Association of America (TIA) has just released its 2005 economic forecasts, projecting that total travel expenditures in the United States will increase 5.3%, from $592.6 billion to $624.1 billion. While U.S. resident travel volume (in the United States) is expected to grow 1.7%, international visitor volume, fueled by the continuing decline in the value of the U.S. dollar, is expected to grow 5.0%, to almost 46 million trips. As has been the case for the past three years, this growth is being driven by leisure travel. Business travel is expected to climb by 3.6%, to 149 million trips, reflecting a very slow recovery from the decline in the early 2000s. That year, business travel was estimated at 161.5 million person trips.

Given that the Colorado economic recovery has generally lagged behind the national economy, growth in the Leisure and Hospitality Supersector is anticipated to also lag slightly behind the TIA forecasts for the nation. Specifically, receipts in

LEISURE AND HOSPITALITY EMPLOYMENT 1995–2005 (In Thousands)

Year	Arts, Entertainment, and Recreation	Accommodations	Food Service	Total Accommodations and Food Service[a]	Total Leisure and Hospitality[a]
1995	35.4	37.8	142.0	179.8	215.2
1996	36.0	38.3	145.9	184.1	220.1
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	205.2	247.2
2002	41.2	39.8	166.2	205.9	247.0
2003	39.9	39.3	166.3	205.6	245.5
2004[b]	40.3	38.8	169.6	208.4	248.7
2005[c]	40.6	39.3	174.0	213.3	253.9

[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.

Colorado's travel, tourism, outdoor recreation, leisure, and hospitality economy are projected to grow by 4.0% in 2005.

For a variety of reasons, employment will not grow as much as expenditures. Specifically, supersector employment is forecast to increase 2.1%. Most importantly, employers seem to have been reluctant to significantly increase the number of employees in most business sectors, including leisure and hospitality. Secondly, maintaining competitiveness in the Leisure and Hospitality Supersector over the past decade has required significant investments in technology, including not only information technology, but also new facilities and services. Given that the market has been largely stagnant over this period, much of this technology has been financed by human resource cost savings. Following recent trends, employment is anticipated to grow slightly faster in the food service area (2.6%) and slower in the accommodations area (1.3%).

The following paragraphs focus on the specific areas included within the Leisure and Hospitality Supersector. International travel is then examined, followed by a more general discussion of challenges facing the industry.

Sector Reports

Lodging and Hospitality

For the 2004–05 period, relatively slow growth in lodging occupancy rates, average daily rates, and revenue per available room is projected. Specifically, for the state as a whole, occupancy rates are expected to increase from 60.0% to

COLORADO LODGING AND HOSPITALITY FORECASTS

	2004			2005		
	Occupancy	Average Daily Rate	Revenue per Available Room	Occupancy	Average Daily Rate	Revenue per Available Room
Denver Metro Area						
South and SE	58%	$74.0	$39.4	60%	$75.0	$42.4
Midtown	61	62.0	37.8	64	60.0	38.4
Downtown	67	120.0	80.4	66	115.0	75.9
Northeast	72	67.0	59.6	72	69.0	58.8
West	60	71.0	48.1	63	73.0	50.1
North	50	63.0	31.5	54	63.0	34.0
Hwy 36 Corridor	63	85.0	53.6	66	86.0	56.8
Boulder	64	95.0	60.8	65	102.0	66.3
Subtotal	62	83.0	51.4	64	84.5	52.8
Colorado Springs	62	72.0	43.4	64	74.0	47.4
Resort Areas						
Vail	54	205.0	110.7	59	210.0	123.9
Aspen	60	295.0	177.0	64	299.0	191.4
Steamboat	47	118.0	55.5	50	119.0	59.5
Winter Park	40	115.0	46.0	43	118.0	50.7
Other resorts	44	175.0	77.0	47	176.0	82.7
Subtotal	48	175.0	84.0	52	177.0	92.0
Other Colorado Cities						
Durango	57	80.0	45.6	58	83.0	48.1
Cortez	52	66.0	34.3	54	68.0	36.7
Grand Junction	60	60.0	36.0	63	65.0	41.0
Salida	54	67.0	36.2	56	70.0	39.2
Glenwood Springs	67	103.0	69.0	69	105.0	72.5
Estes Park	45	125.0	56.3	46	125.0	57.5
Montrose	56	61.0	34.2	58	62.0	36.0
Ft Collins	57	68.0	38.8	60	70.0	42.0
All Other CO Areas	56	68.5	38.4	59	69.0	40.7
Colorado Total	60%	$95.0	$57.0	63%	$98.0	$61.3

Source: Hospitality Valuation Services, Inc., Boulder, CO.

62.5%; average daily rates will climb 3.2%, from $95.00 to $98.00; and revenue per available room will rise 7.5%, from $57.00 to $61.25. Focusing on the more important revenue per available room (REVPAR) numbers, the Denver metropolitan area is expected to grow 2.8%, from $51.39 to $52.83; the Colorado Springs area from 9.0%, from $43.41 to $47.36; and the Colorado resort areas 9.6%, from $84.00 to $92.04.

Conventions and Business Travel

The outlook for meetings and conventions in Denver and Colorado is very promising. The Colorado Convention Center expansion will be completed in December 2004. Despite the disruptive renovation, the center and the surrounding hotels have accommodated more conventions and room nights than in any previous year. Although bookings for 2005 are down somewhat from the 2004 figures, future bookings are significantly higher overall. This is also due in part to the increased convention capacity and the associated Hyatt convention center hotel, which is expected to open at the end of 2005 or early 2006. Business travel is also continuing to recover, but is unlikely to achieve the levels recorded in 2000. During the recent recession, companies learned, out of necessity, that business can increasingly be conducted electronically using Internet, video and teleconferencing, and e-mail technologies. Given the continuing focus on cost control by major businesses, it is unlikely that business travel budgets will increase dramatically.

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COLORADO CASINOS
1995–2005

Year	Colorado Casinos Open	Colorado Devices (000s)	Adjusted Gross Proceeds (In Millions) Black Hawk	Central City	Cripple Creek	Total
1995	59	12.7	$195.9	$94.5	$94.0	$384.4
1996	54	12.9	219.9	88.9	102.7	411.5
1997	54	13.5	234.6	87.4	108.6	430.7
1998	53	14.3	272.0	94.0	113.2	479.2
1999	49	14.1	354.9	73.8	122.6	551.3
2000	46	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[a]	45	15.8	522.8	50.1	147.6	720.6
2005[b]	46	15.9	509.0	83.9	154.1	747.0

[a]Estimated.
[b]Forecast.
Source: Colorado Division of Gaming and Colorado Business Economic Outlook Committee.

CASINOS AND GAMING

The available data on the Colorado casino area of the Leisure and Hospitality Supersector is shown in the table on this page. These forecasts for 2005 are problematic. The completion of the new road from I-70 to Central City will most likely reallocate some of the casino revenues from Black Hawk to Central City. In general, however, it is anticipated that the number of casinos and gambling devices will continue their slow growth. Specifically, adjusted gross revenues for the Colorado casino industry are projected to grow by 3.7%, to $747.0 million.

PARKS AND OUTDOOR RECREATION

Visitation to state parks, national forests, Bureau of Land Management lands, and the various county park and open-space areas hugely exceeds

COLORADO PARKS VISITS
1995–2004
(In Thousands)

Parks	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[a]
Bent's Old Fort NHS	38.3	37.6	38.8	41.1	36.8	30.5	31.0	29.8	31.2	31.5
Black Canyon of the Gunnison NP	221.1	200.1	209.9	193.5	200.1	191.5	181.0	173.7	167.2	153.7
Colorado NM	249.0	318.7	307.1	291.7	297.1	572.4	237.6	294.0	336.6	341.9
Curecanti NRA	993.1	1,017.3	966.7	973.7	1,044.5	1,022.3	879.8	732.7	1,008.8	1,006.8
Dinosaur NM, also in Utah	496.5	464.1	446.6	420.3	410.7	397.8	326.4	299.1	289.8	311.1
Florissant Fossil Beds NM	91.4	91.3	86.5	79.8	81.5	82.1	79.7	62.5	67.5	60.8
Great Sand Dunes NM	323.7	309.3	309.9	279.8	286.7	261.3	277.5	234.8	251.4	270.0
Hovenweep NM, also in UT	27.0	27.5	24.5	23.7	47.6	43.6	37.4	30.9	29.7	27.2
Mesa Verde NP	663.8	617.4	627.7	604.6	635.7	471.1	513.4	406.4	438.6	446.7
Rocky Mountain NP	2,878.2	2,923.8	2,965.4	3,035.4	3,186.3	3,380.0	3,139.7	2,988.5	3,067.3	2,896.8
Total Visitors to Parks and Sites	5,982.1	6,007.1	5,982.9	5,943.4	6,227.2	6,452.6	5,703.4	5,252.5	5,688.3	5,546.6

[a]Estimated.
Source: National Park Service and Colorado Business Economic Outlook Committee.

visitation to National Park Service (NPS) facilities. Indeed, NPS visitation is a very small component of the overall outdoor recreation system in Colorado. Furthermore, an immense amount of outdoor recreation in Colorado occurs on privately owned lands. Unfortunately, reliable visitation data for these other various outdoor recreation areas is 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. Taking all this into account, it is projected that outdoor recreation behavior in Colorado will grow essentially in conjunction with the overall growth in state tourism. Thus, outdoor recreation visitation and spending in Colorado is forecast to increase by approximately 5.0% in 2005.

Downhill Skiing

Colorado continues to be the nation's premier winter ski destination, with 35,585 acres of skiing, 304 lifts, and 2,089 trails at 24 resorts. Colorado ski resorts once again dominated *SKI Magazine*'s annual ranking of North American ski resorts. Six Colorado ski resorts were named in the top 10, and 12 were named in the top 25 in *SKI*'s October 2004 issue. Led by Vail in the number one position, Colorado had more resorts in the top 25 than any other region. Utah and California had the second highest number, with four resorts in the top 25. The top 10 resorts in North America, according to *SKI Magazine*'s readers, are:

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

The 2003–04 ski season recorded approximately 11.25 million skier visits. The 2003–04 ski season started out at a slower pace than the 2002–03 season's record start. At the end of December, skier visits were 9.0% behind the previous season. In January and February, visits began catching up and were behind by only 1.0% before a heat wave and no snow in the month of March kept Front Range skiers away. Denver recorded its second driest March since 1872. The good news of the 2003–04 season was for the first time in seven years, Colorado posted a slight increase in destination skier visits, which represent more than 60.0% of the total skier visits for the state. Colorado experienced strong demand from traditional core destination markets like Texas and California. Internationally, Colorado had resurgence from core markets, with

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

Season	Destination Resorts[a]	Front Range Destination Resorts[b]	Other Front Range Areas	Other West Slope Areas	Total
1994-95	3.62	6.42	0.56	0.50	11.11
1995-96	3.46	6.86	0.64	0.42	11.39
1996-97	3.72	7.00	0.59	0.47	11.79
1997-98	3.88	6.90	0.67	0.54	11.98
1998-99	3.61	6.72	0.58	0.50	11.41
1999-00	3.32	6.52	0.63	0.42	10.89
2000-01	3.39	7.19	0.62	0.49	11.68
2001-02	3.21	6.86	0.58	0.47	11.13
2002-03	3.27	7.17	0.66	0.50	11.60
2003-04	3.31	6.83	0.60	0.51	11.25
2004-05[c]	3.36	7.12	0.60	0.52	11.60

[a]Resorts more than a two-hour drive from Denver with a bed base.
[b]Resorts within a two-hour drive of Denver with a bed base.
[c]Forecast.
Source: Colorado Ski Country USA.

