THIRTY-NINTH ANNUAL

COLORADO

BUSINESS ECONOMIC OUTLOOK

2004

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 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 the advancement of 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 Thirty-Ninth 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 2004 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 the preparation, presentation, and promotion of this project. My sincerest thanks go to Gary Horvath, Marketing Analyst; Cindy DiPersio, Publications Coordinator; Terry Rosson, Program Assistant; Lynn Reed, Graphic Designer; Julie Arnett, Research Assistant; Brendan Hickey, Erin Hickey, and Spencer Thompson, Student Research Assistants; Lori Call, Director of Communications; and Greg Swenson, Staff Writer with the Office of News Services, for their help in assembling and presenting the 2004 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 2004.

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 13 groups, each group representing a major economic sector.

Beginning with this forecast, the economic sectors reflect the new North American Industry Classification System (NAICS), 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.

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

A Return to Optimism

For the first time in several years, there seems to be a glimmer of light at the end of the tunnel—and some promising economic news for the United States and for Colorado. In what we all hope is the beginning of a sustained economic trend, it was announced several weeks ago that the U.S. gross domestic product grew by 7.2% in the third quarter. Better still is what we see happening in this region. The business community has seemingly weathered the worst of the cycle, and evidence suggests that some industries are getting healthy once again.

Whether we're at the peak or the bottom of the cycle, though, KeyBank has been and continues to be strongly committed to this community, and to serving the total financial needs of Colorado. We're focused on being more valuable to our clients and to this community by offering better ideas and financial solutions that are meaningful and relevant in today's economic environment.

With that as a backdrop, it is KeyBank's privilege once again this year to partner with the University of Colorado's Leeds School of Business to sponsor this annual event. This is the third year of our partnership, and I cannot think of a better organization to team with in order to provide you with the latest in-depth knowledge and investment research.

Today, we will hear about current economic trends, and what the experts anticipate for the coming year. How will an election year next year affect the economy? How can this region leverage its role as a major distribution hub to uncover future growth opportunities? And finally, will sectors such as technology, telecommunications, and tourism bounce back, or are there new, emerging sectors that will lead this area back to economic prosperity?

On behalf of KeyBank, I would like to thank you for your continued commitment to this important program, and for supporting the 2004 installment of the Leeds School of Business annual economic forecast.

Michael B. Hobbs
Executive Vice President
KeyBank Commercial Banking

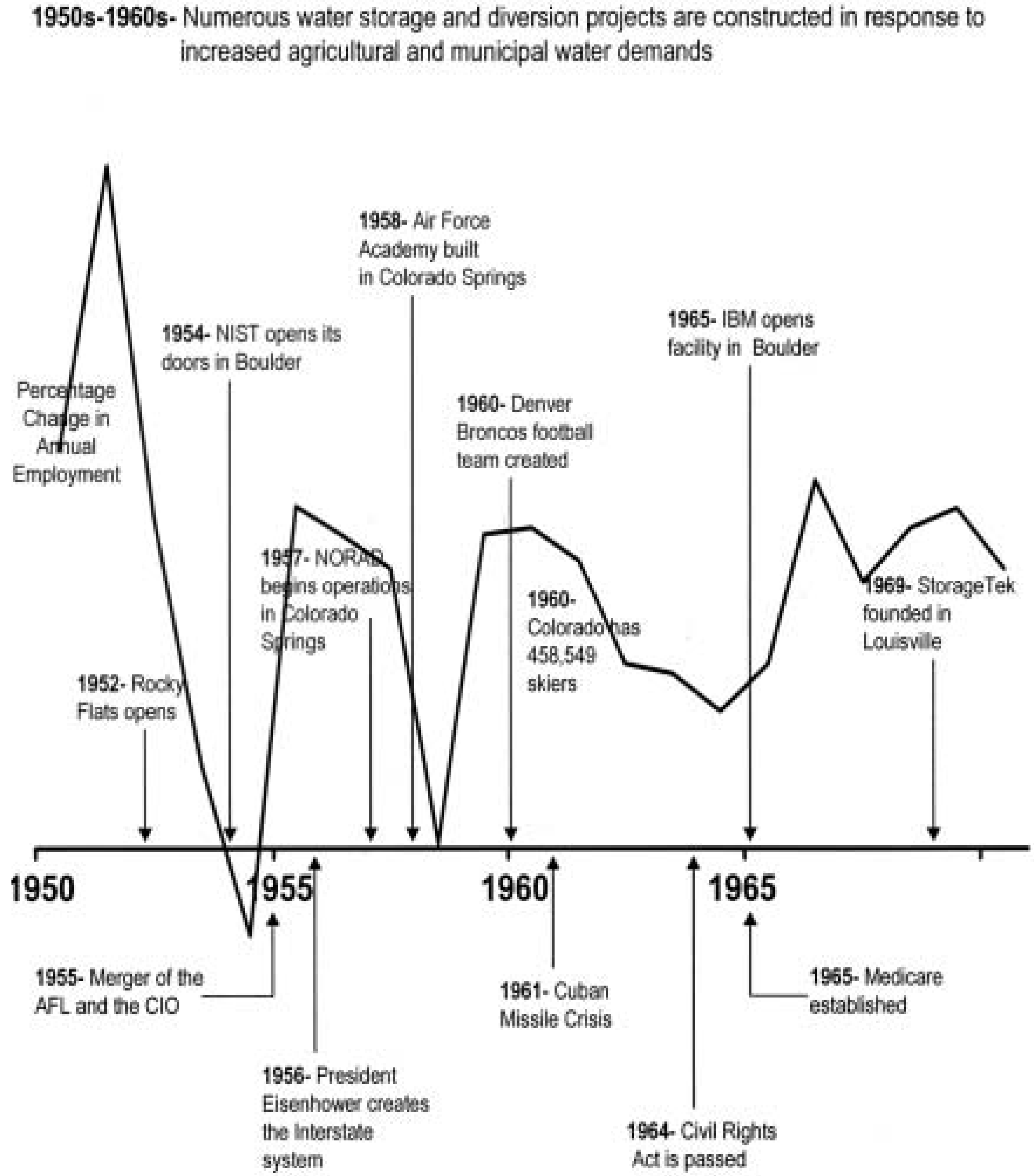
Colorado Then and Now

In 1950, the population of the United States was about 151 million, and approximately 1.3 million people resided in Colorado. Since then the U.S. population has almost doubled, while the population of the state has increased about 3½ times. The United States has experienced wars in Asia, the Cold War, and now the war on terrorism, along with periods of relative peace. The state has endured floods and droughts and economic booms and busts, and basked in the glory of two professional football and hockey world championships.

Although state and national employment data are available back to 1939, the adjacent timeline provides a glimpse of the social, economic, educational, and political changes that have occurred since 1950. These landmarks have laid the foundation for events that will impact our economy in the years ahead. Colorado events are listed on the top half of the page, with the U.S. events listed on the lower half. The percentage change in employment for the past 50 years is shown in the background.

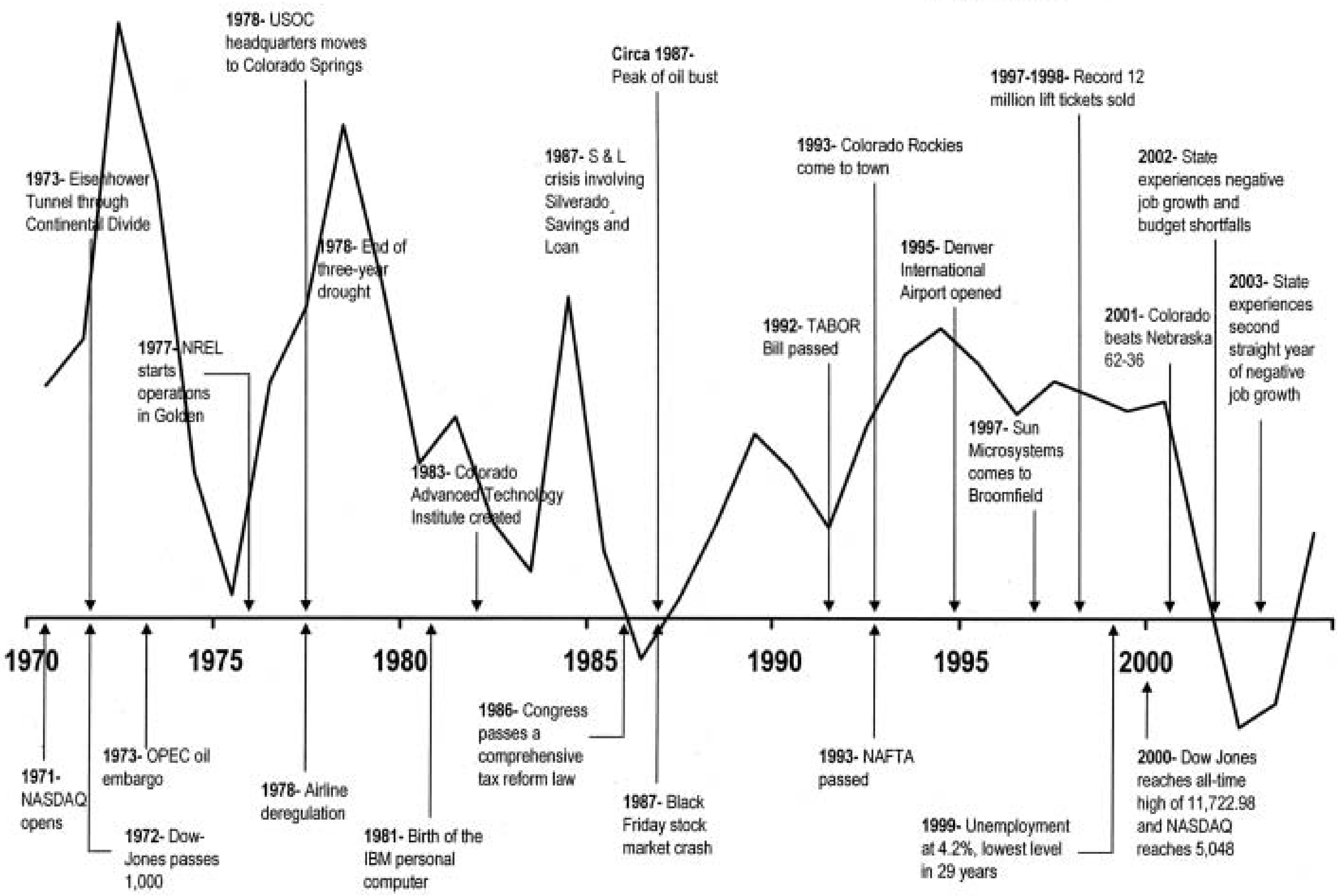
The employment downturn in 2003 marks only the sixth time since 1939 (when records were first kept) that Colorado has shown negative job growth. During this period the U.S. has shown negative job growth on 11 occasions. This is the first time that Colorado has recorded negative job growth in consecutive years and only the second time that the U.S. has shown negative job growth in consecutive years.

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



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

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



United States and Colorado Economic Outlook

Output

From 1992 to 2000 the United States enjoyed strong growth in gross domestic product (GDP). The strongest growth occurred between 1996 and 2000, when the annual rate of growth in real GDP varied between 3.6 and 4.4%. The economy moved into recession in 2001, with three periods of negative growth. The fourth quarter grew at a modest rate of 2.7%, with the annual rate for the year ending at 0.3%.

A shallow recession is often followed by a shallow recovery. That axiom appears to be holding true for the 2001 downturn. After showing a strong spurt of growth in the first quarter of 2002, growth tapered off to a more modest level, and real GDP growth for 2002 was 2.4%. The following year started off as more of the same; however, the recent third quarter surge has raised forecast expectations to 2.7% or higher for annual growth in 2003.

The GDP deflator registered 1.6% annual growth in 2003 as deflation has become more of a concern than inflation. The accelerated rate of growth that occurred in the third quarter of 2003 cannot be maintained as several reasons behind that surge were more short term in nature. Nonetheless, the monetary and fiscal stimulus has worked, and the economy will grow at a rate closer to potential in the year ahead. The annualized year-over-year real GDP for 2004 will grow at a rate of 4.2%, with a GDP deflator of 1.2%.

Consumption

Despite the weak employment picture, the consumer has continued to be the cornerstone of the U.S. economy. Consumers have responded positively to low interest financing programs provided by domestic automobile manufacturers, allowing that segment of retail sales to record slower but still significant sales in 2003. In addition, many homeowners have taken advantage of low interest rates to either refinance their homes or take out home equity loans. This has provided them with additional equity or lower monthly payments, both of which have supported additional consumption. These resources may also have allowed workers who have been laid off to maintain prior purchasing patterns. The Bush tax cuts of 2003 have also given a significant boost to consumption, particularly in the third quarter when rebate checks were mailed to many American families with children.

Looking ahead to 2004, it is likely that consumption will continue at a modest, but slightly accelerated rate of growth more consistent with a recovering economy. This will be driven primarily by an increase in personal disposable income, but will also be fueled by rising consumer optimism and the rising wealth effect of a modestly appreciating stock market. Nationally, retail sales are expected to show a slight increase in 2004. A key component of retail sales, light truck and auto sales, will support an increase in sales after three consecutive years of decline. Still, sales will not surge in this segment of the recovery as they have in the past. Many of the typical "recovery" auto sales have occurred during the 0% financing in 2002 and 2003 and were, in effect, borrowed from the future (2004 and 2005). This will be one dampening factor on the recovery.

After reaching a high of 144.7 in May 2000, the Conference Board's Consumer Confidence Survey declined to 80.7 by year-end 2002. The index has slowly rebounded to 88.0 by year-end 2003. As the economy improves in 2004, national consumer confidence is expected to also increase, to 95.0.

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
1994	148.2	2.6	141.8	4.4
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[b]	184.1	2.3	190.1	2.9
2004[c]	186.8	1.5	194.9	2.5

[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.

While there is no state indicator of consumer confidence, the Conference Board measures consumer confidence for the Mountain States. Prior to 1991 the Mountain index for consumer confidence was consistently lower than the U.S. index. In 1991 this trend reversed itself, and consumer confidence in the Mountain States has remained higher than in the United States overall. On occasion, the Mountain index was up to 30 points higher than the U.S. index during the mid-1990s, but as the decade ended the difference dropped to a range of 5 to 10 points. During the recent downturn the difference between the two indexes has become much smaller. Although Rocky Mountain consumer confidence has recently surged, the year-end index for the Mountain States is expected to be only 100.0 for 2003 and 110.0 for 2004.

Investment

Another component to growth is investment. During both 2001 and 2002, companies showed a decrease in business investments of more than 5.0% each year. This negative trend has reversed itself in 2003 as companies found that they could no longer postpone certain business expenditures. Year-end investment should rise by 2.0%, modest by the standards set in the late 1990s, but positive after the aforementioned two years of decline. As we go forward, continued replacement investment, augmented by an increased demand for expansionary investment, will drive growth in this area. Business investments are expected to expand by a more robust 9.2% in 2004.

In part as a result of this increase in investment, industrial production will rise by 4.3% in 2004 after experiencing a meager 0.1% gain this year. Business inventories will also grow from less than $1 billion in 2003 to $43.7 billion in 2004. The failure of businesses to expand their inventories in 2003 was one of the major reasons that the macroeconomic recovery was slow. Currently, inventory-to-sales ratios are at their lowest levels in history, which indicates they will need to be replenished in short order. As orders pick up, firms will be more likely to invest in inventory to make certain they can fulfill demand for their product. However, it is not clear that we will return to historic inventory-to-sales ratios even during a more robust recovery. Much of the investment in "just-in-time" production and other cost-saving devices will likely change the long-term inventory-to-sales ratio relationship.

In 2004, housing starts are expected to decline as mortgage rates continue their slow rise from 40-year lows reached in July 2003. Still, the housing market is expected to be better than it was in the 1999-2001 period. This optimism is fueled by increased employment levels and continued good mortgage rates. (Mortgage rates remain at 20-year lows at the time of this writing, November 2003.) In Colorado, the number of housing starts will not be as strong as at the national level, although we believe that permits will move slightly back into the positive range. Much of the new construction in Colorado will continue to be in lower priced homes.

No appreciable improvement is anticipated in the U.S. international trade position until international economic conditions improve. Although the dollar

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GROSS DOMESTIC PRODUCT AND NATIONAL UNEMPLOYMENT RATE 1994-2004

Year	Gross Domestic Current Dollars (Billions)	Gross Domestic Constant Dollars (Billions)	GDP Deflator (1996=100)	National Unemployment Rate
1994	$ 7,054.3	$ 7,347.7	96.0	6.1%
1995	7,400.5	7,543.8	98.1	5.6
1996	7,813.2	7,813.2	100.0	5.4
1997	8,318.4	8,159.5	101.9	4.9
1998	8,781.5	8,508.9	103.2	4.5
1999	9,274.3	8,859.0	104.7	4.2
2000	9,824.6	9,191.4	106.9	4.0
2001	10,082.2	9,214.5	109.4	4.8
2002	10,446.2	9,439.9	110.7	5.8
2003[a]	10,895.0	9,695.0	112.4	6.1
2004[b]	11,483.0	10,102.0	113.7	5.9

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

United States and Colorado Economic Outlook

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NATIONAL ECONOMIC INDICATORS
1999-2004

Year	1999	2000	2001	2002	2003[a]	2004[b]
Gross Domestic Product						
Real GDP (% change)	4.1%	3.8%	0.3%	2.4%	2.7%	4.2%
Nominal GDP (% change)	5.6%	5.9%	2.6%	3.6%	4.3%	5.4%
Consumption						
Real Disposable Personal Income (% change)	2.6%	4.8%	1.8%	4.2%	2.7%	4.2%
Real Personal Consumption (% change)	4.9%	4.3%	2.5%	3.1%	3.0%	3.7%
National Consumer Confidence (December)	141.7	128.6	94.6	80.7	88.0	95.0
Rocky Mountain Consumer Confidence (December)	151.0	137.0	97.1	88.1	100.0	110.0
Consumer Credit ($ billions)	$1,518.8	$1,692.9	$1,817.2	$1,895.4	$1,999.0	$2,108.3
Auto and Light Truck Sales (million units)	16.8	17.2	17.0	16.7	16.5	16.7
Retail Sales (% change)	8.8%	6.6%	3.7%	3.1%	5.4%	4.8%
Investment						
Real Gov't. Consumption and Investment (% change)	3.9%	2.7%	3.7%	4.4%	3.3%	2.2%
Real Business Investment (% change)	8.1%	7.8%	-5.2%	-5.7%	2.1%	9.2%
Industrial Production (% change)	4.3%	4.7%	-3.5%	-0.8%	0.1%	4.3%
Housing Starts (millions units)	1.64	1.57	1.60	1.71	1.76	1.66
Change in Business Inventories ($ billions)	$62.8	$65.0	-$61.4	$5.2	-$0.7	$43.7
Prices						
Consumer Price Index (% change)	2.2%	3.4%	2.8%	1.6%	2.3%	1.5%
Producer Prices (% change)	1.8%	3.7%	2.0%	-1.3%	3.1%	0.4%
Employment Costs (% change)	3.2%	4.3%	4.1%	3.8%	3.6%	3.4%
Money and Interest						
3-Month Constant Maturities (rate)	5.5%	5.9%	1.7%	1.2%	1.0%	1.6%
10-Year Constant Maturities (rate)	6.4%	5.1%	4.1%	3.8%	4.4%	4.9%
Fed Funds Rate (year end)	5.50%	6.50%	1.75%	1.24%	1.00%	1.50%
Employment and Population						
Population (% change)	1.2%	1.1%	1.1%	1.1%	1.1%	1.0%
Unemployment Rate	4.2%	4.0%	4.8%	5.8%	6.1%	5.9%
Nonfarm Employment (% change)	2.4%	2.2%	0.0%	-1.1%	-0.3%	1.3%
Other Indicators						
Nominal Pre-Tax Profits (% change)	3.7%	-2.2%	-7.2%	7.6%	13.9%	12.3%
Current Account ($ billions)	-$293.0	-$410.0	-$394.0	-$481.0	-$567.0	-$618.0
Federal Budget Balance ($ billions for fiscal year)	$126.0	$236.0	$127.0	-$158.0	-$393.0	-$502.0
Real Net Exports ($ billion)	-$321.0	-$399.0	-$416.0	-$489.0	-$544.0	-$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.

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. Our forecast does not indicate a narrowing of this gap until early 2005. Worldwide economic recovery and a weaker dollar are needed for this to happen. The strength of the global marketplace is especially important to export-dependent sectors such as agriculture, international tourism, and manufacturing.

Prices

At present, deflation is more of a concern than inflation. Nationally, the CPI is expected to increase by 2.3% in 2003 and 1.5% in 2004. Although housing prices and energy costs have decreased over the past year, the CPI-U growth rate for Colorado continues to be higher than the rate for United States, at 2.9% for 2003 and 2.5% for 2004.

Producer prices, as measured by the Producer Price Index (PPI), increased by a rate of 3.1% in 2003, led by higher crude and intermediate prices and a higher level of price control at the wholesale level. The PPI is expected to increase only 0.4% in 2004 as abundant suppliers keep pricing in check.

Employment costs grew at a 3.6% rate in 2003 and are forecast to rise by 3.4% in 2004. These increases are modest and reflect the slow wage appreciation of an economy in the earlier stages of recovery. However, this slow appreciation in wages is being offset by increasing benefit and medical costs.

Employment and Population

National unemployment increased from 4.8% in 2001 to 5.8% in 2002 and 6.1% in 2003. We forecast a slight decline, to 5.9%, in 2004 as overall labor conditions and hiring improve. More robust hiring plans will be partially offset by some of the workers reentering the workforce. This increase in labor force participation, while welcomed, will keep the unemployment number high.

As 2004 begins, job creation at the national level is expected to be broad based, with most sectors experiencing growth. Throughout the year, the service-producing subsectors are expected to grow more rapidly, while the goods-producing sectors are expected to lag.

The Colorado economy depends on the national and global economy for its growth. Unemployment in the state is expected to again remain below that of the United States, coming in at a rate of 5.7% in 2003 and dropping to 5.6% in 2004.

Nationally, population is expected to show growth of 1.1% in 2003 and 1.0% in 2004, while the growth of the state is expected to slow to 1.2% in 2003 and increase slightly, to 1.3%, in 2004. The biggest factor in the slowing of the state's growth rate from the rates of the 1990s has been the significant decrease in net migration. While net migration is substantially lower than the 1990s, it is still positive and has helped to stabilize housing market prices in an extremely weak employment environment.

In the sections that follow, a summary of 2003 and a forecast for 2004 is presented. These sections provide 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	2002	2003[a]	2004[b]	2003 New Jobs[a]	Percentage Change	2004 New Jobs[b]	Percentage Change
Natural Resources and Mining	13.1	13.9	14.7	0.8	6.1%	0.8	5.8%
Construction	160.2	151.9	147.2	-8.3	-5.2	-4.7	-3.1
Manufacturing	166.3	155.3	154.2	-11.0	-6.6	-1.1	-0.7
Trade, Transportation, and Utilities	412.6	409.3	414.9	-3.4	-0.8	5.6	1.4
Information	93.6	88.7	92.0	-4.9	-5.2	3.3	3.7
Financial Activities	147.7	146.6	147.3	-1.1	-0.7	0.7	0.5
Professional and Business Services	289.9	285.7	297.6	-4.2	-1.4	11.9	4.2
Educational and Health Services	208.7	213.0	221.1	4.3	2.1	8.1	3.8
Leisure and Hospitality	247.4	244.4	252.6	-3.0	-1.2	8.2	3.4
Other Services	85.6	85.9	87.1	0.3	0.4	1.2	1.4
Government	358.7	354.4	352.7	-4.3	-1.2	-1.7	-0.5
Total	2,183.7	2,149.1	2,181.4	-34.6	-1.6%	32.3	1.5%

[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 of its work force. Data from the U.S. Census show that the population of the state will increase by about 900,000 from 1994 to 2004. Over that period almost 62.0% of the state's population growth will be attributed to net migration, with the remainder attributed to natural increase. Net migration is expected to drop from 36,700 in 2002 to 16,500 in 2003 and increase slightly to 18,800 in 2004. As a result, Colorado's population is expected to grow by 58,200 persons in 2004, to 4.63 million. This rate of population increase will rise slightly to 1.3%, still above the national average.

The rapid rate of population growth, in particular the net migration, caused the labor force to grow at a compound annual growth rate (CAGR) of 2.5% between 1994 and 2002. Reduced net migration will result in a labor force that will increase by only 1.4% in both 2003 and 2004.

For the first time since 1939, when the Bureau of Labor Statistics first began tracking employment data, Colorado employment showed negative job growth for two consecutive years, in 2002 and 2003. This was only the second time that the United States has shown negative job growth in back-to-back years during this period.

During the 1990s, the Colorado economy relied on telecommunications, manufacturing, construction, and tourism to drive growth. Increased employment

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**COMPONENTS OF COLORADO RESIDENT POPULATION
1994-2004
(In Thousands)**

Year	Births (Resident)	Deaths (Resident)	Natural Increase	Net Migration	Population Change
1994	53.8	23.8	30.0	77.5	107.5
1995	53.9	24.7	29.2	70.3	99.5
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	78.4	115.3
2001	66.4	27.8	38.6	67.2	105.8
2002	67.6	28.9	38.7	36.7	75.4
2003[a]	68.8	29.8	39.0	16.5	55.5
2004[b]	70.0	30.6	39.4	18.8	58.2

[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
1994-2004
(Base Year: 1994=100)**

	Colorado		United States	
Year	Index	Resident Population (In Thousands)	Index	Resident Population (In Thousands)
1994	100.0	3,713.9	100.0	263,126
1995	102.7	3,813.4	101.2	266,278
1996	105.2	3,905.2	102.4	269,394
1997	107.7	3,999.2	103.6	272,647
1998	110.6	4,106.2	104.8	275,854
1999	113.6	4,220.2	106.0	279,040
2000	116.7	4,335.5	107.3	282,224
2001	119.6	4,441.4	108.4	285,318
2002	121.6	4,516.8	109.6	288,369
2003[a]	123.1	4,572.4	110.7	291,400
2004[b]	124.7	4,630.6	111.9	294,431

[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
1994-2004
(In Thousands)

Labor Force	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003[a]	2004[b]
Colorado Labor Force	2,001.5	2,087.5	2,093.2	2,150.2	2,241.8	2,264.1	2,351.2	2,379.1	2,437.4	2,470.7	2,505.1
Unemployed	84.4	87.5	88.4	70.1	86.1	66.0	65.0	88.5	139.8	140.5	140.0
Unemployment Rate (%)	4.2	4.2	4.2	3.3	3.8	2.9	2.8	3.7	5.7	5.7	5.6
Total Employment	1,917.0	2,000.0	2,004.7	2,080.0	2,155.7	2,198.1	2,286.2	2,290.6	2,297.6	2,330.2	2,365.1
Agricultural	23.9	27.1	26.0	26.3	26.0	25.7	25.5	25.0	27.5	28.5	29.5
Nonagricultural	1,893.1	1,972.9	1,984.3	2,053.7	2,129.7	2,175.4	2,260.7	2,265.6	2,270.1	2,301.9	2,335.7

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

COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
1994-2004
(In Thousands)

Sector	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003[a]	2004[b]
Natural Resources and Mining	13.7	13.3	12.6	13.2	13.4	12.3	12.2	12.9	13.1	13.9	14.7
Construction	97.9	103.7	112.2	120.5	134.6	148.5	163.6	167.7	160.2	151.9	147.2
Manufacturing	172.5	179.5	182.9	189.3	194.4	190.7	191.3	181.9	166.3	155.3	154.2
Trade, Transportation, and Utilities	343.4	360.6	372.1	381.3	392.4	404.9	418.9	423.0	412.6	409.3	414.9
Information	59.1	64.5	67.9	73.7	86.4	97.0	108.4	107.3	93.6	88.7	92.0
Financial Activities	121.0	121.1	127.9	135.2	142.8	147.4	147.0	148.3	147.7	146.6	147.3
Professional and Business Services	224.1	239.0	252.1	270.2	279.2	298.1	315.2	308.4	289.9	285.7	297.6
Educational and Health Services	157.4	165.4	171.2	178.2	182.9	186.9	192.8	200.8	208.7	213.0	221.1
Leisure and Hospitality	202.8	215.2	220.1	226.6	231.0	238.5	246.0	247.2	247.4	244.4	252.6
Other Services	64.7	68.5	72.7	75.7	77.3	79.0	80.2	83.8	85.6	85.9	87.1
Government	299.3	303.7	308.7	315.6	322.3	328.4	337.0	344.1	358.7	354.4	352.7
Total[c,d]	1,755.9	1,834.4	1,900.4	1,979.5	2,056.7	2,131.5	2,212.6	2,225.4	2,183.7	2,149.1	2,181.4

[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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in these areas fostered strong growth in retail sales, business services, and local government. In 2004 all supersectors of the state economy are expected to show improvement over 2003; however, not all sectors will add jobs. Strong growth will be seen in professional and business services, leisure and hospitality (tourism), health care, and retail trade. In 2004 Colorado will return to positive job growth, showing an increase of 32,300 jobs, or a 1.5% gain.

