FORTY-SIXTH ANNUAL

COLORADO BUSINESS ECONOMIC OUTLOOK 2011

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

University of Colorado at Boulder

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

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Introduction

The Business Research Division (BRD) in the Leeds School of Business is proud to present our 46th annual Colorado Business Economic Outlook. The 2011 Colorado outlook is a product of partnerships that rely on research conducted by our students and staff, and members of the public and private sector.

This forecast analyzes changes that have taken place in all economic sectors during the past year, and looks at the events and activities that will shape the changes in our population, employment, and overall economy for the coming year. The information in this book is initially presented at the Forty-sixth Annual Outlook Forum in Denver, followed by approximately 50 forecast speeches that are held throughout the state during the year, ranging from presentations to industry organizations to the Federal Reserve Bank of Kansas City.

Methodology

We are fortunate to have more than 100 individuals from the business, education, and government communities who serve on 13 sector estimating groups. These groups convene at a kickoff meeting in September, where members discuss trends and issues that might affect economic growth during the upcoming year. During the second half of September and into November, the committees apply this information to their industry. From this series of meetings the sector write-ups and forecasts are prepared and submitted to the BRD in early November, when they are edited and published in this book. The following June, the Steering Committee, which is comprised of the sector chairs, meets to review their forecasts and identify factors that are positively or negatively driving change in their industry's economic performance during the second half of the year. These updates are published in the summer issue of our quarterly newsletter, the *Colorado Business Review*.

Related Economic Research

The BRD's mission is to conduct quality, relevant, meaningful, and socially responsible business and economic research within the local, state, and regional economies for the purpose of expanding the knowledge base of the decision makers throughout the state and region. The annual *Colorado Business Economic Outlook* provides the foundation for all research the BRD conducts within the state. Recent projects include the *Economic Impacts of Implementing the Colorado Clean Air-Clean Jobs Act under Different Scenarios*; the *Enterprise Zone Benchmarking Report;* a brand study for the Leeds School of Business; economic impact studies of

the Recycle America/Waste Management recycling complexes in Austin and Spokane; and an economic impact study of the National Western Stock Show.

The BRD compiles the Leeds Business Confidence Index (LBCI), a forward-looking index that gauges Colorado business leaders' opinions about national and state economic trends and how their industry will perform in the coming quarter. Panelists are invited to complete a brief online survey about next-quarter expectations for sales and profits, hiring, and capital expenditures. The survey results are then compiled into the LBCI. Additional information about participating on the panel and quarterly updates are available throughout the year at http://leeds.colorado.edu/brd.

In addition, the BRD publishes the *Colorado Business Review (CBR)* and conducts contract research projects, including economic impact and marketing studies, and customer perception surveys. The *CBR* and project summaries are available on the BRD website http://leeds.colorado.edu/brd.

Acknowledgments

We are humbled and thankful to have dedicated partners in producing this forecast. A complete list of committee members appears at the back of this book. Their efforts are very much appreciated. We also thank the staff of the Colorado Department of Local Affairs and the Colorado Department of Labor and Employment who supply us with much of the employment and population data used in the forecast.

Finally, I would like to acknowledge the support of our primary sponsor, BBVA Compass, particularly Reneé Meaux. In addition, many Leeds School of Business and CU-Boulder personnel worked hard at preparing, presenting, and promoting this project. My sincerest thanks go to Brian Lewandowski, Research Analyst; Cindy DiPersio, Project Coordinator; Bonnie Beverly, Administrative Assistant; Lynn Reed, Graphic Designer; Kim Warner, Project Manager; and Rachel Ford, Noah Hahn, Cassidy Kinnaird, Ryan Streit, and Matt Wolfe, Student Research Assistants, for their help in assembling and presenting the 2011 Business Economic Outlook Forum. The assistance provided by Sarah Behunek, director of Alumni Relations/Communications in the Leeds School, and Greg Swenson and Dirk Martin, both with the Office of News Services, is also greatly appreciated.

Colorado Economic Forecast for 2011

The sections that follow provide a summary of 2010, a forecast for 2011, and industry-specific data analysis and insight into the key factors influencing each of the sectors. We trust this information will prove useful in your business and policy decision-making process.

Richard L. Wobbekind

Associate Dean for MBA and Executive Programs
Executive Director, Business Research Division
Leeds School of Business
http://leeds.colorado.edu/brd

Colorado Then and Now

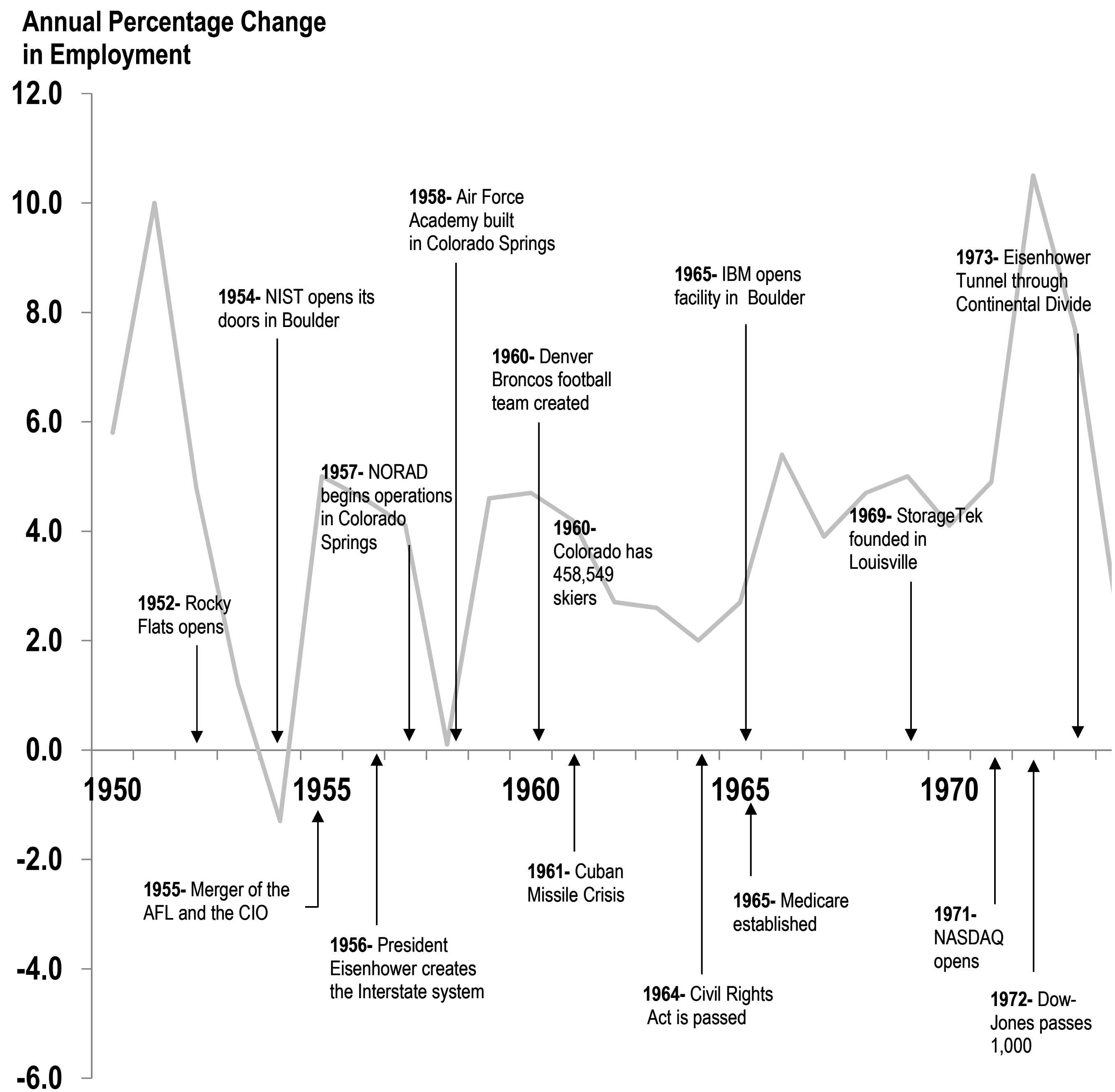
In 1950, the United States was a net exporter of goods. The national population was about 151 million, and approximately 1.3 million people resided in Colorado. The Dow Jones reached a high of 235, and Colorado annual per capita personal income was $1,512.