Leisure and Hospitality

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Australia and New Zealand each increasing by 41.0% and Germany growing by 38.0% over the 2002–03 season.

Stabilization of the destination business was most pronounced with the strong results of the destination resorts. Destination resorts, which are those resorts more than a two-hour drive from Denver with a bed base, recorded 3.3 million skier visits, or a 1.74% increase over 2002–03. Front Range destination resorts, or those resorts within a two-hour drive from Denver with a bed base, posted 6.83 million skier visits, or a 4.26% decline compared to 2002–03. The remaining areas with a minimal or no bed base, recorded 1.1 million skier visits, a 12.48% decline.

On the basis of early snow, an improving economy, strong season pass sales, a return of the destination skier, excellent early reservations, a recovering international market, and an extremely strong euro, it is estimated that skier visits will recover from the downturn in the 2003–04 season and rebound to the 11.6 million level. If Colorado has abundant snowfall, the 2004–05 season could be the one when the elusive 12-million-skier-visit mark is reached.

The 2004–05 ski season will be helped by the expansion of lifts, terrain, and other improvements at the ski resorts. Events will also help bolster ski visits. Some of the notable events are:

- Women's World Cup Slalom/Giant Slalom and ESPN Winter X Games at Aspen
- Men's World Cup Downhill and Super G Races and the North American Snowshoe Championships at Beaver Creek
- U.S. Freeskiing Open, American Ski Classic, U.S. Disabled Alpine Nationals, and Mountain Mania at Vail
- Vans Triple Crown of Snowboarding, the U.S. Snowboard Grand Prix, and the International Snow Sculpture Championships at Breckenridge
- Annual U.S. Extreme Freeskiing Telemark Championship at Crested Butte
- Mountain Snowboard Series and Annual Freeride Series at Copper Mountain
- Masters Nordic Series and the Winter Carnival at Steamboat
- Annual Wells Fargo Bank Cup, USSA Chevy Truck Rocky/Central J4 Junior Olympics, and Sprite Spring Splash at Winter Park

Second Homes and Recreational Real Estate

As documented by a number of recent studies, recreational real estate (vacation and second homes) is a major component of the Colorado Leisure and Hospitality Supersector, particularly in the mountain resort communities. A recent study of Eagle, Grand, Summit, and Pitkin counties by the Colorado Northwest Council of Governments found that the economic impact of second-home expenditures exceeded both winter visitors and summer visitors—34.0% of the base economy compared to 28.0% and 14.0%, respectively. Companies like Denver-based Exclusive Resorts have built their business models on purchasing high-end second homes and "renting" them to members of their exclusive clubs. As a result, they have become both major purchasers of real estate and key generators of transient demand in resort communities. Furthermore, this segment is growing rapidly. Through the first three quarters of

RECREATIONAL REAL ESTATE SALES IN SELECT COLORADO RESORT AREAS
(In Billions)

County/Resort Community	2003 Annual Sales	2004 Q3 YTD Sales
Eagle County	$0.98	$1.53
Pitkin County	1.00	1.08
Summit County	0.63	0.76
Garfield County	0.33	0.43
Grand County	0.13	0.14
Telluride	0.28	0.32
Crested Butte	0.09	0.16
Steamboat Springs	0.33	0.32
Total	$3.77	$4.74

Source: *Rocky Mountain News*, 11/6/04.

2004, buyers have paid $4.74 billion for real estate in the eight primary mountain resort counties of Colorado. Some economists have concluded that the construction and maintenance of second homes has become the major employer in these resort counties. This trend is expected to continue and may reach $6 billion in sales in 2005.

International Travel and Tourism

While travel to destinations worldwide increased in the first half of 2004, travel to the United States enjoyed double-digit gains from almost every market in the second quarter of 2004. Total international arrivals to the United States in second quarter 2004 were up by more than 20.0% over the second quarter of 2003.

The U.S. share of the long-haul travel market declined in 2003 from all but five of the top inbound-tourism generating countries: Austria, Spain, Sweden, the United Kingdom, and Canada. The 2004 forecast of the long-haul travel market should see improvement in most of the top 25 inbound tourism-generating countries. Canada, the United Kingdom, and Germany will remain important contributors to international travel in the United States.

In January 2004, the U.S. Department of Homeland Security implemented the US-VISIT border management program, where biometric identifiers are captured from those visitors who require a visa to enter the United States at major U.S. ports of entry. This new program did not appear to deter travel from nonvisa waiver country travelers. In fact, May arrivals from the nonvisa waiver countries were up 18.0%.

The U.S. Department of Commerce, Office of Travel and Tourism Industries' most recent tourism data reported that Colorado was the 17th most popular state for overseas visitors traveling to the United States, with 288,000 visitors in 2003. Colorado hosted 1.6% of the total international visitors to the United States, a slight decrease of 2.0% from 2002.

The Office of Travel and Tourism Industries also reported Denver was the 26th most popular U.S. city to visit for overseas visitors in 2003, tying with Maui. A total of 180,000 international travelers visited Denver in 2003, down from the 249,000 visitors in 2002.

Major Challenges in Leisure and Hospitality

As first noted in the 2003 Colorado Business Economic Outlook, the Internet has become the major source of information used for trip planning in the United States. Depending on the activity and the length of the trip, as much as 75.0% of the traveling public is using the Internet as a primary source of information; the percentage using the Internet for booking reservations is also growing dramatically, reaching approximately 40.0% of the market. Much of this transition has been driven by discounting and special offers. For the past five years, leisure and hospitality businesses have been increasingly using the Internet for last-minute discounting, offering empty capacity at greatly reduced prices. Consumers have learned to delay booking reservations in anticipation of these discounts. As a result, core product (e.g., lodging rooms) profit margins are being squeezed thinner and thinner. The successful leisure and hospitality businesses are those that have been able to promote high supplementary product sales, such as meals, activities, souvenirs, and shopping.

This technology profit structure trend is a significant element of current leisure and hospitality business success. High energy prices in 2005 may dramatically increase this importance. Historically, high energy prices have not dramatically reduced the number of trips taken. People still travel and still participate in recreational and entertainment activities. However, travel budgets may get reallocated. As more monies are spent on transportation, less is spent on high-end lodging and meals, activities, equipment, and souvenirs. This could have an extremely negative impact on high-end restaurants and shops. Moreover, businesses that depend heavily on supplementary product sales could also suffer heavy losses. History indicates that the total dollars spent on travel will not change dramatically, but allocation across different areas of the leisure and hospitality industry may change significantly.

Finally, the struggle to increase funding for Colorado tourism promotion programs may limit potential growth in this supersector. As the state tourism offices in Colorado's major competitor states continue to increase their promotional funding, the inability to fund Colorado's tourism promotion at the same level puts the industry at a competitive disadvantage. This contributes to the forecast that Colorado leisure and hospitality economy will not grow as rapidly as that of the nation. ✜

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.

Nationally, this supersector only employs about 5.5 million people, or about 4.0% of total employment. Growth mirrors population and general economic conditions. In the period from 1993–2003, national employment in the supersector grew at a compound annual growth rate (CAGR) of 2.2%. Over the same period, the U.S. population grew at a CAGR of 1.1%.

In 2003, 85,800 people were employed in the Other Services Supersector in Colorado, making up 4.0% of total state employment. The majority of the roughly 12,000 companies in the supersector are small businesses—average employment was just over five. Average annual wages at these companies were slightly above $26,000.

Since 1993, the supersector has grown at a CAGR of 3.6%, while population growth was 2.4%. Other Services has posted job gains in each of the past 10 years. Growth was the largest during the mid-1990s and slowed considerably in 2002 and 2003. With the economy gaining ground, growth is picking up again in 2004, with employment rising to 87,000, an addition of 1,200 jobs. The supersector is projected to increase by 2,500 jobs in 2005.

The largest sector in Other Services is Religious, Grantmaking, Civic, Professional, and Similar Organizations, which includes organizations such as Focus on the Family, YMCA, and other religious or nonprofit organizations. About 49.0% of the total supersector employment falls in this area. This sector has also been the fastest growing, with a CAGR of 4.4% since 1993. In 2004, employment is expected to increase by 1,200, reaching a total 43,000 jobs. Another 2,100 jobs should be added in 2005.

The next largest sector is Repair and Maintenance Services. The major employer here is automotive, but the sector also includes furniture, clothing, and appliance repair and maintenance. Since 1993, the sector has posted a CAGR of 3.1%. In 2004, employment is expected to reach 22,700, a decrease of 200 jobs from 2003. The area should regain roughly 100 jobs in 2005.

The Personal and Laundry Services Sector includes everything from beauty salons and barbershops, to photo processing shops and funeral services. The sector has grown at a CAGR of 2.6% since 1993. In 2004, it is projected that 100 positions will be added for a total of 21,300 jobs. An additional increase of 300 positions is expected in 2005. ✣

OTHER SERVICES EMPLOYMENT
1995–2005
(In Thousands)

Year	Repair and Maintenance Services	Personal and Laundry Services	Religious, Grantmaking, Civic, Professional, and Similar Organizations	Total[a]	Percentage Change
1995	20.1	17.9	30.5	68.5	5.9%
1996	20.7	18.4	33.7	72.7	6.1
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	22.9	21.2	41.8	85.8	0.2
2004[b]	22.7	21.3	43.0	87.0	1.4
2005[c]	22.8	21.6	45.1	89.5	2.9

[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.

Government

Employment in the Government Supersector includes a wide variety of activities and many levels of government. Governmental activities comprise 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.