In 2002 the state's level of unemployment jumped above the natural rate of unemployment, 4.5 to 5.0%, for the first time since 1993. The unemployment rate increased to average 5.7%, where it is expected to remain for 2003. Despite an increase in employment of 32,300 jobs, Colorado unemployment will not drop significantly as labor force participation rates are likely to increase. Unemployment is expected to be 5.6% in 2004.

TOTAL PERSONAL AND PER CAPITA INCOME, COLORADO AND UNITED STATES 1994-2004 (Base Year: 1994=100)

	Colorado			United States		
Year	Index	Total Personal (Millions)	Per Capita[a]	Index	Total Personal (Billions)	Per Capita[a]
1994	100.0	$85,859.7	$23,055	100.0	$5,878.4	$22,340
1995	108.3	92,946.5	24,289	105.3	6,192.2	23,255
1996	116.5	100,012.2	25,514	111.2	6,538.1	24,270
1997	126.7	108,765.0	27,067	117.9	6,928.5	25,412
1998	137.9	118,412.8	28,764	126.2	7,418.5	26,893
1999	149.5	128,386.5	30,380	132.3	7,779.5	27,880
2000	166.6	143,043.2	33,060	142.9	8,398.9	29,760
2001	172.7	148,238.6	33,455	147.6	8,677.5	30,413
2002	174.0	149,424.5	33,154	151.6	8,911.8	30,900
2003[b]	178.9	153,608.4	33,585	156.6	9,205.9	31,641
2004[c]	186.1	159,752.7	34,425	163.0	9,583.3	32,654

[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, and *Survey of Current Business*.

Between 1994 and 2002, Colorado personal income grew at a rate at least one percentage point above the national rate. In 2003 and 2004, the rate of growth for Colorado will be lower. The nation's rate of increase in 2003 total personal income will be approximately 3.3%, followed by 4.1% in 2004. Growth in 2003 total Colorado personal income will be 2.8% in 2003 and 4.0% in 2004.

Between 1994 and 2000, Colorado per capita personal income increased at a CAGR of 6.2%, compared to the national CAGR of 4.9%. Since then, per capita income in Colorado has grown at a rate well below the national rate. After showing negative growth in 2002, Colorado per capita income is expected to increase 1.3% in 2003 and 2.5% in 2004. This growth will continue to be lower than the national rates of growth, which will be 2.4% in 2003 and 3.2% in 2004.

This decrease at the state level illustrates the importance of jobs in finance, manufacturing, utilities, communications, wholesale trade, and technology, and the fact that the recent downturn affected a greater number of white-collar workers. It also illustrates the importance of dividend income and capital gains, which disappeared with the downturn of the equity markets in 2001. These results further highlight the differences between the national and state economies. In retrospect, our higher wage structured industries appear to have been more sensitive to the recent national recession. ❖

Agriculture

If 2002 will long be remembered as the year of the drought, 2003 will be remembered as the year cattle prices rose to levels never before experienced. Although many of these same factors are in place for 2004, it is unlikely that we can maintain the record prices posted in late 2003. Still, 2004 should be another good year for cattle prices. Crops in general will show a modest increase in 2004, assuming that precipitation is normal and reservoirs are again filled to allow for irrigation.

In 2003, four important factors simultaneously impacted the cattle industry. First, fewer cattle at lower weights (due to the cattle cycle) and the drought significantly reduced the amount of beef going to market. Second, bovine spongiform encephalopathy, or mad cow disease, was discovered in Canada, stopping all beef and cattle shipments into the United States and further reducing domestic supplies. The third factor is that Canada was unable to export their beef to other countries, which opened up additional markets to U.S. suppliers. The final contributing factor is that consumer demand for beef, fueled by interest in low carbohydrate diets, continued the rebound that began a few years ago.

As we look to 2004, many of these factors are still in place. It is likely, however, that as protocols are established for Canadian cattle and beef to again enter the United States, the pressure on domestic supplies will ease (i.e., Canada supplies about 9.0% of the beef and cattle in the United States). Canada's reentry into other international markets will also affect U.S. exports. It is expected that beef will face increased competition from poultry and other protein sources, cutting into the demand for beef. The result of these changes will be that the average price for fed cattle will likely drop 5.0 to 6.0%, to around $84 per hundredweight (cwt.). By historical standards this is still a very strong price and should keep feeders profitable at least into early 2004. Feeder cattle prices are very high, however, and feeding margins will be tight. The cattle cycle will continue to produce fewer cattle, so total Colorado fed cattle marketed in 2004 will be down to 2.2 million, the lowest level in many years.

Because numbers of cattle remain low, most cow-calf operations should be profitable in 2004. Average calf prices are forecast to be about $1.05/lb., a record price. The one discouraging note is that due to the drought a number of cattlemen liquidated their herds and missed out on perhaps the best cattle market of their lifetime. It will also be difficult for many of these producers to restock their herds at this time because the cost of breeding stock has increased significantly. Overall, due to fewer fed cattle and slightly lower fed cattle prices, total cash receipts from cattle will be down about 10.0% in 2004, to $2.55 billion.

The dairy industry has experienced extremely poor prices this past year. Low milk prices have resulted in some dairies being forced out of business due to financial stress. Herd numbers in Colorado could drop as much as 10.0%. Moreover, average milk prices in 2004 should increase to the range of $13 to $14/cwt., a gain of 20.0%. Total dairy products

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COLORADO CASH RECEIPTS FROM FARMING AND RANCHING
1996-2004
(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
1996	$2,820.6	$1,580.3	$4,400.9	$437.8	$176.2	$5,014.9
1997	2,959.7	1,527.7	4,487.4	456.2	175.6	5,119.2
1998	2,810.3	1,541.5	4,351.8	558.9	260.3	5,171.0
1999	2,992.9	1,367.3	4,360.2	578.7	374.2	5,313.1
2000	3,330.0	1,227.0	4,557.0	504.5	351.1	5,412.6
2001	3,301.8	1,413.2	4,715.0	562.9	319.6	5,597.5
2002	3,217.7	1,206.6	4,424.3	645.2	188.4	5,257.9
2003[c]	3,563.0	1,351.0	4,914.0	630.0	200.0	5,744.0
2004[d]	3,265.0	1,418.0	4,683.0	625.0	225.0	5,533.0

[a]Includes sales of forest products, custom feeding fees, custom harvest fees, and other farm income
[b]Payments made directly to farm producers in connection with farm programs
[c]Estimated
[d]Forecast
Source: Colorado Agricultural Statistics Service and Colorado Business Economic Outlook Agriculture Committee

Agriculture

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sold will account for about $235 million, making dairy our second largest livestock sector after cattle. Hogs will be a close third, with $230 million in receipts. Although hog numbers are declining both nationally and in Colorado, prices should improve by 7.0 to 8.0% in 2004.

Because of lower fed weights and fewer imports, lamb sales have been very strong, with a large jump in price this past year. Marketings, however, are expected to drop in 2004, and the price will be off by about 8.0%. This will bring cash receipts to around $100 million. Poultry sales will be up slightly in 2004 due to a strong market for turkeys, resulting in cash receipts of $110 million. Unfortunately, alternative livestock in Colorado are not doing well. Chronic wasting disease has been devastating to the state's elk producers, and buffalo prices have slumped to the point that there is little profitability left in this industry. These alternative livestock industries will see sales slip by some 8.0%.

Colorado remains a strong livestock state due primarily to the size of our cattle industry. Although total livestock sales will be down about 8.0%, to $3.265 billion, in 2004, the state's cattle industry should remain strong. It will account for nearly 55.0% of all agricultural cash receipts in the state.

Corn will top all crops, with $290 million in cash receipts in 2004. Although 2003 will be the largest U.S. corn crop on record, improving exports and an expanding ethanol industry will keep prices next year at around $2.35/bushel. Wheat prices should remain fairly constant in 2004, at $3.25/bushel, and with a normal harvest (80 million bushels), wheat will account for about $245 million in cash receipts. Hay, Colorado's other major crop, will see prices decrease slightly, to around $85/ton, for total cash receipts of some $205 million. Potato acreage in the San Luis Valley has declined somewhat due to drought conditions. This area did not receive the precipitation that much of the rest of the state did in 2003. It is expected that acreage and prices will be down slightly in 2004 for crop marketings of around $140 million. Greenhouse and nursery sales remain an important part of the state's agricultural picture and will see sales increase slightly, to $220 million, this coming year.

The state's sugar beet industry was down significantly in 2003 due to concerns over adequate irrigation water. With the Greeley plant closing, beets were only processed in Fort Morgan. Unless water issues are resolved along the South Platte, this could be repeated again in 2004. Total cash receipts for beets are expected to come in at around $25 million. Fruit production on the Western Slope is beginning to change, with peaches surpassing apples as the largest cash contributor. Wine grapes and cherries are also seeing some increases in production. Total cash receipts from fruit will again come in at approximately $20 million.

Overall cash receipts from crops are expected to total slightly more than $1.4 billion. Government payments to farmers will be up slightly next year, to around $225 million, due to higher crop deficiency payments. In 2004 the effect of inflation will increase total farm production expenses about 2.0%, to $4.7 billion, but this increase will be offset by fewer cattle being fed. This will put Colorado net farm income for 2004 at $833 million. ✜

COLORADO FARM INCOME AND PRODUCTION EXPENSES 1996-2004 (In Millions of Dollars)

Year	Gross Value of Farm Revenue	Total Farm Production Expenses	Net Farm Income
1996	$5,014.9	$4,208.5	$806.4
1997	5,119.2	4,415.2	704.0
1998	5,171.0	4,333.5	837.5
1999	5,313.1	4,362.1	951.0
2000	5,412.6	4,768.7	643.9
2001	5,597.5	4,490.9	1,106.6
2002	5,257.9	4,547.0	710.9
2003[a]	5,744.0	4,600.0	1,144.0
2004[b]	5,533.0	4,700.0	833.0

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

Natural Resources and Mining

This NAICS sector includes: Forestry and logging; oil and gas extraction, mining; and support activities for mining.

Logging

The logging industry has historically been an extremely small part of the Colorado economy, employing between 100 and 200 people. The recent wildfires have raised a number of issues relating to the management of our forests; however, this is not expected to impact employment in this sector in 2003 and 2004.

Oil, Gas, and Carbon Dioxide

The Colorado Oil and Gas Conservation Commission (COGCC) estimates the value of the oil, gas, and carbon dioxide produced in Colorado in 2002 at $2.00 billion, 45.0% less than the production value of 2001. About 78.0% of this total is from conventional natural gas and coalbed methane (CBM), 17.0% from oil, and 5.0% from carbon dioxide. Estimated production volumes in 2003 will total approximately 875 billion cubic feet of gas (including CBM), 19.2 million barrels of oil, and 294 billion cubic feet of carbon dioxide.

Gas prices were stable in 2002, with an average price of $2.42 per thousand cubic feet. Oil prices averaged $23.52 per barrel in 2002. The basis differential between the average Colorado gas price and the Henry Hub price increased from an average of minus $0.77 per million British thermal units (Btu) in 2001 to minus $0.97 per million Btu in 2002, reflecting the oversupply problem for Rocky Mountain producers in 2001 and 2002 (pipeline companies report gas volumes as million Btu).

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PHYSICAL OUTPUT OF FOSSIL FUELS: COAL AND CRUDE OIL 1994-2004 (Base Year: 1994=100)

Year	Coal Index	Coal Millions of Short Tons	Crude Oil Index	Crude Oil Millions of Barrels
1994	100.0	25.3	100.0	30.9
1995	101.6	25.7	92.6	28.6
1996	98.4	24.9	82.8	25.6
1997	108.3	27.4	72.8	22.5
1998	117.0	29.6	72.8	22.5
1999	118.6	30.0	62.5	19.3
2000	115.0	29.1	61.8	19.1
2001	132.0	33.4	63.4	19.6
2002	138.7	35.1	57.3	17.7
2003[a]	134.4	34.0	62.1	19.2
2004[b]	134.4	34.0	62.1	19.2

[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.

PHYSICAL OUTPUT OF FOSSIL FUELS: NATURAL GAS AND CARBON DIOXIDE 1994-2004 (Base Year: 1994=100)

Year	Natural Gas Index	Natural Gas Billions of Cubic Feet	Carbon Dioxide Index	Carbon Dioxide Billions of Cubic Feet
1994	100.0	509.8	100.0	307.4
1995	105.8	539.6	97.3	299.0
1996	114.6	584.0	107.1	329.3
1997	126.9	646.7	108.1	332.3
1998	138.3	704.8	119.6	367.7
1999	143.6	732.2	99.1	304.7
2000	151.4	771.8	101.1	310.7
2001	161.9	825.4	99.0	304.3
2002	166.7	849.9	87.0	267.3
2003[a]	171.6	875.0	95.6	294.0
2004[b]	186.3	950.0	94.3	290.0

[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.

Natural Resources and Mining

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COGCC estimates that the production value of oil, gas, and carbon dioxide will surpass $3 billion in 2003—a 50.0% increase from 2002. Natural gas should account for about 83.0% of this value. Average natural gas prices are forecasted to be $4.33 per million Btu in 2003—an 89.0% increase over the 2002 average of $2.29 per million Btu—with the basis differential increasing to $1.27 per million Btu. Daily average oil production is predicted to remain flat, at 19.2 million barrels, but the average oil price will rise to $28.80 per barrel in 2003—an increase of 22.0% from the average 2002 price of $23.52.

The Energy Information Administration (EIA) predicts an increase in oil and natural gas demand (and prices) in the United States for 2003 and 2004 as the economy begins to recover, with a projected 2.9% growth rate. This expansion is expected to result in a 3.7% increase in natural gas demand in 2003 and a continued rise in 2004. Natural gas production is expected to increase by only 1.2% in 2003. The Rocky Mountain region is expected to respond to this supply deficit by increasing natural gas production from existing fields and expanding into new areas. The expansion of the Kern River pipeline, which will take an additional 900 million cubic feet per day out of the Rocky Mountain market, has dramatically reduced the basis differential for gas. As a result, COGCC forecasts an average natural gas price in Colorado of $4.61 per thousand cubic feet for 2003-2004, the highest average since 2000-2001.

EIA reports that crude oil prices have been rising because of instability in the Middle East, low inventories, continued cold weather, and a slow recovery in Venezuelan exports. World oil prices are expected to remain near $30 per barrel through the winter of 2003-2004, declining to about $27 per barrel by late 2004.

The petroleum industry in Colorado, particularly the natural gas segment, may be poised for another boom. High natural gas prices and soaring oil and gas revenues are expected to drive a resurgence in natural gas-directed activity in 2003-2004 following the downturn in 2002. Employment should increase in response to higher prices and the added pipeline capacity for delivery of natural gas to more markets. Natural gas production is forecasted to total 875 billion cubic feet in 2003 and 950 billion cubic feet in 2004. This is expected to result in an employment level for the oil and gas subsector of 8,000 in 2003 and 8,800 in 2004. Generally, employment in this subsector is directly correlated to energy prices. The implication for the consumer is that all energy prices will be relatively high. Gasoline is likely to be in the range of $1.50 to $2.00 per gallon in 2004. This level of gasoline price may have a negative impact on tourism and agriculture in Colorado.

The petroleum industry in Colorado, particularly the natural gas segment, may be poised for another boom.

The Independent Petroleum Association of Mountain States has identified four interrelated issues that are now challenging competitiveness in Colorado and the Rocky Mountain region:

1) Financial Constraints—Drilling wells and building new pipelines requires capital (cash flow and credit).
2) Price Volatility—Uncertainty over future prices results in cautious investing. The cyclical nature of gas prices makes timing critical.
3) Infrastructure Deficiencies—To compete with other regions, new pipelines must be built in the Rockies.
4) Regulatory Uncertainty—Delays limit a company's ability to respond to supply and demand imbalances.

Coal

Colorado's coal industry set new records for production and efficiency in 2002. In that year, the state's 12 coal mines produced a record 35.2 million short tons of coal. This is the first time that the 35-million-tons mark was surpassed, and is more than double the coal produced in 1989. Most of the produced coal (97.0%) is sold as steam coal for electrical generating plants. More than half of the coal is exported to markets in Kentucky, Indiana, Tennessee, and Mississippi. Coal sales set a record high in 2002, and are only 4.0% lower through October 2003. The Colorado Geological Survey estimates that coal production for 2003 will be about 34 million short tons.

Coal industry employment has also increased in recent years. According to the Colorado Department of Labor, 1,853 coal miners were employed as of December 2002, a 3.0% increase over the previous year. These miners work and live primarily in rural parts of northwest Colorado. The coal mines provide good, stable employment to areas that may otherwise have low employment opportunities. More than 2,400 people are currently employed in the industry. According to a 2002 survey of coal producers by the Colorado Mining Association, the average miner earns more than $80,000 annually in pay and benefits. Coal miners are the highest paid industrial workers in Colorado and have the fourth highest average salary for mining states.

Twelve mines currently operate in nine Western Slope counties. The three highest coal producing counties last year were Gunnison, Routt, and Moffat. Seven underground and five surface mines supply coal via truck and rail to power plants in Colorado, Utah, and the Midwest. Oxbow Mining closed its Sanborn Creek Mine in February 2003 after opening the new adjacent Elk Creek Mine. Elk Creek will provide safer mining conditions as the coal is only 750 feet deep, much shallower than the 2,400-foot depth reached in the Sanborn Creek Mine. This mine had substantial methane gas and rock burst conditions.

Colorado ranks eighth in coal production nationally. Of the top 10 coal producing states, only Colorado and Wyoming had increases in coal production over the previous year. This remarkable output in regional coal production reflects the demand for clean western coal. Power plants in the Midwest use low-sulfur and low-mercury western U.S. coal to blend with their higher sulfur coal in order to comply with air quality requirements. Approximately 82.0% of the electric generation output in Colorado is supplied by coal, giving the citizens of Colorado the third lowest electricity rates in the nation.

According to EIA data, the average mine price for Colorado coal dropped from $24.65/ton in 1985 to $17.72/ton in 2002. Prices fell during the first quarter of 2002 and are in the $16 to $18/ton range as of October 2003. The estimated value of Colorado coal produced in 2002 was more than $600 million.

In the future, Colorado coal production will depend highly on environmental regulations. Coal production could be constrained by national regulatory and legislative action, including mandatory greenhouse gas emission standards for coal-fired power plants and regional haze regulations. The demand for Colorado coal is projected to fluctuate between 29 and 40 million short tons annually through 2014. Hill & Associates, a management consulting firm, forecasts the demand for Colorado coal could drop as low as 25 million tons by 2014 under current air quality regulations if all power plants attain compliance. The demand for Colorado coal could fall to as low as 11 million tons annually if stringent carbon dioxide emissions are adopted. Under current regulations, prices are expected to decline to the $12/ton range (2002 constant dollars) by 2014 as more power plants develop air pollution controls.

According to EIA data, the average mine price for Colorado coal dropped from $24.65/ton in 1985 to $17.72/ton in 2002.

Nonfuel Minerals

Nonfuel mineral production includes metals, industrial minerals, and construction aggregates. Nonfuel mineral production and employment is forecast to remain stable in Colorado in 2004. Colorado will continue to be an important U.S. producer of molybdenum, gold, soda ash, sodium bicarbonate, construction aggregate, gypsum, and cement. In 2002 (the most recent annual data available), the U.S. Geological Survey estimated a total value of nonfuel mineral production in Colorado of $614 million. This was a gain of 6.4% over the 2001 production value. The production value of nonfuel minerals is expected to be substantially higher in 2003 and 2004, due principally to increases in the prices of gold and molybdenum.

According to U.S. Department of Labor's Bureau of Labor Statistics, annual employment in the metal mining industry in 2002 was 1,141 workers. Nonmetallic, nonfuel mineral mining employed 2,101 people in 2002. The Colorado Geological Survey estimates 3,500 employees in the nonfuel mining subsector for 2003 and 2004.

Gold prices increased significantly in 2003 compared to the depressed prices during the previous four years. As of early October 2003, the spot gold price was around $380 per ounce, while the average gold price in 2002 was $310 per ounce. This is good news for Colorado's only operating gold mine, the Cripple Creek & Victor Mine (CC&V) in Teller County. This world-class mine employs about 300 people and produced 224,000 ounces of gold in 2002. In late 2002, CC&V completed its two-year, $168.5 million expansion and capital improvement program. With the expanded production capacity,

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Natural Resources and Mining

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the mine is expected to produce 300,000 to 400,000 ounces of gold per year in 2003 and beyond. The current reserve base is sufficient to support gold production until 2012 at the expanded production rate.

Denver-based Newmont is the world's largest gold mining company. Although it does not have any active mining operations in Colorado, the company employs several hundred people. Several smaller mining and mineral exploration companies also are headquartered in the Denver area and provide employment for geologists, mining and metallurgical engineers, and financial specialists.

The Henderson Mine in Clear Creek County continues to be North America's largest primary producer of molybdenum. The underground mine is owned by Climax Molybdenum Company, a subsidiary of Phelps Dodge Corp., and employs approximately 300 people. In 2002, the mine produced 20.5 million pounds of molybdenum metal, an increase of 9.0% over the 18.8 million pounds produced in 2001. Molybdenum prices have risen significantly in the past two years. As of October 2003, the price for molybdic oxide was more than $6.00 per pound compared to an average price of $3.75 per pound in 2002 and $2.36 per pound in 2001. The Henderson Mine hopes to increase production by 5.0% over the next year and an additional 5.0% the following year, according to a July article in the *Clear Creek Courant*.

The continued sluggish economy has resulted in a slower pace of residential and commercial construction in 2003, which, in turn, has led to a decline in demand for and production of construction aggregates (sand, gravel, and crushed stone). This trend is expected to stabilize or reverse in 2004 as the overall economy improves. In 2002 (the most recent year for production statistics), aggregate mines in Colorado produced approximately 62.5 million tons of construction material, for a total estimated value of $319 million.

COLORADO NATURAL RESOURCES AND MINING EMPLOYMENT 1994-2004 (In Thousands)

Year	Total Natural Resources and Mining Employment	Percentage Change
1994	13.7	-2.1%
1995	13.3	-2.9
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	13.1	1.6
2003[a]	13.9	6.1
2004[b]	14.7	5.8

[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. Soda ash and sodium bicarbonate continue to be produced by solution mining techniques in Rio Blanco County, northwest of Parachute. Solvay America, Inc. purchased American Soda LLP from Williams in September 2003 for an undisclosed price. 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 large portland cement manufacturing plant near Florence, Colorado. It recently upgraded the plant to a production capacity of 1.9 million tons per year. GCC Rio Grande, Inc. has been planning and permitting a major new cement plant near Pueblo during the past several years. The $200 million plant is projected to produce 1 million tons of cement per year. When operational, the plant and mine is expected to directly employ approximately 100 people.

Employment

Employment in the logging industry is expected to remain flat in 2003 and 2004. There will be between 150 and 200 jobs in this area.

Employment in the Mining Sector falls into three categories. About 32.0% of the employees work in the area of oil and gas extraction, approximately 38.0% are employed in mining, and around 30.0% are in support activities. Employment in this sector is expected to increase by 800 jobs in both 2003 and 2004.

Employment in the Natural Resources and Mining Supersector is expected to total 13,900 employees in 2003 and 14,700 employees in 2004. ✤

Construction

This NAICS sector includes: Construction of buildings, heavy and civil engineering construction, and specialty trade contractors.

The effects of the slowing Colorado economy caught up with the Construction Supersector a year ago. The decline broke a string of positive growth rates—many of which were double-digit increases—that dominated the 1990s and continued through 2001. Layoffs actually accelerated in the second half of 2003. The annual average employment for the year is expected to drop 5.2% from the prior year, to 151,900 workers. Stability in major building sectors during 2004 will be offset by increased competition for contracts, particularly in the first half of the year. A net employment decline of 3.1% from 2003 is forecast for 2004, for an annual average of 147,200 workers.

Single-Family Housing

New single-family activity has been declining in 2003 throughout Colorado, with single-family residential permits down 10.6% from 2002. The decrease has been broadly based, with the sharpest slides in the Front Range counties from metro Denver north to the Wyoming border. An exception to these downswings is the Grand Junction area, which has seen an increase in both single-family and multifamily permits. In El Paso County a 90.0% decline in multifamily permits overwhelmed stable single-family permits to give Colorado Springs the largest decline—26.0%—in total permits for any of the state's metropolitan areas.

Low mortgage interest rates, which reached 40-year record lows for several months, helped moderate the decrease in permit activity throughout 2003. This allowed continued "borrowing from the future" as declining mortgage interest rates have made home ownership affordable to first-time buyers who would otherwise be apartment renters.

In 2004 little carryover of demand is anticipated, but new single-family home sales and construction activity will begin to improve. The stability will come from a recovering economy, modest employment growth, and more people arriving from out of state. The Federal Reserve will keep interest rates stable during an election year. A modest 5.4% increase in single-family detached permits is forecast for 2004, bringing the total number of permits to 33,000 units. For perspective, this level of activity is 12.0% below the average number of single-family permits from 1998 through 2001, but 6.0% higher than the average for 1996 and 1997. The biggest effect on the value of new housing costs will be that the baby-boom generation is still buying larger units.