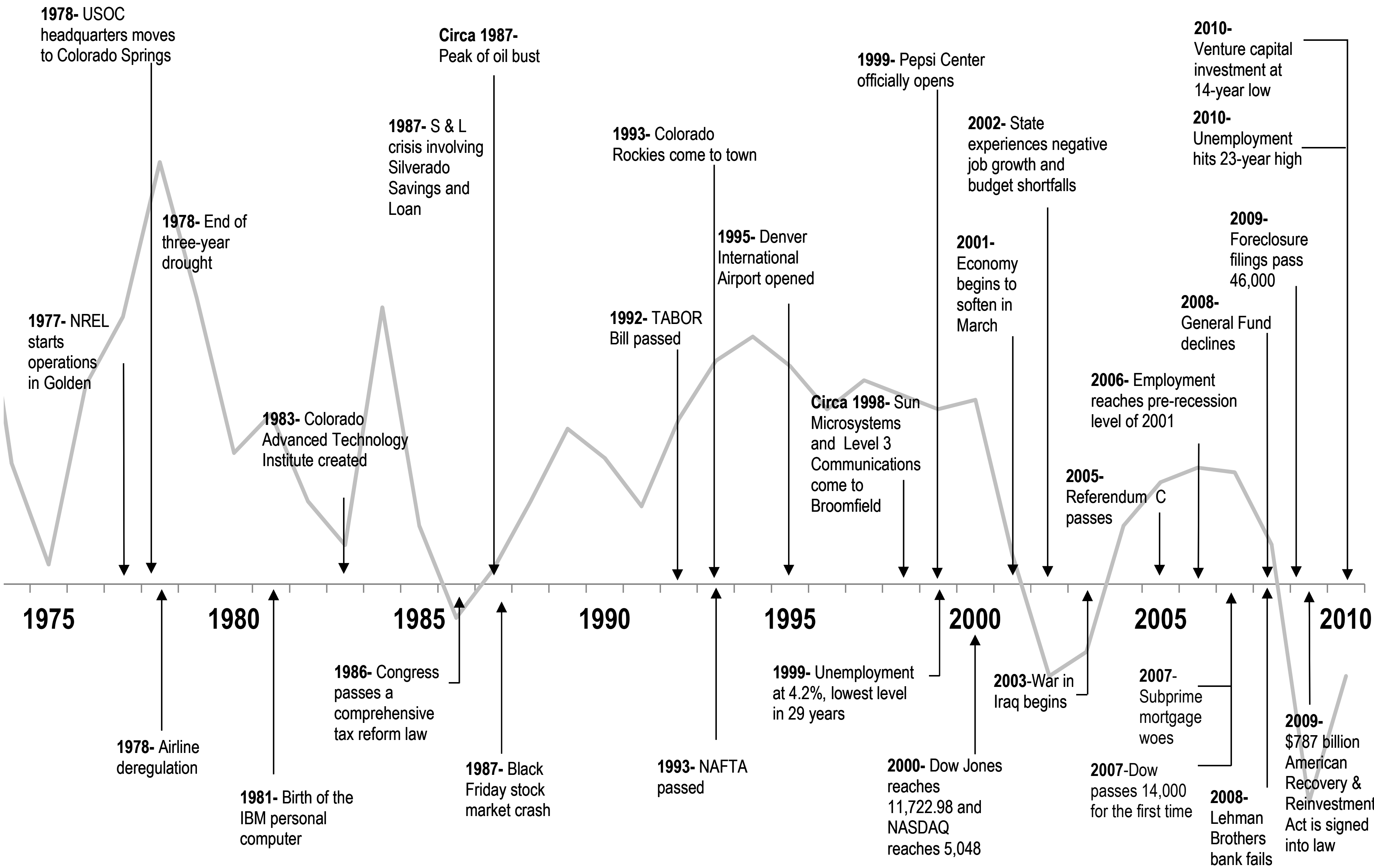
Since then, the U.S. population has grown to more than 310 million, and Colorado's is nearing 5.1 million. The United States has a massive trade deficit, the Dow is recovering from a precipitous drop—from 14,000 to less than 6,600—and Colorado per capita personal income is nearing $42,000.

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

The employment downturn in 2009 marked only the seventh time since 1939 (when records were first kept) that Colorado showed negative job growth. During this same period, the United States recorded negative job growth on 12 occasions.

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




1977- NREL starts operations in Golden
1978- USOC headquarters moves to Colorado Springs
1978- End of three-year drought
1978- Airline deregulation
1981- Birth of the IBM personal computer
1983- Colorado Advanced Technology Institute created
1986- Congress passes a comprehensive tax reform law
1987- S & L crisis involving Silverado Savings and Loan
Circa 1987- Peak of oil bust
1987- Black Friday stock market crash
1992- TABOR Bill passed
1993- Colorado Rockies come to town
1993- NAFTA passed
1995- Denver International Airport opened
Circa 1998- Sun Microsystems and Level 3 Communications come to Broomfield
1999- Pepsi Center officially opens
1999- Unemployment at 4.2%, lowest level in 29 years
2000- Dow Jones reaches 11,722.98 and NASDAQ reaches 5,048
2001- Economy begins to soften in March
2002- State experiences negative job growth and budget shortfalls
2003-War in Iraq begins
2005- Referendum C passes
2006- Employment reaches pre-recession level of 2001
2007- Subprime mortgage woes
2007-Dow passes 14,000 for the first time
2008- General Fund declines
2008- Lehman Brothers bank fails
2009- Foreclosure filings pass 46,000
2009- $787 billion American Recovery & Reinvestment Act is signed into law
2010- Venture capital investment at 14-year low
2010- Unemployment hits 23-year high
1975
1980
1985
1990
1995
2000
2005
2010

U.S. Economic Outlook

After 18 months of recession, the United States officially emerged in June 2009, according to the National Bureau of Economic Research, the entity charged with dating recessions. However, to the average American the end of the recession is not as clear. With unemployment rates persisting at levels twice those prior to the recession, most of us know someone who is unemployed or underemployed. In fact, based on the more inclusive U-6 measure of unemployment, roughly one out of every six people who would like to be working fits into these categories. The reality is like expansions, recessions are difficult to sustain when the key elements of the economy are working to increase output and efficiency through the optimization of land, labor, and capital.

Efforts are being made by the private and public sectors to increase the pace of the recovery. Consumer-driven firms are taking measures to lure customers back to the market, including competitive discounts and incentives on goods. The government spent billions approved through two stimulus packages, and the Fed injected liquidity into the market through quantitative easing measures that ultimately dropped interest rates to historically low rates. However, with the current level of economic uncertainty, consumers and businesses alike are saving and building cash reserves instead of spending. While this is positive for the long-run health of the economy, it detracts from current consumption, which in recent history has accounted for 70% of GDP.

Looking to 2011, the rate of expansion will be most influenced by whether U.S. consumers return to former consumption patterns. While disagreement exists, a preponderance of macroeconomists expects the "new normal" to include savings rates lower than the current rate but significantly higher—in the 4% to 5% range—than they were prior to the recession. With this backdrop, the following sections examine forecasts of output and the key components of GDP.

Total Output

U.S. economic output was flat in 2008 before declining 2.6% in 2009. Output growth for the first three quarters of 2010 was estimated at 3.7%, 1.7%, and 2.5%, respectively, and 2010 growth is expected to be in the 2.7% range. Growth will continue to improve in the first half of 2011, with full-year real GDP growth projected at 2.9%.