This supersector includes employees at the federal civilian, state, and local government levels. For the period 1998-2003, government employment in Colorado grew at an annual rate of 2.1% (which is below the rate of growth for the population in the state). In 2003, employment in Colorado for all levels of government increased by 0.4%, which was approximately the same growth experienced in the United States. Employment growth is projected to fall by 0.5% in 2004, primarily due to decreases in state and local employment. In 2005, the forecast calls for employment to increase by 0.9%. Growth is expected to be more even across this supersector, with education hiring leading the way.

Federal Government

Overall, the level of federal government employment has decreased slightly over the past five years, declining by 0.3%. This trend was interrupted due to the 2000 Census as federal government employment rose by 1.3%, but then dropped to historic lows the following year. The events of 9/11 reversed the downward trend as federal government employment posted an increase in Colorado and the nation with the advent of homeland security initiatives.

In 2002 and 2003, federal government employment increased 0.6% and 1.1%, respectively, in Colorado, due in part to the federalization of airport security jobs. The Aviation and Transportation Security Act was passed in November 2001, creating the Transportation Security Administration. This agency is responsible for securing the nation's transportation systems, and in 2002 began the process of federalizing security at U.S. airports. The agency added 67,000 workers nationally. As airport security jobs were federalized, private security firms lost contracts to provide security services at airports.

Due to the war in Iraq and the events of 9/11, federal government expenditures are growing rapidly. Federal defense expenditures increased 7.4% in 2004 and are forecast to expand another 5.0% in 2005. Federal nondefense spending is projected to rise 0.4% and 3.2% in 2004 and 2005, respectively.

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GOVERNMENT EMPLOYMENT IN COLORADO
1995–2005
(In Thousands)

Year	State	Local	Total State and Local[a]	Federal Civilian[b]	Total Civilian[a]
1995	72.0	174.7	246.7	56.9	303.7
1996	72.6	181.1	253.7	55.0	308.7
1997	74.5	186.8	261.3	54.3	315.6
1998	75.9	191.9	267.8	54.5	322.3
1999	77.1	197.1	274.2	54.1	328.4
2000	78.6	203.6	282.2	54.8	337.0
2001	80.0	211.2	291.2	52.9	344.1
2002	81.9	220.3	302.2	53.2	355.4
2003	80.4	222.6	303.0	53.8	356.8
2004[c]	80.0	222.0	302.0	53.1	355.1
2005[d]	81.2	223.7	304.9	53.4	358.3

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

Government

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Although federal defense expenditures are climbing, the effect in Colorado is negligible due to increased defense subcontracts. Defense expenditure increases will only help maintain current levels of federal employment. In fact, federal government employment in Colorado is expected to fall by 1.3% in 2004. In 2005, the sector is expected to increase minimally, by 0.6%.

The U.S Postal Service (USPS) employment accounts for approximately one-fifth of the employment in this sector. While national USPS employment continues to decline and will fall by another 3.0% in 2004, Colorado postal employment is expected to post a slight increase due to the continuation of population expansions in the surrounding areas of metro Denver and the rural areas.

State Government

Between 1998 and 2002, state government employment grew at an annual rate of 1.9% or nearly 8.0% over that period. State revenues dropped dramatically in 2003, and employment decreased by 2.3% over the past two years. State education accounts for approximately 61.0% of state government employment and posted a similar downturn in 2003, falling 1.4%. In 2004 the sector is expected to decrease once again by 0.5%. The forecast calls for state employment to increase by 1.5% in 2005, with growth of 1.8% in state education. Excluding state education from the figures, state government will likely experience little employment growth, primarily through open vacancy hiring.

The slowdown in state government employment in 2002 and the decline in 2003–04 can be attributed to weaknesses in Colorado's economy and the stock market, which significantly reduced sales tax and capital gains income tax receipts into the state's coffers. During that same period, state employees took advantage of a relatively low rate for purchasing years to add to their pension. The purchasing of years has led to a higher than average number of retirees in the last several years. Many of the vacancies left by these retirees remained open as a number of state departments implemented a voluntary hiring freeze to minimize personnel expenditures. This trend continued into 2004 to a lesser extent, due, in part, to the filling of some of these positions.

As the state's economy began to expand in 2004, sale tax revenues rose 4.0% for the state fiscal year ending June 2004 compared to a 3.0% decline in the previous state fiscal year. State sale tax revenues will continue to rise for the foreseeable future.

Individual income tax receipts are forecast to increase by 4.6% this fiscal year. Corporate income tax receipts will rise by 4.5% this year and another 8.3% next fiscal year.

As the state's economy began to expand in 2004, sale tax revenues rose 4.0% for the state fiscal year ending June 2004 compared to a 3.0% decline in the previous state fiscal year.

Normally, such positive news would correlate to an expansion in state government employment; however, increasing revenue does not allow the state to retain and spend additional money because of the refund requirements under the Taxpayer's Bill of Rights (TABOR). TABOR is a state constitutional provision that limits the state's revenue growth to the sum of inflation, plus population growth of the previous calendar year. Due to the recession and an exceptionally low rate of inflation in 2004, state government growth will be severely limited. At the same time, Colorado citizens will receive approximately $53 to $114 million in tax refunds.

The governor's budget request starting July 2005 contains a modest 3.5% general fund increase, primarily to fund the natural increases for state correctional facilities, K-12 education, and Medicaid. Prior to the recession, state expenditures had increased at an average of 6.0%. Current estimates will allow the state to increase spending by only $84.8 million, while the governor's budget requires an increase of $19.6 million for corrections, $27.5 million for K–12 education, and another $200 million to fund the increase in the Medicaid caseload.

This forecast assumes that the governor's budget is funded by the general assembly by either securitizing the Tobacco Settlement Fund or declaring a fiscal emergency to gain voter approval to allow the state to retain the tax refunds due under TABOR. Under either scenario, state government employment growth will be at a minimum into the foreseeable future.

The voters of Colorado recently approved an additional tax on cigarette sales. The revenues from this measure are earmarked for increased health care for children and smoker education programs. This action will likely result in some increases in public health employment.

In July 2004 the University of Colorado System became an enterprise, which excludes all tuition and fee collections from the restrictions of TABOR. Although the effects of this new status is uncertain, the CU System accounts for almost 45.0% of degrees granted by four-year institutions within Colorado, and is the only institution-granting degrees in a number of academic and professional fields in Colorado and the Rocky Mountain area. While this may allow for market-based pricing of a number of academic programs, higher education is a competitive environment. Like any business, recognizing the impacts of changes in price (tuition) on demand for the product (enrollment) needs to be considered in the larger marketplace.

Community colleges, four-year colleges, and universities are facing and responding to changes in both the demands for specialized training and in the means for providing traditional education and training. Specifically, Colorado's businesses and residents are demanding knowledge and skill level updating. Building on existing traditional education knowledge, these certificate and professional development programs allow students to obtain quick, intensive training in updated technology and skills.

These nontraditional students extend the educational day and week into the evening and weekend, and expand the campus from a fixed geographic location into a statewide approach where faculty members come to the student either through a satellite campus, a business learning center, or an Internet connection directly into the home. In the past, the average faculty member spent nearly all of his/her time either in an office or classroom on a single campus. Faculty members today are spending an increasing amount of time in an off-campus site.

The recent trends of using adjunct faculty to meet significant portions of instructional demands on campuses throughout the state. The growing number of students attending community colleges for their first year or two of their undergraduate degree requirement will likely to continue to play a role in the economic and employment outcomes in this sector.

This forecast suggests higher education will grow more than the other sectors of the state government. The employment losses in 2003, the dissolution of academic programs, and research centers will be reversed in 2004 and 2005.

Local Government

Local government is comprised of municipalities, counties, school districts, and special districts. From 1998 through 2002 local government employment increased by more than 14.8%, or an annualized rate of 3.5%. In 2003 employment grew by 1.0%, due to growth in K-12 education and municipal government. Between 1998 and 2002, the annual growth rate in local educational services, which accounts for about 51.6% of local government employment, was 3.2% as school districts continued to catch up education needs with strong population growth. Local employment for 2004 is estimated to fall slightly, and increase by 0.8% in 2005. The local education subsector is projected to increase substantially slower than recent historical trends, increasing only by 0.3% in 2004 and another 1.2% in 2005.

INDEX OF GOVERNMENT EMPLOYMENT IN COLORADO 1995–2005 (Base Year: 1995=100)

Year	State	Local	Federal Civilian[a]
1995	100.0	100.0	100.0
1996	100.8	103.7	96.7
1997	103.5	106.9	95.4
1998	105.4	109.8	95.8
1999	107.1	112.8	95.1
2000	109.2	116.5	96.3
2001	111.1	120.9	93.0
2002	113.8	126.1	93.5
2003	111.7	127.4	94.6
2004[b]	111.1	127.1	93.3
2005[c]	112.8	128.0	93.8

[a]Includes postal workers.

[b]Estimated.

[c]Forecast.

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

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Changes in the local education subsector are estimated using information on school district enrollment. Growth in new students enrolled in public schools in 2004–05 is projected to be lower than any other time in the past 10 years. Lower migration (due to the slowdown in employment growth) is the primary reason for this. Colorado Springs, metro Denver, and northern Colorado account for the majority of the enrollment increase, with school districts in Adams, Douglas, and El Paso counties experiencing the most significant enrollment growth. Many of the rural areas have posted significant declines in student enrollment over the last decade, which will continue as a long-term trend.

Throughout the state, local school districts were able to get numerous bond initiatives and property tax increases on the ballot to address aging infrastructure concerns, improve pay to attract and retain staff, and maintain small class sizes. Many of these initiatives passed. A small portion of these revenues will be allocated to the hiring of additional teachers. The state's largest school district, Jefferson County, continues to post declines in school enrollment. At the same time, voters in the district recently approved a $38.5 million tax increase for administration and another $48.8 million increase to fund bonds to renovate and build new buildings. School districts in Adams County are the fastest growing within the state. Brighton School District received voter approval to increase taxes by $10.4 million to build a second high school, while Adams 12 Five State Schools received another $50 million for administration and construction.

Many city budgets and bureaucracy have grown over the past decade. Local communities were negatively impacted in 2003 due to a decline in tourism and falling sale tax receipts. Local government budgets were cut in 2003, and employment losses occurred in 2004 owing to hiring freezes. On average, local governments throughout the state experienced a slight decrease in employment in 2004. The budget woes hit some municipalities hard in 2003 and 2004, and in others the effects were delayed by a year or so. While the 2005 employment outlook is somewhat brighter, several of the largest cities in the state continue to experience revenue shortfalls. These communities will likely to continue hiring freezes (except for emergency personnel) and to make expenditure cuts in programs, which may lead to overall staffing level cuts.