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EMPLOYMENT IN CONSTRUCTION, COLORADO AND UNITED STATES
1994-2004
(In Thousands)
(Base Year: 1994=100)

	Colorado			United States		
Year	Index	Number	Percentage Change	Index	Number	Percentage Change
1994	100.0	97.9	12.8%	100.0	5,095.0	6.6%
1995	105.9	103.7	5.9	103.5	5,274.0	3.5
1996	114.6	112.2	8.2	108.7	5,536.0	5.0
1997	123.1	120.5	7.4	114.1	5,813.0	5.0
1998	137.5	134.6	11.7	120.7	6,149.0	5.8
1999	151.7	148.5	10.3	128.5	6,545.0	6.4
2000	167.1	163.6	10.2	133.2	6,787.0	3.7
2001	171.3	167.7	2.5	134.0	6,826.0	0.6
2002	163.6	160.2	-4.5	132.1	6,732.0	-1.4
2003[a]	155.2	151.9	-5.2	133.5	6,802.0	1.0
2004[b]	150.4	147.2	-3.1	134.9	6,873.0	1.0

[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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Multifamily Housing

There was a surge in production of multifamily units until 2003, when the economy weakened and low interest rates made home ownership affordable to many renters. These factors combined to batter apartment and rental markets. Vacancy rates are up, rent concessions are widespread, average rents are dropping in some areas, and new product is being absorbed at the expense of old. The softest markets are along the Front Range, but even the historically tight mountain areas have not been immune.

The proportion of attached, for-sale units in total multifamily production continues to increase. Although this sector has benefited from low mortgage interest rates, the low rates have been a two-edged sword. Many first-time home buyers, who typically would be looking for an affordable attached home, have been able to qualify for a higher priced, single-family home, pulling some attached home sellers' best clients out of this market. As of fall 2003, the number of condominiums listed for sale in the Denver area totaled 7,000 units, a number that may dampen builders' enthusiasm in the short run.

After a recent construction peak of more than 18,500 new units in 2001, multifamily production was scaled back to fewer than 13,000 units in 2002. This cutback accelerated in 2003, and we expect the total for this year to fall to 6,700 units. Although the Denver metro area experienced a major correction in 2003, it still accounts for the lion's share of multifamily construction in the state. Much of the remainder of Colorado has seen multifamily production come to a virtual halt. Multifamily starts in the nonmetropolitan areas of the state (including resort counties) will not likely exceed 500 units for the year.

Another decline in multifamily starts in 2004 seems unavoidable. A recovery in the apartment market appears to be three to four years away in major Front Range markets, leaving the attached home sales market shouldering the burden for the multifamily sector in the next few years. Look for a drop to 5,000 multifamily permits in 2004, with most of these intended for sale.

Nonresidential Building

The value of construction during 2003 in the commercial, retail, and institutional building subsectors will drop 3.0% from its 2002 total. The weakness in this sector will continue into 2004, with only a small 4.0% gain. A larger increase from 2003 might be realized if nonresidential construction continues to follow new housing starts and if the four planned +$100 million prisons are started in 2004 in southern Colorado.

Medical buildings will again be the major exception to the downturn in nonresidential building. This sector has historically accounted for less than 10.0% of nonresidential building, but it has grown to a greater proportion of that total. A surge of this type of work will start in 2004 as the new Children's Hospital and the next phase of higher education development at Fitzsimons begin construction. Medical office buildings, senior living, ambulatory surgery centers, and imaging centers are expected to remain strong into the first half of 2004.

Vacancies in office building throughout the Front Range have stabilized in 2003. Construction of new space totaled only 185,000 square feet. The corporate and speculative market will likely have excess capacity until approximately 2008. The pace of construction in the industrial and retail sectors will remain slow in 2004. Even a rapid recovery in the high-tech and telecommunications industries would not absorb unused offices quickly, especially in northwest metropolitan Denver where vacancy rates declined further in 2003, to 29.5%.

Voters considered requests by school boards for $900 million in new K-12 bond issues; historically, we have seen about two-thirds of these requests pass. These moneys are not likely to be expended until 2005, but a large percentage of bond issues approved in 2002 will continue to make this subsector one of the robust spots in 2004. The remainder of government construction is mixed. The new Denver convention center hotel is on a fast schedule and will contribute to next year's volume, but state government will be forced to restrain spending. No significant capital development is expected during this forecast horizon.

Nonbuilding Construction

This segment of the construction market is driven by large projects, such as those sponsored by the Colorado Department of Transportation (CDOT), the T-REX project, water and pipeline projects, and municipal public works.

In 2003 the sector experienced a small decline as governmental budgets have remained weak and margins on jobs bid in the public arena have become impossibly slim. Contracting companies have seen the number of firms that respond to bid notices skyrocket, and the increased competition has pushed down prices. Several large firms expect to retrench or seek work outside of Colorado.

Propping up the nonbuilding work has been T-REX highway work. This is the peak year of the project, with $230 million of activity. Thanks to the sale of $100 million in bonds during 2003, CDOT will spend approximately $470 million in 2003 for highway work in addition to the southeast corridor project.

Nonbuilding work will experience an overall decrease of about 15.0% in 2004. The highway portion of T-REX will decline in 2004, to $114 million, but southeast corridor contractors will continue to build the light-rail segment at a pace of about $150 million. The 2004 CDOT highways budget (not including T-REX) will be down modestly, to $460 million, excluding design and right of way.

A sharp decline in airport work is forecast for 2004. Denver International Airport's sixth runway, which is the longest at the facility, has been completed. More airport work will focus on security measures, and spending will shift to the machinery and buildings to support new those new facilities.

Like 2003, strength will continue in utility work for pipelines, water treatment plants, and dams and other water-related projects. Contractors report 20.0 to 25.0% increases on minireservoir storage, pipelines, dam repairs, and water treatment plants. The Denver Water Board plans to accelerate the Moffat Collection System and expand the recycled water distribution system. Utility work for developers will see a similar increase in 2004 as the single-family market recovers to a small degree. ✜

BUILDING PERMITS BY TYPE
1994-2004

Year	Single Family	Multifamily	Total Housing Units
1994	29,317	7,912	37,229
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	55,007
2001	36,437	18,507	54,944
2002	34,933	12,938	47,871
2003[a]	31,230	6,690	37,920
2004[b]	32,916	5,000	37,916

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

VALUE OF CONSTRUCTION IN COLORADO BY TYPE
1994-2004
(In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding	Total Construction
1994	$3,896.0	$1,585.0	$5,481.0	$974.0	$6,455.0
1995	3,632.9	1,957.2	5,590.1	878.8	6,468.9
1996	4,599.4	2,544.2	7,143.6	833.7	7,977.3
1997	4,774.6	3,273.7	8,048.3	1,145.1	9,193.4
1998	5,486.1	2,553.5	8,039.6	1,376.9	9,416.5
1999	6,229.1	3,602.2	9,831.3	1,576.0	11,407.3
2000	7,028.6	3,244.2	10,272.8	1,712.2	11,985.0
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[a]	5,924.0	2,690.0	8,614.0	2,050.0	10,100.0
2004[b]	6,169.0	2,800.0	8,969.0	1,850.0	10,819.0

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

Manufacturing

This NAICS sector includes: 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.

The state and national economic downturn continues to be especially brutal to the manufacturing industry, with continual job losses posted since 1998. While economic performance in the manufacturing industry did improve in 2003, the industry still sustained heavy job losses. Based on the new North American Industry Classification System (NAICS) industry definition, the manufacturing industry lost a record 15,600 jobs in 2002. Job losses in 2003 are not expected to be quite as severe, but a further contraction of the industry, by 11,000 positions, is forecasted. While the picture brightens in 2004, it is expected that the industry will lose another 1,100 jobs. Indeed, manufacturing jobs now account for only about 7.0% of the state's total employment base, down from 9.5% in 1998.

Two main themes emerged in the examination of the manufacturing industry this year. First, the number of off-shore 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 changes have advanced global productivity at an astonishing rate. Between 1995 and 2002, global industrial production was up 30.0% even as manufacturing employment fell 11.0%. This means that manufacturers all over the world are able to do more with fewer employees due to these productivity increases. While there are advantages to both off-shore operations and productivity gains, they each have their downside, namely that despite improving economic conditions, manufacturing employment in the United States and Colorado is still expected to decline in 2004.

Survey Results

For the 13th year in a row, the manufacturing committee conducted a survey of Colorado manufacturing businesses to determine their outlook on the industry and discover their needs and concerns. Companies responding to the survey represented about 3,700 employees or approximately 2.5% of the manufacturing employment base. Although this is a small sample size, it does give some perspective on the manufacturing outlook for Colorado.

Company representatives were asked whether their company's performance over the past year was better than expected, worse than expected, or as expected. Companies had expected a more positive year in 2003, but that did not happen. About 38.0% of the firms surveyed stated that their performance was worse than expected, similar to last year's results of 37.0%. On the positive side, 33.0% noted that their company performed better than expected this year compared to 30.0% last year. Twenty-nine percent of the company representatives said performance was on target this year.

PERCENTAGE OF SURVEY RESPONDENTS OUTSOURCING OPERATIONS

	Outsource Domestically		Outsource Internationally	
	2003	2004	2003	2004
Manufacturing	69%	67%	17%	21%
Product Design	21	24	2	7
Product Development	10	12	5	10

Companies remain cautious as we enter 2004 as evidenced by facility expansion plans for the next three years. More than 56.0% of the respondents said they have no facility expansion plans compared to last year when 60.0% had no such plans. On the positive side, 32.0% expect to expand their facilities in Colorado; this percentage was 28.0% last year. Furthermore, only 5.0% expect to downsize, the same as last year.

Outsourcing and off-shoring of Colorado manufacturing operations are a growing concern. Indeed, planned overseas expansions were up this year, increasing from 3.0% in 2002 to nearly 10.0% this year. As the direction of future manufacturing orders remains uncertain, numerous companies are outsourcing their manufacturing, product design, and product development activities to avoid making permanent staff changes. As the table on this page shows, companies are increasing their outsourcing operations, both domestically and overseas.

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 lose their sources of tacit knowledge generation and intellectual property. Without continuous product innovation, companies can quickly lose their new product development capabilities. Within one or two product lifecycles these companies can relinquish control of their processes, technologies, and products and end up as marketing shells. Manufacturing firms should use caution in their outsourcing operations, making sure that they are not substituting short-term financial results for long-term strategic competitive advantage.

From 1993 to 2001, one of the major concerns of manufacturing companies was the availability of workers. Rising unemployment in the latter half of 2001 through 2003 has eased some of the workforce issues facing manufacturers. In 2001, only 30.0% of the responding companies thought that the availability of professional staff was excellent or good. This figure jumped to 71.0% in 2003. As for hourly workers, 54.0% of the companies felt that availability was excellent or good this year compared to 23.0% in 2001.

Related to this, the percentage of survey respondents stating that the work ethic of the labor force is excellent or good also increased. In 2001, 39.0% of the survey respondents were pleased with the work ethic of their professional staff. This figure jumped to 56.0% in 2003. In 2001, 27.0% of the survey respondents were pleased with the work ethic of their hourly staff. This figure increased to 34.0% in 2003. As layoffs across industries continue, employers are finding it easier to hire qualified workers, and it appears that employees are working harder in the hopes of keeping their position. The table on this page details the results of the labor questions this year compared to 2001.

Finally, companies were asked to identify operational factors that would positively or negatively impact their operations during 2004. On the positive side, 23.0% of the companies reported that the availability/cost of financing would help them in the coming year. Moreover, 20.0% noted that the company's proximity to research colleges and universities is expected to be a benefit to their operations in the coming year.

ATTRIBUTES OF THE COLORADO LABOR MARKET

	Professional Staff		Hourly Staff	
	2001	2003	2001	2003
Skill Level	58%	73%	34%	39%
Willingness to Learn	57	68	40	51
Productivity	50	59	33	39
Availability	30	71	23	54
Work Ethic	39	56	27	34

Note: Percentage of responding companies stating that the labor force attribute was "excellent" or "good."

On the downside, 91.0% of the survey respondents indicated that rising health insurance costs are hindering business operations. Rising energy costs are also expected to hamper business operations as noted by 81.0% of the survey respondents. Lackluster state economic conditions (57.0%) and rising labor rates (54.0%) were also noted as negative influences on business by the respondents.

Companies were also asked to identify national and global factors that may help or hinder their operations. There were two factors that stood out as potentially having a positive impact on Colorado manufacturers. First, 31.0% of the respondents indicated that outsourcing manufacturing operations would positively influence their operations. Second, 20.0% of the companies indicated that the value of the dollar internationally is having a positive impact on their operations. On the downside, numerous factors were identified as having potential negative impacts on manufacturers. The factors most frequently cited included increasing levels of foreign competition (57.0%), more stringent domestic government regulations (56.0%), and weak national economic conditions (55.0%).

The issues and challenges facing Colorado manufacturers were succinctly summarized by one of the survey respondents.

> "As long as we continue to export manufacturing jobs, it will hurt our business. Businesses also continue to be burdened with a disproportionate share of taxes (personal property an excellent example). It is difficult

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COLORADO MANUFACTURING EMPLOYMENT BY INDUSTRY GROUPS
1994-2004
(In Thousands)

Industry Group	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003[a]	2004[b]
Food	18.8	19.6	19.3	19.6	19.6	19.3	19.8	19.8	19.5	19.5	19.6
Beverage and Tobacco	6.9	6.9	6.7	6.4	6.3	5.9	5.9	6.0	5.9	6.0	6.1
Printing and Related	12.5	12.7	12.3	12.5	12.4	11.8	11.4	10.4	9.2	8.5	8.3
Other Nondurables	22.5	21.6	21.4	21.6	23.5	23.4	23.0	20.8	19.4	18.8	18.6
Subtotal, Nondurable Goods	60.7	60.8	59.7	60.1	61.8	60.4	60.1	57.0	54.0	52.8	52.6
Nonmetallic Minerals	7.6	8.1	8.7	9.1	9.7	10.3	10.8	10.4	9.8	9.3	9.2
Fabricated Metals	15.0	16.0	16.5	17.3	17.9	17.6	18.3	17.2	15.7	15.2	15.4
Computer and Electronics	40.1	41.6	43.2	45.1	48.3	47.5	48.3	47.6	40.7	35.6	34.4
Transportation Equipment	10.7	11.8	12.4	13.8	13.9	13.2	12.3	11.3	10.4	9.2	9.4
Other Durables	38.3	41.2	42.4	43.9	42.8	41.6	41.5	38.4	35.7	33.2	33.2
Subtotal, Durable Goods	111.7	118.7	123.2	129.2	132.6	130.2	131.2	124.9	112.3	102.5	101.6
Total, All Manufacturing	172.5	179.5	182.9	189.3	194.4	190.7	191.3	181.9	166.3	155.3	154.2

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

enough competing with foreign labor rates, escalating health costs (that many foreign countries do not have), unfavorable currency valuations, etc. without having our own local, state, and federal governments add to the problem."

Employment Forecast

Colorado manufacturers took another beating in 2003 after sustaining a record loss of 15,600 jobs in 2002. The industry contracted by an additional 11,000 positions in 2003, a 6.6% decline. While the picture is brighter for 2004 as national and international economies improve, employment is still expected to drop by 0.7%.

Nondurable Goods

Under the newly implemented NAICS, the largest nondurable goods subsector in Colorado is food manufacturing. The value of food product shipments throughout the United States continues to increase, with shipments increasing 4.3% from August 2002 to 2003. Total inventories are holding steady, while the ratio of inventories to shipments has declined since the beginning of the year, indicating some industry strength. Employment in the food products industry nationally shows a positive trend, with stronger growth since the beginning of 2003. In Colorado, employment in this subsector is expected to remain at 19,500 positions in 2003, the same level as 2002. The industry is forecasted to expand by 100 positions in 2004.

The beverage manufacturing subsector in Colorado has remained relatively stable since 1999. Total employment in 2002 stood at 5,900 positions, and is expected to increase by 100 positions in both 2003 and 2004. Colorado is a leading producer of beer and micro-brews, and also has significant wine, water, and soda production operations.

The printing and related support activities subsector includes newspaper production, commercial printing, periodicals, books, greeting cards, and other miscellaneous publishing. Computerization and the economic downturn have contributed to continual declines in the subsector since 1998, both nationally and in Colorado. Computer hardware and software has increased the ability of all companies to produce and distribute reports and publications electronically rather than in printed format. Furthermore, the economic downturn decreased demand for printed media by businesses. The total value of shipments in the United States in the printing subsector is down 5.6% from August 2002 to August 2003. This decline began in 2000 when shipments throughout the United States peaked at a little over $9 billion. Colorado employment in the printing and related support activities subsector continues to decline, with a loss of 700 positions expected in 2003 followed by an additional loss of 200 jobs in 2004.

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 subsectors employ about 3,200 people, but continue 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 people work in the petroleum and coal products subsector, mainly within petroleum refining operations. Flat to slightly declining employment is expected within all of these subsectors in 2003 and 2004.

MANUFACTURING EMPLOYMENT, COLORADO AND UNITED STATES
1994-2004
(In Thousands)
(Base Year: 1994=100)

	Colorado			United States		
Year	Index	Number	Percentage Change	Index	Number	Percentage Change
1994	100.0	172.5	3.6%	100.0	17,021	1.5%
1995	104.1	179.5	4.1	101.3	17,241	1.3
1996	106.0	182.9	1.9	101.3	17,237	0.0
1997	109.7	189.3	3.5	102.3	17,419	1.1
1998	112.7	194.4	2.7	103.2	17,560	0.8
1999	110.6	190.7	-1.9	101.8	17,322	-1.4
2000	110.9	191.3	0.3	101.4	17,263	-0.3
2001	105.4	181.9	-4.9	96.6	16,441	-4.8
2002	96.4	166.3	-8.6	89.9	15,306	-6.9
2003[a]	90.0	155.3	-6.6	86.4	14,701	-4.0
2004[b]	89.4	154.2	-0.7	86.4	14,701	0.0

[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.

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, though employment is expected to grow by only 100 jobs in both 2003 and 2004. Chemical manufacturing employs approximately 7,100 Colorado workers.

The plastics and rubber products subsector includes companies producing plastic film, plastic foam products, and other miscellaneous products. Rubber firms have a limited presence in Colorado,

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while the plastics industry continues to grow. This subsector includes injection-molding companies, which are closely tied to the biotech and electronics industries. The recent slowdown in those industries means that employment in the rubber and plastics subsector will decline by 200 workers in both 2003 and 2004, down from the 2002 employment base of 5,400 workers.

The other nondurable goods subsectors are expected to decline by 600 positions in 2003 and 200 positions in 2004. This brings the total Nondurable Goods Sector employment forecast to 52,800 positions in 2003, down from 54,000 jobs in 2002. Employment will continue to fall slightly in 2004, declining by 200 positions. Nondurable goods employment continues to represent about one-third of Colorado's total manufacturing employment base.

MANUFACTURING EMPLOYMENT
DURABLE AND NONDURABLE
1994-2004
(In Thousands)
(Base Year: 1994=100)

	Durable		Nondurable	
Year	Employment	Index	Employment	Index
1994	111.7	100.0	60.7	100.0
1995	118.7	106.3	60.8	100.2
1996	123.2	110.3	59.7	98.4
1997	129.2	115.7	60.1	99.0
1998	132.6	118.7	61.8	101.8
1999	130.2	116.6	60.4	99.5
2000	131.2	117.5	60.1	99.0
2001	124.9	111.8	57.0	93.9
2002	112.3	100.5	54.0	89.0
2003[a]	102.5	91.8	52.8	87.0
2004[b]	101.6	91.0	52.6	86.7

[a]Estimated.
[b]Forecast.
Note: Slight differences may occur due to rounding.
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 all types of construction activity. This group includes everything from pottery, plumbing fixtures, and glass products to brick and tile and concrete and stone products. This subsector lost an estimated 500 jobs in 2003, to end the year with average employment of 9,300. The T-REX transportation expansion project is ongoing, as are other infrastructure projects, but both residential and nonresidential construction are projected to drop in 2004, though at a slower rate. Because of the diversity of products in this group, and improvement in both the Colorado and national economies, employment in this subsector should level off. Still, another small drop of 100 jobs is expected in 2004.

The fabricated metals subsector provides materials for numerous 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 has endured three years of job losses, dropping another 500 jobs in 2003, to end the year with average employment of 15,200. Business investment is finally starting to show signs of life, and this should translate into higher demand for fabricated metal products. However, excess capacity and the high productivity of existing workers will temper demand for new hires. Still, the slow state and national recovery will help this subsector recoup 200 jobs in 2004.

The largest durables goods subsector in Colorado is computers and electronics products. The years 2002 and 2003 have not been good for information technology and other electronics products. 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% and has stayed at a maintenance level during 2002 and 2003. 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 millions of U.S. manufacturing jobs to Asian countries.

Colorado electronics manufacturing has been hit particularly hard by these events. The outsourcing trend shut down several state-of-the-art printed circuit board assembly plants and final assembly plants. The lack of demand for telecommunications and Internet equipment has devastated the local optical networking equipment and photonics equipment subsectors. Many companies put off purchases of capital equipment for the manufacturing floor, as well as software and computer systems for the front office, during the recession. However, older equipment and IT systems will need to be replaced in the near future, and this should bring about new orders in those subsectors. While these new orders will eventually lead to the need for more workers, employment conditions will remain bleak in the short-term as companies make use of excess capacity and productive, existing employees. Colorado employment in this subsector will be down by about 5,100 jobs in 2003, and decline by another 1,200 positions in 2004.

Lockheed Martin dominates the transportation equipment subsector. Increased defense and security spending in 2003 has provided Lockheed Martin and Ball Aerospace with several new defense and security-related contracts. However, other contracts have been completed and some manufacturing activities have been transferred out of Colorado. On balance, transportation equipment subsector employment is expected to decrease by about 1,200 jobs in 2003 but will rebound with the addition of 200 jobs in 2004.

The other Durable Goods Sectors include wood products, primary metals, machinery, electrical equipment and appliances, furniture, and miscellaneous manufacturing. Employment in this diverse group of subsectors is expected to stay flat during 2003 and 2004. However, slight improvements in many of these subsectors over the last several months bode well for late 2004 into 2005.

Employment in the wood products and furniture subsectors fell by about 900 positions between 2002 and 2003 due to overall recessionary conditions. With decreased home construction but improving consumer demand, the net impact is expected to be a loss of just 100 positions in 2004.

Roughly 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 subsector provides materials for many other subsectors, especially fabricated metals. Due to the overall sluggishness of the manufacturing industry, the primary metals subsector is also expected to remain flat in 2003 and 2004.

Demand is strengthening for a wide variety of goods, with companies starting to see increases in orders for machinery, and electrical equipment and appliances. Still, with excess capacity in most industries, business investment has not picked up as expected. Employment within these two subsectors fell from 11,900 workers in 2002 to 10,700 in 2003. With new orders coming in, employment should stabilize at about 10,600 workers in 2004.

While the shift to NAICS improved the definition of most manufacturing sectors, the miscellaneous manufacturing subsector became even broader. Indeed, about 4,500 Colorado workers had been classified in miscellaneous manufacturing under the old Standard Industrial Classification system compared to about 10,000 workers now. Moreover, subsectors now classified as "miscellaneous" include several that are very important to Colorado's industrial base, such as medical and dental equipment and supplies, surgical instruments and appliances, and sporting goods production. Employment in the miscellaneous categories fell by 400 positions in 2003 but is expected to gain 100 jobs in 2004, growing to 9,900 workers.

The lack of demand for telecommunications and Internet equipment has devastated the local optical networking equipment and photonics equipment subsectors.

In total, durable goods manufacturing in Colorado lost 9,800 jobs in 2003. While conditions will improve in 2004 as companies start to receive new orders, new employment will lag. It is expected that the net job loss in 2004 will be about 900 positions, bringing total durable goods employment to 101,600 positions.

Summary

The 6,000 manufacturing establishments in Colorado are expected to employ about 155,300 workers in 2003, representing about 7.0% of the state's total employment base. This is a loss of about 11,000 positions in 2003 as slow recovery nationally and internationally has not been enough to foster employment growth. Most subsectors should experience increasing orders in 2004, leading to firmer employment conditions. Still, excess domestic capacity, continued off-shoring activities, and highly productive existing employees mean that another 1,100 jobs will be lost in 2004. An estimated 154,200 workers will be employed in the manufacturing industry in Colorado in 2004. ✜

Trade, Transportation, and Utilities

This NAICS sector includes: 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.

The Trade, Transportation, and Utilities Supersector is the largest provider of jobs in Colorado. Despite higher sales, trade, transportation, and utilities firms continued to cut jobs in 2003. The number of jobs dropped by 0.8%, to 409,000. Job growth should return in 2004, with even stronger sales pushing employment up by 2.0%, to nearly 415,000.

WHOLESALE TRADE EMPLOYMENT
1994-2004
(In Thousands)

Year	Wholesale Trade Durable Goods	Wholesale Trade Nondurable Goods	Other Wholesale	Total[a]	Percentage Change
1994	46.1	28.2	6.2	80.5	4.4%
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	56.3	33.6	5.5	95.4	-4.4
2003[b]	54.3	33.2	6.0	93.5	-2.0
2004[c]	55.3	33.7	6.1	95.1	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.

Wholesale

Most of the businesses in Colorado's wholesale subsector are merchant wholesalers (i.e., firms that sell to retail outlets) that account for more than 90.0% of the sector's jobs. Also included in this sector are business-to-business electronic markets and agents and brokers. The sector currently employs about 100,000 workers, two-thirds of which specialize in durable goods. Tech goods play a major role among durables wholesalers, with computers and peripherals and electronics the two largest employers. Sellers of groceries and related products are the largest employer in the nondurables area.

With weakness in manufacturing, and the tech subsector in particular, durable wholesalers have lost more than 6,000 jobs in the last two years. A rebound depends on recovery in these areas. With conditions in the state's durable manufacturing subsector expected to improve, durable wholesalers should add 1,000 jobs next year following losses in both 2002 and 2003. Nondurable wholesale activity is tied more closely to the retail subsector and the overall performance of the Colorado economy. A stronger performance is anticipated here as well.

Retail

The state retail subsector employs nearly 250,000 workers. It encompasses stores that sell directly to consumers, including auto dealers, building material supply stores, food and beverage stores, and general merchandise stores. (With the change from the SIC classification to the NAICS, the retail sector no longer includes eating and drinking places, which accounts for more than 160,000 jobs.) Retail employers added an average of 7,000 new jobs annually through the 1990s. With a slowing economy, however, the sector has lost 4,000 jobs since 2001.

Sales growth in the state over the past three years has fallen well short of that in the 1990s and has even lagged U.S. growth during the recession and tepid recovery. Colorado retail sales through the first eight months of 2003 are marginally ahead of last year, with a gain of 0.3%. (Retail sales excludes sales by eating and drinking places.) This represents an improvement over 2002 when sales were flat. In 2001 the increase was less than the rate of inflation, so Colorado will likely experience three consecutive years of real sales decline. State sales growth for the 2001-03 period will probably average less than 1.0% per year compared with nearly 8.0% between 1995 and 2000. Colorado sales growth has slowed more than that of the nation over the past three years. The deterioration in state sales is more than can be explained by slower state economic growth during this period, suggesting that the negative impacts of wealth and consumer confidence have been greater in Colorado. However, it may also mean that state consumers have more pent-up demand for consumer durables, vehicles, and other big-ticket items. If so, spending may surge when the recovery gets underway.

The forecast calls for 1.0% sales gain in 2003, and anticipates reasonably healthy sales in the holiday season. The last two Decembers were noticeably lacking in cheer for retailers, who depend on holiday sales for almost one-quarter of their annual volume. But 2003 promises to be the best holiday selling season since 2000. The National Retail Federation estimates a 5.7% increase in U.S. holiday sales, a marked improvement over last year's 2.2% gain. Merchants will benefit from one

RETAIL TRADE EMPLOYMENT
1994-2004
(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
1994	25.8	15.0	40.1	30.1	84.5	195.5	7.2%
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	32.9	22.6	42.7	44.1	100.6	242.9	-1.1
2003[b]	32.6	21.5	42.3	45.0	100.4	241.8	-0.5
2004[c]	32.9	21.7	42.6	45.9	101.8	244.9	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.

additional selling day in the Thanksgiving to Christmas shopping window. However, analysts warn that these rosy expectations may not be met. Sluggish labor markets, rising consumer debt, and an increase in bargain hunting may cause the Grinch to make another appearance this year.