REAL GROSS DOMESTIC PRODUCT, 2002–2011
(In Millions of Chained 2005 Dollars)

Economic Indicator	2002	2003	2004	2005	2006	2007	2008	2009	2010[a]	2011[b]
Real GDP	$11,553.0	$11,840.7	$12,263.8	$12,638.4	$12,976.2	$13,228.9	$13,228.8	$12,880.6	$13,228.4	$13,612.0
Percentage Change	*1.8%*	*2.5%*	*3.6%*	*3.1%*	*2.7%*	*1.9%*	*0.0%*	*-2.6%*	*2.7%*	*2.9%*
Fixed Investment	$1,807.0	$1,871.6	$2,058.2	$2,172.2	$2,230.4	$2,161.6	$1,957.3	$1,515.7	$1,573.3	$1,703.9
Percentage Change	*-1.4%*	*3.6%*	*10.0%*	*5.5%*	*2.7%*	*-3.1%*	*-9.5%*	*-22.6%*	*3.8%*	*8.3%*
Personal Consumption	$8,021.9	$8,247.6	$8,532.7	$8,819.0	$9,073.5	$9,289.5	$9,265.0	$9,153.9	$9,309.5	$9,542.3
Percentage Change	*2.7%*	*2.8%*	*3.5%*	*3.4%*	*2.9%*	*2.4%*	*-0.3%*	*-1.2%*	*1.7%*	*2.5%*
Government Expenditures	$2,279.6	$2,330.5	$2,362.0	$2,369.9	$2,402.1	$2,434.2	$2,502.7	$2,542.6	$2,570.6	$2,609.1
Percentage Change	*4.7%*	*2.2%*	*1.4%*	*0.3%*	*1.4%*	*1.3%*	*2.8%*	*1.6%*	*1.1%*	*1.5%*
Net Exports	-$548.8	-$603.9	-$688.0	-$722.7	-$729.2	-$654.9	-$504.1	-$363.0	-$444.3	-$466.3

[a]Estimate.

[b]Forecast.

Sources: Bureau of Economic Analysis, Economy.com, National Association for Business Economics, and Colorado Business Economic Outlook Committee. Note: Components may not sum to total due to chained dollars.

GDP Components

Consumer Spending

Employment, incomes, and wealth took a lashing during the recession, making this downturn more difficult on households compared to other recent contractions. In aggregate, employment fell by 6.8 million, and employer incomes dropped $282.9 billion. The S&P 500 decreased 57%, and household wealth declined 33% from 2007 to 2009. All began to rebound in 2010.

Consumer confidence, as measured by The Conference Board, peaked at 90.6 in December 2007 and plummeted to a record low 25.3 in February 2009. Since then, the monthly number has moved upward, now resting marginally above 50.

Layoffs and a lack of hiring led to a sharp decline in employment nationally. The resulting unemployment rate has remained unwaveringly high, at 9.6% in November 2010, and will continue at that level even as the situation improves. As the economy recovers, workers who had dropped out of the labor force will begin to return, and by nature of the formula, the number of unemployed looking for work will increase. Therefore, high unemployment will remain even as employers increase their workforce.

Virtually every state is expected to resume employment growth in 2011, albeit off a smaller employment base. The unemployment rate should trend downward, especially during the latter part of the year. Vehicle sales, at 10.4 million units in 2009, will likely end 2010 in the 11.5 million range and climb to nearly 12.5 million units in 2011. This vast improvement will still be well below the 16-17 million units sold annually between 2004 and 2007.

Construction will improve marginally in 2011 as 800,000 homes will be started, a trickle compared to 2.1 million in 2005. Retail sales will remain strained as consumers walk the wealth and income tight rope, choosing saving over spending. Inflation, which still appears to be in check, will remain below 2% as slack in the economy keeps prices low, despite a rise in commodities prices.

Fixed Investment

Fixed investment includes investment in residential structures, as well as nonresidential structures, equipment, software, and changes in inventory. In 2010, about 76% of real investment was business-related. Nonresidential investment resumed growth, estimated at 5%, after declining 17.1% in 2009. Expect nonresidential investment to increase in excess of 5.5% in 2011.

Residential investment will continue to contract, if only slightly, in 2010, after plunging 22.9% in 2009. Residential investment growth of nearly 20% is projected in 2011.

Government Expenditures

About 59% of total government expenditures are at the state and local level, roughly 28% are allocated to national defense, and 13% to nondefense programs. Government spending growth is expected to slow to 1.1% in 2010 and 1.5% in 2011.

The Bush and Obama administrations worked out stimulus packages that took the form of tax rebates, the Troubled Asset Relief Plan (TARP), and the American Recovery and Reinvestment Act—all attempts to stimulate the economy and shore up financial markets. Regardless of the often-debated return on investment of these acts, one result is certain—the federal budget deficit is projected to reach alarming levels, in excess of $1.3 trillion in 2010 and decline only slightly in 2011.

Expect fiscal austerity measures in 2011 as legislatures begin down a road of disciplined government spending. The result may be a more balanced global economy and a reduction in the risk of a federal debt crisis; however, it may also mean a slower overall recovery.

Net Exports

In 2009, net exports improved in real terms to a level not seen since 1999. From 2008 to 2009, imports fell more precipitously than exports, 13.8% compared to 9.5%, respectively. The shrinking trade deficit bottomed in Q4 2009 and by Q3 2010 had returned to 2008 levels. The United States maintains a net deficit on goods and a net surplus on services. Indeed, *services exports* hit record levels.

The trade imbalance will surely be impacted by household savings, but more troubling is the emergence of currency wars. Aside from China pegging their currency against the dollar, other global currencies are playing the devalue game, attempting to make domestic products more attractive on world markets.

Expect net exports to decline, from -$444.3 billion in 2010 to -$466.3 billion, in 2011. ✜

Colorado Economic Outlook

This section provides a brief historical perspective of key Colorado economic indicators, synthesizing Colorado's output, income, population, employment growth, and inflation.

Population

Colorado's 2009 population was estimated at 5,074,528, a gain of 1.7%—or 87,856 people—over the 2008 estimate of 4,987,672. Between 2000 and 2009, Colorado's average annual population growth rate was 1.8%, compared to 0.9% nationally, and increased by an estimated 735,000. Colorado's population change between 2000 and 2009 ranked seventh in the nation, and between 2008 and 2009 it ranked fourth.

Colorado's increase in population is due to a combination of natural increase (births minus deaths) and net migration (in-migration minus out-migration). The state's population increase between 2008 and 2009 was estimated to be a natural increase of 38,648 and net migration of 48,208.

Population growth for the state is expected to slow to 1.6% in 2010 and 1.5% in 2011. As of July 1, 2010, Colorado's population was forecast to reach 5,157,500, an increase of approximately 83,000 (38,000 from natural increase and 45,000 from net migration). Approximately 10,000 of the 45,000 is attributable to the planned move of military troops and their families to Fort Carson in El Paso County following the Base Closure and Realignment Commission reallocation. Many of these troops may currently be deployed and will not be physically at

COMPONENTS OF COLORADO RESIDENT POPULATION, 2002–2011
(In Thousands)

Year	Births (Resident)	Deaths (Resident)	Natural Increase	Net Migration	Population Change	Total[a] Population
2002	67.8	28.8	38.9	30.8	69.8	4,526.0
2003	69.0	29.0	40.1	20.1	60.2	4,586.2
2004	68.5	29.0	39.4	24.5	63.9	4,650.1
2005	69.0	29.1	39.9	24.3	64.2	4,714.4
2006	69.5	29.3	40.2	53.5	93.8	4,808.1
2007	70.8	29.7	41.1	46.4	87.5	4,895.7
2008	70.7	31.0	39.7	52.3	92.0	4,987.7
2009	69.1	30.5	38.6	48.2	86.9	5,074.5
2010[b]	69.0	31.0	38.0	45.0	83.0	5,157.5
2011[c]	72.0	31.4	40.6	38.5	79.1	5,236.6

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

[b]Estimated.

[c]Forecast.

Source: Colorado Department of Local Affairs, State Demography Office.

STATE AND NATIONAL ECONOMIC COMPARISON, 2002–2009

	2002	2003	2004	2005	2006	2007	2008	2009
Colorado								
Real GDP ($ billions, chained 2005 dollars)	204.4	205.1	209.4	217.4	223.1	229.5	233.9	231.9
Total Personal Income ($ billions)	157.8	159.9	168.6	179.7	194.4	205.2	214.7	210.2
Per Capita Personal Income ($)	35,023	35,156	36,652	38,555	40,898	42,367	43,509	41,839
Employment (thousands)	2,184.2	2,152.8	2,179.6	2,226.0	2,279.1	2,331.3	2,350.5	2,245.6
Unemployment Rate (percent)	5.7	6.1	5.6	5.1	4.4	3.9	4.9	7.7
LBCI Expectations for State Economy (Q4)	N/A	61.2	65.7	50.9	50.1	47.2	48.3	51.9
United States								
Real GDP ($ billions, chained 2005 dollars)	11,553.0	11,840.7	12,263.8	12,638.4	12,976.2	13,228.9	13,228.8	12,880.6
Total Personal Income ($ billions)	9,060.1	9,378.1	9,937.2	10,485.9	11,268.1	11,912.3	12,391.1	12,174.9
Per Capita Personal Income ($)	31,444	32,244	33,857	35,398	37,679	39,441	40,649	39,595
Employment (thousands)	130,341	129,999	131,435	133,703	136,086	137,598	136,790	130,920
Unemployment Rate (percent)	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3
LBCI Expectations for National Economy (Q4)	N/A	65.2	65.2	39.6	43.8	38.8	42.8	50.9

Note: Figures are not inflation-adjusted.