Many local governments have already received voter exemptions from TABOR, which means that as local sale tax revenues grow, local government will be able to expand at a faster rate than state employment. Yet, this sales tax growth tends to lead to lagging employment gains, due to the municipal budget process. Local governments and special districts that have not passed exemptions from TABOR will face a permanent reduction in their future spending potential, making any rebound in 2005 unlikely. The forecast projects that sales activity, which leads to sales tax revenue increases, will strengthen throughout the remainder of this year and into next year. This translates into relatively stable employment growth. ✜

International Trade

Prospects for Growth in 2005

The improvement of the global economy in the first half of 2004 led to strong increases in the growth of U.S. and Colorado exports during the first five months of 2004. At the same time, an even greater increase in U.S. imports created record monthly trade deficits and raised vocal concerns in this country over the loss of jobs to offshoring. The topic of offshoring became highly politicized during the election and could have a negative impact on trade and the establishment of new free trade agreements if unemployment in the United States continues above the 5.0% level.

By mid-2004 the meteoric rise in the price of oil began to inflict significant economic pressure on virtually all of the major industrial economies and quickly dampened the optimism for a strong global economic recovery. The impact of higher energy prices cooled the growth of exports and raised major concerns about future economic growth, especially in the rapidly developing economies of Asia.

Despite strong criticism in many parts of the world to U.S. actions in Iraq, exports for the first half of 2004 of U.S. manufactured goods, minerals, and agricultural products increased to all but 3 of our top 25 markets. U.S. exports during the first eight months of 2004 were up by 13.48%, while Colorado exports grew by 13.68%. The Colorado increase is especially significant, since the ban on beef imports from the United States brought about by the discovery of a dairy cow in the state of Washington with bovine spongiform encephalopathy (BSE—mad cow disease) has cost the state's beef industry more than $150 million in export sales in the first half of the year. Seven of Colorado's top 10 export markets showed increases, with only Japan, Korea, and France registering decreases. A closer look reveals that both Japan and Korea would have shown little or no decrease if the ban on beef imports had not gone into effect.

In addition to the huge increases in the cost of oil, other factors that will influence the balance and future of international trade include the new bilateral and regional free trade agreements being negotiated by the United States and some of our competitors. Furthermore, the elimination of global textile quotas is scheduled to go into effect in January 2005.

In 2004 the United States signed free trade agreements with Australia, Morocco, Bahrain, CAFTA (Guatemala, Honduras, El Salvador, Costa Rica, Nicaragua, and the Dominican Republic) and began discussions with Panama, the Andean Pact (Colombia, Bolivia, Peru, and Ecuador), and the South African Customs Union. These free trade agreements will lower or eliminate the duties charged by other countries on U.S. imports and make U.S. products more competitive. As global competition drives foreign manufacturers toward the latest technology, Colorado companies stand to gain new business in markets that have historically been closed to U.S. products. Although Colorado does not have a textile industry, the elimination of the textile import quota system will have a significant impact on many developing countries and could impact Colorado exports to those markets.

VALUE OF COLORADO EXPORTS
FISCAL YEARS 2000–2005
(In Millions of Dollars)

Year	Total Exports	Percentage Change
2000	6,593.0	11.2%
2001	6,125.5	-7.1
2002	5,521.7	-9.9
2003	6,109.1	10.6
2004[a]	6,707.8	9.8
2005[b]	7,177.3	7.0

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

The weak U.S. dollar in comparison to the euro and yen will continue to have a positive impact on U.S. exports and our ability to compete with our major foreign competitors. Although China continues to peg the yuan to the dollar, the United States and the International Monetary Fund (IMF) are continuing to pressure China to revalue their currency. A stronger yuan would make U.S. products even more attractive to the Chinese, who are already the fastest growing market for U.S. and Colorado products.

With oil prices holding above $50 a barrel, the International Trade Committee is projecting a

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slowdown in the growth of Colorado exports through the end of the year, with 2004 year-end growth at 9.8%. The committee is forecasting 7.0% growth in 2005 based on a mild slowdown in the U.S. and global economy.

Manufactured Exports

Colorado manufactured, mineral, and agricultural exports grew dramatically in 2003, up from $5.5 billion in 2002, to $6.1 billion, a rise of 10.6%. Increases have continued through August of 2004 (the most current data available), with exports up 13.7% over August 2003 levels. These increases have taken place in spite of many countries' restrictions on U.S. beef, traditionally one of Colorado's top five export categories. In 2004, Colorado's top export commodities have been dominated by products related to information technology, scientific/measuring equipment, medical equipment, and aviation/aerospace equipment. The largest dollar increase this year has been in Colorado's top export, semiconductors, which reached $825 million in exports through August, a 40.0% rise from its $591 million level in August of 2003.

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

Country	2000	2001	2002	2003	Percentage of Total
Canada	$1,077.1	$1,146.1	$1,425.5	$1,431.7	23.4%
Mexico	312.6	335.4	370.3	570.4	9.3
Korea, Republic of	339.5	248.0	320.4	443.1	7.3
Japan	891.6	764.7	436.8	424.6	7.0
Malaysia	201.4	228.0	180.9	302.0	4.9
France	416.5	339.6	281.5	282.0	4.6
Singapore	318.3	357.0	237.3	267.1	4.4
United Kingdom	480.8	385.9	288.2	245.6	4.0
Germany	444.8	341.0	290.2	237.3	3.9
Netherlands	338.8	312.5	209.0	237.0	3.9
China (Taiwan)	196.4	152.5	200.4	236.7	3.9
Hong Kong	233.8	261.6	235.9	213.2	3.5
China (Mainland)	164.6	168.5	153.1	202.4	3.3
Australia	133.9	118.6	117.5	134.4	2.2
Philippines	78.3	78.7	77.9	112.7	1.8
All Other Countries	964.6	887.4	696.8	768.9	12.6
Total All Countries	$6,593.0	$6,125.5	$5,521.7	$6,109.1	100.0%

Source: Foreign Trade Division of the U.S. Census Bureau and the World Institute for Strategic Economic Research.

MAJOR EXPORT MARKETS FOR COLORADO IN 2004

Asia

The Asian region receives the largest share of Colorado exports, with 38% of the state's total international sales in 2004. However, this region has seen a dramatic shift in purchasing during the past few years, with China, Malaysia, Taiwan, and the Philippines increasing their demand for Colorado products, and exports to Japan and Singapore decreasing their demand. Korea and Hong Kong have been mixed, with sales to Korea down 21.0% this year after increases of 29.0% and 33.0% for the past two years and Hong Kong up 20.0% this year after decreasing by 10.0% and 14.0% in 2002 and 2003, respectively. Fully 88.0% of Colorado's semiconductor exports go to Asia.

Growth is expected to slow in Asia during 2005, from 5.0% for real GDP growth in 2004 to 3.5% the following year. The availability and cost of oil will play a very important role in the growth rate for energy intensive developing countries such as China and India. Asia's industrialized countries of South Korea, Japan, Singapore, Hong Kong, and Taiwan, which depend on fuel for increased output, are all showing signs of weaker economic growth. Additionally, the pressure of rising inflation, 5.0% for the past two months, has caused the Chinese government to announce that it would actively try to slow its rate of economic growth, now 7.5%, by reducing lending to overheated sectors and increasing banks' reserve requirements. Furthermore, despite more than a year of urging by the Bush administration, and now the IMF, China refuses to give a date as to when it will "unpeg" its yuan's value to the U.S. dollar's. If China does float the yuan, it should reduce the U.S. trade deficit with China, which could lead to increased opportunities for Colorado exporters and strengthen the overall global economy.

The NAFTA Region

Together, the United States' two NAFTA partners, Canada and Mexico, received $1.44 billion in Colorado exports through August of this year. This is 33.5% of the state's $4.3 billion year-to-date total.

Canada is by far the largest export market for Colorado. During 2003, 23.0%, or $1.4 billion of Colorado's $6.1 billion in total exports, went to Canada. At $1 billion through August, it has received 24.0% of the state's exports so far this year. While the rise of Canada's currency against the U.S. dollar has been an important factor in Colorado's 13.0% increase in sales to the country through August, a significant part of Canada's growing economy this year has been fueled by its own exports. Therefore, global economic factors, including the strength of the U.S. economy and of the U.S. dollar, the increase in commodity prices worldwide, and the growing role of emerging market economies, will all play significant roles in Canada's continued growth. Canada's real GDP grew at an annual rate of 3.7% during the first six months of 2004, with third quarter growth anticipated to slow to 3.0%. The Bank of Canada projects growth to be just under 3.0% in 2005, with production near capacity.

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

Region	Exports 2001	2002	2003
Mexico	$190.5	$225.7	$236.3
Japan	199.3	153.5	165.3
Canada	174.7	163.1	165.1
Korea	90.8	103.5	108.0
Taiwan	74.4	78.1	60.7
China	30.9	35.4	39.8
Hong Kong	32.1	28.2	29.8
Europe	41.9	38.0	30.3

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

At $429 million through August, Mexico is Colorado's second largest export market, up 26.0% compared to the first eight months of 2003. Mexico now accounts for 10.0% of all Colorado exports. Stronger manufacturing output in the United States translated into a recovery in Mexico's maquiladoras, which in turn revived Mexico's fortunes and enabled the country to purchase more. Mexico's long run of strong currency levels has also led to increased consumer-spending power. The real GDP growth is expected to be 3.4% in Mexico for 2004 and 3.1% for 2005. This correlates with predictions for U.S. economy growth, which is expected to be higher in 2004 than in 2005. These data reflect the dependence of the Mexican economy on the U.S. economy.

If China does float the yuan, it should reduce the U.S. trade deficit with China, which could lead to increased opportunities for Colorado exporters and strengthen the overall global economy.