The outlook for 2004 will be determined to a great extent by the overall performance of the Colorado economy. An improvement depends on better performance in several areas. The state must see an end to the job losses that have put a damper on consumer confidence since early 2001. The loss of many high-wage jobs in the technology and telecommunications industries cut income gains. Average wage and salaries

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RETAIL SALES
1995-2004
(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	9.9	11.8	6.9
2000	52.2	10.2	13.0	7.6
2001	52.9	1.4	13.9	7.9
2002	52.9	0.0	13.5	8.2
2003[b]	53.4	1.0	13.9	8.6
2004[c]	55.3	3.5	14.3	9.1

[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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paid per employee showed no growth in 2002 and have fallen short of overall inflation every year since 2001.

The housing market is also critical to the retail subsector. Home sales frequently lead to the purchase of furniture, appliances, and home repair materials by the new owner. But more significant is the wealth effect of home values. Most research suggests that the fluctuations in home values have a larger impact on consumer spending than changes in other household assets such as stocks, mutual funds, or retirement funds. The impact of home prices is reinforced by low interest rates, which the nation is now enjoying. These rates make it easier for homeowners to tap their home equity for cash. Strong housing markets have been a major factor in preventing any decline in U.S. consumer spending during the recent recession and weak recovery. Colorado housing prices have slowed over the past two years but are still posting gains. The feared collapse in the housing bubble has been avoided. Improved sales in 2004 will require that housing markets, at worst, stabilize.

Other clouds on the horizon include consumer debt, which is at record levels nationally and probably in Colorado as well. This limits any recovery in spending. But household net worth is higher than it was in the mid-90s, thanks to surging home values. Many households locked in low interest rates, which make their debt service payments more manageable. High energy prices will cut into discretionary income, and sluggish job growth will dampen enthusiasm for major purchases.

The forecast calls for stronger sales growth in 2004, with a gain of 3.5%, which is somewhat above the expected rate of inflation. Auto sales should strengthen in the state. Weak sales over the past two years suggest that Coloradans have not taken advantage of incentives as much as people

TRANSPORTATION AND WAREHOUSING EMPLOYMENT
1994-2004
(In Thousands)

Year	Truck Transportation	Couriers and Messengers	Warehousing and Storage	Air Transportation	Other Transportation	Total[a]	Percentage Change
1994	16.2	7.9	6.0	14.0	12.9	57.0	4.4%
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	9.6	8.6	14.3	16.8	66.2	-4.7
2003[b]	17.1	9.4	8.4	13.8	17.0	65.7	-0.8
2004[c]	17.3	9.6	8.4	14.1	17.2	66.6	1.4

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

[b] Estimated.

[c] Forecast.

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

elsewhere in the nation. This should mean more purchases of new cars when the economy begins to improve. General merchandise stores will benefit from healthy holiday sales and faster job and income growth. While sales gains in 2004 will be higher than any of the previous three years, they will still fall well short of those in the 1990s.

Retail firms are forecast to add some 3,000 jobs next year after losing 1,000 in 2003. By late 2004 the number of jobs in the subsector will be back to the peak level reached in early 2001. Job gains will, for the most part, be caused by increased sales volume. No new large retail centers are scheduled to open before late 2004, and store closings, including three Lord & Taylor metro outlets, will mean some job losses.

Retail Real Estate Developments

Despite prevalent views that Colorado's Front Range has too much retail space, new outlets continue to surface. The still rapid pace of new housing development has stimulated retail outlets, which tend to "follow the rooftops." New urban infill shopping centers have also been developed, such as Belmar (the old Villa Italia) and Stapleton Plaza. Developers of Belmar report 70.0% of the first phase of development is leased. The 1.5-million-square-foot Southlands regional center is scheduled to open in late 2004.

No other large new shopping areas are foreseen in the immediate future, although discussions continue for a large development at I-25 and 160th. Store closings have occurred in the most competitive segments of the market. Department stores continue to be squeezed between the high-end boutiques and discount stores. The growing role of Wal-Mart in the already competitive grocery market contributed to Cub Foods' decision to withdraw from the Front Range. In both cases, other retailers either committed to taking over the abandoned space or are in the process of doing so.

Transportation and Warehousing

The Transportation and Warehousing Sector includes air, railroad, and water transportation; trucking; taxi service; urban transit; couriers; warehousing; and pipelines companies. These industries are expected to contribute 65,700 jobs in 2003 and 66,600 in 2004. Employment in the sector fell by 0.8% in 2003, due in part to the weakness in air transportation, couriers, and warehousing. Conditions in these subsectors should improve in 2004, resulting in a 1.4% gain in transportation and warehousing employment.

Regional Air Transportation

According to a recent study by the Colorado Department of Transportation (CDOT)–Aeronautics Division that updates the economic impact of aviation in Colorado, the state experienced moderate to substantial increases in most aviation areas studied.

In 1996 the Colorado aviation industry totaled 246,000 jobs, and increased to 280,156 in 2002, a gain of 34,156 positions, or 13.9%. The annual growth rate for the 1996 to 2002 period was 2.31%, or 5,692 jobs per year. The study reports that Colorado aviation wages were approximately $9.8 billion in 2002.

In the same study, the economic impact of Colorado aviation was reported to total approximately $23.5 billion in 2002, which represents an increase of $9.2 billion, or 39.1%, compared to the economic impact in 1996. The annual growth rate for the period was 6.5% per year, or a gain of $14.0 billion.

Concerns expressed by airport operators, airlines, general aviation aircraft operators, and businesses include:

1) Airport inefficiencies due to security measures;
2) Increased competition at hub airports and deteriorating service to smaller metropolitan and rural areas;
3) Uncertainty of the price of aviation petroleum products; and
4) Uncertainty of the price of labor.

Commercial Air Transportation

Denver International Airport (DIA), which accounts for nearly 90.0% of the state's aviation economic activity, posted modest activity increases in 2003. Passenger traffic increased to pre-9/11 levels, although cargo freight and air mail remained at lower levels. On a national level, DIA activity has outperformed the commercial aviation system by posting an increase of 2.9% in 2003, while the system has seen a decrease in activity of nearly 3.2%. Activity at DIA is expected to continue its growth pattern in 2004, due to a terminal expan-

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sion project, anticipated international service connections, and an expansion of Frontier Airline's route structure.

The Colorado Springs Airport (COS) has been experiencing negative growth since 1997, even to a greater magnitude than the commercial aviation system. The COS, which accounts for around 10.0% of the state's commercial aviation activity, is expected to suffer another decline in 2003 of approximately 4.9%, and the trend is expected to extend into 2004.

Rail Transportation

Colorado's rail freight industry is dominated by Burlington Northern-Santa Fe and Union Pacific railroads, which own and operate 91.0% of the rail track in the state. Nationwide, carload rail traffic has been flat in 2003, with intermodal traffic up nearly 7.0%. The value of Colorado rail shipments is currently estimated at around $10 billion.

RTD is moving ahead with a proposal to fund FastTracks. Under the plan, Denver's historic Union Station would become a transportation hub with commercial buildings and rail and regional bus stations located underground. The project would also vastly expand rail services, with new lines to Arvada, Boulder, DIA, Highlands Ranch, Lakewood, and Longmont.

At the same time, the CDOT is studying a plan to move most of the freight trains out of downtown Denver and onto the Eastern Plains. If implemented, two-thirds of the freight trains would be relocated far outside the congested city center. A similar plan is being examined for downtown Colorado Springs.

Motor Freight Transportation and Warehousing

The outlook for the trucking industry is improving as freight shipments and tonnage have grown on a national and regional basis. Demand in some cases has begun to outstrip capacity, which has allowed carriers to obtain slight increases in shipping rates, improving the bottom line for many trucking companies.

Key factors that will determine how trucking will fare in the next year include how well state and regional shippers recover, fuel costs, and insurance rates. In the past year diesel fuel prices have fluctuated but have been generally high. Carriers continue to experience significant problems in passing these costs along to shippers in a timely manner. Any major spike in fuel rates will substantially affect the profitability of the trucking industry in the state.

Insurance costs, particularly relating to property and casualty, also represent a wild card regarding the recovery of trucking companies within the state. In the past two years, following 9/11, trucking companies have experienced considerable increases in premiums, averaging more than 70.0%. Initial indications from the insurance industry reflect stabilization in the marketplace, with only modest increases anticipated.

CDOT is studying a plan to move most of the freight trains out of downtown Denver and onto the Eastern Plains.

Mergers and acquisitions will also determine how the trucking subsector fares in Colorado in 2004. The impact of the acquisition of Roadway, one of the largest less-than-truck load (LTL) carriers in the country, by another huge LTL carrier, Yellow Corporation, is yet to be determined. Like other acquisitions, some contraction in jobs should be anticipated in management and in other areas. In addition, the consolidation of these two major carriers, along with the failure of one of the other national LTL carriers, Consolidated Freightways, may translate into higher rates for shippers. Additional acquisitions and mergers should be anticipated as continued consolidation occurs in the trucking industry.

Colorado has a disproportionate flow of freight into the state versus out of the state. To a large extent, this may be attributed to the lack of major manufacturing centers within the state, 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. Colorado ranks as the fourth highest state in the country in transportation taxes and fees, placing Colorado-based companies at a substantial cost disadvantage to trucking operators in surrounding states. Because of this situation, many trucking companies and distribution centers with substantial transportation operations have selected other states in lieu of Colorado.

The sale of heavy-duty truck tractors has suffered in the past two years because of concerns relating to the 2002 engines required by the Environmental Protection Agency. Because of questions regarding the reliability and reduced fuel economy associated with the new engines, firms are avoiding purchasing new trucks in the past year in lieu of late model used trucks or are deferring purchases of trucks. This situation, which negatively impacts new truck sales in the state, is somewhat offset by increased business in the parts and maintenance area.

For 2004 we anticipate that new truck sales will rebound as confidence grows in the new engines. Furthermore, an improving economy should also lead to better truck sales as trucking companies realize growth and acquire both tractors and trailers to accommodate that growth.

Overview of Trucking Industry in Colorado

- The trucking industry and associated activity were estimated to provide 127,791, or 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 industry salary of $31,526.
- A total of 75.0% 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.

Utilities

Electric, gas, and water utilities faced many challenges in 2003. Natural gas prices moved higher, pushing up the cost of heating homes and producing electricity. At the same time, water utilities urged conservation as they struggled to rebound from severe drought conditions in 2002.

Volatility and price spikes have taken the luster off of natural gas as the fuel of choice. In 2003, wholesale natural gas prices moved up in Colorado and throughout the nation. Average prices have increased by more than 60.0% over the past year, from around $3.40 to $5.50 per MMBTU at the national trading hubs. Prices jumped up by a similar amount in Colorado, but from a much lower base. Colorado wholesale prices have averaged $4.10 this year, up 116.0% from $1.90 in 2002.

Nationally and in Colorado, gas utilities were forced to pass these cost increases along to retail customers. The fact that Colorado retail natural gas prices remain significantly below the national average prices has been little comfort to consumers.

Colorado natural gas consumption has fallen by 3.5% this year based on warmer than average weather compared to 2002. New natural gas-based generation and average weather are expected to push up natural gas demand in 2004 by 4.8%, to 392 billion cubic feet.

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TRADE, TRANSPORTATION, AND UTILITIES EMPLOYMENT
1994-2004
(In Thousands)

Year	Wholesale Trade	Retail Trade	Total Trade	Transportation and Warehousing	Utilities	Total TTU[a]	Percentage Change
1994	80.5	195.5	276.0	57.0	10.4	343.4	5.8%
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	95.4	242.9	338.3	66.2	8.2	412.6	-2.4
2003[b]	93.5	241.8	335.3	65.7	8.2	409.3	-0.8
2004[c]	95.1	244.9	340.0	66.6	8.3	414.9	1.4

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

Trade, Transportation, and Utilities

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Retail electricity prices moved up in 2003 as utilities passed on the higher cost of using natural gas-fired generation to customers. More natural gas-based generation will be coming on line in 2004, raising the prospects of higher fuel-related electricity prices.

Electricity consumption continues to swell with household growth and new technologies. Electricity consumption in Colorado grew from 45,443 million Kwh in 2002 to an estimated 45,772 million Kwh in 2003. Consumption growth should accelerate next year with an improving economy.

Electric and gas utilities continue to look for efficiencies and new business opportunities. Utilities are reducing staff and reorganizing their businesses at lower costs. They are moving away from the "one-size-fits-all" utility approach to one that's more focused on customers' needs.

Many natural gas and electric utilities have suffered significant losses in their nontraditional deregulated businesses. There has been a widespread pullback from electricity deregulation. As a result, utilities are focusing on basics and looking for ways to improve or exit nontraditional businesses. Currently, there are no active efforts to bring retail electricity competition to Colorado. In 2003, increased efficiency held utility jobs flat in Colorado. Gains of approximately 100 jobs are expected in 2004. ✤

COLORADO NATURAL GAS CONSUMPTION 1998-2004 (In Billions of Cubic Feet)

Year	Total	Percentage Change
1998	330.3	na
1999	333.1	0.8%
2000	367.9	10.4
2001	379.5	3.2
2002	387.4	2.1
2003[a]	374.0	-3.5
2004[b]	392.0	4.8

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

COLORADO ELECTRIC POWER CONSUMPTION 1994-2004 (In Millions of Kilowatt Hours)

Year	Non-residential	Residential	Total	Percentage Change
1994	22,728	10,911	33,639	2.1%
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	30,125	15,318	45,443	2.7
2003[a]	30,270	15,502	45,772	0.7
2004[b]	30,706	15,756	46,462	1.5

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

Information

This NAICS sector includes: 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.

Overview

This sector comprises establishments engaged in the following processes: (1) producing and distributing information and cultural products, (2) providing the means to distribute these products or data, and (3) processing data. The unique characteristics of information and cultural products and their production and distribution distinguish the Information Supersector from the goods-producing and service-producing sectors. Some of these characteristics are:

1) Unlike traditional goods, an "information or cultural product," such as an on-line newspaper or television program, does not necessarily possess tangible qualities, nor is it associated with a particular form.

2) Unlike traditional services, the delivery of these products does not require direct contact between the customer and the supplier.

3) The value to the customer lies in the informational content, not in the format in which they are distributed. Most products are protected by copyright laws.

4) The intangible property aspect of these products makes the processes involved in their production and distribution quite different from goods and services.

5) Distributors can easily add value to the products they distribute (*NAICS Manual* 2002).

It is projected that the information technology industry worldwide will grow 34.0% between 2001 and 2006. This growth rate could be closer to 49.0% if global software piracy were to be reduced by 10.0%. The United Kingdom, where software piracy rates are the lowest in Europe (25.0% in 2001), has a very high growth rate in the information technology software industry and services. Almost 200,000 new jobs were added between 1995 and 2001. Spain has significantly reduced software piracy since 1996; the growth rate in its information technology software industry between 2001 and 2006 is projected to be three times faster than between 1995 and 2001 (*European Report* 2003).

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2002 INFORMATION EMPLOYMENT, WAGES, AND ESTABLISHMENTS

Category	2002 Employment (In Thousands)	Percentage of Total	2002 Establishments	Percentage of Total	Average Weekly Wages
Telecommunications	39.6	42.4%	1,010	26.0%	$1,305.0
Publishing Industries, except Internet	31.1	33.3	1,430	36.9	1,169.0
ISPs, Search Portals, and Data Processing	8.9	9.5	638	16.4	1,213.0
Broadcasting, except Internet	8.1	8.7	219	5.6	1,339.0
Motion Picture and Sound Recording	4.5	4.8	467	12.0	516.0
Internet Publishing and Broadcasting	1.0	1.1	84	2.2	1,296.0
Other Information Services	0.2	0.2	33	0.9	1,045.0
Total Information	93.4	100.0%	3,879	100.0%	1,215.0
Total All Industries	2,154.0		156,691		$731.0

[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.

Information

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Employment

From 1993 to 2002, the Information Supersector grew at a compound annual growth rate (CAGR) of 6.46%. A review of the Colorado Department of Labor and Employment ES202 data for 2002 provides some additional insights. As expected, employment in the Information Supersector in Colorado is focused largely in the Telecommunications and Publishing Industries (except Internet) Sectors. The two sectors comprise 42.4% and 33.3%, respectively, of total information employment in Colorado. Perhaps more significantly, the average weekly wage is $1,215, more than 66.0% higher than the state average weekly wage.

Publishing

The Publishing Sector accounts for 33.3% of overall Information Supersector employment. Within this sector, the largest employer is software publishers, with nearly 49.0% of the total publishing industry employment in Colorado and slightly over 50.0% of the establishments. The second largest publishing group, newspaper publishers, employs nearly 23.0% of the workers and makes up nearly 13.0% of the publishing establishments in the state.

This area has seen employment growth rates higher than that of the state during the 1993 to 2002 period. During that time, the CAGR was 7.1%. However, this area, like most in the state, has suffered during the past two years. The publishing subsector lost 3,600 jobs in 2002, approximately 10.0% of its employment base. Employment has continued to decline in 2003, although at a much slower pace as an additional 400 jobs have been eliminated. The future appears brighter as 400 new jobs are forecast in 2004.

Newspaper, Periodical, Book, and Directory Publishers

This subsector had an extremely high annual growth rate of 15.1% during the 1993 to 2002 period, but has endured significant cutbacks since that time. In 2002, 1,500 jobs were lost and that trend has continued, albeit at a much slower pace. In 2003 an additional 200 jobs disappeared. By all appearances, this trend has already reversed itself. Newspaper and periodicals appear to be adding marketing and sales staff now that advertising budgets have once again started to rise. Nonetheless, the growth in this area will be modest as automation and cost conscience behavior will limit hiring in other administrative positions and in the news gathering area.

Software Publishing

Software is an enabling technology that has applications in every market in the economy. The software market consists of three major segments:

- Software package developers (also called ISVs—independent software vendors),
- Software integrators and consultants, and
- Software custom developers.

The Information Supersector only includes the published software component of software. Software integrators and consultants and custom software developers are included in Professional and Business Services Supersector.

Without an elaborate discussion of the custom software area, suffice it to say some areas are expected to grow. One such example is the security software market, which was forecast to grow 18.0% in 2002, according to a report published by Dataquest, a unit of Gartner Inc. Sales of security software worldwide will reach $4.3 billion in 2002, up from $3.6 billion the previous year. Companies want better defensive security technologies, such as antivirus software, intrusions detection systems, and firewalls (*Newsbytes News Network* 2002). Continued growth in 2003 and 2004 is indicated in this area. To the degree that this type of software becomes a published product, the information area will benefit.

While overall spending for software has slowed in the current slack economy, AMR Research, a market research firm, projects that supply chain software packages (execution and fulfillment applications) will record $6.4 billion in sales in 2003. Furthermore, sales are projected to grow 26.0% annually, to $13.6 billion, by 2006. End-user companies are changing from planning to execution applications, such as warehouse management and transportation management systems. Planning

The Information Supersector in Colorado is focused largely in the Telecommunications and Publishing Industries (except Internet) Sectors. The two sectors comprise 42.4% and 33.3%, respectively, of total information employment in Colorado.

applications, which generally forecast demand, will grow by only 9.0% annually to 2006 (*Modern Materials Handling* 2002).

Colorado's Competitive Position

Colorado is ranked fifth in the United States for software services employment, and the Boulder-Longmont "diagonal" has been ranked as the leading area in the country for software employment for the past four years, according to a national trade organization, the Software and Information Industry. In this national ranking, Denver was 13th and Colorado Springs was 24th (*Boulder County Business Report* 2003).

Software industry leaders agree that the Colorado industry has many competitive strengths, including an educated labor force, access to good universities and colleges, people with innovative ideas, an entrepreneurial culture, a lower cost of living and cost of doing business, and many software companies with diverse products and services. In addition, the industry is supported by the Colorado Software & Internet Association, a nine-year-old trade organization offering public policy, advocacy, programming, affinity, and leadership for software companies (Software Industry Focus Group/ Survey, August 2003).

The software publishing area had excellent growth during the 1993 to 2002 period, with a CAGR of 15.1%. This reflected the increasing importance of the information or knowledge-based economy, but also marked the boom of the Internet and other tech-related overinvestment. That growth was followed by a loss of 2,100 jobs in 2002 and an additional 200 this year. In 2004, a more positive technology-based economy will drive growth of 200 jobs.

Motion Picture and Television Industry

In June 2003, the Business Research Division of the Leeds School of Business at the University of Colorado at Boulder completed a comprehensive study, *The Impact of the Film Industry on Colorado.* The research revealed the following for 2001:

- Film and Video Production, Freelance Crew, and Suppliers
  - –$205.5 million in wages
  - –3,933 jobs
- Television Stations and Cable Companies
  - –$1.2 billion in wages
  - –15,622 jobs
- Film Commissions and Production Statewide
  - –Approximately 70 communities throughout the state support a local film commission contact.
  - –Between 1997 and 2000, concentrations of production-related companies became evident in the following areas outside the Denver metro area: El Paso County, Eagle County, and Summit County.
- Film Festivals
  - –Approximately 87,000 people attended Colorado film festivals.
  - –Approximately 60 full-time equivalent employees and 1,800 volunteers worked at these festivals.
  - –Total film festival spending in Colorado was $12.6 million.
- Colleges and Universities
  - –Approximately 2,000 students were enrolled in film programs with a production emphasis.

The study further reported that:

- This industry pays higher than average wages compared to the state as a whole.
- This industry grew faster in the past 10 years than the Colorado economy
- The basic infrastructure is stronger than anticipated.

The researchers found that the entertainment industry presents several distinct advantages to the state.

- It is a tool for economic development throughout Colorado. Filming took place in at least 40 of the state's 64 counties in 2002.
- It attracts new dollars to the state's economy. In 2001, 75.0% of receipts for production companies came from out of state.
- It is not necessarily tied to normal economic patterns. When the economy falters or is flat, this segment continues to grow.
- It encourages tourism. It is a clean industry that increases exposure of the state.
- It culturally enriches the state.

A growing independent film community within Colorado has resulted from the increasing number of film students in-state, as well as from changing technology that makes it easier and less expensive to produce a movie. Currently, the Colorado Film and Video Association has more than 560 members. Several venues regularly exhibit Colorado-produced projects, including the unique nonprofit Starz FilmCenter in Denver and a number of micro-cinemas.

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On a global scale, industrywide changes and the downturn in the world economy continue to negatively affect the employment of freelance production crews in Colorado and throughout the United States. 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 production" cost the U.S. $10.3 billion in 1998, and the figure has increased in the past five years. 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, and Oregon passing recent incentive legislation. Such incentives are not available in Colorado, and the expense of shooting here continues to be a hurdle in attracting location filming. The bipartisan United States Independent Film and Television Production Incentive Act of 2003 that proposed wage credits was introduced in Congress this year, with 20 cosponsors in the U.S. Senate (S.1613), and 67 in the House of Representatives (H.R.715).

In October 2003, the Association of Film Commissioners International held their annual educational conference, Cineposium, in San Diego. More than 200 film commissioners attended, representing 30 countries. For the first time since the initial Cineposium was held in Denver in 1976, foreign attendees outnumbered U.S. film commissioners. Due to severe deficits, several U.S. state and city film offices experienced extreme budget and staff cuts in the past year. In March 2003, a dedicated budget was eliminated for the Colorado Film Commission, originally established in 1969.

Despite these factors, the potential for growth is evident. PriceWaterhouseCoopers projects in their *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. Notable for their projected

CHANGES IN INFORMATION EMPLOYMENT
(In Thousands)

Sector	2002	2003[a]	2004[b]	2003 New Jobs[a]	Percentage Change	2004 New Jobs[b]	Percentage Change
Publishing Industries	31.2	30.8	31.2	-0.4	-1.3%	0.4	1.3%
Newpaper, Periodical, Books	15.6	15.4	15.6	-0.2	-1.3	0.2	1.3
Software Publishers	15.6	15.4	15.6	-0.2	-1.3	0.2	1.3
Motion Picture and Sound Recording	4.5	4.3	4.5	-0.2	-4.4	0.2	4.7
Broadcasting, Except Internet	8.1	7.8	8.1	-0.3	-3.7	0.3	3.8
Internet Publishing and Broadcasting	1.0	0.9	1.0	-0.1	-10.0	0.1	11.1
Telecommunications	39.7	36.4	38.1	-3.3	-8.3	1.7	4.7
Internet Service Providers	8.9	8.4	8.9	-0.5	-5.6	0.5	6.0
Other Information Services	0.2	0.1	0.2	-0.1	-50.0	0.1	100.0
Total Information	93.6	88.7	92.0	-4.9	-5.2%	3.3	3.7%

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

growth rates are the following sectors: filmed entertainment; TV networks: broadcast and cable; video games; and educational and professional books and training.

The International Intellectual Property Alliance (IIPA) reports the following on the copyright industries (i.e., movies, TV programs, home videos, books, music, computer games, and software):

- These industries were responsible for 5.0% of the gross domestic product (GDP) of the United States in 2001.
- Their share of GDP grew more than two times as fast as the remainder of economy in the past 25 years.
- New job creation is three times the rate of the rest of the economy.
- They represent more international revenues than autos and auto parts, aircraft, and agriculture.
- The movie industry alone, unlike any other American industry, has a surplus balance of trade with every single country in the world.

These data suggest an increasing global demand for entertainment and media products. In addition, technology is rapidly changing the industry, and the move toward high-definition production and distribution could present an opportunity for Colorado.

A significant finding from *The Impact of the Film Industry on Colorado* is the following: "As 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 to stimulate the growth of the digital media segment, it has the potential to be a leader in this field."

Telecommunications

For many years, Colorado has been a major player in the area of telecommunications. In the late nineteenth century, as the telephone system expanded throughout the country, Denver became the hub of the nation's longest north/south telephone line. Since then, the city has continued to be a key location for telephone companies. Due to the area's geographic location and strong military presence, Colorado became a leader in the field of satellite communications in the 1940s. This continued during the Cold War and laid the groundwork for the tech boom in the 90s. Denver was also the birthplace of cable television more than 50 years ago, and the city has held its position as a cable center. Today, Denver is home to The Cable Center, an independent, global institution that works with the cable industry. These developments gave rise to the term "Convergence Corridor" to describe Colorado as the place where telecommunications, satellites, and cable television come together. This fact, along with the quality of life in Colorado, the concentration of telecom-related industries (especially photonics and software), and the highly educated workforce, makes the state an attractive place to locate a telecommunications business (*EDCC/OED Report* 2003).

These data suggest an increasing global demand for entertainment and media products. In addition, technology is rapidly changing the industry, and the move toward high-definition production and distribution could present an opportunity for Colorado.

Historically, the strength of Colorado's telecom industry has been in setting up and running cable and telephone networks. Telecom equipment manufacturing, although present, has never been prominent in the state. This trend is expected to continue as the state's telecommunications industry builds on its strengths in satellite and cable network services.