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis, Colorado Business Economic Outlook Committee, and LBCI (http://leeds.colorado.edu/brd).

Fort Carson. The 2011 population forecast is an increase of 79,100—40,600 from natural increase and 38,500 from net migration—for a total of 5,236,600.

Since 1980, gross migration to and from Colorado has been fairly stable with in-migration fluctuating between 120,000 and 160,000 and out-migration varying between 110,000 and 140,000. When thinking about migration and population change, it is important to remember that net migration is the net of the much larger in-migration and out-migration. Even during periods of net migration loss for Colorado, well over 100,000 people moved to the state each year.

The short-term forecast proposes lower levels of net migration, which historically occurs during recessions, lagged by one to two years. Net migration is highly correlated to changes in the economy. Historically, Colorado has had net out-migration or low levels of net in-migration during and for a year or two after recessions (1975-76, 1984-1990, 2002-05).

Census 2010 counts for the state will be released at the end of 2010 to the U.S. president. Population counts for counties and cities, down to the block level, will be released starting in March 2011. After these counts are received the State Demography Office will create intercensal estimates for 2001-2009 using Census 2010 counts as a benchmark, re-bench its forecasts, and update methodologies after comparing Census 2010 counts to its own estimates.

Leeds Business Confidence Index (LBCI)

Since 2003, the Business Research Division has produced a quarterly leading indicator that measures the expectations of Colorado business leaders. Looking back at the results for 2010, the forward-looking Leeds Business Confidence Index (LBCI) has shown both optimism and caution. For the first three quarters, thte index reached nearly 55, similar to the level before the recession. By the end of 2010 confidence dropped to 48.6, the first decline since Q1 2009. The elements that make up the index include confidence in the U.S. and Colorado economy, sales, profits, capital expenditures, and hiring plans. Business leaders have consistently expressed greater optimism about the Colorado economy compared to the U.S. economy. In Q4 2010, business leaders indicated they are watching employment, consumer spending, and housing/construction to gauge confidence in the economy. Additionally, they said politics, lending/finance, and consumer/business confidence are the greatest inhibitors to the recovery.

The LBCI has accurately tracked changes in economic performance relating to major events, such as the start of the Iraq War, the effects of Hurricane Katrina, and the start and end of the most current recession. As a supplement to the information gained in this book, business leaders are invited to track the performance of the Colorado economy throughout the year via the LBCI. For additional information about how to participate as a panelist or receive survey results go to http://leeds.colorado.edu/brd and select Leeds Business Confidence Index. ✥

CONSUMER PRICE INDEX, U.S. AND DENVER-BOULDER-GREELEY 2002-2011 (1982–1984=100)

Year	U.S. CPI	U.S. CPI Rate	Denver-Boulder-Greeley CPI	Denver-Boulder-Greeley CPI Rate[a]
2002	179.9	1.6%	184.8	1.9%
2003	184.0	2.3	186.8	1.1
2004	188.9	2.7	187.0	0.1
2005	195.3	3.4	190.9	2.1
2006	201.6	3.2	197.7	3.6
2007	207.3	2.8	202.0	2.2
2008	215.3	3.8	209.9	3.9
2009	214.5	-0.4	208.5	-0.6
2010[b]	218.0	1.6	211.9	1.6
2011[c]	221.5	1.6	215.2	1.6

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

[b]Estimated.

[c]Forecast.

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

Colorado Labor Force and Employment

This marks the 46th sector by sector forecast and discussion of state employment, compiled by industry leaders in Colorado and presented by the Business Research Division (BRD). Selected sectors in this book discuss output, sales, cash receipts, permits, and other measures of economy growth. However, one message is consistently delivered throughout the book—employment growth. Foundationally, jobs are the economy. This section lays the foundation for each of the NAICS supersectors by providing an overview of labor force and wage and salary employment totals.

Labor Data Sets

The data for this forecast are derived from two U.S. Bureau of Labor Statistics (BLS) sources: Current Employment Statistics (CES) and Local Area Unemployment Statistics (LAUS).

The CES data set is the most frequently cited labor series and is typically used to evaluate sector trends. Compiled from a survey of *companies*, it includes full-time and part-time workers, temporary workers, employees on paid holiday or sick leave, and those who worked for only part of a pay period. It does not include sole proprietors. CES data for a particular year are revised twice—3 months and 15 months after the end of the year—based on the Quarterly Census of Employment and Wages (QCEW) that all firms are required to submit.

The LAUS labor series provides an estimate of the size of the total labor force and is used to calculate the unemployment rate. The LAUS data considers the labor force as everyone of working age who is actively employed or looking for a job. Students, retirees, stay-at home parents, institutionalized individuals, and discouraged workers are not included in the workforce. This data series, which is more inclusive than the CES data set, is compiled from a survey of *households*. It includes farm workers, self-employed individuals, and full-time or part-time employees.

Labor Force

Between 2004 and 2007, household employment grew faster than the labor force. As a result, the unemployment rate declined from 5.6% to 3.9%. With continued population growth and the drop in wage and salary employment, Colorado's unemployment began to increase in 2008, with a strong uptick to 8.2%, in 2010. Prior to this recession, the last time Colorado experienced unemployment above 8% was in 1987. The unemployment rate is expected to top out at 8.8% in 2011 as new entrants and unemployed individuals who stopped looking for work during the recession return to the workforce. Colorado's unemployment rate is expected to remain nearly 1% below that of the nation.

COLORADO RESIDENT LABOR FORCE (NOT SEASONALLY ADJUSTED), 2002–2011
(In Thousands)

Labor Force	2002	2003	2004	2005	2006	2007	2008	2009	2010[a]	2011[b]
Colorado Labor Force	2,442.7	2,492.3	2,535.7	2,588.4	2,653.3	2,695.8	2,727.6	2,701.0	2,653.8	2,693.8
Total Employment	2,304.1	2,339.5	2,393.0	2,455.8	2,537.3	2,591.4	2,595.3	2,492.5	2,445.7	2,465.7
Unemployed	138.6	152.8	142.5	132.6	116.0	104.4	132.4	208.5	218.1	238.1
Unemployment Rate	5.7%	6.1%	5.6%	5.1%	4.4%	3.9%	4.9%	7.7%	8.2%	8.8%

[a]Estimated.

[b]Forecast.

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

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

Employment

From the end of 2000 through 2010, Colorado added nearly 819,000 people but shed 2,900 jobs, indeed making it the "lost decade." With the state's diverse industry composition, high-tech clusters, educated workforce, and entrepreneurial spirit, Colorado is poised for growth in 2011. Moreover, employment gains should be relatively achievable, given the much smaller base on which to grow.

In 2010, the goods-producing sectors will lose 23,100 workers. The largest declines will occur in Construction as both residential and commercial real estate development remain all but stagnant. In addition, Manufacturing will show losses for the 11th consecutive year, while the Mining and Logging Supersector will post a very modest contraction.

Services-producing sectors will shed 11,600 jobs, mostly on the declines in retail and wholesale trade. The Education and Health Services Supersector and the Government Sector will gain jobs in 2010.