Central and South America

Colorado's exports to Central and South America are rising sharply this year, up 11.0%, to $74 million, through August. Colorado's largest market in this region, Brazil, is at $35 million through August, an increase of 21.0%. Exports to Argentina have risen to $6 million through August, a 44.0% increase over the same period last year. South America's $50 billion trade surplus in 2003 is the main cause of the region's currency and foreign debt stability, which have led to lower inflation and lower interest rates in 2004. Rebounding currencies

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AGRICULTURAL EXPORTS FROM THE STATE OF COLORADO
FISCAL YEARS 2001–2005
(In Millions of Dollars)

Commodity	2001	2002	2003	2004[a]	2005[b]
Beef and Meat Products	$ 382.6	$ 366.8	$ 435.7	$163.0	$288.0
Hides and Furs	166.6	169.1	153.0	157.0	157.0
Course Grains/Feed/Fodder	170.8	176.0	132.5	156.0	155.0
Wheat, Flour and Products	121.6	148.7	120.2	152.0	121.0
Fruit, Vegetables	80.4	76.3	74.6	75.0	70.0
Misc. Processed Foods and Ag. Products	71.4	68.7	55.8	54.0	50.0
Dairy	17.6	16.1	11.2	11.0	11.0
Animal Fats/Oils	20.8	29.5	36.7	37.0	35.0
Total[c]	$1,031.5	$1,051.2	$1,019.6	$805.0	$887.0

[a]Estimated.
[b]Forecast.
[c]Totals may not add due to rounding.
Source: U.S. Department of Agriculture Economic Research Service (ERS), ERS Forecast, and Colorado Business Economic Outlook Committee.

will help boost Latin American imports to record levels in 2004. Sales to the region will rise this year, reaching $142 billion from U.S. suppliers. Real GDP growth for 2004 is expected to be 6.0% in Argentina, 3.7% in Brazil, and 5.3% in Chile. The pace of expansion among the fastest growing economies is expected to be moderate, while slower growing economies, such as those in Central and South America, catch up. The real growth percentage for the region as a whole (including Mexico) is 3.5% for 2004 and 4.0% for 2005. Chile and Peru remain the growth leaders in the region.

Europe

Colorado companies exported $985 million in products to Europe through August, 23.0% of the state's total export sales. This total reflects a 9.0% increase over the same period last year. The leading markets for Colorado products in Europe in 2004 were Germany, the United Kingdom, France, and the Netherlands, respectively. A factor that has helped increase Colorado exports to Europe in 2004 has been the further depreciation of the U.S. dollar against the euro, which has also slowed European exports.

Growth throughout Europe in 2005 will be modest partially due to rising energy costs, the prospect of further currency appreciation, ongoing E.U. fiscal constraints, and adjustments in the labor market. Real GDP growth in Europe is expected to recover gradually from 0.5% in 2003 to around 1.75% in 2004 and 2.0% in 2005. Some of Colorado's strongest European export markets will experience more robust growth, such as the United Kingdom, which is projected to have an output growth of 3.25%, and France, with 2.25%. A stronger economic recovery in Europe depends on a more vigorous pickup in domestic activity that has yet to materialize in 2004.

A total of 2.0% of Colorado's exports to Europe go to Eastern Europe. Exports to Eastern Europe increased by 50.0% from 2002 to 2003 and are up an additional 13.0% in 2004. Top markets for Colorado in this region are Russia, Poland, and the Czech Republic. Real GDP growth in Eastern Europe is expected to be 5.5% in 2004 and 5.2% in 2005, higher than that expected in Western Europe.

Other Markets

Australia and Oceania. Exports to Australia, New Zealand, and the Pacific Islands make up 2.0% of the state's total, with Australia dominating that trade. The United States and Australia are both expected to benefit from the U.S.-Australia Free Trade Agreement, due to take effect on January 1, 2005. The U.S. Trade Representative estimates that the tariff reductions in the free trade agreement will result in an increase of approximately $2 billion in manufactured exports to Australia for the United States as a whole. Australia is currently Colorado's 15th largest market, with $113 million in 2003.

Middle East and Africa. Another 2.0% of Colorado exports went to the Middle East and Africa through August of 2004. The largest markets in these regions were Israel, at $38 million in 2003, and the Republic of South Africa, with $36 million.

Colorado Agricultural Export Trends

Colorado's agricultural exports reached $1.019 billion in 2003, representing a slight decrease of 2002's record level. In 2004, agricultural exports will be significantly lower, impacted by the global obstacle of BSE in the beef industry. Effective December 2003, the export of all U.S. beef was halted due to the discovery of BSE in one dairy cow in the state of Washington. This resulted in the closure of world markets for beef products and live cattle.

Colorado's top agricultural export product category is beef and meat products, which increased to 43.0% of total agricultural exports in 2003, up from 35.0% in 2002. In addition, the exports of other livestock-based products, including hides and animal fats, represent an additional 18.0% of exports. The 62.0% of exports for beef and products mirrors the value this sector represents in Colorado's farm/ranch revenue. Despite the problems for beef exports, sales to other states for this sector are expected to be resilient, even strong, with increased domestic beef prices. Wheat represents the next largest export sector; the majority of all harvested wheat is exported each year. The course grains, feed, and fodder sector, a collection of a wide range of farmed products, represents a $132 million market, or 66.0% of the state's wheat production.

Colorado's top agricultural world markets continue to be dominated by Mexico, Japan, and Canada, which represent more than 55.0% of Colorado's total agricultural exports.

The closure of world beef markets affects more than beef exports. Colorado has developed a global reputation for beef cattle breed stock, which has ended with the BSE market closures. Mexico reopened their market on a limited basis in spring of 2004 to boneless beef products. This market is for beef from traditional feeder cattle, which are brought to market before they reach the age of 20 months. The export for beef, offal, and other byproducts from all other cattle is still closed. In mid-October of 2004, the Japanese announced they reached an accord with the U.S. government to reopen the Japanese market. The market will now be open to meat from cattle that are younger than 20 months. The new protocol is under development and is welcomed by the U.S. cattle industry. The ban on other beef and meat products above this age limit will continue to put pressure on the U.S. industry, requiring additional special handling and segregation of products, not just for meat products but for offal and byproducts to enter the export market.

The U.S. beef industry is forecasting that even with the Japanese and other global markets reopening in late 2004 and early 2005, it will be several years before the United States has regained the sales levels achieved before the market closure.

Colorado's top agricultural world markets continue to be dominated by Mexico, Japan, and Canada, which represent more than 55.0% of Colorado's total agricultural exports. With the loss of the Japanese market in 2004, it is anticipated that there will be further changes in our top markets for

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International Trade

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2004. Japan's market has been sluggish for many years and 2004 represents the first year when the Japanese economic growth is projected to exceed 4.0%. Continued economic growth of 2.5% is forecast in 2005, so with the reopening of the Japanese market, the question is how quickly it will return to the United States for their beef purchases. Mexico's economy is projected to grow 3.4% in 2004 and 2005. Korea's primary agricultural import from Colorado has been beef (more than 66.0%). With the complete closure of this market in 2004, the United States is still in negotiations to reopen the Korean market for beef. Taiwan has announced in mid-October 2004 a reopening of their market to U.S. beef. However, Taiwan's primary import from Colorado is hides, with just 8.0% of their imports from beef.

The Colorado and the U.S. pet food market are also impacted by the BSE market closure. These sectors will struggle and are not assured of any return to market access for beef-based products in the foreseeable future.

Colorado's 2004 and 2005 agricultural export trends will run counter to the greater U.S. agricultural export trends. Total U.S. agricultural exports are forecast to increase 10.0% in 2004 from 2003, while Colorado's exports will fall 20.0%. In 2005 the U.S. exports of agricultural products are projected to decrease 7.3%, while Colorado's total agricultural exports will climb 10.0%, due largely to Colorado's reentry into the export market for beef and beef products.

International Educational

After five years of steady growth, the number of international students attending colleges and universities in the United States in 2002–03 showed only a slight increase of less than 1.0% over the prior year *According to Open Doors 2003*, the annual report on international education published by the Institute of International Education, with support from the State Department's Bureau of Educational and Cultural Affairs, the 2002–03 total was 586,323 students.

The number of international students in Colorado totaled 6,295 in 2002–03, down slightly from 6,692 in the previous year. The figures for 2003–04 should be in the same range. These figures reflect the impact of a number of factors: a weak global economy, student and family concerns about safety, possible delays associated in getting U.S. visas, and an increase in competition from other countries for foreign students.

Colorado's 6,295 foreign-born students contributed $88.6 million in tuition and fees for the 2002–03 school year, with another $105.2 million in living expenses. Total economic impact on the Colorado economy was $30,797 per student. ✜

Summary

For the first time since 2001, the Colorado economy is expected to show positive job growth in 2004, posting an increase of 9,300 jobs. This growth comes after back-to-back years of deep losses, the only time for such an occurrence since the Bureau of Labor Statistics first began tracking employment data in 1939.

The economy started 2004 on the downside, with quarter-over-quarter job losses in the first quarter. In March, several sectors began to show signs of improvement, which continued throughout the second quarter. During the second quarter additional sectors began to show signs of recovering. Overall, most job losses in the first quarter were offset with comparable increases in the second quarter. Employment growth escalated during the second half of 2004, when an average of almost 20,000 positions was added on a month-to-month basis.

The general consensus of the outlook committee members is that the upturn that began in early to mid-2004 will continue into 2005 and that Colorado will experience job increases in all sectors, with an addition of 43,100 jobs. Compared to the state's recent employment history, this is strong growth; however, a longer-term perspective suggests that this is average growth. To illustrate this point, average job growth for the 10 years ending in 2003 is 39,450 jobs, while average growth for a 20-year period ending in 2003 is 37,400 jobs.

Industries that have primary jobs, or those jobs with higher than average wages or multiplier effects, play an important role in the strength of the Colorado economy. Many of these industries, such as telecommunications and manufacturing, have experienced the largest relative job losses during the recent downturn and have taken the longest to return to positive job growth. The real measure of the strength of the recovery will not only be in the total number of jobs gained, but also will be determined by the number of quality or primary jobs recovered.

To that point, the leader of this recovery has been the Professional and Business Services, a supersector that has wages approximately 22.0% above the state average. After showing average job growth of about

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NEW JOBS CREATED IN NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT SECTORS

Industry	Jobs Added 2004[a]	Jobs Added 2005[b]	Jobs Added 1994-2003	Percentage Jobs Added
Natural Resources and Mining	500	700	-600	-0.2%
Construction	-2,700	900	51,900	13.2
Manufacturing	-2,200	1,800	-16,300	-4.1
Durable Goods	-1,600	1,600	-7,500	-1.9
Non-Durable Goods	-600	200	-8,700	-2.2
Trade, Transportation, and Utilities	-900	6,900	60,700	15.4
Wholesale Trade	-900	1,200	11,700	3.0
Retail Trade	2,800	4,900	43,500	11.0
Transportation and Utilities	-2,800	800	5,400	1.4
Information	-2,900	1,300	25,800	6.5
Financial Activities	700	1,200	33,200	8.4
Professional and Business Services	9,200	14,800	62,400	15.8
Educational and Health Services	4,900	4,600	56,100	14.2
Leisure and Hospitality	3,200	5,200	42,700	10.8
Other Services	1,200	2,500	21,100	5.3
Government	-1,700	3,200	57,500	14.6
Total[c]	9,300	43,100	394,500	100.0%

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

Summary

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3,500 jobs per month during the first half of 2004, the sector is expected to close out the year by adding on average roughly 14,700 jobs per month for the entire year. The Professional Business Services Supersector is expected to add 14,800 jobs in 2005.