However, over the last couple of years, telecommunications companies in Colorado have struggled mightily. The telecommunications industry collapse has been blamed for the weak state economy of today. Bankruptcies, mergers, and acquisitions have resulted in the loss of thousands of jobs. Between January of 2001 and March of 2002, an average of 585 communications jobs was lost each month (*2003 Colorado Business Economic Outlook*). These cuts continued through the end of the 2002 and into 2003. Qwest, AT&T, WorldCom, Sprint, and many other telecommunications firms have all announced significant layoffs since 2001. Financial and legal struggles have also plagued the industry. Many experts cite excessive optimism, excess capacity, lack of adequate funding, decreased demand, and poor management as sources of telecom's woes.

How bad has the telecom collapse in Colorado actually been? According to employment and wage data from the Colorado Department of Labor, in the first quarter of 2001 there were 1,154 telecom companies in the state, employment totaled 48,893, and wages exceeded $871.2 million. Since then, the number of companies has dropped by 16.0%, to 968 in the fourth quarter of 2002. Employment fell

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to 37,585, a 23.1% decrease, and total wages declined 28.4%, to $624.2 million. Average wages have also fallen 7.0%, from $71,277 in Q1 2001 to $66,430 in Q4 2002. However, when this industry is viewed in a longer term context, the picture looks different. While there has been a significant downturn in the telecommunications industry over the last couple of years, overall, the industry has still grown dramatically since 1993. Employment rose sharply during the 90s and then fell drastically in 2001, but has remained well above employment levels of the early 90s.

What will drive the future health of telecommunications? The answer is that it will likely be a multitude of factors. A more robust economy will probably spur some additional demand. An increased use of the Internet for transactions will also consume some of the capacity. Additional demand for capacity from emerging industries such as photonics will play a role. And certainly the consolidation of the industry that has occurred over the past three years will help.

Colorado industry experts are generally optimistic about the future of telecom in Colorado. Mass layoffs in the industry have created a large group of skilled, experienced employees looking for work. With the labor pool already in place, Colorado will be an attractive place for new or relocating companies. Additionally, companies that let go large portions of their workforce are now dealing with the problems of being greatly understaffed. As customer service becomes a bigger concern, these firms will have to rehire some of the positions they eliminated. Furthermore, new technologies, such as web conferencing services, voice-over IP and cable, broadband wireless, and Wi-Fi, are expected to stimulate demand in the industry. The passage of the Homeland Security Act of 2002 has also made funds available for security-related telecom products and services. While this has not fueled growth in the industry yet, it offers significant potential (Telecom Industry Focus Group/Survey September 2003).

In an effort to make these same opportunities available to people in the state's rural areas, Colorado has embarked on the Multiuse Network (MNT) Project. The state contracted with Qwest Communications International Inc. to build a high-speed data network stretching to each of the state's 64 counties. By providing Internet access to every county in the state, the project takes the first step in the "last-mile" solution. The focus of the last-mile issue is now making broadband Internet access available to every household and business within these counties. By making high-speed, broadband Internet available to rural areas at affordable rates, the state will foster growth in small businesses and benefit local governments. New businesses will be more likely to locate in these areas, and new jobs could be created. Broadband technology has the potential to jumpstart rural economies. As of September 2003, 62 of the 70 planned aggregated network access points are completed, with the additional 8 scheduled to be finished by the end of the year (OED/Telecom Industry Focus Group/Survey September 2003).

By making high-speed, broadband Internet available to rural areas at affordable rates, the state will foster growth in small businesses and benefit local governments.

Employment and Wages

Telecommunications accounts for 42.4% of the entire Information Supersector employment. Within the Telecommunications Sector, wired telecommunications carriers employ more than 70.0% of the telecom workers in the state and make up nearly 55.0% of the establishments.

In 2002, Colorado's telecommunications industry employed 39,700 people, representing more than 3.3% of the total telecom employment in the United States. These 39,700 telecom employees make up over 1.8% of Colorado's total employment. With a concentration almost twice that of the nation, Colorado is clearly a leader in the telecommunications industry.

Perhaps more importantly, based on 2002 data, there were 1,010 telecom companies in the state, and these firms paid out a total of $2.69 billion in wages. Average wages in the telecom industry for 2002 were $67,842—79.0% higher than the state's average wage for all industries combined and 20.0% more than the national average for telecom employees.

During the 1993 to 2002, employment in the telecom sector has doubled in Colorado, with a CAGR of over 6.7%. Telecom employment growth in Colorado has been nearly two and a half times faster than that of the nation.

This area experienced severe job losses following the tech bust and has continued to suffer from the continuing excess capacity in the industry. During 2002, 7,100 or 15.0% of the jobs were lost. That has been followed by an additional 8.0% or 3,300 lost this year. The future appears much brighter as capacity issues are being resolved. Look for employment growth of 1,700 jobs in 2004.

Other Information Services Sector

Technically, there is a NAICS sector entitled "Other Information Services." In Colorado this group accounts for between 100 and 200 jobs. For the purpose of our analysis, we are grouping the employment discussion of all remaining parts of the Information Supersector into this section. This includes motion picture and sound recording industries; broadcasting (except Internet); Internet publishing and broadcasting; Internet service providers, web search portals, and data processing services; and other information services. In total, these other categories account for 21,500 employees and approximately 24.0% of the supersector.

This "other" group experienced a 5.2% CAGR during the 1993 to 2002 period. While this is quite strong, it is weaker than the telecommunications and publishing pieces of the Information Supersector. While one might think that the slower growth rate may have been beneficial in the downturn, the other category has continued to lose employment at a pretty significant rate over the past two years. In 2002, 3,000 jobs were eliminated, and in 2003 an additional 1,200 have disappeared. As discussed in previous sections, we believe that several of the "other" categories will once again experience growth and an increase of 1,200 positions is forecast for 2004.

INFORMATION EMPLOYMENT
1994-2004
(In Thousands)

Year	Publishing	Telecommunications	Other	Total
1994	18.2	26.3	14.6	59.1
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	31.2	39.7	22.7	93.6
2003[a]	30.8	36.4	21.5	88.7
2004[b]	31.2	38.1	22.7	92.0

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

Summary

The Information Supersector is poised for a turnaround. While we are only forecasting modest growth in the year ahead, it will be a welcome relief to an industry that has experienced heavy losses over the past two years. The publishing area (including software) should experience some growth, with increased advertising budgets and investment expenditures.

Colorado's telecommunications industry should also expand. With both state and national economic recoveries on the horizon, the industry is poised to grow. While the growth levels seen in the 90s will likely never be replicated, the future appears to be bright. Colorado's large pool of unemployed telecom workers; concentration of software, photonics, and other telecom-related industries; and quality of life can attract new companies. Existing firms should benefit from reduced competition, the affordable assets made available through bankruptcies, and exciting new technological advancements. How much of this growth will occur in 2004 remains to be seen, but longer term industry growth seems likely. Whether Colorado will return to top tier status in telecommunications is the critical long-term question. Expansion of current efforts by the state government to provide "last-mile" access to broadband will bring these benefits to Colorado's rural communities and help equalize economic opportunity in all areas of the state.

Overall sector employment is expected to rise by 3,300, or 3.7%. ✣

Financial Activities

This NAICS 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; funds, trusts, and other financial vehicles; real estate; rental and leasing services; lessors of nonfinancial intangible assets (except copyrighted works).

The Financial Activities Supersector is comprised of the Finance and Insurance Sector and the Real Estate, Rental and Leasing Services Sector. This supersector has been one of the bright spots in the Colorado economy during 2003.

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; funds, trusts, and other financial vehicles. In addition to real estate jobs, the Real Estate Sector includes rental and leasing services and lessors of nonfinancial intangible assets (except copyrighted works).

Between 1993 and 2002, the Financial Activities Supersector grew at a compound annual growth rate (CAGR) of 2.8%, with the strongest employment growth occurring in securities, 6.6%, and credit organizations, 3.7%. Insurance employment increased at a CAGR of 3.2% and real estate employment increased at 2.6%.

In 2003, the Finance and Insurance Sector is expected to decrease by 1,100 jobs, while the Real Estate, Rental and Leasing Services Sector is projected to remain flat. In 2004, an additional 200 jobs are expected to be added in the Finance and Insurance Sector, while the Rental and Leasing Services Sector will show a gain of 500 jobs.

Finance and Insurance Sector

Commercial Banking Outlook for 2004

Trends in the banking industry will continue to change in 2004. In the area of loan growth, 2003 benefited from good consumer loan demand (primarily mortgage and home equity due to low interest rates), while demand for commercial credit was weak, similar to 2002. Trends in 2004 will show slower consumer growth due to weaker mortgage activity and increasing demand on the commercial side after three years of lackluster growth. The level of commercial demand will depend on the pace of economic recovery.

Net interest margins should stabilize in 2004 as much of the asset repricing that has pressured

FINANCIAL ACTIVITIES EMPLOYMENT
1994-2004
(In Thousands)

Year	Finance and Insurance	Real Estate and Rental and Leasing	Total[a]
1994	84.0	37.0	121.0
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	102.4	45.3	147.7
2003[b]	101.3	45.3	146.6
2004[c]	101.5	45.8	147.3

[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.

margins has run its course. We do not expect any margin expansion until the Federal Reserve increases short rates, which would start the repricing of variable rate assets upward while any increase in deposit rates would lag.

Fee income should also transition in 2004. The big drivers of fee income in 2003 were mortgage banking and deposit fees. We forecast mortgage banking fees to be flat to down as mortgage origination activity is projected to decline by 50.0% in 2004. However, we expect to see an increase in loan servicing fees as a partial offset to lower origination fees. Deposit fee growth should slow with the expected moderation of growth in the deposit base. On the positive side, banks are projected to experience expanding capital markets and asset management fees, with the better market and higher insurance revenues from increased market share of insurance sales. Expense growth in 2004 is likely to be slower than in 2003 as growth from pension and option expense should moderate.

Credit quality should be a bright spot for banks in 2004. Problem loans and loss rates have peaked and should improve throughout the year, returning to a more normalized level by 2005. Overall, the industry remains well capitalized and fundamentally sound.

As the equity markets began to show signs of life in late 2002, there were signs that total bank deposits would decrease as money was transferred to more lucrative investments. This transfer of funds to the equity market seems to have been only temporary as a result of the mutual funds scandals. It is also felt that companies are becoming more profitable, that corporate loans are down, and that firms are building their cash reserves, at least for the moment, until they are completely comfortable with either investing in other financial tools or increasing their capital expenditures. Deposits are expected to grow through 2003 into 2004, but at a much lower rate than recent years.

Savings and Loans

In 1995, about 5.5% of total deposits were held in savings and loan (S&L) companies. Total S&L deposits dropped to less than 1.5% in 2000 as consolidations and changes in federal regulations made other investment opportunities more lucrative. Since then they have increased slightly as consumers viewed them as safer investments than volatile equity or real estate markets. This trend is expected to continue, although growth will occur at a much lower rate than in previous years.

Less than 1.0% of financial activities employees work at S&Ls. Employment is this area is expected to increase slightly in both 2003 and 2004.

The strategy for members continues to be short-term investments and maintaining increasing liquidity in regular shares and money market accounts.

Credit Union Trends

With the slow economic recovery and low interest rate environment expected to continue through 2004, there will be continued pressure on credit union net margins. Credit union cost of funds is greatly influenced by fed rates. Many members have taken advantage of the low interest rates to refinance existing or purchase new homes and vehicles, but at the same time they have taken on more debt. At this time, there does not appear to be a housing "bubble," but should housing prices fall, it would slow or stop the ability of home owners to continue taking equity out of their homes to finance other consumer purchases. Debt service to disposable income is close to an all-time high. These trends, along with high unemployment, cause concern for potential increases in delinquencies and bankruptcies. However, credit unions have monitored their underwriting standards to maintain a high quality of assets.

The continuing slow recovery has savers searching for safe investments while attempting to maintain some reasonable rate of return. Asset growth is expected to remain in the 10.0 to 12.0% range for 2004, with consumer loans increasing at a 6.0 to 8.0% pace. Some credit unions are experiencing double-digit loan growth, which will continue to put pressure on management to maintain competitive rates to attract new money and retain member deposits that are maturing. The strategy for members continues to be short-term investments and maintaining increasing liquidity in regular

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Financial Activitites

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COMMERCIAL BANK, SAVINGS AND LOAN, AND CREDIT UNION ACTIVITY IN COLORADO 1994-2004

Year	Commercial Bank Deposits (In Millions)	Savings and Loan Deposits (In Millions)	Credit Union Deposits (In Millions)
1994	$29,704.6	$1,961.0	$5,133.2
1995	31,248.5	2,141.0	5,669.1
1996	34,319.1	1,986.0	5,969.6
1997	29,228.5	1,943.0	6,470.0
1998	31,263.5	783.0	6,621.8
1999	33,813.0	867.7	6,857.6
2000	37,315.0	617.9	7,354.5
2001	36,872.3	683.8	8,577.4
2002	37,402.0	1,809.8	9,406.8
2003[a]	37,900.0	1,900.0	10,537.0
2004[b]	38,375.0	1,950.0	11,000.0

[a]Estimated.
[b]Forecast.
Source: National Credit Union Association, Federal Deposit Insurance Corporation, and Colorado Business Economic Outlook Committee.

shares and money market accounts. Any rapid movement of short-term funds to other investments, such as the stock market, could cause short-term liquidity concerns.

Consolidation of credit unions continues as new regulations and the high cost of technology make it difficult to keep up with compliance, especially in a small shop. Such issues as privacy, new security requirements for debit and credit cards, as well as ATMs, require new policies, procedures, and training, which continue to put pressure on return on assets. To ensure future growth potential some credit unions are changing to community charter or expanding into underserved areas. This, along with new products such as small business loans, point to a strong future.

Financial Market Trends

For the first three quarters of 2003, the overall stock market has performed well. The Dow Jones Industrial Average is up 11.0% since the beginning of the year. The NASDAQ Composite Index is up 34.0% for the year. It appears that positive corporate earnings reports, accompanied by a combination of low interest rates, generous tax cuts, and rapid monetary growth, have provided an impetus to the rising market. However, there is concern that the overall stock market will not be able to continue its ascent, due to rising oil prices, the falling dollar, and a still-shaky economy.

Nonetheless, the securities industry is making a comeback. After two years of layoffs and lower profits, it appears that the industry will post record profits in 2003. The industry is earning greater profits from underwriting fees, commissions, and gains in brokerage firm's own investment accounts. Furthermore, after several years of job cuts, brokerage firms are hiring more staff.

As of September 30, 2003, approximately 124,850 individuals were licensed to conduct business as stockbrokers in Colorado. Of that number,

FINANCE AND INSURANCE EMPLOYMENT
1994-2004
(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]
1994	35.6	9.4	30.8	8.2	84.0
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	47.5	14.9	39.2	0.8	102.4
2003[b]	47.5	13.8	39.2	0.8	101.3
2004[c]	47.5	14.0	39.2	0.8	101.5

[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.

approximately 13,800 stockbrokers actually reside in the state. In addition, of the 2,386 brokerage firms licensed to do business in Colorado, 90 have offices here. Moreover, approximately 5,630 investment adviser representatives are licensed in Colorado. This represents an increase of more than 975 licensed investment adviser representatives over last year. The growth in the number of licensed stockbrokers is expected to remain steady in 2004.

Most of the state's equity mutual funds made money for their shareholders in the third quarter of 2003. The average gains were between 1.0% and 6.0%. However, nationally, there have been allegations regarding abuses in connection with late trading and market timing of fund shares. At this point, it is not known what adverse impact these allegations may have on Colorado-based mutual funds.

During the past few years, the securities industry endured corporate scandals, accounting and audit failures, excessive executive compensation, as well as a bear market. Nonetheless, the industry has emerged from these difficult times because it was well capitalized. However, this positive trend will go on only if there are positive corporate earnings reports and continued investor trust in the market.

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Financial Activitites

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Insurance

The insurance industry is comprised of two categories: life and health insurance and property and casualty insurance. Nationally, about 2.2 million people are employed in the industry. Technology has been a double-edged sword. While it has made it possible for companies to provide more timely service and more creative products, it has also minimized employment growth. Between 1993 and 2002, the industry increased at a CAGR of 0.7%. The number of insurance carriers in 2003 grew during the 1990s, but has been on a steady decline since 1999. Today, the number of insurance carriers is the same as the 1993 total.

Employment in the Colorado Insurance Sector follows a pattern similar to that of the nation. The industry grew rapidly during the first half of the 1990s, but tapered off in 1999. Although this sector shows a CAGR of 2.8% between 1993 and 2003, employment has not grown since 2000. It is estimated that insurance companies in Colorado will total approximately 3,780 in 2003 and that average wages will exceed $2.0 billion, or about $51,000 per employee. Although the demand for insurance products will continue to grow, no noticeable increase in Colorado employment is forecast in this sector in 2003 and 2004.

The following statistics provided by the American Council of Life Insurance help understand the impact that the insurance industry has on the U.S. and Colorado economies. In 2002 Californians spent the most on life insurance, around $216 billion, while residents of Wyoming spent approximately $2 billion (Coloradans spent about $30 billion). During 2002, the total life insurance in force range from $2.5 trillion in New York to $25 billion in Wyoming (Coloradans had about $315 billion in force).

Other key Colorado statistics for 2002 include:

- $300 billion in policy and contract dividends were paid;
- Almost $700 million in death payments were made;
- Premium receipts totaled approximately $9.8 billion;
- $5.6 billion in mortgages were owned in Colorado; and
- $859 million in real estate was owned by life insurers in the state.

REAL ESTATE AND RENTAL AND LEASING EMPLOYMENT 1994-2004 (In Thousands)

Year	Real Estate	Rental and Leasing	Total[a]
1994	25.1	11.9	37.0
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	32.0	13.3	45.3
2003[b]	31.7	13.6	45.3
2004[c]	31.5	14.3	45.8

[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.

During 2003, the Colorado legislature eliminated no-fault insurance. While this change is unlikely to impact industry employment, it will have various effects on consumers. It is too early to identify how this will impact the industry in 2004.

Real Estate and Rental and Leasing

The Real Estate and Rental and Leasing Sector is divided into two subsectors. The sector is not expected to experience any growth in 2003; however, 500 jobs will be added in 2004.

Real Estate

In 2003, it is unlikely that this category will exceed last year's total of 32,000 jobs. The nine-month average for 2003 is 31,700, a modest decline of 1.0% that will continue through year-end.

While it is true that significant additional space has been brought to the market since 2001, the rate of increase has slowed dramatically to the point that it has virtually stopped. Compounding this effect is the compression caused by competition in the Real Estate Sector. Climbing vacancy rates have severely affected revenues for property owners. Low demand for space has increased the "cost" of securing an occupant, and the resultant pressure on the other costs (property management, etc.) is severe. Efficiencies will have to be found and fewer people will be asked to do more.

There is no news on the horizon that would indicate an increase in jobs for this sector in 2004. In fact, employment will decrease by 300 jobs in 2003. A continued slow decline is forecast, and the average number of jobs will fall by an additional 200 in 2004, to 31,500 jobs.

Rental and Leasing

The Rental and Leasing Services Sector includes a variety of companies from Blockbuster Video to Budget Rent A Car to Mr. Neats Formalwear. After showing declines for three consecutive years, from 2000 to 2002, this sector will post an increase of about 300 jobs in 2003, a reflection of an economy that has turned around. This rate of growth is expected to continue into 2004 as 700 jobs will be added. ✤

Professional and Business Services, and Other Services

This NAICS sector includes: 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.

Professional and Business Services Supersector

The three major sectors of this supersector are: 1) Professional, Scientific, and Technical Services; 2) Management of Companies and Enterprises; and 3) Administrative and Support and Waste Management and Remediation Services.

Professional, Scientific, and Technical Services Sector

The major subsector classifications for Professional, Scientific, and Technical Services tracked by the Colorado Department of Labor and Employment are legal services, engineering and architecture services, computer systems services, and other professional services. Other subsectors included are the accounting services, scientific research services, advertising services, photography services, and veterinary services.

The businesses in this sector are the benefactors of outsourcing from other companies. The demand for these services remains soft as the private and public sectors continue to delay meaningful capital spending on new projects and only contract for those services they deem absolutely necessary. One trend that negatively affects the health of business employment is the local, state, and federal agencies internally performing many of these services until the economic conditions improve.

Legal services employment appears to have peaked in 2002. This subsector averaged 1.0% growth over the last 10 years and is expected to show a slight dip in employment in 2003, about 400 jobs. The 2003 legislative session provided a paradox of new statutes from tort reforms on punitive and other damages to reinstating a tort system for auto insurance. These would seem to cancel each other; however, there should be a need for additional legal services for businesses as the economy improves. Legal services employment is expected to remain flat in 2004.

After steady growth for many years, the architectural and engineering subsector experienced a decline in employment in 2002 and is projected to suffer another 2.5% cutback in 2003, about 800 jobs. Decreased state and local agency capital spending on infrastructure has been the preferred and quick method to balance budgets. Future general fund annual increases for state and local agencies

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR EMPLOYMENT
1994-2004
(In Thousands)

Year	Legal Services	Engineering and Architectural Services	Computer Systems Design Services	Other Professional, Scientific, and Technical Services	Total[a]	Percentage Change
1994	14.4	25.6	19.9	43.4	103.3	1.4%
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	15.7	35.8	35.8	53.7	141.0	-7.0
2003[b]	15.3	35.0	33.0	55.7	139.0	-1.4
2004[c]	15.3	36.0	34.0	60.0	145.3	4.5

[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.

are expected to be 3.0 to 4.0% per year for many years. The demand for public service, along with the growth in congestion levels on many roads, will increase faster than the anticipated tax revenues. The future viability of public agencies' service and infrastructure systems necessitate that existing revenue sources be protected and new innovative funding and business sources be pursued.

Many visible building and transportation projects managed to provide a certain level of employment through construction engineering services. A large loss of jobs due to the substantial completion of the T-REX project was realized early in 2003. The commencement of the design of many public and private projects was delayed until later in 2003. Both factors significantly contributed to first quarter 2003 recording the lowest level of employment for this subsector in many years.

Starting with the second quarter of 2003, employment began steady growth. Some of this can be attributed to increasing demand for geotechnical, environmental, and surveying services that 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 is not expected to commence soon due to existing excess plant capacity and the fact that many new plants are being built overseas for competitive product cost reasons. The employment levels of this subsector are expected to increase by about 1,000 jobs in 2004.

One of the fastest growing areas in the 1990s was computer systems services. This subsector experienced several years of employment increases in the 16.0 to 18.0% range, with growth peaking in 2000.

ADMINISTRATIVE AND SUPPORT SERVICES SECTOR EMPLOYMENT 1994-2004 (In Thousands)

Year	Employment Services	Services to Buildings and Dwellings	Other Adm. Services	Total[a]	Percentage Change
1994	36.3	23.3	35.9	95.5	11.4%
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	38.6	34.1	48.4	121.1	-6.7
2003[b]	34.9	34.3	48.4	117.6	-2.9
2004[c]	36.0	35.3	50.0	121.3	3.1

[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.

Employment for 2003 is anticipated to be about 12,400 jobs lower than the 2000 employment level. To put this decrease in perspective, the number of jobs in the subsector in 2003 is comparable to the number in 1998. The big question is when will businesses really be forced to replace their pre-Y2K computer systems? The update of Microsoft's latest Windows operating systems for computers and servers created a need to replace some older systems. Although several high-end applications were also updated in 2002, most businesses chose not to upgrade for reasons ranging from cost control to the upgrades' lack of useful features. In 2004, operating system and application software upgrades will again be offered, but this time the upgrades will be forced on businesses by various methods. These upgrades are also expected to cause replacement of the majority of the computer hardware purchased for the Y2K event due to their significant demand for processing and larger application sizes. This timely turnover in computer systems is expected to result in a minor increase in employment for this subsector, which is hopeful news. After three years of decreases, employment in this subsector is projected to increase by 1,000 jobs in 2004 as a result of the expected increase in overall business activity.

Growth in other subsectors of the Professional and Business Services Sector will increase by about 2,000 jobs in 2003. In 2004, the sector is expected to add 4,300 jobs as the economy improves. Primary areas of growth will be advertising, management consulting, and accounting services.

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Professional and Business Services, and Other Services

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ADMINISTRATION AND SUPPORT AND WASTE MANAGEMENT SERVICES SECTOR EMPLOYMENT 1994-2004 (In Thousands)

Year	Administrative and Support Services	Other Adm. Services	Total[a]	Percentage Change
1994	95.5	10.9	106.4	10.0%
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	121.1	8.8	129.9	-6.2
2003[b]	117.6	9.8	127.4	-1.9
2004[c]	121.3	11.0	132.3	3.8

[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.

Management of Companies and Enterprises Sector

The Management of Companies Sector employs about 20,000 workers in approximately 1,000 establishments. Three subsectors make up this sector. The largest is the managing offices subsector, which accounts for 91.5% of the total employment in the sector and 79.4% of the total establishments. About 8.0% of employees are included in the second subsector, offices of other holding companies, and the smallest subsector is offices of bank holding companies. Examples of companies in this sector include Qwest Services Corporation, MDC Holdings, MediaOne Group, and the Anschutz Corporation.

The sector has had positive growth since 1998 and is less susceptible to fluctuations in the economy than other sectors. It is expected to increase by 500 jobs in 2003 and 600 jobs in 2004.

Administrative and Support and Waste Management and Remediation Services Sector

The major subsector classifications for the administrative and support portion of this sector is employment services, which includes placement agencies, temporary help services, and professional employer organizations; and services to buildings and dwellings, which includes pest control, janitorial services, landscaping services, and carpet cleaning services. Other subsectors included 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 has slowed through 2003, down 2,500 jobs compared to a loss of 8,600 in 2002 and 7,400 in 2001. The demand for these services that are provided to businesses is expected to gradually increase through next year, reflecting the general improvement in business activity. The subsector is expected to grow by 4,900 jobs in 2004.

A precipitous drop of almost 35.0% has been realized for the employment services subsector since its peak in 2000, with the first quarter of 2003 seeing the lowest employment levels since 1993. On the other hand, and even more dramatically, job recruitment agency employment levels have increased almost 25.0% in the first eight months of 2003. This boost of temporary and contract workers, coupled with weekly hour levels exceeding 40 per week in the third quarter of 2003, are indicators of increasing business activity. Even with this dramatic increase in employment in 2003, the average yearly employment numbers for this subsector will decrease from 2002, but should recover significantly in 2004.

The services to buildings and dwellings subsector has exhibited a steady average growth in employment of 1.2% per year over the last 10 years. Starting in 2001, this subsector's employment levels plateaued and are expected to remain flat through

2003. Most of these services are support for office buildings that are currently in oversupply. With few new office buildings being designed and constructed, this subsector is expected to increase at very minimal levels for the next few years.

Other Services

The Other Services Supersector consists of three sectors: Repair and Maintenance, Personal and Laundry Services, and Membership Associations.

Over 23,000 employees work at about 4,500 different establishments in the Repair and Maintenance Sector in Colorado at companies such as Envirotest, Safelite Glass, and Midas International. During the 1990s the sector grew rapidly to meet the demands of an increased population. As the economy tapered off, 100 jobs were added in 2002.The sector is expected to decline by 200 jobs in 2003, but a 200 job gain is forecast for 2004 as the economy turns around.

Personal and Laundry Services employs about 21,000 workers at more than 3,200 establishments. The leading group in the sector is beauty salons, with about 7,500 workers and 1,300 establishments. A sampling of other services provided include funeral services, parking companies, one-hour photo processing shops, and barber shops, with much smaller employment bases.