Nonfarm wage and salary employment for 2011 will increase by 0.5%, reflecting a gain of 10,100 jobs. Most sectors of the economy will return to growth in 2011, save for Construction,

continued on page 12

COLORADO NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT
2002–2011
(In Thousands)

Sector	2002	2003	2004	2005	2006	2007	2008	2009[a]	2010[b]	2011[c]
Mining and Logging	12.9	13.2	14.4	17.2	21.1	25.2	28.5	24.2	24.0	26.0
Construction	160.4	149.9	151.3	160.0	167.8	167.8	161.8	131.3	113.5	106.5
Manufacturing	163.8	153.9	151.8	150.4	149.1	147.0	144.1	129.6	124.5	123.9
Trade, Transportation, and Utilities	412.1	404.5	406.6	413.0	419.3	429.2	429.3	403.8	396.5	400.0
Information	92.9	84.6	81.2	76.9	75.4	76.4	76.8	74.7	71.3	69.9
Financial Activities	149.5	154.1	154.6	158.5	160.4	159.5	155.6	148.0	144.0	144.7
Professional and Business Services	296.2	292.0	304.1	316.8	331.8	347.9	351.9	330.2	328.1	335.1
Education and Health Services	208.5	213.0	218.5	224.6	231.2	240.4	250.5	257.2	264.5	267.8
Leisure and Hospitality	247.0	245.6	251.3	257.5	264.9	270.4	272.9	262.4	259.6	262.6
Other Services	85.6	85.9	87.4	88.5	90.8	92.9	94.8	93.7	92.4	93.8
Government	355.4	356.2	358.5	362.6	367.2	374.7	384.1	390.5	392.5	390.7
Total[d,e]	2,184.2	2,152.8	2,179.6	2,226.0	2,279.1	2,331.3	2,350.3	2,245.6	2,210.9	2,221.0

[a]Revised.

[b]Estimated.

[c]Forecast.

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

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

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

Colorado Labor Force and Employment

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Manufacturing, Information, and Government, which will shed jobs. Total government employment declines will occur in 2011—the first time since CES statistics began in 1990.

Illustrating the shift from goods to services, in 1990, approximately 16.5% of all employees were in the goods-producing sectors (Mining and Logging, Construction, and Manufacturing). By 2010, only about 12% of Colorado workers were employed in these industries. While benefits are associated with all types of jobs, concerns exist that Colorado is losing its competitive advantage in innovation and thought leadership. Goods-producing industries are often a critical result of innovation and typically have higher wages, a larger supply chain, and a greater multiplier effect than service industries. ✤

2009 AVERAGE ANNUAL WAGES BY SECTOR
COLORADO AND UNITED STATES

Sector	Colorado	United States
Agriculture, Forestry, Fishing, Hunting	$28,613	$26,031
Mining	90,188	85,526
Utilities	79,184	84,877
Construction	47,824	49,322
Manufacturing	58,019	54,873
Wholesale Trade	65,470	61,595
Retail Trade	26,693	26,162
Transportation and Warehousing	41,838	42,823
Information	77,614	71,191
Finance and Insurance	68,766	79,793
Real Estate and Rental and Leasing	40,860	42,263
Professional and Technical Services	77,600	74,770
Management of Companies and Enterprises	116,399	91,429
Administrative and Waste Services	33,239	32,590
Educational Services	36,756	41,994
Health Care and Social Assistance	44,247	43,201
Arts, Entertainment, and Recreation	30,457	31,633
Accommodation and Food Services	17,192	16,691
Other Services	32,717	28,814
Government	47,062	47,552
All Industries	$46,820	$45,559

Note: Average annual pay, Quarterly Census of Employment and Wages.

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Agriculture

Agriculture Sector Stabilizing and Resisting Further Economic Erosion

Colorado's agricultural economy staged a modest but encouraging recovery in 2010. Gross farm revenue for 2010 is expected to increase by almost $90 million, to $6.9 billion. Record estimated cash receipts for wheat and corn offset a decline for hay, while cash receipts were little changed for other crops grown by Colorado farmers in 2010 compared to 2009. Total livestock cash receipts are estimated to be up in 2010 for the first time in two years, but have not regained much of the ground lost from the sharp drop in 2009. Total farm production expenses are expected to be virtually unchanged for 2010. Net state farm income for 2010 is estimated to rise 17%, to $869 million from 2009's low water mark of the last decade, $743 million, but is still 36% below the 2001 record level of $1.4 billion.

Looking ahead to 2011, Colorado net farm income is expected to continue to recover, but not nearly as robustly as in 2010. Production expenses are anticipated to inch higher and will be a limiting factor on net farm income growth. Projected 2011 net farm income of $932 million is 7% higher than the 2010 estimated figure, but it is the third consecutive year below $1 billion. Contextually, from 2000 through 2008, Colorado annual net farm income exceeded $1 billion six times.

For the most part, as goes the livestock industry, so goes Colorado's Agriculture Sector because the livestock complex traditionally accounts for as much as 60% of total farm gate cash receipts. The state's livestock industry revenues are not expected to improve in the coming year. While the 2011 projected average price of $96 per hundredweight for steers and heifers is $5 per hundredweight above the recent lows of 2009, the continuing shrinking of the herd size and fewer cattle being placed on feed make it doubtful that Colorado cattle producers will experience much real net income growth.

Grain prices are projected to be firm in 2011. The average price of wheat and corn received by the state's farmers in 2011 should be substantially higher than in 2010, reflecting global price trends, and may have potential to reach or exceed record levels if any major world supplier or consumer nation experiences a substantial production shortfall in the 2011 season. Livestock producers and the meat and dairy industries will be rewarded by diligent and effective risk management of feed inputs during 2011.

Volatile energy and fertilizer markets, as well as prices, will continue to be "wild cards" for Colorado's agricultural economy, which will challenge business planning, risk management, and economic forecasting. Weather factors were very favorable and produced a record average state wheat yield in 2010, but cannot be assumed to repeat in 2011. Acres coming out of the Conservation Reserve Program in 2011 and re-enrollment decisions by farmers will again be a variable in determining the area planted to Colorado crops.

Volatile energy and fertilizer markets, as well as prices, will continue to be "wild cards" for Colorado's agricultural economy.

Record net farm incomes in 2007 and 2008 helped many farmers and ranchers strengthen balance sheets, and as a result, agricultural producers were in a relatively stronger financial position than some other sectors to weather recent economic storms. Colorado's Agriculture Sector is among the most diverse in the nation, and Colorado farmers and ranchers have proven to be quite resilient and innovative. Many continue to diversify operations and seek additional sources of revenue to sustain their businesses. Agritourism is still expanding in the state, with producers inviting the public onto their lands to experience pumpkin patches, corn mazes, bird watching, hunting, fishing, and other rural agriculture-related activities. Specialty crops continue to add great value and diversity to our agricultural economy. An estimated 100 Colorado wineries are making award-winning wines from grapes grown in the state, and new crops, like hops and millet, are finding markets.

The total value of sales of forestry products, services, and fees received by Colorado farmers exceeds $800 million annually. Government payments for commodity and conservation programs, and from disaster assistance, also bolster farm income and are likely to total $250 million in 2010 and perhaps slightly less in 2011. Landowners are also capturing increased lease payments associated with the development of wind farms, predominantly on Colorado's Eastern Plains.

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Agriculture

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Cattle and calves, the heavyweight of Colorado's agriculture industry, will remain on a plateau in 2011 with cash receipts projected to remain around $2.8 billion. Slightly higher fed cattle prices expected in 2011 will not offset a likely decline in calf prices due to higher feed costs. Colorado cattle marketings in 2011 will be lower and in line with the national trend toward 4%-5% fewer cattle slaughtered. Heavyweight calf prices will be relatively firmer than for lighter-weight calves due to greater production efficiencies. Export demand for cattle and beef is likely to be relatively more supportive to prices than domestic demand as many economies and consumers abroad continue to enjoy a steady economic recovery. U.S. and Colorado high-end diners remain conservative spenders compared to historical patterns.

Colorado's **dairy** industry experienced financial stress in 2009 as revenues plunged by at least 25% from the previous two years. Cash receipts for dairy products did not recover significantly in 2010 and are projected to remain around $365 million again in 2011. Milk production is expected to increase due to more efficiency in output per cow. Near year-end 2010, exports are supporting prices, with cheese and butter benefiting the most. Additional industry restructuring can be anticipated. The Leprino Foods cheese plant under construction in Greeley is not expected to begin adding to local milk demand until 2012, and the total impacts on demand are not anticipated to occur until 2013 when the full plant begins operation.