For the first time since 1998, all good-producing supersectors are slated to show positive job growth. At that time, they gained a total 19,400 jobs, with a majority of the jobs added in construction. In 2005 the three goods-producing sectors are expected to add a total of 3,400 jobs.

Overall, the service producing sectors will add 39,700 jobs in 2005. In addition to the jobs added in Professional Business Services, 16,700 jobs will be added in Trade, Transportation, and Utilities; Leisure and Hospitality Services; and Education and Health Services. The remaining categories (Financial Activities, Information, and Other Services) will add about 5,000 jobs and about 3,200 government jobs will be added.

The growth rate for Colorado population has declined slightly, but it will continue to outpace that of the United States. The state is expected to grow at a rate of 1.2% compared to 1.0% for the country. The state growth rate has experienced a significant decrease in net migration. It peaked at 82,500 in 2000 and is expected to be 20,000 in 2005. However, the recent downturn is different from the 1980s recession when Colorado experienced negative net migration for the five years from 1986 to 1990.

Although the Colorado economy does not directly track the national economy, its growth depends on strong national and international economies. Looking forward, committee members believe the following events are key to the future growth and prosperity of Colorado's economy:

Nationally and Internationally

- Strong business investment, along will solid consumption growth, will be the critical drivers in 2005.
- Uncertainty associated with the recent national and state elections will rapidly dissipate.
- The situation in the Middle East and the constant threat of terrorism will create a level of caution among consumers and businesses.
- Highly volatile energy prices will present challenges to critical industries.
- As the Federal Reserve increases the target federal funds rate to a more neutral position, long-term interest rates are likely to show modest increases in 2005. From a long-term historical perspective, these rates will remain low.
- Improving global markets will positively impact manufacturing and agriculture-based companies that have international sales. International tourism visits should also improve.

Colorado

- Both state officials and local government communities will continue to investigate the merits of de-Brucing as the restrictions of the TABOR amendment have kept them from providing necessary services.
- State tax revenues are expected to improve; however; the state legislature will continue to face difficult fiscal decisions and will operate in a defensive mode unless and until tax reform occurs.
- Higher education, a major driver of the state's economy, will have to rely more heavily on external sources to maintain or improve the quality of education.
- State policy for the next two years will be set by a Republican governor and a Democratic legislature.
- While the effects of the 2002 drought have diminished in most parts of the state, the need to address water storage issues has become even more critical as the state moves into a period of stronger growth.
- Reduced net migration, increased e-commerce sales, and a saturated retail sales market will moderate growth in retail sales, despite a greatly improved state economy.
- Reduced net migration and excess office and commercial capacity will cause statewide construction to perform below the national level.
- Firms will continue to benefit from loose labor markets for certain types of jobs; however, anecdotal evidence suggests that companies have already begun to have difficulty filling specific technical or math/science-based job openings. ✜

From Around the State: La Plata County

The economy in La Plata County continues to grow, despite the destabilizing events of recent years. Tourism, which is very important to the county's economy, has been sensitive to both national and local events. The 9/11 terrorist attacks; the forest fires in the area, with their accompanying national media coverage; and the continuing droughts have all negatively impacted La Plata County's economy. However, some of these negative effects have been partially offset by increases in the area's construction industry, as well as by industrial activity (especially in the energy sector).

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 in a quarterly publication, *The Econometer*. *The Econometer* Index, which is presented in each issue of the publication, is a composite index of the county's economy, and represents changes in personal income. *The Econometer* index and quarterly write-ups can be reviewed at http://soba.fortlewis.edu/soba/pub/econo.htm.

Seasonality

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 that is associated with winter sports, most La Plata County tourism 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-term and short-term (or seasonal) stability to the local economy. Seasonal stability occurs because most of the college's students attend classes in La Plata County 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

In 2003 La Plata County had a lower unemployment rate on average (4.7%) than both the United States and Colorado (6.0%) (Bureau of Labor Statistics). Since the beginning of 2004, the unemployment rates have decreased in all three areas.

Area Comparisons of Average Annual Unemployment Rate

The La Plata County labor force averaged 26,799 persons during 2003, with average total employment of 25,536 (U.S. Bureau of the Census, Current Population Survey, Table PINC–04). Interestingly, employment patterns within La Plata County are somewhat different from those found in the national and state economies. Employment in the county is less concentrated in manufacturing than in both the United States and the state. Construction and mining are somewhat more significant in the county, while transportation and public utilities; wholesale trade; and finance, insurance, and real estate are somewhat less significant. Services, retail trade, and government are relatively more important providers of employment in La Plata County than in Colorado or the United States. However, retail trade has declined in its importance as an employer in the county in the last few years. In 1997, retail trade employed 24.1% of the workers in the county; in 2003 that number dropped to 14.2%. Construction has seen some growth, along with government and service employment.

Personal income in La Plata County rose significantly during the period of 1990–2002 and is expected to continue to increase in 2004 and beyond.

A close examination of La Plata County employment shows that the three major industries providing the bulk of employment are services, retail trade, and government. Together, these three sectors counted for 73.7% of nonagricultural employment in the county during 2003.

Income

Personal income in La Plata County rose significantly during the period of 1990–2002 and is expected to continue to increase in 2004 and beyond.

Personal Income

Although personal income has been rising in La Plata County, differences exist in per capita personal income when the United States, Colorado,

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From Around the State: La Plata County

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and La Plata County are compared. In 2002 per capita personal income in the county was 86.0% of the per capita personal income in the state of Colorado and 94.0% of the per capita personal income in the United States. The good news is that La Plata County's per capita personal income is growing relative to the per capita personal income in the United States. In 1996, La Plata County's per capita personal income was 91.0% of the per capita personal income in the United States.

Recent and Future Trends

The most recent indicators of La Plata County show continued growth. The Econometer Index for the second quarter of 2004 increased 5.7% over the second quarter of 2003. Barring any national or local destabilizing events, this growth trend should continue. Most sectors of the county's economy show year-to-year growth. Tourism remains an important sector of the economy, although its importance has decreased in recent years. On the other hand, the construction industry has grown in importance. Due to the recent defeat of a local initiative that would have required voter approval for annexation of housing developments with more than 10 units and building of commercial structures larger than 40,000 square feet, construction should remain strong in La Plata County. Population growth in La Plata County continues at around 3.0% (the average growth rate for the last eight years). This population growth will continue to fuel the construction industry, and the local economy in general, as well. ✜

From Around the State: Mesa County

Growth in the Mesa County economy through mid-year 2004 reflected a long-term trend that has remained relatively stable over the past 10–15 years. Increases in employment and personal income occurred at average annual rates of 3.3% and 4.4%, respectively, over the period 1990–2004. The year-to-year growth is also reflected in concurrent changes in key sectors of the economy. Positive year-to-year growth has occurred in retail sales, construction, real estate, vehicle registrations, and population. A composite growth index of these indicators increased during 2003 and 2004, rising an average annual rate of 3.6% over the 1990–2004 period.

Total employment in Mesa County has nearly doubled in the past 30 years, outpacing both the national and Colorado economies. A ranking of job growth according to sectors of the local economy shows the largest percentage of new employment occurring in the Services Sector (health, legal, business, etc.). Retail trade and construction also account for a larger percentage of total employment in 2004 than in 1970. Declines in the percentage of total employment have occurred in manufacturing, mining, and agriculture. The emerging employment patterns have resulted in changes in the distribution of personal income. The Services, Construction, and Retail Trade Sectors now account for a larger percentage of the change in new personal income. Income of sole proprietors has grown by 76.0% over the 1970-2000 period, while wages and salaries increased by 48.0%. Of note in the distribution of personal income growth is the change in nonlabor income, which now makes up some 40.0% of total personal income. The latter comes mostly from dividends-interest and rents, as well as growth in transfer payments.

The forecast for the latter part of 2004 and into 2005 calls for increased growth in the range of 3.0–6.0%. These estimates are based on projections of trends observed for key sectors of the local economy. The index values for retail sales tax collections, building permits, and real estate sales tend to lead the quarter-to-quarter growth. Changes in these values, along with other key sectors, result in growth that begins slowly in the first quarter and peaks during the third quarter of a typical year. As a result, a composite index of indicators that slows in the fourth quarter typically ends with year-to-date growth in the overall economy. The current forecast calls for the same pattern of change during 2005.

The indicator results cited above are complemented by current increases in the Business Confidence Index. This index uses the same questions as those for the national Consumer Confidence Index. A sampling of Mesa County businesses regarding perceptions of current and expected economic conditions rose between spring 2003 and spring 2004, resulting in a dramatic increase in overall confidence. These same businesses were also asked to evaluate their company's condition. Again, this index increased, although not as dramatically as that observed for general economic conditions. A third survey is currently under way to evaluate business confidence during the third and fourth quarters of 2004.

The confidence of local firms in current and future conditions is an important determinant of the success of the Mesa County economy. Growing confidence supports the trends suggested by changes in the leading sector indicators noted above. As such, it appears that the Mesa County economy is on track to sustain the steady year-to-year growth observed since the 1990s.

Grand Junction was recently named the 77th best small metro area for business by *Forbes Magazine*. It ranked 105th in 2003. The Forbes rankings are based on criteria such as cost of living, cost of doing business, crime rate, education levels, housing affordability, culture/leisure, income, and job growth. The Grand Junction economy out-ranked three other Colorado communities covered by the study: Greeley, Pueblo, and Boulder.

During the past six months, the Grand Junction Economic Partnership has announced the relocation of two companies to the area. Twin Otter International, a company that customizes and leases aircraft to air-tour operators and aerial research agencies, will be moving its operations and headquarters to Walker Field Airport from Las Vegas. Guardian Pro Star, a utility line-damage prevention software company, is relocating to Grand Junction from Canada. Guardian combines technologies from a variety of high-tech companies, including precision GPS and data collection software compatible with GIS and AM/FM equipment. Officials from both companies cited the quality of life in Mesa County, as well the business-friendly tax climate and growing and healthy economy as instrumental in their decisions to relocate. ✜

From Around the State: Northern Colorado

In 2004 it was reported that approximately $1 billion in new capital construction projects would be created in northern Colorado. Approximately 5-million-square-feet of new commercial, industrial, and mixed-use construction projects are under way in the region. Highlights by industry sector follow.