Growth in this sector parallels the growth pattern of the Repair and Maintenance Sector. Approximately 200 jobs will be lost in 2003. With the improving economy in 2004, growth in the sector will return with the addition of 200 jobs.

The largest sector, Religious, Grantmaking, Civic, Professional, and Similar Organizations, includes such organizations as Focus on the Family, YMCA of the Rockies, Highlands Ranch Community Association, Denver Dumb Friends League, and the American Water Works Association.

This sector has been affected by population growth and the recent economic downturn, but has not been negatively impacted as much as other sectors. The sector is expected to increase by 700 jobs in 2003 and 800 jobs in 2004.

OTHER SERVICES EMPLOYMENT
1994-2004
(In Thousands)

Year	Repair and Maintenance Services	Personal and Laundry Services	Religious, Grantmaking, Civic, Professional, and Similar Organizations	Total[a]	Percentage Change
1994	18.5	17.2	29.0	64.7	7.3%
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	23.6	21.0	41.0	85.6	2.1
2003[b]	23.4	20.8	41.7	85.9	0.4
2004[c]	23.6	21.0	42.5	87.1	1.4

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

The Forecast and Conclusions

The 2003 employment levels of the Professional and Business Services Supersector suffered compared to 2002 due to uncertainty caused by negative national and international events. This resulted in lower business spending on the types of services offered by this supersector. Meaningful capital spending is still not taking place, and the question of how long some of the equipment purchased prior to Y2K will last is still relevant. At some point, businesses will have to replace antiquated equipment. Business spending for capital equipment and related services is anticipated to gradually increase in 2004. This growth could be tempered if a significant business scandal occurs or if other international crises occur. In the background, there may also be a lack of labor force mobility caused by the constant increasing cost of health insurance. This makes employers reluctant to hire and employees hesitant to leave current employment.

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Professional and Business Services, and Other Services

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Two other significant emerging issues will impact the manner in which professional and business services are provided. The first issue is of a short-term nature and related to the significant decrease in government spending to the private sector during these challenging economic times. With the anticipated increase in economic activity, the recovery of private sector employment is directly related to the public sector resuming the outsourcing of services. If governments choose to initially hire internally as their tax receipts increase, this will put a damper on private sector services employment growth.

The second issue is of a long-term nature and related to the service jobs that are moving overseas. Businesses are using the cheaper overseas labor markets to stay price competitive. This has been happening for many years for manufacturing goods; however, this is a relatively new trend for services. The United States still has the best educated workforce among the major economies, which drives our competitive global advantage for invention and 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. Our focus on maintaining a better educated workforce is strongly needed in order to prevent the United States from being overtaken as skill and education levels rise elsewhere.

TOTAL PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT
1994-2004
(In Thousands)

Year	Professional, Scientific, and Technical Services	Management of Companies and Enterprises	Administration and Support and Waste Management Services	Total[a]	Percentage Change
1994	103.3	14.4	106.4	224.1	5.5%
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	141.0	18.9	129.9	289.9	-6.0
2003[b]	139.0	19.4	127.4	285.7	-1.4
2004[c]	145.3	20.0	132.3	297.6	4.2

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

The practices of private sector law, banking, management consulting, engineering, architecture, medicine, telecommunications, and accounting were once tradition-bound "gentlemanly" businesses. No more. One by one, each of these professions has entered the world of competition, technology, firm restructuring, and even marketing. Firms are experimenting with various restructuring options to gain geographic coverage and broader market exposure. In addition, strategic alliances are formed for the purpose of completing short-term projects. The push of technology has created on-line web-based research and new billing practices. Competition is forcing firms to look very hard at overhead structure, especially since most of it is labor driven. The tradition of the single proprietor and small partnerships is giving way to larger corporations due to mergers and acquisitions. The constant push is for corporate profitability, downward pressures on salaries, aggressive marketing, and cost cutting.

The forecast was developed using a much shorter trend analysis than previously used, due, in part, to the realized uncertainties of switching over to the new NAICS classifications and the recent national and international business and cultural events that seem to have more significant effects on local businesses' spending decisions. The resulting forecast for the Professional and Business Services Supersector in 2004 is growth of 4.2%, or 11,900 jobs. Projected growth for the Other Services Supersector is 1,200 jobs in 2004. ✥

Educational and Health Services

This NAICS sector includes: educational services; ambulatory health care services; hospitals; nursing and residential care facilities; and social assistance.

Overview

This NAICS supersector includes private sector educational and health-care companies and organizations. From 1993 to 2002, it increased at a compound annual growth rate (CAGR) of 3.7%, with the education sector posting a CAGR of 5.8% and the much larger health-services sector showing a CAGR of 3.5%. Despite the recent recession, growth occurred in the industry in both 2002 and 2003. Overall supersector employment grew by 4,300 jobs, or 2.1%, in 2003 and is expected to increase by 8,100 jobs, or 3.8%, in 2004.

Structure of the Industry

About 31.0% of the employees in the private Educational Services Sector work for private colleges and universities, of which about 83.0% are employed at the University of Denver, Regis University, Colorado College, the University of Phoenix, Naropa Institute, and Colorado Christian University.

Other major components of the Educational Services Sector include elementary and secondary education and miscellaneous technical training. About 19.0% of the workers in this sector are employed at private elementary and secondary schools, while approximately 10.0% have jobs at miscellaneous technical training schools. Around 21.0% of the workers are employed in the areas of management training, sports instruction, miscellaneous education, and fine arts. About 19.0% of the workers in this sector are employed in programs that range from computer or management to language schools and flight training.

The much larger Health-Care Sector is composed of four subsectors: ambulatory care, nursing, hospitals, and social assistance. The accompanying table displays ES202 and average wage, employment, and establishment data from 2002 (the most recent year published), illustrating the composition of the sector. To help understand how the recent change from Standard Industrialization Classification codes to NAICS codes has redefined the industry, another table provides subsector breakdowns based on first quarter 2003 ES202 data.

About two-thirds of the employees in the largest subsector, ambulatory care, 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.

Colorado is currently home to 80 private hospitals. About 90.0% of the employees in this subsector work at general medical or surgical hospitals.

Employment in the nursing care subsector is dominated by nursing care facilities, homes for the elderly, and residential mental and substance abuse care. About 28.0% of the companies and 58.0% of the employees work in nursing care facilities, while about 28.0% of the companies and 13.0% of the workers are employed at homes for the elderly industry. About 10.0% of the employees work in the area of mental care and substance abuse.

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HEALTH SERVICES EMPLOYMENT, WAGES, AND ESTABLISHMENTS (2002 ES202 DATA)

Category	2002 Employment (In Thousands)	Percentage of Total	2002 Establishments	Percentage of Total	Average Weekly Wages
Ambulatory Care	74.7	40.6%	7,978	74.6%	$894.0
Hospitals	45.5	24.7	89	0.8	720.0
Nursing Care	33.8	18.4	761	7.1	454.0
Social Assistance	30.0	16.3	1,871	17.5	367.0
Total Health Services	184.0	100.0%	10,698	100.0%	684.0
Total All Industries	2,154.0		156,691		$731.0

[a]Estimated.
[b]Forecast.
Note: Differences may occur between ES202 data and CES data series.
Source: Colorado Employment and Wages (ES202) and Colorado Business Economic Outlook Committee.

Educational and Health Services

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The final component of the health-care subsector is social assistance, which is dominated by child day care and other youth services, services for the elderly, and vocational rehabilitation services.

Education

Between 1993 and 2002, the private education subsector increased by a CAGR of approximately 5.8%, or about 1,000 employees a year. Much of this growth has come in response to the general expansion of the economy and the need for continuing education, and technical, computer, and management training programs.

Decreases in higher education and public education budgets should strengthen the demand for services provided by companies in this area during the next 18 months. About 800 jobs will be added in the subsector in 2003 and approximately 1,200 in 2004. Growth will occur primarily at the private universities and in the areas of business support.

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 2002 and are reporting another increase of over 20.0% in 2003.

Efforts by the State of Colorado to curtail these rising costs include offering Multiple Employer Welfare Association participation, introducing opportunities to rate band premiums under certain conditions, and allowing the sale of health insurance policies that exempt certain mandates, such as mammograms and prostate screenings. Employer strategies include decreasing coverage (16.0%), increasing deductibles (19.0%), and increasing copayments (38.0%) (*Denver Business Journal,* August 2002).

Employment in the health industry continues to be limited by the supply side: there is a national desperation for health-care workers, particularly nurses. For this reason, demand is expected to remain strong but only modest growth in health employment overall is forecast. With the construction of five new hospitals in the Denver

ESTIMATED EMPLOYMENT AND ESTABLISHMENTS
AMBULATORY AND SOCIAL ASSISTANCE

Subsector	Estimated Percentage of Total Employment	Estimated Percentage of Total Establishments
Ambulatory Services		
Physicians	37.8%	32.0%
Dentists	17.2	26.5
Home Health Care	12.2	2.2
HMOs	4.9	0.3
Outpatient Mental Health	4.3	1.5
Specialty Therapists	4.1	5.9
Chiropractors	3.0	10.0
Ambulance Services	2.4	0.5
Optometrist	2.2	3.6
Medical Labs	2.2	1.6
Other Ambulatory	9.7	15.9
Total Ambulatory	100.0%	100.0%
Social Assistance Services		
Child Day-Care Services	39.4%	48.7%
Services for Elderly and Disabled	20.0	10.0
Other Individual/Family Services	14.0	20.0
Vocational Rehab Services	11.7	5.5
Child and Youth Services	9.1	8.6
Other Social Assistance	5.8	7.0
Total Social Assistance	100.0%	100.0%

Source: Colorado Employment and Wages (ES202) and Colorado Business Economic Outlook Committee.
Note: Approximately 73,000 ambulatory employment and 31,000 social assistance employment in 2003.
Note: Approximately 8,000 ambulatory establishments and 1,900 social assistance establishments in 2003.

metropolitan area, 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 medical employees (the movement of local labor from one institution to another) must be considered, which will not result in an overall increase in total employment in this sector. Rather, we expect the hiring limitations to shift from one institution to another as they compete for available labor. It is not fair to assume that all new hospitals will have the ability to move labor into their institutions without significant financial incentives and responsiveness to potential employee needs. The use of temporary and contract labor can be expected to further shift costs upward. In a Chicago suburb, signing bonuses of $30,000 affect the flux within that particular market, and it may be reasonable to assume that regional and rural markets' ability to compete with such incentives will limit the ability to recruit and retain labor. One area of promise is a new initiative of the Robert Woods Johnson Foundation that recruits students interested in health-care professions from rural areas who are more likely to return to these areas after graduation. Although the need for additional qualified labor is apparent, the capacity of the education system in Colorado has not been altered to create additional influx into the workforce.

The capital that hospitals have available to pay for additional labor may be limited by a variety of market factors, including the cash flow and financial liabilities within a particular institution. For instance, a community hospital that provides a great deal of charity care and is struggling with bad debt from clients may have more difficulty freeing up capital that would allow it to compete in the contest of enticing new labor. Nationally, the number of uninsured Americans is expected to increase the amount of bad debt in hospitals. In 2003, staffing limitations have forced some hospitals to go on divert status.

COLORADO EDUCATIONAL SERVICES EMPLOYMENT 1994-2004 (In Thousands)

Year	Total Educational Services	Percentage Change
1994	15.8	6.0%
1995	17.0	7.6
1996	18.2	7.1
1997	19.4	6.6
1998	20.4	5.2
1999	21.3	4.4
2000	22.7	6.6
2001	23.7	4.4
2002	24.7	4.2
2003[a]	25.5	3.2
2004[b]	26.7	4.7

[a]Estimated.

[b]Forecast.

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

A factor that may impact revenue for certain institutions is "boutique hospitals." Boutique, or specialty, hospitals are popping up statewide and concentrating their services on one or two particular procedures that are quite profitable because of the quantity and scale of services. As full service, general hospitals lose out on these profitable procedures, they no longer have the ability to use the profit from particular lucrative procedures to offset the care for which they receive inadequate compensation. This situation will further limit community hospitals' ability to be financially viable.

2002 ESTIMATED SOCIAL ASSISTANCE EMPLOYMENT AND ESTABLISHMENTS

Category	Estimated Employment (In Thousands)	Percentage of Total	Estimated Establishments	Percentage of Total
Child Day-Care Services	11.8	39.4%	911	48.7%
Services for Elderly and Disabled	6.0	20.0	187	10.0
Other Individual/Family Services	4.2	14.0	378	20.0
Vocational Rehab Services	3.5	11.7	103	5.5
Child and Youth Services	2.7	9.1	161	8.6
Other Social Assistance	1.7	5.8	131	7.0
Total Social Assistance[a]	30.1	100.0%	1,871	100.0%

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

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

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Educational and Health Services

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Organizations that are able to adapt and use newer information technologies to streamline their processes will begin to realize economic efficiencies over their competitors. The costs associated with updating the health-care information infrastructure are significant, but will pay for themselves over time. The initial start-up funding remains the difficulty. Health care will continue to build itself as an industry that depends on information from the use of electronic medical records and telemedicine, linking physicians and patients across the state. Capitalizing on technologies such as telemedicine will allow rural communities to benefit from advances in medicine that are often initially limited to urban centers.

The health-care industry hopes to benefit from efforts to educate consumers about the true costs of health-care procedures. Many interests claim that consumers have too long been insulated from the actual costs of visits, procedures, and medicines. With the newfound interest in consumer-driven health care (models that transfer more responsibility and cost to patients), it is fair to be cautiously optimistic that individuals will become more thoughtful and particular before using health-care services. Ideally, such a model will limit unnecessary trips to the doctor, but others have argued these increased costs pushed onto consumers may result in a decision to forego needed medical treatment, which can ultimately mean greater costs to the health-care system down the road. In addition to cost information, all health plans can be expected to provide greater access to quality metrics, outcomes of care, and opportunities for patients to share in decisions with their physicians.

Colorado has some true opportunities for growth in the health-care arena with the continued expansions at the Fitzsimons campus. The campus has been designed to allow for industry growth and collaboration and is actively recruiting new organizations. One Pfizer has announced it will bring a new regional center to Colorado in the summer of 2004, and many hope that this major national presence will encourage additional movement from smaller, yet significant, players to contribute to the Colorado economy. With the presence and support of the University of Colorado educational system, this industrial project is expected to attract both skilled and highly educated laborers.

HEALTH-CARE SERVICES EMPLOYMENT
1994-2004
(In Thousands)

Year	Ambulatory Care	Hospitals	Nursing Care	Social Assistance	Total[a]	Percentage Change
1994	59.8	33.0	26.3	22.4	141.6	4.6%
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	74.6	45.5	33.9	30.1	184.0	3.8
2003[b]	75.3	46.6	34.6	31.0	187.5	1.9
2004[c]	77.6	48.8	35.9	32.1	194.4	3.7

[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.

HEALTH-CARE EMPLOYMENT

Between 1993 and 2002, Colorado population increased at a CAGR of 2.5%. Growth in health-care employment increased at a CAGR of 3.5%, with ambulatory health care increasing at a CAGR of 3.1% and hospital employment growing at a rate of 4.1%. The smaller subsectors also enjoyed growth greater than that of the state population as nursing care employment increased by a CAGR of 2.9% and social assistance employment grew by 4.0%.

In 2003, health-care employment will increase by 1.9%, or 3,400 jobs. Seven hundred jobs will be added in ambulatory care and 1,100 jobs added in hospitals. Nursing care employment is expected to finish 2003 up 700 jobs, while social assistance will increase by 900 employees.

Growth is expected to continue at a much faster rate, 3.7%, in 2004, with an increase of 6,900 jobs. The supply of physicians, dentists, and other trained employees in the ambulatory health-care subsector will not be able to meet demand, and employment will rise 3.1%, or 2,300 employees. With the addition of several new hospitals, employment in the hospital subsector will increase by 2,200 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; however, the subsector is expected to grow by 3.7%, or 1,300 jobs. Within the nursing home and assisted living industry, construction of new facilities is expected to be flat. However, occupancy rates remain very high, in the 95.0% range. In the past few months, staff vacancy rates have improved from 18.0% to 15.0%. Finally, social assistance employment will rise by 1,000 jobs. While there is a definite need for the services provided in this subsector, it is felt that the recent downturn has reduced the resources available to these organizations. ✜

COLORADO EDUCATION AND HEALTH-CARE SERVICES EMPLOYMENT
1994-2004
(In Thousands)

Year	Education Services	Health-Care Services	Total[a]	Percentage Change	U.S. Total	Percentage Change
1994	15.8	141.6	157.4	4.7%	12,807.0	4.1%
1995	17.0	148.4	165.4	5.1	13,289.0	3.8
1996	18.2	153.0	171.2	3.5	13,683.0	3.0
1997	19.4	158.8	178.2	4.1	14,087.0	3.0
1998	20.4	162.6	183.0	2.7	14,446.0	2.5
1999	21.3	165.6	186.9	2.1	14,798.0	2.4
2000	22.7	170.1	192.8	3.2	15,109.0	2.1
2001	23.7	177.2	200.9	4.2	15,645.0	3.5
2002	24.7	184.0	208.7	3.9	16,184.0	3.4
2003[b]	25.5	187.5	213.0	2.1	16,527.7	2.1
2004[c]	26.7	194.4	221.1	3.8	16,940.0	2.5

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

[b]Estimated.

[c]Forecast.

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

Leisure and Hospitality

This NAICS sector includes: 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.

Between 1993 and 2002, employment in the Leisure and Hospitality Supersector increased at a compound annual growth rate (CAGR) of 2.9%. Food Services was the fastest growing area, increasing at a CAGR of 3.3%. Arts, Entertainment, and Recreation grew at a CAGR of 3.1%, and Accommodation increased at a CAGR of 1.5%.

In 2003, total employment in Leisure and Hospitality will decrease by 1.2%, or 3,000 jobs. Job increases of 1,800 in Accommodations and 400 in Arts, Entertainment, and Recreation will be offset by the 5,200 jobs lost in Food Services.

In 2004, the Leisure and Hospitality Supersector is expected to bounce back, with employment growth of 3.4%, or 8,200 jobs. The Food Services area is expected to post the largest job gains, roughly 5,000. In addition, both Accommodation and Arts, Entertainment, and Recreation are forecasted to grow by 1,600 jobs.

Data presented at the Travel Industry Association of America's (TIA) Travel Marketing Outlook Forum in Austin, Texas, in late October 2003 indicate that the travel outlook for 2004 is cautiously optimistic. After several years of little travel volume growth, combined with significantly lower travel spending, it appears that things are improving. According to TIA's annual travel forecast, overall traveler spending by domestic and international visitors is predicted to increase 4.4% in 2004, up from $544 billion in 2003. However, it will not be until 2005 that the level of spending (forecast to reach $594 billion) will surpass the record set in 2000.

Domestic leisure travel has slowly but steadily increased over the years, despite the aftermath of September 11, the lagging economy, the war in Iraq, and severe acute respiratory syndrome (SARS). TIA is forecasting U.S. leisure travel to grow 3.2% in 2004, up from a 2.8% gain in 2003. Domestic leisure travel is predicted to increase again in 2005 by approximately 2.0%. Leisure travel has been and will continue to be the one bright spot in the travel picture. Last-minute planning and booking will remain the norm.

Two of the hardest hit segments of the travel industry, domestic business travel and international inbound travel to the United States, will once again see year-over-year declines in 2003 of 3.7% and 4.0%, respectively. However, the outlooks for both segments are more positive for 2004 and 2005.

LEISURE AND HOSPITALITY EMPLOYMENT
1994-2004
(In Thousands)

Year	Arts, Entertainment, and Recreation	Accommodations	Food Service	Total Accommodations and Food Service[a]	Total Leisure and Hospitality[a]
1994	34.1	35.8	132.8	168.6	202.8
1995	35.4	37.8	142.0	179.8	215.2
1996	36.0	38.3	145.9	184.2	220.1
1997	37.6	39.5	149.6	189.1	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	41.8	39.4	166.2	205.6	247.4
2003[b]	42.2	41.2	161.0	202.1	244.4
2004[c]	43.8	42.8	166.0	208.8	252.6

[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.

For the first time since 1999, the number of business trips U.S. residents will take in 2004 is expected to rise, to 122 million trips. This is a 4.2% increase over 2003. In 2005, business travel is anticipated to increase 3.5%, to nearly 127 million trips.

After falling steadily for three years, international inbound arrivals to the United States are forecasted to increase 5.0% annually in both 2004 and 2005. This translates to more than 42 million international arrivals in 2004 and over 44 million the following year. These numbers, however, are well below the high of 51 million arrivals recorded in 2000. International traveler spending in the United States is anticipated to rise 5.5% in 2004, to more than $69 billion. Another increase—8.0%—is expected in 2005, to $75 billion. Once again, these spending levels are well below the $82 billion spent by international travelers in 2000.

National trends in consumer travel behavior show greater interest in highway travel, in-state travel, and short getaways (three or fewer nights). Visiting small towns and rural areas, reconnecting with the important things and people in one's life, and economizing are also trends. Less interest has been shown in travel outside the United States, air travel, visits to places that draw large crowds, and travel to major cities.

Colorado's tourism economy has reflected these trends and will continue to mirror them in the future. Overall, we anticipate that Colorado's travel, tourism, outdoor recreation, leisure, and hospitality economy will grow by 4.0% in 2004, with slower growth during the first half of the year. Stronger growth will occur in the second half. The following paragraphs provide specific forecasts for Colorado by subsectors.

Business and Convention Travel

The future outlook for meetings and conventions in Denver and Colorado is very promising. The Colorado Convention Center Expansion will be completed in December 2004. The following year the 1,100-room Hyatt Convention Center Hotel will open. Future convention bookings for Denver are double compared to past bookings in the original center. However, the increase in meetings and citywide conventions bookings in 2004 will be only in the 2.0 to 3.0% range. Construction at the convention center will continue to be a limiting factor throughout the year. There are 26 national and regional conventions scheduled for Denver in 2004. Business travel and corporate meetings are expected to increase 4.5% in 2004 as the economy rebounds. Increased business travel, combined with a solid convention year, will allow downtown Denver hotels to increase occupancy and the average daily rate.

The expansion of low-cost airlines serving Denver International Airport (DIA) will cause the number of air passengers to grow 6.0% in 2004 in both business and leisure travel. The growth will be primarily guaranteed by Frontier Airlines' and United's new low-cost carrier Ted.

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MEETINGS AND CONVENTIONS BOOKED BY THE DENVER METRO CONVENTION VISITORS BUREAU 1998-2004

Year	Attendance	Room Nights	Spending Generated (In Millions)
1998	284,284	386,388	$369.5
1999	246,452	370,072	320.1
2000	241,830	342,901	330.3
2001	218,956	336,058	286.1
2002	218,938	429,196	286.7
2003[a]	197,930	396,698	266.0
2004[b]	206,580	369,686	274.2

[a]Represents meetings on the books as of 10/13/03; previous years are actual figures.
[b]Estimate based upon current bookings.
Source: Denver Metro Convention and Visitors Bureau and Colorado Business Economic Outlook Committee.

Leisure and Hospitality

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The future for meetings and convention business in Colorado is very bright. New or expanded meeting facilities planned for Vail, the Broadmoor in Colorado Springs, and Pueblo, along with the recent expansion of the Keystone Conference Center, will offer more opportunities for groups to meet in Colorado.

Accommodations

With strong dependence on fly-in traffic, Colorado accommodations lagged national data by 0.3 occupancy points in 2001 and 1.5 occupancy points in 2002. Year-to-date data for 2003 indicate the state is lagging 2002 by 1.9 points, leading to a year-end occupancy projection of approximately 56.0%. On the positive side, data since July have stabilized compared to the same months in 2002, indicating that the worst of the lodging recession may be past.

While average rates have been well managed, and have actually increased on a year-to-date basis, declining occupancies will result in falling hotel revenues for the fourth consecutive year. Although the historic numbers are discouraging, stabilization of rates and occupancies since summer and the tendency of Colorado's lodging industry to trail the nation both entering and exiting a recession, lead us to believe that better times may be ahead for the state's lodging industry.

SUMMARY OF OCCUPANCY AND AVERAGE DAILY ROOM RATES 1997-2003

Year	Occupancy Percentage	Average Room Rate
1997	67.0%	$93.64
1998	65.1	96.02
1999	63.0	96.78
2000	64.0	98.41
2001	59.4	96.45
2002	57.6	95.62
2002 YTD Sept.	60.7	95.97
2003 YTD Sept.	58.8	96.11

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

Colorado Restaurant Industry Outlook

Amidst a backdrop of economic and population growth, Colorado is expected to rank fourth in the nation in terms of restaurant sales growth in 2004. Colorado's restaurants are projected to register sales of more than $7 billion in 2004—a robust 6.1% increase over the 2003 level. The $7 billion in sales will generate nearly $400 million in state and local taxes, while employing 166,000 workers in 9,500 restaurant establishments.

A popular perception is that the restaurant industry is a collection of low-wage jobs, with a nominal impact on a state's economy other than providing students with a part-time job in the summer or during school. However, a look inside the numbers reveals a completely different story. The restaurant industry is not only an important source of job and tax revenue in the state; it is important to the success of many other industries in Colorado.

Within Colorado, every dollar spent in restaurants generates an additional $1.16 in sales for other industries in the state, according to the U.S. Department of Commerce. This encompasses a wide variety of industries, including agriculture, construction, manufacturing, transportation, real estate, financial services, and wholesale trade. In fact, essentially any industry that is associated with the operation of a restaurant enjoys increases in sales when the restaurant industry grows.

The restaurant and food-service industry is the largest private sector employer in Colorado. According to the National Restaurant Association, the Colorado restaurant and food-service industry employed 214,700 individuals in 2002. This represents nearly 10.0% of the total employment base in Colorado. By 2012, Colorado's restaurant industry is projected to employ 259,500 individuals—an increase of 20.9% (or 44,800 jobs) over the 2002 level. The 214,700 employment figure includes employment in all eating and drinking place occupations, plus employment in food-service positions that are not located in eating and drinking places.

Outdoor Recreation

Much of the leisure travel to Colorado is based on the state's outdoor recreation attractions and parks. Among the numerous outdoor recreation attractions available to Colorado tourists is a remarkable diversity of national and state parks. The spectrum of parks administered by the National Park Service extends from premier national parks, such as Rocky Mountain National Park and Mesa Verde National Park, to historical sites such as Bent's Old

Fort. In addition, the extensive state park system offers high-quality recreation attractions and facilities to both tourists and residents throughout the state of Colorado.

In recent years outdoor recreation has been impacted by local problems, as well as national trends and a lack of international visitors. Drought conditions, wildfires, and camping restrictions created dramatic declines at many of the state's parks and outdoor recreation areas in 2002. As with other sectors, 2003 saw some recovery, but visits are still below previous peaks. It is estimated that both state and national parks in Colorado will record increased visitation in 2004. Visitation is expected to increase 4.0 to 5.0% over 2003 levels. National park visitation will rebound from recent declines, and state park visits will continue their long-term growth trend.

A variety of survey research used to produce the *2004 State Comprehensive Outdoor Recreation Plan* validates the premise that Colorado is an increasingly attractive retirement location. Survey results documented that Colorado's population is aging, that Colorado residents' participation in outdoor recreation activities far exceeds national averages, and that retirees are seeking locations near federal recreation lands. Thoughtful recognition of the economic value of an older population should result in several opportunities for the tourism industry. Potential benefits of these consumer preferences are recreation users who have more leisure time and more inclination to spend disposable income on recreation attractions, consumers who use facilities year-round, and persons who are more inclined to support tax initiatives for local infrastructure that enhance recreational opportunities. Consistent voter support to fund open-space and wildlife initiatives provide ample evidence of this last benefit. Numerical impacts to be realized from targeting this population group will be increased visitation frequency, expansion of tourism seasons, increased demand for bed-and-breakfast and other small scale "weekend escape" facilities, and revenues derived from both personal consumption expenditures and tax revenues.