Hog prices rebounded by as much as 20%-30% in 2010, bringing cash receipts to a projected $170 million. Prices will remain well below 2008 levels, with any run-up in corn and/or soybean prices limiting upside potential. Additionally, well-funded efforts to bring changes in production practices continue to pose a threat to hog producers. Colorado hog industry cash receipts are expected to remain in the $160-$170 million range in 2011, a level far below the average from 1997 through 2007.

The loss of the turkey processing facility in Longmont in 2009 hurt the Colorado **poultry** industry. High feed input costs will also be a drag on profitability with cash receipts expected be flat in 2011.

Sheep and lamb prices could increase marginally in 2011 but Colorado production is projected to decline about 2% from 2010. Cash receipts should remain steady or decline slightly overall. Although gaining greater interest among chefs and locavores, lamb still suffers from generally low consumer demand, and producers continue to experience losses from animal predators. For this livestock

VALUE ADDED BY AGRICULTURAL SECTOR, COLORADO 2002–2011 (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
2002	$3,496.3	$1,280.9	$4,777.2	$679.5	$211.0	$5,667.7
2003	3,736.0	1,293.0	5,029.0	572.7	319.9	5,921.6
2004	4,082.6	1,395.9	5,478.5	643.4	221.2	6,343.1
2005	3,959.0	1,511.4	5,470.4	732.7	382.0	6,585.1
2006	4,110.2	1,574.7	5,684.9	773.4	244.7	6,703.0
2007	4,262.3	2,111.6	6,373.9	838.0	197.4	7,409.3
2008	4,040.2	2,209.3	6,249.5	897.4	261.0	7,407.9
2009	3,323.3	2,370.0	5,693.3	944.6	191.9	6,829.8
2010[c]	3,596.0	2,248.0	5,844.0	825.0	250.0	6,919.0
2011[d]	3,590.0	2,382.0	5,972.0	835.2	225.0	7,032.2

[a]Includes sales of forest products, custom feeding fees, custom harvest fees, and other farm income.
[b]Includes farm program payments directly to producers.
[c]Estimated.
[d]Forecast.
Source: Colorado Business Economic Outlook Agricultural Committee.

sector, 2010 was a price recovery year with record-high prices for slaughter lambs and feeder lambs leading to a sharp rebound in cash receipts from depressed 2009 levels.

Colorado **wheat** acreage is expected to be up in 2011, to about 2.7 million acres. The increase is due to normal crop rotation and grower response to strong prices and a record average yield in 2010 of more than 40 bushels per acre. The early yield expectation for the 2011 is around 35 bushels per acre. While fall 2010 was unusually dry, subsoil moisture was reported to be adequate going into winter dormancy. Prices in 2011 are expected to be substantially higher than in 2010, which would translate into record cash receipts for wheat producers despite lower total production. As was the case in 2010, if estimates for wheat cash receipts in 2011 are far outside current projections, the most likely direction is higher. Global stocks remain historically tight, which provided additional support to prices in 2010.

The state could have another near record year for **corn** production in 2011, with cash receipts projected to reach a record $600 million. Corn prices have proven to be among the most volatile of any crop in recent years. Colorado's five ethanol plants have capacity to utilize 55-60 million bushels of corn annually and produce 140 million gallons of ethanol every year. At maximum capacity, these plants could utilize nearly half of all corn produced in the state. Corn prices will continue to have a major impact on Colorado's livestock industry profitability and animal numbers.

The downturn in the dairy industry was a factor in pulling down **hay** prices, especially for high-quality alfalfa hay, in 2010. As a result, cash receipts declined more than 20%, to $321million, in 2010 and are projected to fall to $300 million in 2011. Yields approaching three tons per acre in 2010 kept supplies ample and a lid on prices. Decreased cattle numbers are also negatively affecting the hay market. If corn prices were to strengthen sharply, hay prices could be supported.

Barley total cash receipts are expected to recover to a level nearer to the five-year average after a sharp decline in 2010 as brewers continue to contract for production.

Acreage of **sugar beets** has declined in recent years; however, strong world prices for sugar are expected to contribute to Colorado sugar beets maintaining prices at the $44 per ton level. With great uncertainty prevailing regarding the legality of planting transgenic herbicide-tolerant sugar beets and questions about availability of alternative nongenetically modified seed, Colorado sugar beet acreage in 2011 is difficult to estimate. Potentially, it could be substantially less than planted acreage in 2010.

COLORADO FARM INCOME AND PRODUCTION EXPENSES
2002–2011
(In Millions of Dollars)

Year	Gross Value of Farm Revenue	Total Farm Production Expenses	Net Farm Income
2002	$5,667.7	$4,705.1	$962.6
2003	5,921.6	4,828.5	1,093.1
2004	6,343.1	5,119.9	1,223.2
2005	6,585.1	5,379.8	1,205.3
2006	6,703.0	5,843.9	859.1
2007	7,409.3	6,194.1	1,215.2
2008	7,407.9	6,161.9	1,246.0
2009	6,829.8	6,086.7	743.1
2010[a]	6,919.0	6,050.0	869.0
2011[b]	7,032.2	6,100.0	932.2

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

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Agriculture

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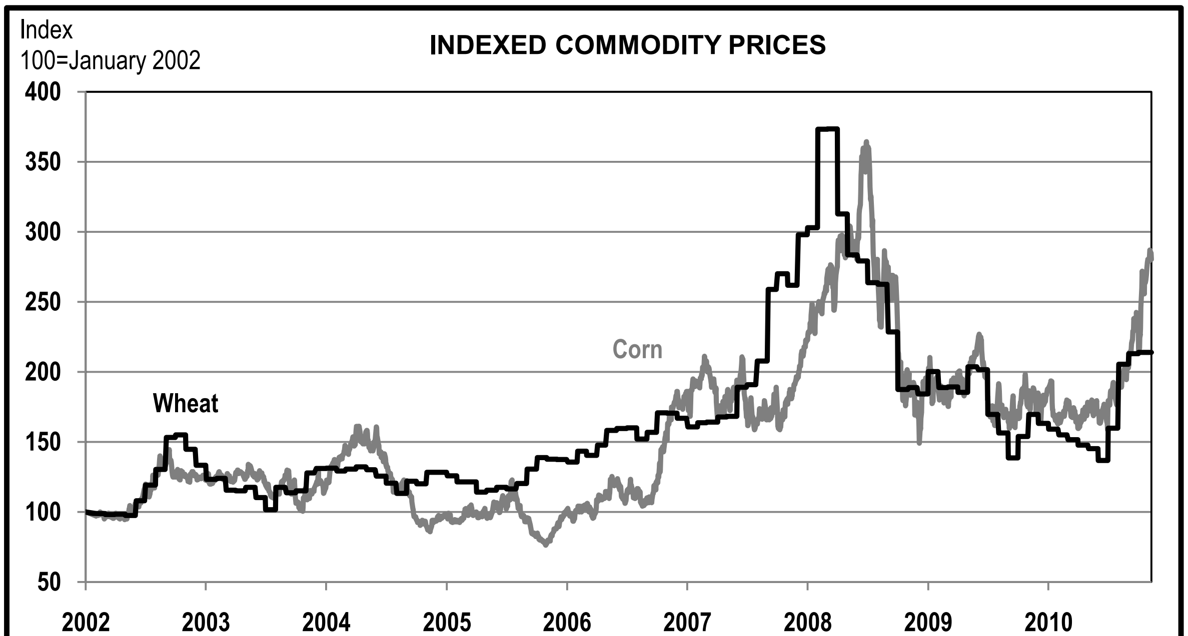
The total value of Colorado's **potato** crop in 2011 is projected to be the second highest on record, at $228 million. Concerns about decreasing aquifer levels in the San Luis Valley seem to have abated somewhat. The industry continues increasing acreage of newer varieties less susceptible to disease and increasing production of specialty potatoes in response to demand. Even though trade of fresh potatoes to Mexico is limited to deliveries of just 26 kilometers inside its border, Mexico continues to be a significant and growing market for Colorado potatoes. More than 2,000 truckloads are exported annually, with an estimated value of $15 million.

Average **onion** prices rebounded in 2010 and are expected to inch up to $15.00 per hundredweight in 2011. Production is forecast to remain stable in 2011.