Health Care Is a Hot Industry in Northern Colorado

The Medical Center of the Rockies (Poudre Valley Health Systems) has broken ground on a five-story, 570,000-square-foot hospital that will house 134 beds, employ about 600 people, and cost approximately $220 million. The hospital will specialize in advanced heart, brain, and trauma care. The hospital is scheduled to open in 2006. Banner Health Systems and McKee Medical Center are completing a $68.3 million, 230,000-square-foot expansion project, with a scheduled opening in the spring of 2005. The Northern Colorado Rehabilitation Hospital has broken ground on a 48,000-square-foot hospital that will house 40 separate bedrooms, employ 150 people, and specialize in treating patients recovering from strokes, and head and spinal cord injuries. It will provide a variety of pulmonary, orthopedic, and cardiology care for area residents. The hospital is scheduled to open in the summer of 2005.

Retail Is Strong

Two major "lifestyle shopping centers" have broken ground. Poag & McEwen is developing The Shops at Centerra, which will encompass 668,000 square feet. Signed leases include Foley's, Victoria's Secret, Barnes & Noble, Coldwater Creek, Bath & Body Works, P.F. Chang's, and other restaurants and entertainment centers. Meanwhile, Bayer Properties continues to move forward with plans to develop a 400,000-square-foot shopping center in Fort Collins, with signed leases from Dillard's, Borders Books, Wild Oats, and others. Additional new specialty retailers include a regional Harley Davidson Center, Tri-City Cycles, and BMW Motorcycles, along with a host of health-food stores. Strong retail development will include renovation to many existing properties, including the Foothills Fashion Mall in Fort Collins. "Big-box" retail continues to make its way into northern Colorado, including a new regional Wal-Mart, Lowes, and Kohl's. With a regional retail vacancy rate of less than 5.0%, the various downtown redevelopment projects should do well. Office space is a bit more plentiful (vacancy rate is about 12.0%), but absorption may be fueled by a rapidly developing health-care and business-service sectors.

"Big-box" retail continues to make its way into northern Colorado, including a new regional Wal-Mart, Lowes, and Kohl's.

Industrial and Technology Employment Provides Plusses, Minuses, and Reasons for Optimism

The forecast for industrial real estate includes many new projects. The most significant projects are the 550,000-square-foot Owens-Illinois bottling facility near Windsor; the new Heska 60,000-square-foot headquarters facility, which will open in 2005; and the 48,000-square-foot new office building of Group Publishing, which will be finalized in 2005. In addition, In-Situ recently moved into its new headquarters in Fort Collins. These new primary industries will provide hundreds of new job opportunities to local residents. That said, these job gains do not fully offset the continuing job losses in the technology sector. Several long-time technology employers continue to announce layoffs as the movement of corporate consolidation and cost containment are still driving jobs from the United States to emerging markets, such as China and India.

Reasons for optimism include several advanced research expansions under way at Colorado State University (CSU). The U.S. Centers for Disease Control and Prevention completed a new 155,000-square-foot, $70 million Vector-Borne Infectious Disease Laboratory, employing 55 scientists and support staff. CSU was also awarded $25 million from the National Institutes of Health to battle tuberculosis. In addition, CSU has made economic development a primary mission, thus providing a stronger technology transfer program to Colorado.

Aims and Front Range Community colleges are expanding their programs to accommodate work force development needs. The University of Phoenix increased its operations in northern Colorado. There is new high school in Fort Collins, and the local school districts are experiencing an increase in enrollment. Population growth has slowed from its rapid pace in the late 1990s, but is steady at 1.0–2.0%. More than 60.0% of the new population growth happens "naturally," with birth rates significantly exceeding death rates.

Other Significant Developments in 2005

Continuing consolidations and expansions in financial services (bank mergers/acquisitions) will create new branch bank locations throughout the region. Access to historically low-cost capital will fuel a steady demand for new mortgages and consumer loans. Northern Colorado will see a continuing expansion of the Fort Collins/Loveland Airport. A new 11-story, 250-room Embassy Suites Hotel will provide 80,000-square-feet of convention center space. The 27,000-square-foot ballroom will accommodate 2,400 guests. Numerous smaller developments are scheduled to break ground near the $62.5 million Larimer County Fairgrounds and Budweiser Events Center, which just completed its first full year of operation.

Employment Forecast

Northern Colorado lost more than 2,000 technology jobs between 2001 and 2003, and the layoffs continued into 2004. Nevertheless, the Fort Collins/Loveland/Greeley region (as defined by Colorado Labor and Employment officials) added about 2,500 new jobs between July 2003 and July 2004. Primary employer industry meetings conducted by the Northern Colorado Economic Development Corporation reveal several pending facility and employment expansions. According to local primary industry officials, more than 1,000 new primary job opportunities will be created via the growth of local primary industry within the next 48 months, given a continuing economic recovery. While the region clearly needs to focus on replacement jobs for the lost technology positions, a campaign entitled Leadership 2010 is being launched to address regional job creation for northern Colorado residents. ✣

From Around the State: Pueblo County

Pueblo has shown a surprising degree of resiliency in weathering the economic storms that have plagued the state's economy over the past few years. This is largely due to the fact that Pueblo's relative strength as a regional center for medical care and retail outlets is less prone to cyclical swings. In addition, several projects on the horizon will enhance Pueblo's strength in these sectors in 2005.

In July, Wal-Mart announced its intention to build a 900,000-square-foot distribution facility and a super center retail outlet in Pueblo West. Also, the Pueblo Crossings shopping center continues to develop, with the grand opening of Kohl's on October 7, 2004. The 88,000-square-foot facility is the anchor store of the shopping center, and employs 150 workers. In the medical care sector, St. Mary Corwin Hospital's $51 million expansion project is proceeding.

This new business investment, along with continued strength in the new housing market, has contributed to stable construction sector employment in Pueblo. Construction accounts for about 7.0% of total Pueblo jobs.

Regarding other industries, Pueblo seems to be in a wait-and-see mode as far as prospective economic development during 2005 is concerned. A major disappointment was the decision to authorize only $5 million of the anticipated $152 million for destruction of chemical weapons stored at the Pueblo Chemical Depot. At its peak, the operation of this program could account for more than 800 jobs.

In February, Xcel Energy announced that Pueblo had been picked for a $1.3 billion expansion of its Comanche power-generating facility. As many as 1,000 workers will be employed during the three- to four-year construction phase of the 750-megawatt-generating facility. Construction may begin in late 2005, depending on the length of time required to obtain the necessary environmental permits and Public Utilities Commission approval.

Housing growth in Pueblo is still robust, although lagging somewhat behind the 2003 level—a banner year for new single-family starts. For the first nine months of 2004, 856 new single-family building permits were authorized. While this is a 4.8% decrease relative to the January–September 2003 period, it is very much in line with residential growth for the prior year. Permits for single-family units in the first nine months of 2002 totaled 832 units. Housing growth in Pueblo has been fueled by a combination of low interest rates, low home costs, moderate employment growth, and increased numbers of Pueblo area residents who live in Pueblo but commute outside the county to work. The median sales price of existing homes in the Pueblo region also remains relatively inexpensive ($117,527), compared to $183,800 nationwide. Residential demand for multifamily units, however, remains weak, with a vacancy rate of 12.8%.

The median sales price of existing homes in the Pueblo region also remains relatively inexpensive ($117,527), compared to $183,800 nationwide.

Labor market conditions in Pueblo County show modest improvement compared to a year ago. For the first nine months of 2004, Pueblo's unemployment rate averaged 6.9%. For January–September 2003, the rate averaged 7.3%. Job growth for the first nine months of 2004 was 2.0%. Preliminary September figures show 6.5% unemployment compared to 6.8% in September 2003.

From Around the State: Southern Colorado

Aggregate and specific economic evidence points to March–April of 2003 as the turning point in El Paso County's economic recovery from a two-year downturn. The Southern Colorado Economic Forum's Business Condition Index (BCI) bottomed out at 89.06 in March 2003, a decline of 10.94% from its March 2001 reference point. As of June 2004, the BCI stood at 101.02, a 13.0% gain since March 2003 in the El Paso County aggregate economic indicator.

Many businesses, particularly in high-tech, reported layoffs in 2003. There have been fewer layoffs this year and more job announcements, according to the Greater Colorado Springs Economic Development Corporation. Aside from the closing of the WorldCom/MCI call center, few large layoffs or closings have occurred. In contrast, significant job announcements by California AAA and Progressive Insurance are heralding a labor market transformation and are believed to reflect future announcements over the next 12–18 months. Total jobs are up for the first six months of 2004, a notable departure from the past few years. Moreover, people are quitting their jobs to take new positions with other firms, another sign of a strengthening local economy.

The unemployment rate through 2004 has averaged 5.58%, compared to 6.44% in 2003. The reductions in the unemployment rate have been occurring systematically since May 2003. Additional gains in employment are expected as the economy continues to strengthen. This is especially true among technology-based, primary employers. Additional gains in finance, health care, retail, and construction are expected in 2005. The unemployment rate for 2004 is expected to average 5.7%, compared to 5.5% for next year.

In 2003 the average wage in El Paso County grew by $712, or 2.1%, over 2002, and now stands at $35,391. This is a marked improvement over the 0.9% increase in 2002. Although wages rose locally, they did not grow at the same rate as the rest of the state. The average wage in Colorado was $38,942 in 2003 compared to $38,012 in 2002, a hike of $930, or 2.4%. Technically, the El Paso County wage increase in 2003 was a relative decline in income of 0.3% compared to Colorado as a whole.

Personal income is expected to grow by 3.5% in 2004 and 4.8% in 2005. Per capita income is anticipated to increase approximately 3.0% in 2004 and 4.0% the following year. Per capita income levels in El Paso County have averaged approximately 10.0% less than the average for Colorado.

The return of Fort Carson's troops from Iraq in March and April of 2004 helped bolster the growing strength in retail sales in the City of Colorado Springs. Growing retail strength is reflected in the 9.7% increase in collected sales tax for the city through July 2004. Allowing for redeployment of troops from Fort Carson in the fourth quarter, it appears retail sales will rise by at least 7.3% for Colorado Springs in 2004. Sales and use tax collections by the city are expected to climb approximately 12.0% in 2004. Retail sales growth in El Paso County is expected to be higher due to an increasing number of stores, especially large box stores, opening just north and east of the Colorado Springs city limits. The net effect of the strong growth in retail sales collections will be a TABOR surplus.

Wholesale trade activity in El Paso County continued its expansion in 2003 by surging 17.2%. Wholesale gains are especially impressive considering the reduction in output El Paso County experienced in technology manufacturing over the last few years.

Given the increased level of economic activity, growth in retail and wholesale trade sales in El Paso County is expected to outpace growth in Colorado's retail and wholesale trade sales in 2005. The redeployment of Fort Carson troops to Iraq will have a restraining effect on retail trade, which is anticipated to increase by at least 7.0% in 2005. Wholesale trade is expected to rise by approximately 15.0% in 2005, especially with the technology sector recovery under way. Intel's favorable position in the industry should help to lead the technology sector over the next several years.