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COLORADO PARKS VISITS
1995-2004
(In Thousands)

Parks	1995	1996	1997	1998	1999	2000	2001	2002	2003[a]	2004[b]
Bent's Old Fort NHS	38.3	37.6	38.8	41.1	36.8	30.5	31.0	29.8	30.5	31.7
Black Canyon of the Gunnison NP	221.1	200.1	209.9	193.5	200.1	191.5	181.0	173.7	169.4	176.2
Colorado NM	249.0	318.7	307.1	291.7	297.1	572.4	237.6	294.0	312.5	325.0
Curecanti NRA	993.1	1,017.3	966.7	973.7	1,044.5	1,022.3	879.8	732.7	610.2	634.6
Dinosaur NM, also in Utah	496.5	464.1	446.6	420.3	410.7	397.8	326.4	299.1	219.1	227.8
Florissant Fossil Beds NM	91.4	91.3	86.5	79.8	81.5	82.1	79.7	62.5	66.5	69.1
Great Sand Dunes NM	323.7	309.3	309.9	279.8	286.7	261.3	277.5	234.8	262.9	273.4
Hovenweep NM, also in UT	27.0	27.5	24.5	23.7	47.6	43.6	37.4	30.9	12.6	13.1
Mesa Verde NP	663.8	617.4	627.7	604.6	635.7	471.1	513.4	406.4	443.4	461.2
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	3,072.9	3,195.8
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	5,200.0	5,408.0

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

Leisure and Hospitality

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The previously mentioned *2004 State Comprehensive Outdoor Recreation Plan* should be must reading for all tourism professionals as it presents a vision for Colorado's outdoor recreation future and discusses the nexus of tourism and outdoor recreation in Colorado. The full document can be downloaded on-line at <www.parks.state.co.us>. A limited number of CDs are available through the Colorado State Parks office at 1313 Sherman Street, Room 618, Denver, CO 80203, or 303-866-3437.

Downhill Skiing

Colorado continues to be the nation's premier winter ski destination, with 34,568 acres of skiing, 296 lifts, and 2,062 trails at 24 resorts. During the 2002-03 season Colorado ski resorts enjoyed good snowfall and overcame the challenges of a lagging economy, war in Iraq, safety concerns, and a troubled airline industry to record 11.6 million skier visits for a 4.3% increase over the 2001-02 season and 198,958 visits above the five-year average.

On the basis of a recovering economy, season pass sales, strong early reservations, a recovering international market, and a stronger Canadian dollar, we estimate that skier visits will continue to grow in the 2003-04 season. If Colorado has abundant snowfall, a new record could be set.

As in the past several years, visitation will be driven by the heavily discounted season passes sold by the Front Range destination resorts, which means spending levels will not be as high as when destination skiers accounted for a larger market share of visitors.

The 2003-04 ski season visitation level will be helped by the huge expansion of terrain parks and

SKI LIFT TICKETS
1993-94 to 2003-04
(In Millions)

Season	Lift Tickets	Percentage Change
1993-94	11.2	0.5%
1994-95	11.1	-0.5
1995-96	11.4	2.5
1996-97	11.8	3.6
1997-98	12.0	1.7
1998-99	11.4	-5.0
1999-00	10.9	-4.4
2000-01	11.6	6.4
2001-02	11.1	-4.3
2002-03	11.6	4.3
2003-04[a]	11.8	1.7

[a]Forecast.

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

COLORADO CASINOS
1994-2004

Year	Colorado Casinos Open	Colorado Devices	Adjusted Gross Proceeds (In Millions)			
			Black Hawk	Central City	Cripple Creek	Total
1994	60	11,410	$173.7	$69.7	$82.3	$325.7
1995	59	12,744	195.9	94.5	94.0	384.4
1996	54	12,851	219.9	88.9	102.7	411.5
1997	53	13,361	234.6	87.4	108.6	430.6
1998	49	13,376	272.0	94.0	113.2	479.2
1999	48	13,988	354.9	73.8	122.6	551.3
2000	45	14,588	433.8	63.5	134.6	631.9
2001	43	14,587	478.3	59.7	139.5	677.5
2002	43	15,575	524.5	52.8	142.2	719.5
2003[a]	44	15,576	519.7	51.9	147.9	719.5
2004[b]	46	16,924	545.7	54.5	155.3	755.5

[a]Estimated.

[b]Forecast.

Source: Colorado Division of Gaming and Colorado Business Economic Outlook Committee.

other improvements at the ski resorts. The following events will also help bolster ski visits:

- Men's World Cup Downhill and Super G Races at Beaver Creek
- 13th Annual SAAB U.S. Extreme Freeskiing Championships and the 10th Anniversary U.S. Extreme Boarderfest at Crested Butte
- ESPN Winter X Games VIII at Aspen/Snowmass
- U.S. Freeskiing Open at Vail
- Chevy Truck NorAm Superseries and 29th Annual Wells Fargo Bank Cup at Winter Park
- 30th Annual Bud Light Cowboy Downhill at Steamboat

Gaming

Colorado's casino gaming industry has enjoyed dramatic growth in the past, registering double-digit or healthy single-digit increases each year. However, adjusted gross proceeds through September 2003 show a sluggish pace, decreasing 3.3%, to $532.3 million. While 2003 performance is expected to be flat, the casino industry will rebound in 2004 and record a 5.0% increase.

Blackhawk, which dominates the casino market, continues to grow. Cripple Creek is recording slow growth, and Central City continues to lose market share.

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[b]	18.5	18.5	37.0
2004[c]	19.6	19.6	39.2

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

Air Travel

The leisure and hospitality sector depends heavily on air travel. For the first time since 9/11, there is some encouraging news on the air outlook. Denver passenger traffic surged 9.3% in September 2003 for the highest monthly gain since January 2003. The improving economy and more competition were the keys to passenger growth. A total of 2,960,096 travelers passed through DIA during September compared with 2,709,400 in the same month in 2002. The September figure brought the total for the first three quarters of 2003 to 28,126,571, an increase of 3.7% over the first nine months of 2002.

Other good news on the air front is that seven new airlines began using DIA in the past two years. United will launch its new low-cost carrier Ted, with flights beginning February 12, 2004. In November, Denver Mayor Hickenlooper announced a settlement with United Airlines that will provide Frontier with gates needed for expansion. This will accommodate Frontier's anticipated growth over the next several years. ✜

Government

This NAICS sector includes: 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.

The Government Supersector includes federal civilian, state, and local government employment in the state of Colorado. For the past five years (1997 to 2002), this supersector has grown at a compound annual growth rate (CAGR) of 2.6%. In 2002, employment in the Government Supersector in Colorado increased 4.2%, which was considerably higher than the national employment increase of only 1.8%. Employment growth in the supersector is projected to decrease by 1.2% in 2003. In 2004, the forecast calls for growth to decline slightly, falling by 0.5%. Employment in all subsectors is expected to decrease in both 2003 and 2004.

Federal Government

Overall, the level of federal government employment has decreased slightly over the past five years, declining by 0.5%. This trend was interrupted due to the 2000 Census as federal government employment increased by 1.3%, but then dropped to historic lows the following year. The events of September 11 temporarily reversed the downward trend for 2002. Federal government employment posted a 0.2% increase in Colorado and 0.1% nationally with the advent of the homeland security initiatives. Nationally, federal government employment is expected to post similar gains in 2003, while in Colorado the forecast is for a 0.6% decline, or 300 jobs.

Because of the war in Iraq, federal government expenditures are growing very rapidly. Federal defense expenditures are forecast to increase almost 10.0% this year and will rise another 5.0% in 2004. Federal spending related to nondefense projects will also climb in 2003 and 2004 but at about half the rate posted for defense expenditures. Although defense spending will not have a huge impact on the Colorado economy, the regional impact of this spending will help maintain federal government employment levels. Federal employment will post only minimal losses due to an employment freeze in the first half of 2003 and retirees not being replaced. National U.S. Postal Service employment will fall by almost 4.0% in 2003, but in Colorado employment is expected to remain steady due to the continuation of population expansions in the surrounding areas of metro Denver and the rural areas. In 2004, the Federal Sector is expected to drop by 0.8%, or 500 jobs.

GOVERNMENT EMPLOYMENT IN COLORADO
1994-2004
(In Thousands)

Year	State	Local	Total State and Local[a]	Federal Civilian[b]	Total Civilian[a]
1994	71.3	168.9	240.2	59.1	299.3
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	223.8	305.7	53.0	358.7
2003[c]	80.4	221.3	301.7	52.7	354.4
2004[d]	80.0	220.5	300.5	52.2	352.7

[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.

State Government

Over the last five years, state government employment has grown at a CAGR of 1.9%. In 2002, the sector increased by 2.4%, significantly above the subsector average. State education accounts for approximately 61.0% of state government employment. This subsector posted a CAGR of 1.4% over the past five years and showed an increase of 2.7% in 2002. These trends for state government employment will dramatically reverse in 2003 as declines in state revenues cause state government employment and state education to contract by 1.8% and 1.7%, respectively. The forecast calls for state employment to remain virtually flat in 2004, while state education falls by another 0.6%.

This decrease in state employment can be attributed, in part, to state employees taking advantage of the relatively low rate for purchasing years to add to their pension. Record numbers of state employees have been buying years because the price of purchasing them jumped in November 2003. This has led to a higher than average number of retirees in 2002 and 2003. With record numbers of state retirees and a voluntary hiring freeze in place, many of the vacancies will remain open. This process has also mitigated the need for layoffs in some state departments. The attrition seen at the state government level in 2003 is due in some degree to salary freezes, along with increased health-care costs passed along to employees. As the state economy shows signs of life, some state staff are jumping into the private sector.

The contraction in state government employment will occur primarily because of the steep decline in the state's economy. The recent downturn has been exacerbated by losses in the stock market, which significantly reduced sales tax and capital gains income tax receipts. Many of Colorado's major industries, from manufacturing to tourism, have suffered in 2002 and 2003, and there is little improvement expected in 2004. Other than the Grand Junction area, tourism is off significantly throughout the state due to several factors. There were some signs of recovery in 2003, with growth in airport traffic at Denver International Airport. According to the Office of State Planning and Budgeting, the state's general fund budget has decreased by 4.2% ($236 million) in state fiscal year 2002-03, but will increase slightly by 2.2% ($122 million) in the following fiscal year. As an example, collectively, the University of Colorado is expected to lose $79 million in funding between 2003 and 2004. The cuts have already resulted in the dissolution of academic programs and research centers and almost 200 positions. The university is expected to cut up to 300 more positions in 2004.

Local Government

Local government is comprised of municipalities, counties, school districts, and special districts. From 1997 through 2002 local government employment increased by almost 20.0%, a CAGR of 3.7%. During the same period, the annual average growth in local educational services, which accounts for more than 51.0% of local government employment, increased by a slightly slower rate of 3.2%. In 2002, local government grew by 6.0%, while local education posted a 5.1% gain. The 2003 estimate is for local government to fall by 1.1%, or 2,500 jobs, while the 2004 forecast calls for a 0.4% decrease, or 800 jobs. The local education subsector will experience similar rates of decline.

Nationally, reports indicate that since 1977 state per capita funding on higher education has decreased by 17.0%. As a percentage of the Colorado state

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INDEX OF GOVERNMENT EMPLOYMENT IN COLORADO 1994-2004 (Base Year: 1994=100)

Year	State	Local	Federal Civilian[a]
1994	100.0	100.0	100.0
1995	101.0	103.4	96.3
1996	101.8	107.2	93.1
1997	104.5	110.6	91.9
1998	106.5	113.6	92.2
1999	108.1	116.7	91.5
2000	110.2	120.5	92.7
2001	112.2	125.0	89.5
2002	114.9	132.5	89.7
2003[b]	112.8	131.0	89.2
2004[c]	112.2	130.6	88.3

[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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general fund, public higher education funding has gone from 13.3% of the fund in state fiscal year 2001-2002 appropriations to 10.6% in 2003-2004. In the same time period, Colorado resident student full-time equivalent (FTE) has risen significantly, from 123,383 to 135,392. Out-of-state FTE has increased slightly, from 22,152 to 22,809. The number of Colorado high school graduates in Colorado will continue to rise through 2006 and 2007, reaching an all-time high estimated at 47,856.

The outlook for 2004 and 2005 is indicated by the governor's proposed budget, which will increase state spending by 5.8% and provide a $16.3 million hike in financial aid to help students attending state institutions of higher education. The increase to the state budget will assist higher education in preparing for the expected increase in the Colorado resident student population. The role higher education plays in Colorado's rural areas is substantially bigger than in the metro regions. Rural communities such as Durango, Alamosa, and Gunnison will see a proportionately higher impact from an increase in funding to higher education because of the important role higher education plays in these communities.

In the metro area, local school districts are facing budget concerns, partially due to a decrease in enrollment. Boulder County closed more than three schools this spring because the buildings did not accommodate enough students to make operations worthwhile. Jefferson County is also struggling with attracting enough student enrollments. However, the Cherry Creek School District wants to build four elementary schools and two middle schools with the passing of a $14 million mill levy increase. It has not been stated whether plans are for 2004 or 2005. One question remains: What effect will the voucher system have on local school districts' employment levels?

Many city budgets and bureaucracy have grown over the last decade; however, they have not kept pace with the population. Over the past few years, local communities have been negatively impacted by a number of factors. The continuing Colorado drought, summer wildfires, and a decline in tourism have all contributed to a weakening of many local economies. The effects of the TABOR amendment that limits the amount of revenues the taxing authority can spend have restricted growth in government spending. As a government's revenues decline (as a result of lower sales tax revenue, for example), the amount of revenues that can be spent in the following years are bound by a lower spending level. Local government budgets were cut in 2003, and will see no growth in 2004 due to the economic slowdown and the lagging recovery. The impact of this will lower government's ability to maintain revenues for years to come. That is to say, the base from which allowable growth is calculated according to the TABOR amendment has declined, thereby reducing the government's future spending potential and ability to proactively rebound from the poor economic state of today.

Local government across the state has curtailed local services and capital projects in 2003, which will continue into next year. Budget cutbacks have required local governments to leave vacancies unfilled and in some cases, eliminate positions. In almost every municipality, a reduction in budget finds cuts to the police force and a lack of salary increases and bonuses for city employees. It will take several years for these local economies to rebound. ✜

International Trade

Prospects for Growth in 2004

The world economy is showing signs of recovery, but the pace and strength of the recovery is still unclear. After three lean years, the global economy appears to be ready for growth, but it may be uneven. The recent collapse of the World Trade Organization (WTO) trade talks in Mexico could foretell a slowdown.

The United States, under the impetus of extreme pro-growth monetary and fiscal policies, seems to be driving the world recovery, but the dual problem of a trade deficit and a mounting budget deficit could eventually cause trouble. Large trade and payments imbalances can lead to exchange rate volatility, ultimately resulting in a further significant drop in the value of the U.S. dollar. The probable depreciation of the U.S. dollar against other major currencies is positive for U.S. manufacturers and exporters, but negative for exporters in Europe, Canada, and other industrial regions. Dollar depreciation does nothing, however, to realign the trade balance with China as long as the yuan is pegged to the U.S. dollar. While the Chinese government will probably endorse some moderate currency realignment over the next year, it will do little to change the shift in the economic landscape that now so heavily favors China.

The U.S. trade deficit should continue to reach near record levels through 2004, partly due to the high cost of energy imports. An additional cause for the trade imbalance is America's increasing demand for consumer and industrial goods manufactured primarily in Asia. Similarly, some services that can be accessed electronically are being outsourced to other low-wage countries such as India.

Europe is still struggling to turn its economy around, but should see modest growth in 2004. The slow economy has reduced European profits and negatively affected business confidence, making firms cut capital spending and employment, which will prolong Europe's recovery. The stronger euro in 2003 hurt European manufacturers, thereby eliminating the hopes of an export-led recovery.

Growth remains weak in the Americas, with problems particularly critical in Argentina, Venezuela, and Colombia. Throughout the region, borrowing costs are still very high, fiscal imbalances in the largest countries have not been structurally reduced, and inflation remains problematic. Brazil and Chile are the exceptions. Economic and fiscal initiatives in Brazil and Chile have helped bolster activity and boost investor confidence.

The severe acute respiratory syndrome (SARS) outbreak in 2003 took a toll on Asian economic activity. The hardest hit economies were Hong Kong and Singapore, both of which depend heavily on travel and tourism. Emergency spending packages are being implemented throughout the region to counteract the slump in consumer spending. In contrast, industrial activity and manufacturing remains strong as Asian exporters continue to gain global market share. China, which suffered the most casualties from the SARS outbreak, has been the economically least affected in the region. Its economy has been growing rapidly, and is showing no signs of slowing. Japan, too, was barely touched by the SARS epidemic. Many positive growth indicators are coming from Japan, such as increased capital spending and rebounding investment; however, Japanese banks continue to have problems with nonperforming loans. This keeps many insolvent companies alive, which acts as a drag on the economy.

VALUE OF COLORADO EXPORTS
FISCAL YEARS 1999-2004
(In Millions of Dollars)

Year	Total Exports	Percentage Change
1999	$5,931.4	n/a
2000	6,593.0	11.2%
2001	6,125.5	-7.1
2002	5,521.7	-9.9
2003[a]	5,770.2	4.5
2004[b]	3,058.7	5.0

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

Because of projected uneven growth in the global economy and the instability of the U.S. dollar, the International Trade Committee is guardedly optimistic regarding Colorado's export outlook for 2004. The committee is forecasting a 2003 year-end increase of approximately 4.5%, which reflects an improvement in exports in the last three months of 2003 compared to 2002. Additionally, the committee is forecasting 5.0% growth in exports from Colorado in 2004.

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Impact of Free Trade Agreements

Despite the collapse of the WTO trade talks in September 2003, the U.S. government is aggressively pursuing the opening of foreign markets for U.S. goods and services by negotiating bilateral and regional free trade agreements. In July Congress approved free trade agreements with Singapore and Chile, Colorado's 7th and 35th largest export markets, respectively. Other free trade agreements that are targeted for completion by the end of 2003 are being negotiated with Australia, Morocco, CAFTA (Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua), and the South African Customs Union (South Africa, Botswana, Lesotho, Namibia, and Swaziland). The positive impact of the North American Free Trade Agreement (NAFTA) on the export of manufactured goods and agricultural products from Colorado to Mexico and Canada illustrates how these agreements can create new opportunities for Colorado businesses in the global marketplace.

Manufactured Exports

Colorado companies shipped $3.3 billion in manufactured, agricultural, and mineral products through July 2003, the most recent month available. This figure was 3.0% higher than the $3.2 billion shipped through July 2002, and continues a gradual turn around in Colorado exports. At $5.5 billion, annual 2002 Colorado exports finished 10.0% below the 2001 levels.

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

Country	2000	2001	2002	Percentage of Total
Canada	1,077.1	1,146.1	1,425.5	25.8%
Mexico	312.6	335.4	370.3	6.7
Korea, Republic of	339.5	248.0	320.4	5.8
Japan	891.6	764.7	436.8	7.9
Malaysia	201.4	228.0	180.9	3.3
France	416.5	339.6	281.5	5.1
Singapore	318.3	357.0	237.3	4.3
United Kingdom	480.8	385.9	288.2	5.2
Germany	444.8	341.0	290.2	5.3
Netherlands	338.8	312.5	209.0	3.8
China (Taiwan)	196.4	152.5	200.4	3.6
Hong Kong	233.8	261.6	235.9	4.3
China (Mainland)	164.6	168.5	153.1	2.8
Australia	133.9	118.6	117.5	2.1
Philippines	78.3	78.7	77.9	1.4
All Other Countries	964.6	887.4	696.8	12.6
Total All Countries	6,593.0	6,125.5	5,521.7	100.0%

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

Major Export Markets for Colorado in 2003

In 2003, the largest region for Colorado exports was Asia, at $1.3 billion, up 9.0% compared to 2002 figures through July. Exports to Asia now make up 39.0% of all foreign sales. Exports to NAFTA partners Canada and Mexico also continued to grow in 2003, increasing 5.0% from the previous period, to $1.1 billion. These two countries form another 32.0% of Colorado's foreign sales (data through July). Exports to Europe, down 6.0% to $796 million compared to July 2002, make up 24.0% of Colorado's total foreign sales. The remaining areas were Australia and Oceania, and Latin America (without Mexico), each forming another 2.0% of Colorado exports, and the Middle East and Africa, together forming 1.4% of the total (data through July).

The state's largest export market through July continues to be Canada at $776 million, followed by Mexico at $291 million and Korea at $249 million. Japan's continued persistent economic troubles, as well as Japanese companies' shift to manufacturing in China and elsewhere in Asia, likely contributed to its drop from Colorado's second largest export market to the number four position, at $242 million. Rounding out Colorado's top 10 markets were Malaysia, France, Singapore, the United Kingdom, Germany, and the Netherlands, in that order.

Colorado's Top Manufactured Exports

Much of Colorado's export growth in 2003 has been due to the strong sales of electronic integrated circuits and microassemblies. Colorado companies sold more than $520 million in this category through July. Export sales of these products have been quite volatile during the past few years: down 36.0% from 2000-2001, up 2.0% from 2001-2002, and up 38.0% over the same period last year. It is once again the largest single category of Colorado exports. The jump in the electronic integrated circuits category—45.0%—was particularly important in Colorado's sales to Asia, forming 35.0% of all Colorado exports to the region. Asia is the dominant foreign buyer for these products, with 89.0% of all products in that category exported to the region. The largest recipients are Korea and Malaysia. Sales in Colorado's second largest export category, automatic data processing machines and magnetic readers, totaled $474 million, down 4.0% through July. The top destinations for these products are Canada, the Netherlands, Germany, Japan, and the United Kingdom.

Outlook from Colorado's Manufacturers

Each year the University of Colorado at Boulder's Leeds School of Business surveys manufacturers throughout the state. Of the 400 surveys sent out this year, 42 firms responded. While this is not a large sample, the responses accurately reflect exporting trends. Of the respondents, 69.0% of them actually export. Among the companies that export, the largest markets were Europe and NAFTA countries, each with 31.0% of international sales (for the NAFTA partners, Canada was at 18.0% and Mexico at 13.0%). Asia was the next largest trading area, accounting for 21.0% of export sales, with 4.0% of these to Japan. Australia and Oceania was another big region, with 11.0% of international sales. The remaining 7.0% of exports were to Latin America (excluding Mexico) at 3.0%, Africa/Middle East at 2.0%, and Russia and the Newly Independent States (NIS) at 2.0%. Of the respondents, the average percentage of current total sales that were exported was 20.0%. Firms estimate total global export sales growth at 10.0% during the next 18 months.

Although Colorado's two largest export partners are the NAFTA countries, companies anticipate a higher growth rate of international sales to Asia, Europe, and Australia/Oceania at 16.0%, 12.0%, and 10.0%, respectively. A growth rate of 5.0% for Canada and 4.0% for Mexico is predicted. Projected sales growth for the remaining markets is as follows: Latin America (Mexico excluded), 5.0%; Africa/Middle East, 4.0%; and Russia/NIS, 2.0%. There is not a single foreign market where companies think sales growth will decline.

Much of Colorado's export growth in 2003 has been due to the strong sales of electronic integrated circuits and microassemblies.

Colorado's Agricultural Export Trends

Colorado's agricultural exports reached $933.3 million in 2002, representing a 1.6% gain over 2001. This increase in exports has continued in 2003, with an additional growth through July 2003 of 1.2% and projected year-end exports of $944.1 million. The U.S. Department of Agriculture (USDA) forecast for 2004 indicates continuing strength in the export markets that should provide an additional 6.2% growth leading to $1 billion in sales.

Colorado's top agricultural exports are beef and meat products, representing more than 39.0% of

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COLORADO'S TOP AGRICULTURAL EXPORT MARKETS (Value in U.S. Millions)

	2000	2001	2002
Mexico	$ 78.7	$202.9	$237.7
Japan	203.0	166.8	119.2
Canada	131.9	113.2	102.7
Korea	86.7	88.6	100.7
Taiwan	75.4	77.5	79.4
China/HKong	46.6	63.9	63.8
Europe	21.8	19.6	21.0

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AGRICULTURAL EXPORTS FROM THE STATE OF COLORADO
FISCAL YEARS 2000-2004
(In Millions of Dollars)

Commodity	2000	2001	2002	2003[a]	2004[b]
Beef and Meat Products	$341.1	$380.5	$366.1	$360.8	$383.1
Hides and Furs	137.5	169.6	169.1	169.1	171.2
Course Grains/Feed/Fodder	135.6	124.7	129.5	135.9	141.8
Wheat, Flour, and Products	188.9	134.8	160.3	169.2	195.3
Fruits and Vegetables	10.7	10.2	10.8	11.2	11.1
Misc. Processed Foods	20.6	36.7	29.7	30.9	31.8
Misc. Ag. Products	13.1	12.8	10.3	10.8	11.1
Sugar, Confections, and Beverages	10.5	10.5	10.0	10.4	10.7
Dairy	12.2	17.6	16.1	14.4	16.7
Animal Fats/Oils	26.9	20.8	31.5	31.5	30.6
Total[c]	$900.1	$918.2	$933.3	$944.1	$1,003.3

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

all exports. Other livestock based exports, including hides and animal fats, represent an additional 18.0% of exports. Wheat is the next largest export sector, at 17.0%. The majority of all harvested wheat is exported each year. The remaining top agricultural exports are shown on the chart on this page.

The depreciation of the U.S. dollar against foreign currencies, equaling almost 9.0% on a trade-weighted basis, makes U.S. agricultural exports more competitive in the world market. This should continue to positively impact exports into 2004.

The top seven international markets for Colorado agricultural products represent $727.4 million, or 78.0% of all sales. Colorado's largest export markets have shifted in the past three years, with the Japanese market impacted by lackluster growth in gross domestic product and food safety issues that have specifically affected Colorado's export of beef. Beef exports have experienced a 41.0% market retraction in three years. On the positive side, the Japanese economy is projected to register a 1.0% growth in 2003, and in the first eight months of this year, Japan's meat imports have grown more than 40.0%. Mexico has surpassed Japan to become the largest agricultural export market for Colorado, with over 200.0% growth in the past three years.

Beef and livestock is Colorado's largest agricultural export segment. Japan remains the largest export market for beef; however, it has experienced negative market pressure from the country's use of safeguard measures against imported beef and pork. Rising U.S. market prices, combined with Japan's increased tariffs on beef and pork, will continue to impact export sales. In Mexico, the market has also been led by beef, this time representing one of the fastest growing sectors for market growth. The USDA is forecasting increased exports in this segment in 2004 for both value and volume of exported beef.

Colorado's wheat industry has started to recover from the lowest wheat harvest in 30 years, and people from this industry are developing production in a new class of wheat (hard white winter wheat). This product has strong global markets, and Colorado is now the second largest state in production of this wheat class.

The state's agricultural industry will continue to be linked to the export market. The 2004 market outlook for key Colorado commodities is a strong global demand for Colorado's agricultural products, leading to record export growth in 2004.