Fruit crop production and demand in Colorado are expected to result in near record combined cash receipts to producers of peaches, apples, and pears in 2011.

The economic recession has taken its toll on the housing market. Fewer housing starts have resulted in fewer new lawns and landscaping. The **floriculture** and **greenhouse** industry, including **sod** production, will depend largely on the recovery of new home construction to drive growth as the economy stabilizes. Little change in total cash receipts in this sector is projected in 2011.

Colorado's farmers and ranchers continue to have reason to be optimistic about the future and to have confidence in their ability to achieve increasing profitability in the longer term. Urban dwellers and consumers are refocusing on the importance of the economic health and environmental sustainability of agriculture and rural life in the state. ✜



Sources: Prices from U.S. Department of Agriculture (No. 1 hard red winter - ordinary protein, Kansas City, MO), Bloomberg (USDA Toledo No. 2 Yellow Corn Not on the River Spot Price).

Mining and Logging

Colorado is an energy- and mineral-rich state. The U.S. Energy Information Agency (EIA) annually publishes lists of the top 100 natural gas and oil fields in the country. Colorado is home to all, or part of, 13 of the largest natural gas fields in the nation and two of the largest oil fields. Colorado is the 11th largest coal producer by volume in the nation. The Henderson Mine is North America's largest primary producer of molybdenum. In addition to traditional energy resource development, Colorado is also striving to become one of the nation's leading renewable energy states with plans to achieve 30% renewable energy by 2020. This goal will include a portfolio mixed with wind, solar, geothermal, and hydroelectric energy resources.

Revenues generated by Mining and Logging-related activities make this sector one of the most significant contributors to Colorado's GDP. Indications are that this sector will show significantly slower growth in 2010 and 2011 compared to the previous decade primarily due to decreases in natural gas prices. A slower-than-expected recovery from the global economic slowdown has resulted in nationwide oversupply and flat-to-sliding demand. Additionally, the passage of the Clean Air-Clean Jobs Act in Colorado will have both positive and negative impacts on industry and employment, although they will not be felt until late 2011 at the earliest.

Mining and Logging employment is expected to contract by 200 jobs in 2010, followed by a gain of nearly 2,000 positions in 2011.

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VALUE OF COLORADO MINING AND LOGGING
2002–2011
(In Millions of Dollars)

	Oil and Gas Extraction					Mining					
Year	Crude Oil	Natural Gas	Carbon Dioxide	Subtotal	Percent Change	Coal	Minerals	Subtotal	Percent Change	Total	Percent Change
2002	$479	$2,233	$98	$2,810	-23.7%	$616	$629	$1,245	19.5%	$4,055	-14.2%
2003	605	4,567	104	5,276	87.8	703	702	1,405	12.9	6,681	64.8
2004	862	5,929	151	6,942	31.6	796	951	1,747	24.3	8,689	30.1
2005	1,235	8,378	200	9,813	41.3	813	1,789	2,602	48.9	12,415	42.9
2006	1,428	7,469	258	9,155	-6.7	974	1,762	2,736	5.1	11,891	-4.2
2007	1,619	6,368	257	8,244	-9.9	1,075	1,886	2,961	8.2	11,205	-5.8
2008	2,561	10,737	430	13,728	66.5	887	1,821	2,708	-8.5	16,436	46.7
2009	1,540	5,267	324	7,131	-48.1	1,166	1,030	2,196	-18.9	9,327	-43.3
2010[a]	1,796	7,033	330	9,159	28.4	1,070	1,466	2,536	15.5	11,695	25.4
2011[b]	1,778	7,364	337	9,479	3.5	1,000	1,400	2,400	-5.4	11,879	1.6

[a]Estimated.

[b]Forecast.

Sources: 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.

Mining and Logging

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Oil and Gas

Colorado and the Rocky Mountain region continue to be affected by the decline of oil and gas prices after years of strong growth through 2008. The economic downturn, combined with gas discoveries in other parts of the country, adversely affected capital investment in Colorado's oil and gas industry in 2009 and 2010. On a positive note, the extraordinary volatility in petroleum market commodity prices through 2008 and early 2009 appear to have stabilized. Prices are expected to remain stable into 2011.

The total value of oil, gas, and carbon dioxide produced in 2009 was $7.1 billion, a 48% decrease from the 2008 value of $13.8 billion. Colorado's value of oil, gas, and carbon dioxide production for 2010 is projected to be about $9.2 billion, or 28% greater than 2009. For 2011, the value of the state's production is anticipated to be roughly $9.5 billion—a modest increase concomitant with the slow recovery pace for the economy as a whole. Lower natural gas prices or unforeseen volatility in oil prices could significantly impact the 2011 forecast.

Oil

Crude oil prices were higher in 2010 than during the economic slowdown in late 2008 and 2009. The U.S. petroleum benchmark, West Texas Intermediate (WTI), maintained a range between $65 and $85 per barrel, with the monthly spot average typically above $75 per barrel. This contrasts with the average WTI spot price in 2009 of just above $61 per barrel. While demand and price are still significantly below the peaks of mid-2008, demand improved enough to maintain a healthy market for oil, and Colorado crude oil prices responded accordingly. For the first three quarters of 2010, the Colorado weighted-average price per barrel of oil was $69.08 (Colorado Oil and Gas Conservation Commission). This is a 29% increase over the $53.62 per barrel price in 2009. Continued economic recovery will push the price and demand higher, but much will depend on the pace of the global recovery.

EIA expects the WTI to average $80 per barrel through the 2010-11 winter (October-March) and then gradually rise to about $85 per barrel by December 2011. The ministers of the Organization of the Petroleum Exporting Countries agreed in October 2010 to leave production quotas unchanged, with the just-above $80 per barrel range considered ideal. The market is well-supplied currently, and consumers and producers are generally satisfied with prices. The International Energy Agency (IEA) suggests global oil demand in 2011 will be mixed due to possible weaknesses in developed economies. Still, the IEA forecasts a demand of 88.2 million barrels a day for 2011 versus 86.9 million barrels a day for 2010—a 1.5% increase.

Oil activity in Colorado experienced a renewed push in 2010 with increased targeting of Niobrara shale plays in the northeast region of the state. In particular, new lease acquisitions and development in Weld County surged. Comparisons to the Bakken Shale in North Dakota are common; however, the long-term production potential of the Niobrara Formation is still being assessed.

Retail Gasoline

Through September 2010, the average retail price of automotive gasoline in Colorado was $2.70 per gallon. This was a $0.40 increase over the average 2009 price of $2.30, and follows an overall stabilization trend in oil prices in late 2009 and 2010. The transportation sector saw continued relief from the high prices of 2008, but estimates for 2011 suggest prices will slowly creep up to $2.90 or even $3.00 per gallon. Colorado prices do not respond as quickly as the national price corrections, primarily because of minimal local refining capacity. Local prices will continue to vary seasonally in response to mandated fuel requirements.

The use of oxygenated motor gasoline is required during the winter months in the Denver/Boulder and Fort Collins areas. Although the Denver Metro area was the first area in the country to require the use of motor gasoline blended with ethanol to reduce carbon monoxide emissions, Colorado is relatively new to large-scale ethanol production. Colorado produces ethanol mostly from corn at small facilities in the northeastern part of the state. Colorado's *smallest* ethanol production plant is located along with the Coors brewery in Golden, where it uses waste beer to produce ethanol for fuel consumption. New EPA rules will allow blending of higher concentrations of ethanol from 10%-15%, which will have potential effects on supply and demand at Colorado refineries.

Natural Gas

More than 50% of all households in the United States depend on natural gas as a primary heating fuel; for the Midwest, this number climbs to more than 70%. Forecasts from the EIA suggest that the average household using natural gas for heating will likely see a winter (October through March) price increase of 4% (approximately $27 for the winter) over 2009-2010. This projected increase in average household expenditure will result from a forecasted 6% increase in prices and a 2% decline in consumption (net 4%). The National Oceanic and Atmospheric Administration estimates that the total heating degree days in winter 2010-11 will be 3% higher in the lower 48 states compared to last winter and 1% higher than a 30-year average from 1971 through 2000. Regionally, the Mountain West, including Colorado, is projected to be 4% warmer using this same metric.