A significant amount of strength in the single-family housing market in 2003 and 2004 was tied to the record-low interest rates of the 30-year conventional mortgage. Additional growth appears to have come from a larger than expected increase in population from people moving to El Paso County.

The market for office space is expected to improve for the balance of 2004. Vacancies should stabilize and perhaps decrease 0.1%. Rents are anticipated to increase slightly, to $10.30, NNN, as absorption

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rates climb to 200,000-300,000 square feet during 2004. Class A rents are expected to rise to approximately $12.80 in 2004.

Industrial vacancies appear to have peaked in 2003 at 10.3%. Absorption was a negative 160,000 square feet. These downward pressures contributed to a rent decline of $0.24, to $6.63 a square foot, NNN. Increased business activity points to an improved industrial rental market in 2004. Expect to see vacancies decrease slightly, to 10.1%. Rents should stabilize at year-end.

The strong growth in retail activity during the last 12 months is expected to continue through 2005. Barring overproduction of new retail centers, overall vacancy rates should decline, to 7.3%, while rents are anticipated to increase, to $15.75. Differences in vacancy rates are apparent among shopping centers with anchor tenants. Vacancy rates in shopping centers with anchors were 6.2% in June 2004, and rents averaged $20.36 a square foot. Unanchored shopping centers, on the other hand, had vacancies of 7.6% and rents of $15.24.

The normally positive impact of the military on El Paso County was tested during 2003 and early 2004. Upward of 12,000 of Fort Carson's troops were deployed to Iraq in 2003. Due to troop deployment, a number of spouses and families left the Colorado Springs area, resulting in an estimated direct loss of $495.0 million in local wages. Indirect lost wages were projected to total $203.0 million. It was estimated that had the troops not been deployed, approximately 500 local resident service jobs would have been created. Finally, the City of Colorado Springs failed to realize approximately $6.5 million in sales tax collections during 2003 because of the deployment. Since the return of Fort Carson's troops to El Paso County, significant increases in retail trade activity have been measured. Local sales tax collections are running almost 10.0% above the same period in 2003. Pent-up demand while the troops were in Iraq contributed to strong growth in new car sales in El Paso County during the second quarter of 2004.

Where Is the Southern Colorado Economy Headed in 2005?

The ability to maintain economic growth over the next 18 months will depend on consumer confidence, energy prices, and, to a certain extent, the results of the November 2004 elections and the possibility of significant terrorist acts.

Oil inventories were at record lows, relative to normal seasonal reserves, from November 2002 through July 2004. This is believed to be a significant contributor to the rise in oil and other energy prices over the last two years. Beginning in the late spring of 2004, OPEC countries made a concerted effort to increase production. OPEC is now turning out 29.7 million barrels of oil a day, an all-time record. As a result, supply is now matching demand. Inventory levels are expected to stabilize over the next 18 months. By December 2005, West Texas Intermediate Crude is expected to be $38 per barrel. By comparison, it has not been below $40 per barrel since July 14 and averaged $44.90 per barrel in August. Barring significant political or other shocks, business activity should be good if actual prices turn out to be close to the $40 per barrel mark. Significantly higher prices will hurt business and curtail economic growth.

Assuming there are no major surprises in the coming months, it is estimated that unemployment rates will decline to 5.5% in El Paso County in 2005, nonagricultural employment will increase 1.3%, personal income will climb 4.8%, retail trade will rise 6.0%, nonresidential construction will surge 37.0%, and building permits will total 5,300. Growth that began in 2003 and continues in 2004 is expected to be much stronger next year. It is projected that 2005 will be the best year for El Paso County since 2000.

The coming year will not be without its difficulties. Troops from Fort Carson will be deployed for much of 2005. Transportation conditions continue to deteriorate, and government revenues will remain under fire. Economic development will struggle to attract quality primary jobs. Colorado's public financial support of higher education is approaching extinction. There will be concerns about the Department of Defense scaling back its commitment to Fort Carson due to the Base Realignment and Closure effort. It is important that the community's residents understand the economic consequences of these issues. These events need to be planned for in the coming months if the region's quality of life is to be enhanced and the community's economic ups and downs decreased in 2006 and beyond. ✜

Appendix: North American Industry Classification System Descriptions

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 follows.

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 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. ✜

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Business Research Division

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For more than 85 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 CU-BAC, MAMTC-Colorado, and 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.

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, and
- 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; and
- Estimated impact of technology on Colorado.

Health Care

- Conducted customer satisfaction surveys of public and private health plans;
- Conducted a comparative analysis of health plans; and
- 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, and
- 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, and
- Identified processes for administrative and management streamlining project.

General Economic Information

- Prepared local leading economic indicator series, and
- 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

Richard Wobbekind, Director
Julie Arnett, Research Assistant
Cindy DiPersio, Publications Coordinator
Gary Horvath, Marketing Analyst
Miles Light, Research Economist
Bud McGrath, Project Director
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University of Colorado at Boulder: Services to Business and Industry

CU Business Advancement Center

With the retirement of director Karen Eye, the work of the CU Business Advancement Center (CU-BAC) has been incorporated into the operations of the Business Research Division. Projects include support of the growth of technology industries in Colorado through research, consulting, information, and networking services to businesses and organizations. Assistance also includes market definition, feasibility studies, industry studies, business and commercialization plans, needs assessments, market research for new products and technologies, and economic impact studies.

Recent project work includes:

- Administrative and organizational support services for the Colorado Photonics Industry Association and the Colorado Environmental Business Alliance;
- Research focused on target and emerging industries for Colorado's future economic growth, available at www.leeds.colorado.edu/brd;
- Publication of the *2004-2005 Photonics Directory and Industry Analysis;* and
- A no-cost business plan review and opportunity for selected companies to present to investors at a Socially Responsible Investor Forum.

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Robert H. and Beverly A. Deming Center for Entrepreneurship

Founded in 1996, the Robert H. and Beverly A. Deming Center for Entrepreneurship continues its national leadership status. *U.S. News and World Report*'s 2005 ranking of business specialties among graduate school entrepreneurship programs places the program 15th nationally. It also ranks the undergraduate program at 6th among public universities offering doctorates and 12th among public and private universities. *Entrepreneur Magazine*'s 2004 annual survey of the top 100 entrepreneurial colleges and universities results put the overall program at 6th nationally as ranked by program directors, faculty, and alumni. The Deming Center is also connected with CU-Boulder's law and music entrepreneurship centers, and supports undergraduate and graduate students and faculty at CU-Boulder's Leeds School of Business. In 2003 the Deming Center for Entrepreneurship was one of three national recipients of the NASDAQ Center of Entrepreneurial Excellence Award.

The Deming Center's mission is to deliver a world-class entrepreneurship curriculum and experience combined with rigorous academic research on topics relevant and useful to entrepreneurs.

- More than 700 students take at least one entrepreneurship course each academic year.
- A total of 65.0% of the Leeds School of Business MBAs pursue entrepreneurship through one of six entrepreneurship tracks. The MBA program offers 10 courses, many of which provide opportunities for students to work with entrepreneurs and their companies.
- All of the Leeds School entrepreneurship MBA students have summer internships with entrepreneurial companies or not-for-profit agencies.
- Twenty to 30 undergraduates per year earn the Certificate of Excellence in Entrepreneurial Studies. The certificate provides knowledge, understanding, and skills to create, organize, and manage new ventures or small- to medium-size and emerging growth businesses as independent entities or within corporate structures.
- The Ph.D. in Strategy and Entrepreneurship is a top-ranked program and places graduates in the best academic entrepreneurship institutions in the world.
- The Entrepreneurial Law Center conducts educational, research, and service activities on legal matters relevant to entrepreneurs, venture capitalists, and the lawyers who serve them.
- The Entrepreneurship Center for Music bridges traditional performance-based music education and career-related instruction. The center sponsors courses in music entrepreneurship, hosts a guest lecture series of entrepreneurs in the arts, creates internships and mentoring opportunities, and counsels students on career options.

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Services to Business and Industry

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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 our 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 their education.

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Executive Development Programs

A partnership between the Leeds School of Business and the Division of Continuing Education at the University of Colorado at Boulder, Executive Development Programs extend the resources of the Leeds School of Business to the professional community by offering certificate and short programs in executive and business education. In addition, we teach fundamental business courses to nonbusiness undergraduates through the Professional Development Certificate offerings.

Executive Development Programs also offer faculty-taught business education that is customized to fit a company's needs. Clients can work with faculty to develop specialized course materials.

Explore the opportunities that Executive Development Programs can offer you and your organization!

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Mid-America Manufacturing Technology Center (MAMTC-Colorado)

MAMTC-Colorado is a not-for-profit organization designed to help small and mid-size manufacturers improve business performance and profitability. Project directors located in Denver, Boulder, Fort Collins, Colorado Springs, Durango, and Grand Junction provide on-site assessments to identify projects that improve a firm's competitiveness. Projects focus on areas that can impact the bottom line, including process and quality improvement (lean manufacturing), plant layout, cost measurement, inventory control, product design, and software selection.

By tapping into a vast network of public and private resources, project directors help companies meet business challenges by delivering quality solutions at a fair price.

Supported in part by the NIST Manufacturing Extension Partnership, MAMTC also offers a number of valuable services, including technical seminars, vendor and technology searches, product testing, industry roundtables, and equipment demonstrations.

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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 Real Estate Center was created through the efforts of the Real Estate Council. The council consists of more than 275 real estate professionals contributing time, expertise, and financial support to educate the next generation of industry leaders. The partnership between the university and the University of Colorado Real Estate Council creates a dynamic and relevant dialogue that precipitates mutually rewarding opportunities to further the research (theoretical and applied) of subjects related to land use and its appurtenant topics.

The center provides a rewarding mentorship program designed to be mutually beneficial for both the students and council members. In addition, the center develops meaningful internship opportunities to students using the council network while 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.

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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 50.0% 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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Richard M. Burridge Center for Securities Analysis and Valuation

The mission of the Richard M. Burridge Center for Securities Analysis and Valuation is to encourage and support the creation and dissemination of new knowledge about financial markets, with an emphasis on U.S. financial markets. The center

- Facilitates the exchange of ideas and knowledge among students, professional investment managers, finance scholars, policymakers, and the investing public;
- Identifies critical research issues in the theory and practice of security analysis and valuation; and
- Encourages and supports vigorous qualitative and quantitative research on topics relevant and useful to money managers, valuation experts, and finance academics.

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Services to Business and Industry

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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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