International Education

For academic year 2001-02 the number of international students attending colleges and universities in the United States increased, bringing the total to a record high of 582,996, according to the *Open Door 2002 Annual Report* by the Institute for International Education (IIE). This was a 6.4% increase over the previous school year of 2000-01.

The enrollment of international students at Colorado colleges and universities rose slightly for the 2001-02 academic year, according to figures from the IIE's Annual Census of Foreign Students. Statewide enrollment was 6,692 students, compared to 6,442 for 2000-01, indicating a 3.9% increase.

The tuition and fees for these students during the 2001-02 school year were $85.9 million and living expenses were $116.6 million. Using these figures, less the U.S. support for these students, international students' total contribution to the state was $144.2 million.

International student enrollment for individual institutions in Colorado varies. Some schools are up slightly, others are down, while some remain the same. Fortunately, increased enrollment at some schools offset small decreases at other schools.

A new preliminary study for 2002-03 shows that the number of foreign students attending U.S. colleges increased by less than 1.0%. Tightened visa procedures enacted after the 2001 terrorist attacks, which have delayed the entry of many foreigners into the United States, appear to have contributed to the lower growth rate. The committee believes that this sector will continue to grow in 2004, but at a slower pace.

Statistics on International Educational Exchange in Colorado

From the Institute of International Education's *Open Doors Report 2002,* statistics indicate that the top field of study of foreign students in Colorado is business and management (18.8%), followed by math and computer science (16.4%) and engineering (15.3%). Japan is the leading country of origin for foreign students in the state, with 628 students, or 9.4% of the total. Students from the Republic of Korea total 585 (8.7%), and India supplies 567 students (8.5%). Additional statistics are available at IIE's web site <http://opendoors.iienetwork.org/>.

The new forecast for 2003 shows that 40.1 million travelers will visit the United States. This is down 4.0% from 2002.

International Travel and Tourism

The Office of Travel and Tourism Industries (OTTI) issued a revised forecast for international arrivals to the United States. The forecast indicates that for the third straight year, the United States will see a decline in arrivals. Total international arrivals to the country peaked in 2000, at 50.9 million visitors. In 2001 and 2002 total international travel to the country declined, to 44.9 million and 41.9 million, respectively. The new forecast for 2003 shows that 40.1 million travelers will visit the United States. This is down 4.0% from 2002. The declines in 2001 and 2002 have been greater for the United States than for other countries. According to the new data released from the World Tourism Organization, the United States' market share for total international arrivals worldwide has slipped to 6.0%. This is down dramatically since the 1992 peak U.S. market share of 9.4%.

While 2003 will register a declining number of visitors to the country, the forecast for the next few years indicates that arrivals will see an average annual 5.0% growth rate for 2004 to 2006, slowing slightly to a 4.0% growth rate in 2007. The fastest growth in arrivals between 2002 and 2007 among the 30-plus forecasted countries are India, up 49.0%; Austria, up 45.0%; Denmark, up 35.0%; and United Kingdom, up 33.0%. There are numerous shifts in the top markets that generate visitors to this country. The growth rates will vary each year as certain markets recover more quickly than others.

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For both the City of Denver and the state of Colorado, arrivals from Western Europeans decreased from 2001 to 2002. For 2002 Colorado ranked 12th in Western European arrivals and received a total of 198,000 visitors, while the City of Denver ranked 21st among the cities surveyed and recorded 107,000 visitors. In 2001 Colorado had 228,000 visitors, and the City of Denver had 128,000 visitors. The Rocky Mountain Region (which includes Colorado) received 1,006,000 visitors in 2002 and 1,020,000 in 2001.

From the Asian market, Colorado actually received more visitors in 2002 than in 2001 (97,000 and 88,000, respectively). Data were not available for the City of Denver for 2001, but in 2002, it received 85,000 visitors. The Rocky Mountain Region received 637,000 visitors in 2002 and 859,000 in 2001.

For the Australia and Oceania market, Colorado ranked seventh, with about 31,000 visitors. No other information is available for Colorado or the City of Denver. The Rocky Mountain Region recorded 111,000 visitors in 2002 and 148,000 visitors in 2001.

From the South American market, only data for the Rocky Mountain Region were available. In 2002, it received 89,000 visitors, compared to 162,000 in 2001.

Key countries for Colorado growth will be the traditional ones, such as Canada, Mexico, the United Kingdom, and other Western European countries. With a continuing and strong international marketing program throughout the state, international tourism should grow modestly along with national growth. ✜

Summary

For the first time since 1939, when the Bureau of Labor Statistics first began tracking employment data, Colorado employment showed negative job growth for two consecutive years, in 2002 and 2003. This was only the second time that the United States has shown negative job growth in back-to-back years during this period.

The general consensus of the 81 outlook committee members is the Colorado will return to positive job growth in 2004, showing an increase of 32,300 jobs, or 1.5% job growth. During the 1990s, the Colorado economy relied on telecommunications, manufacturing, construction, and tourism to drive growth. Increased employment in these areas brought strong growth in retail sales, business services, and local government. While all supersectors of the state economy are expected to show improvement over 2003, growth will occur in professional and business services, leisure and hospitality (tourism), health care, and retail trade.

The growth rate for Colorado population will continue to outpace that of the United States. The state is expected to grow at a rate of 1.3% compared to 1.0% for the country. The state growth rate has substantially slowed over previous years as decreasing in-migration has dropped from an average of 72,800 people per year from 1993 to 2001 to 36,700 people in 2002, 16,500 in 2003, and 18,800 in 2004. The recent recession is much different from the recession during the 1980s when Colorado showed negative net migration for the five years from 1986 to 1990.

Since 1950, the state has experienced negative job growth only four times. During this same period

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NEW JOBS CREATED IN NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT SECTORS

Industry	Annual Change: 1994-02 average	Annual Change: 2003[a]	Annual Change: 2004[b]
Natural Resources and Mining	-100	800	800
Construction	8,156	-8,300	-4,700
Manufacturing	-22	-11,000	-1,100
Durable Goods	300	-9,800	-900
Non-Durable Goods	-300	-1,200	-200
Trade, Transportation, and Utilities	9,767	-3,400	5,600
Wholesale Trade	2,033	-1,900	1,600
Retail Trade	6,722	-1,100	3,100
Transportation and Utilities	1,022	-500	1,000
Information	4,478	-4,900	3,300
Financial Activities	3,644	-1,100	700
Professional and Business Services	8,600	-4,200	11,900
Educational and Health Services	6,489	4,300	8,100
Leisure and Hospitality	6,300	-3,000	8,200
Other Services	2,811	300	1,200
Government	6,889	- 4,300	- 1,700
Total[c]	57,011	-34,600	32,300

[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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the U.S. economy showed negative job growth on eight occasions. In 1954 Colorado's decrease of 1.3% was followed by a 5.0% increase in employment. The more shallow decrease of 0.7% in 1986 was followed by a gain of 0.3% in 1987. In November 2002 we were optimistic that the economy would rebound quickly; however, the 1.9% decrease incurred in 2002 proved to be too much of a hole to dig out of given the weak national recovery. The year 2003 will go on record as a second consecutive year of job loss, albeit at a much smaller rate. A 1.5% employment increase is expected in 2004.

On the down side, the traditional goods-producing supersectors are expected to shed 5,000 jobs in 2004. About 4,700 jobs will be lost in Construction and 1,100 jobs will be lost in Manufacturing. The Natural Resources and Mining Supersector will be the only goods-producing sector to add jobs, approximately 800, in 2004.

Growth in state employment during 2004 will be led by the service-producing supersectors, which are expected to add about 39,000 jobs. This is a dramatic turnaround from 2003 when these sectors combined lost 12,000 jobs. The Government Supersector is the only service-producing supersector expected to show a decrease in 2004, with a loss of 1,700 jobs.

Even though the Colorado economy does not directly track the national economy, its growth depends on strong national and international economies. As we look forward, committee members believe the events listed below are key to the future growth and prosperity of Colorado's economy.

National and International

- Increased business investment, along will stable consumption growth, will be the critical drivers in 2004.
- The situation in the Middle East and the constant threat of terrorism will create a level of uncertainty among consumers and businesses.
- Improving global markets will positively impact manufacturing and agriculture-based companies that have international sales. International tourism visits should also increase.
- Historically, the stock market performs at a higher than average level during presidential election years. The rally that began in November 2002 and has been more pronounced in 2003 will continue into 2004.
- Interest rates are likely to show modest increases in 2004. However, they will continue to remain low from a historical perspective.

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.
- While the effects of the 2002 drought receded in the Denver metro area during 2003, they continued to negatively impact many agriculture-based economies in the southern and southwestern parts of the state. Many ranchers were forced to sell their breeding stock because of the drought of 2002 and rebuilding herds has been difficult.
- Retail trade sales are expected to grow at a rate greater than the state CPI-U. However, reduced net migration and increased competition as a result of a saturated retail sales market will prevent strong growth in retail sales. State sales may be negatively impacted by e-commerce sales, which will continue to increase as consumers become more confident with shopping over the Internet.
- Reduced net migration, an overbuilt multifamily housing market, and excess office and commercial capacity will constrain construction employment.
- The construction of new homes in the lower-end markets and the oversupply of multifamily units will continue to reduce pressure for affordable housing.
- Firms will benefit from loosening labor markets; they can be selective about finding replacement employees and hiring new employees when business improves.

From Around the State: La Plata County

Historically, the La Plata County economy has been driven by tourism. The base industry studies conducted by the Department of Local Affairs show that about 34.0% of the county's basic jobs are tourism related. Approximately 20.0% of basic jobs are related to resorts and 5.0% are related to second homes. While tourism remains an important part of the local economy, it has been declining since 1992. The proposed construction at Durango Mountain Resort will strengthen La Plata County's tourism industry in the years ahead.

The *Econometer,* a newsletter of economic indicators published by Vernon Lynch, the director of the Office of Economic Analysis and Business Research at Fort Lewis College, reports that during the second quarter of 2003 La Plata County most sectors showed an improvement compared to the same period last year. The *Econometer* index, used to track the local economy, increased by 3.8% compared to the second quarter of 2002. The construction and energy sectors led the expansion. On a year-to-year basis, most sectors of the local economy, including energy prices, construction, bank deposits, calf prices, real estate prices, industrial activity, employment, population, and retail sales, expanded during the second quarter of 2003. This growth in the economy is expected to continue in 2004.

The La Plata County economy is highly seasonal, which means that some sectors of the local economy change significantly during the course of the year. Diversification of the La Plata economy has occurred with growth in the population and workforce. The *Econometer* index tracks both the annual and seasonal variations in the economy and illustrates this diversification. It shows that negative variations in individual sectors are offset by positive changes in any one sector. The three top employers in La Plata County — the Durango School District 9-R, Mercy Hospital, and Fort Lewis College—provide the foundation for this diversification.

In addition to publishing the *Econometer,* Fort Lewis College also conducts the Southwest Business Forum each January. ✣

From Around the State: Mesa County

The rate of growth in Mesa County's economy began to slow during the latter part of 2002 and the early months of 2003 as evidenced by a higher unemployment rate during this period. The average unemployment rate for 2001 was 3.9%. By the end 2002, the annual average had increased to 4.9%. The current rate stands at 4.7%. The changes in employment indicate the steady growth in the size of the county's labor force, which in turn reflects the annual 2.6% increase in population. The labor force grew from an annual average of 60,752 persons in 2001, to 64,210 in 2002, and 69,129 in August 2003. The number of persons employed has increased steadily from an annual average of 58,376 in 2001 to 65,564 in August 2003. The rate of increase in the number employed has, at times, lagged behind the increase in the labor force, thus accounting for the changes in unemployment rates.

The slowing of economic activity is also reflected in less pronounced increases in the leading sector indicators over the last 12 months. However, none of the indicators declined in absolute value over those values observed in previous periods. Since the summer of 2003, the rates of growth in leading indicators have increased. The most notable positive indicator was construction activity as measured by growth in the number and value of county building permits, both residential and commercial. Also noteworthy was the increase in countywide retail sales as indicated by sales tax collections. Both year-to-date and quarter-to-quarter growth were observed for the 2003 summer months. Consumer spending in Mesa County continues to buoy the level of economic activity. This spending mirrors that occurring in the national and state economies. The importance of the retail sector in Mesa County is underscored by the fact that nearly 20.0% of the jobs are in the retail sector, with at least another one-fourth of jobs emanating from the services sector. The county does not have a large manufacturing sector.

The year-to-date values for tourism indicators, such as lodging tax collections, visitor and convention bureau visits, and visits to the Colorado National Monument, exhibited an upswing during the summer and fall months of 2003. Also, special events, such as the Junior College World Series and music festivals hosted by Country Jam and local wineries, were instrumental in attracting more visitors to Mesa County. The county continues to draw attention from bicycling and other outdoor enthusiasts nationwide.

Much of the job growth in the Mesa County economy over the last several years has occurred in the services sector, especially business and services and finance, insurance, and real estate. Growth in social, health, and education services has resulted in substantial job expansion as well. Mesa County continues to expand as a regional provider of consumer goods, as well as business, health, education, and transportation services. The basic income generated by these sectors and enhanced by higher than average increases in nonlabor income, such as retirement and interest income, accounts for much of the year-to-year growth in personal income and employment.

The year-to-date values for tourism indicators, such as lodging tax collections, visitor and convention bureau visits, and visits to the Colorado National Monument, exhibited an upswing during the summer and fall months of 2003.

The Bureau of Economic and Business Research at Mesa State College has formed a partnership with Mesa County Administration, the City of Grand Junction, the Grand Junction Economic Partnership, the Western Colorado Business Development Corporation, and the Grand Junction Area Chamber of Commerce. The bureau has agreed to develop a new set of economic indicators and conduct studies in order to better describe and track changes in the local economy. These same groups were instrumental in sponsoring the recently completed Mesa County Economic Development Forum. The forum drew some 200 participants from public and private groups in the county. It is hoped that continued widespread public participation will result in a broader coordinated effort directed toward the county's economic development.

The recent upswing in our leading economic indicators and the growing interest in monitoring the direction and quality of local economic growth bode well for the future of Mesa County. ✣

From Around the State: Northern Colorado

The 2004 business outlook for northern Colorado looks bright. With more than $1 billion in new capital construction slated for the region during the next two years, we can look forward to many exciting groundbreakings and ribbon cuttings. Here is a snap shot of some of the major construction projects.

The $62.5 million Larimer County Fairgrounds and Events Center was just completed. Located within a five-mile radius will be two large hotels, one of the largest Harley-Davidson stores west of the Mississippi, and a new regional hospital. Poudre Valley Health Systems will construct a 550,000-square-foot, five-story regional hospital at Centerra, in Loveland, which will create 600 new jobs. At least one major "lifestyle shopping center" has been announced, bringing another 500,000 square feet in new construction. Owens-Illinois will break ground on a 550,000-square-foot bottling plant near Windsor. A new biotechnology company will begin construction on a 60,000-square-foot facility in Loveland. Another new company is expected to break ground on a 59,000-square-foot facility in Fort Collins. In total, more than 1,000 new jobs will be created from new industry.

Several existing industry expansions are pending, which will produce another 1,000 new primary jobs during the next two years. In addition, there are five notable health-care industry expansions, namely the ones in the Poudre Valley Health System (with three expansion projects) and the McKee Medical Center expansion, which will pump another $70 million into the Loveland economy. In nearby Greeley, the Northern Colorado Medical Center plans a $130 million expansion. Additionally, Greeley voters recently approved $100 million in "quality-of-life" projects.

Colorado State University is breaking ground on a $72 million expansion of the Centers for Disease Control. The university has another $33.2 million in projects under construction, one of which is a new concert hall. Several projects are also under design review, including a new 700-room dormitory. The university is expanding its Natural Resources Center and its Bio Hazard Containment Lab.

Several new large retail and grocery store developments are also being built in northern Colorado. King Soopers and Safeway stores are constructing new facilities. New Dillard's and Foley's department stores have been announced. Several new bank branches are under construction. In addition, the $27 million expansion of the Larimer County Courthouse has just been completed. Furthermore, at least 5,000 new homes and condos will be constructed in northern Colorado, bringing the value of new construction to more than $1 billion.

Bottom line, more than $1 billion of new capital construction, along with more than 3,000 new jobs, will be created in northern Colorado during the next two years. ✜

Several existing industry expansions are pending, which will produce another 1,000 new primary jobs during the next two years.

From Around the State: Pueblo County

Pueblo's economy seems to have turned the corner along with the state and national economies, rebounding from a trough in early 2003 in terms of consumer confidence and unemployment. The most recent survey of Pueblo residents conducted in September produced a consumer confidence index of 85, substantially higher than February's record low of 68.

The unemployment rate for Pueblo County was 6.3% in September. This rate is largely unchanged from last year; however, the situation was worse only six months ago, when unemployment exceeded 7.0%. Employers in Pueblo County have added 720 jobs this year.

Due largely to unprecedented low interest rates, residential construction in Pueblo continues to flourish. Single-family housing starts totaled 900 units through the end of the third quarter, an 8.2% increase compared to the corresponding three quarters of 2002. During this period, Colorado experienced an 8.2% decrease in single-family construction, according to figures compiled by the Bureau of the Census. Home mortgage foreclosure filings continued to rise, posting a 23.0% gain for the first nine months of the year compared to 2002.

There has been good and bad news so far in 2003 in terms of primary employment. In March, the Boeing Co. announced that it would be closing its Pueblo operation that manufactures Delta satellite launch vehicles. About 250 jobs will be lost over the course of the next year. Budget cuts at the newly renamed Colorado State University-Pueblo resulted in elimination of more than 55 jobs.

These losses were offset by the announcement that Adams Aircraft, with headquarters in Arapahoe County, would be locating a plant in Pueblo that could hire as many as 450 workers over the next three years. In addition, the Pueblo Chemical Depot decontamination project managed by Bechtel Corporation is beginning to ramp up, and will employ approximately 1,300 workers over the next decade. In July, the City of Pueblo offered a 34-acre site to WCC (formerly Wackenhut Corrections Corp.) to build a prison facility adjacent to the Airport Industrial Park. Pending litigation by a citizens' group, the facility could house up to 700 inmates and offer employment to 160 workers.

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Pueblo continues to solidify its position as a regional center for health-care and retail services as shown by expansions at the two local hospitals. A $20 million expansion of facilities at Parkview Medical Center was recently completed. Over the next few years this sector should see additional job growth as St. Mary Corwin Hospital embarks on its own expansion. Houston Construction, a Pueblo-based contractor, won the contract for the initial phase of this $71 million expansion.

The retail sector should benefit from the anticipated construction of the Pueblo Crossings shopping center, located on the city's north side. The project will be built in two phases, with initial store openings slated for October 2004. A Kohl's department store is the anchor retailer for the first phase of the project.

The combination of current economic conditions and future prospects paints the picture of a regional economy on the verge of sustained economic growth. ✜

From Around the State: Southern Colorado

In October 2003, the College of Business at the University of Colorado at Colorado Springs held its Seventh Annual Southern Colorado Economic Forum. Comments in this section are based on results presented at that forum.

The national slowdown still holds a grip on the southern Colorado economy. The economy slowed dramatically after 9/11 and has not regained much strength since then. Although the technology sectors are experiencing fewer layoffs, there still is not enough new job creation to replace the ones that were lost. While some indicators are improving, there are still signs of a sluggish economy, particularly in the employment picture.

Last year's accounting scandals have worked their way through the economy, and the stock market appears to be reacting to better corporate news since it bottomed out in September 2002. Since then, the S&P 500 Index has gone up 22.0%. Compared to a year ago, several measures are driving optimism in the stock market. Corporate profits are up 12.0%, consumer sentiment rose 3.1%, and interest rates are down 75 basis points. The improved market indicators appear to reflect the investment community's expectation of a stronger economy in the next 6 to 12 months.

Housing and Construction

The market for single-family and townhome residential units has been stronger than the general performance of the local economy. In 2003 single-family housing is expected to decline 16.0% compared to 2002, to a total of 4,100 permits. This is most likely a strong number, especially when net migration for 2003 is expected to be only 778 people. The natural increase in population is expected to add 5,300 people, for a total gain of 6,078. This population growth is approximately two-thirds of the average annual increase in El Paso County during the 1990s. With the average household size of 2.6 people, this population gain supports 2,338 new single-family residential units, not the 4,100 units projected for 2003 based on current trends. Traditionally, the population splits its housing preferences into one-third renters and two-thirds owners. This implies that the population increase for 2003 would support only 1,543 new single-family units.

Despite the apparent overproduction of single-family housing units during 2003, the forum believes the units will continue to sell at close to the projected pace of approximately 4,100 units. Home affordability has increased tremendously due to the drop in mortgage rates. The forum expects that most of the people looking for a place to live will purchase a home rather than rent an apartment. This is anticipated to continue into 2004 when mortgage rates are projected to be in the 6.5 to 6.75% range. While these projected rates are higher that those in 2003, home ownership will remain extremely attractive. Relatively high absorption of new single-family housing units will come at the expense of more multifamily vacancies.

Home affordability has increased tremendously due to the drop in mortgage rates.

The weak recovery and low net in-migration point to a modest decline in single-family housing for 2004. The forum projects total single-family and townhome construction in 2004 will be 3,895 units, a 5.0% decline. Nonresidential construction, which shows a great deal of year-to-year volatility, is forecast to decline 1.1% in 2003 and increase 1.0% in 2004.

Employment and Wages

The average unemployment rate for 2003 is expected to be 6.1%. A modest improvement in unemployment is projected in 2004 and is forecast to average 5.8%. We do not expect much change in the unemployment picture in the first half of 2004, unless there is an unforeseen recovery in the manufacturing and technology sectors. Nonagricultural employment is expected to remain flat in 2003 and grow by 1.7% in 2004. Average salaries will increase 1.5% this year and 3.0% in 2004. The small increases in wages and salaries reflect the loss of manufacturing and other high-paying jobs in the community. Total wage and salary income will rise by only 1.5% in 2003 and 4.8% in 2004. Personal income, which is affected by wages and salaries, is expected to increase 3.0% in 2003 and 3.5% in 2004.

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From Around the State: Southern Colorado

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The Military

The military's normally positive impact on the local economy has eroded due to the deployment of troops from Fort Carson to Iraq. An estimated 11,000 troops were deployed and are expected to be in Iraq until March or April of 2004. Allowing for household size and an estimated 15.0% of spouses and children leaving the area due to the deployment, we estimate a direct loss in salary of $165.6 million a year. Based on Keynes' government multiplier model, the direct impact will magnify and ripple through the economy to an estimated loss of $518.2 million to the local economy.

The loss in economic activity will also affect the government sector. According to a Department of Labor's study of household spending patterns, the typical household will spend approximately 26.3% of its income on items subject to state and local sales tax. Thus, the potential lost sales taxes for the City of Colorado Springs attributed to troops deployed from Fort Carson is $4.6 million. This assumes the economic impact is immediate, complete, and sustained. It is more likely the impact will be spread over the course of a year, will end when the troops return, and will not be fully realized. The forum estimates the actual lost sales taxes to Colorado Springs will be closer to $2.5 million. El Paso County will lose approximately $1.04 million in sales tax collections.

The loss of business while the troops are in Iraq will be greatest among firms catering to local resident services used by the soldiers at Fort Carson. This impact will be felt most by businesses near the base, and is expected to be large enough that some local companies will not hire any employees or worse, may lay-off existing employees. Using the same assumptions that the deployment is temporary and its impact lags the actual deployment, the forum estimates as many as 595 jobs, full and part-time, could be lost until the troops return. This could raise the local unemployment rate by 0.25%.

Retail and Wholesale Trade

Retail sales in El Paso County were up 3.0% in 2002 and are running close to the 2002 level in 2003. This is encouraging given the general decline in the economy, the slowdown in building, reduced sales volumes in furniture and automobiles, and the deployment of troops from Fort Carson to Iraq. The taxable components of retail sales are running behind that of 2002. As a result, Colorado Springs sales tax collections through July 2003 are 2.4% below the 2002 levels. The expected strengthening of our economy should produce an increase in retail sales of 3.0% in 2004. The opening of the Shops at Briargate will help keep some higher-end retail trade business in the county and attract additional businesses to this area.

Wholesale sales rose just under 12.0% in El Paso County during 2002. Given the increasing level of economic activity, the forum expects wholesale activity in El Paso County to outpace that of Colorado. Wholesale sales were up 22.0% in the first quarter of 2003 over year-earlier figures. Provided this pace continues, wholesale sales in El Paso County should increase at least 15.0% in 2003. Wholesale sales in El Paso County for 2004 are also expected to be strong, with at least 10.0% growth over 2003. ✜

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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:

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 60 local, regional, and national organizations.

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University of Colorado at Boulder: Services to Business and Industry

CU Business Advancement Center

The CU Business Advancement Center (CU-BAC) supports the growth of technology industries in Colorado through research, consulting, information, and networking services to businesses and organizations. Assistance includes market definition, feasibility studies, industry studies, business and commercialization plans, needs assessments, and economic impact studies. The center specializes in market research for new products and technologies. Other recent projects include:

- Grant-subsidized services to help companies commercialize products and services developed from Small Business Innovation Research (2002) and research that reduces pollution or diverts waste (2003);
- Administrative and organizational support services for the Colorado Photonics Industry Association and the Colorado Environmental Business Alliance;
- Research on such topics as the target and emerging industries for Colorado's future economic growth, the economic impact of Small Business Innovation Research, and on the barriers and solutions to construction waste;
- A no-cost business plan review and opportunity for selected companies to present to investors at a "Socially Responsible" Investor Forum; and
- Editor and publisher of the cooperative, bimonthly newsletter, *Technology Community.*

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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—with 2003 rankings of 17th by *U.S. News & World Report* and 10th by business faculty according to *Entrepreneur Magazine* for the graduate program, and 14th by *U.S. News and World Report* for the undergraduate program. The entrepreneurship Ph.D. program is ranked among the top programs of its kind. 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. The center's mission is to maximize learning opportunities for entrepreneurially inclined student by

- Delivering a world-class entrepreneurship curriculum;
- Conducting rigorous academic research on topics relevant and useful to entrepreneurs;
- Creating a "connected learning environment" via established relationships with the entrepreneurial community; and
- Being a comprehensive and valued resource for students, faculty, and the entrepreneur community.

The faculty and staff of the center strive to

- Have a profound impact preparing students with an enhanced entrepreneurial mindset to pursue careers with new and emerging growth companies;
- Be a catalyst and supporter for research and discovery in the field of entrepreneurship;
- Encourage partnerships between the university and its faculty, students, and practitioners who create, build, and operate entrepreneurial companies;
- Graduate well-educated entrepreneurial thinkers; and
- Significantly improve the probability of success for those graduates who embark on entrepreneurial ventures.

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Executive Development Programs

Executive Development Programs is part of 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 professional communities by offering certificate and short programs in executive and business education. In addition, we teach fundamental business courses to non-business undergraduates through the Professional Development Certificate offerings.

Executive Development Programs also offers business education taught by faculty that is customized to a company's needs. Clients can work with faculty to develop specialized materials for courses.

Explore the opportunities that Executive Development Programs can offer both to 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 270 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 for 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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Services to Business and Industry

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Rocky Mountain Trade Adjustment Assistance Center (RMTAAC)

RMTAAC is an independent, nonprofit organization offering technical and professional assistance to small and medium-size manufacturers adversely affected by import competition.

The center is staffed by professionals with extensive private-sector experience in marketing, management, and engineering. RMTAAC project manager's 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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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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