Colorado is a top natural gas-producing state. The EIA estimates that conventional and unconventional output from several Colorado basins accounts for more than 5% of annual U.S. natural gas production, making it the sixth-largest producing state. The industrial and residential sectors are the leading natural gas-consuming sectors in Colorado. About 75% of Colorado households use natural gas as their primary energy source for home heating, one of the highest shares in the nation. Colorado is a net exporter of natural gas—about two-fifths of its natural gas production is consumed in-state and the remainder is transported to California and to Midwest markets. The 1,679-mile Rockies Express Pipeline (REX), which became fully operational in November 2009, moves natural gas from Colorado to eastern Ohio with a maximum capacity of 16.5 billion cubic meters.

Pricing for natural gas at the Henry Hub benchmark averaged $3.95 per MMBtu in 2009, and as of September 2010 was up to $4.58 per MMBtu. Since mid-September 2010, however, prices have headed downward again. Colorado-specific pricing continues to be less than the Henry Hub futures price due to export market limitations. In 2009, for example, prices averaged $3.95 per MMBtu nationally versus $3.25 per MMBtu in Colorado on a weighted basis. In 2010, the Henry Hub average was $4.58 versus $4.15 per MMBtu in Colorado.

Colorado Interstate Gas (CIG), the major transporter of natural gas in the Rocky Mountain Region, operates the primary pipeline system in eastern Colorado. CIG gas prices, as with national prices, were low in 2009. The average was $3.15 per MMBtu in 2009 compared to $6.85 in 2008. Gas prices in the eastern Colorado region reached a monthly low of $2.43 per MMBtu in April 2009. By December, however, the price had climbed to more than $5.00 per MMBtu. In 2010, CIG prices remained low, with an average price of $4.15 per MMBtu through September. With the natural gas supplies held in underground storage still high (8.4% higher than the five-year average), warm early winter weather, and a slow economy, prices

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COLORADO PHYSICAL OUTPUT OF FOSSIL FUELS
2002–2011

Year	Coal Millions of Short Tons	Coal Index	Crude Oil Millions of Barrels	Crude Oil Index	Natural Gas Billions of Cubic Feet	Natural Gas Index	Carbon Dioxide Billions of Cubic Feet	Carbon Dioxide Index
2002	35.2	100.0	20.4	100.0	918	100.0	295	100.0
2003	35.8	101.7	21.4	104.9	1,004	109.4	308	104.4
2004	39.8	113.1	22.3	109.3	1,065	116.0	342	115.9
2005	37.8	107.4	22.9	112.3	1,119	121.9	362	122.7
2006	35.5	100.9	23.9	117.2	1,218	132.7	373	126.4
2007	36.1	102.6	24.7	121.1	1,296	141.2	375	127.1
2008	32.3	91.8	28.8	141.2	1,463	159.3	334	113.2
2009	28.6	81.3	28.8	141.2	1,492	162.5	367	124.4
2010[a]	25.4	72.2	28.9	141.7	1,592	173.4	336	113.9
2011[b]	26.9	76.4	29.1	142.6	1,666	181.4	343	116.3

[a]Estimated.

[b]Forecast.

Note: Base year for indexed values is 2002.

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.

Mining and Logging

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will likely remain low through the end of 2010 and well into 2011.

Carbon Dioxide

Colorado's carbon dioxide production is marketed primarily for enhanced oil recovery (EOR) operations and secondarily for use in the food industry. In 2009, nearly 367 million cubic feet of CO_2 were produced in three counties (Montezuma, Huerfano, and Jackson), with the total production value roughly estimated to be around $324 million. The carbon dioxide that is provided to the food industry is of a higher grade and therefore commands a premium price (typically one or two dollars) over carbon dioxide produced for energy industry activities. For 2010 and 2011, CO_2 production levels and values will increase modestly, especially if enhanced oil-recovery activity increases.

Drilling Permits

The Colorado Oil and Gas Conservation Commission reports 5,159 drilling permits were approved in 2009, representing a 36% decrease from the 8,027 permits approved in 2008, which was partially attributable to the flood of permits prior to regulatory implementation, and partially due to the economy. For 2010, the commission approved 4,379 permits during the first three quarters of 2010 and expects to finish the year with approximately 6,500 total permits approved. The weekly drilling rig count in Colorado has been increasing since the beginning of 2010, from 45 in January to 66 in August. This is certainly a positive trend, but activity will need to increase substantially to reach the more than 100 rig counts that were common throughout 2007 and 2008. High-paying industry jobs depend on drilling, well operations, and associated infrastructure required to support those operations.

COLORADO MINING AND LOGGING EMPLOYMENT 2002–2011 (In Thousands)

Year	Total Mining and Logging Employment	Percentage Change
2002	12.9	0.0%
2003	13.2	2.3
2004	14.4	9.1
2005	17.2	19.4
2006	21.1	22.7
2007	25.2	19.4
2008	28.5	13.1
2009	24.2	-15.1
2010[a]	24.0	-0.8
2011[b]	26.0	8.3

[a]Estimated.

[b]Forecast.

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

Coal

Since 1864, more than 1.4 billion tons of coal have been mined from the state's reserves. Annual coal production peaked in 2004 at 39.8 million tons but has declined 28% since then. In 2009, production decreased to 28.6 million tons, down 11.6% from 32.3 million tons in 2008. Coal production declines are attributed to geologic constraints at some mines and a slower market for Colorado coal sales to power plants in other states. The demand for low-sulfur, high-heat content Colorado coal decreases each year as more power plants in the Midwest, south-central, and southeast United States come into compliance with air pollution controls. Power companies nationally are also fuel-switching from coal to natural gas to reduce carbon dioxide emissions.

Mines

Ten coal mines that produce bituminous and subbituminous coal for electricity generation at power plants, and to a lesser extent, cement and manufacturing operations, are operating on the Western Slope. Coal is produced in eight western Colorado counties. In 2009, Routt County was the leading coal-producing county, with over 7.8 million tons (more than 27% of the state's total production) from the Peabody Energy Foidel Creek Mine. This mine supplies most of the Front Range power plants with coal, and future production probably will be impacted by HB10-1365 (the Clean Air-Clean Jobs Act), which passed in 2010.

Production

In 2010, Colorado ranked as the 11th-highest producer of coal, and marks the first time Colorado has dropped out of the top 10 coal-producing states during the last 12 years. On the basis of monthly coal production data, the Colorado Geological Survey (CGS) projects that the state's total coal production will be 25.4 million tons by year-end 2010, down an 11.3% for the year.

Value

The value of Colorado's coal production in 2009 was $1,166 million at an average price of $35 per ton. The projected value of produced coal will be $1.1 billion in 2010 and $1 billion in 2011. It should be noted, however, that long-term contracts dictate the price of most coal sold in Colorado.

New Plants

Xcel Energy's new 750-megawatt Comanche Unit 3 coal-fired power plant near Pueblo began operating in July 2010. When fully operational, it will be the largest electrical generating plant in the state and the most efficient, designed with an advanced, supercritical system of environmental controls. Xcel will be able to replace two older, less efficient plants in Denver and Palisade. Comanche's three power stations now have the capacity to generate 1,410 megawatts, the largest potential in the state.

Employment

As statewide coal production decreases, the number of miners needed to operate the machinery also decreases. As of July 2010, a total of 2,090 coal miners were employed by the state's coal mines (out of 2,392 coal mine employees total). This represents a decrease of 6.2%, or 139 miners, when compared to the July 2009 figure. The decline resulted from many of the large coal mines—such as Colowyo, West Elk, and Bowie mines—reducing production. This decline ends a 20-year trend of increasing employment for coal miners.

Export Coal

While Colorado's active coal mines are all located on the Western Slope, the customer base is mainly in the Front Range urban corridor and in states outside of Colorado. More than 53% of the coal produced in Colorado is shipped by rail or truck to 23 other states (five fewer than in 2009), with destinations as far as Delaware and Florida. The five states that use the most Colorado coal are Utah, Mississippi, Kentucky, Tennessee, and Florida. In addition to steam-coal and power generation, over 1.2 million tons of coal are shipped annually to manufacturing and industrial plants in Texas, Indiana, Nebraska, and Wisconsin for cement and other industrial uses. Colorado is considered one of the major environmental-compliance coal suppliers in the nation. Colorado coal exports peaked in 2004 and have declined since then.

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COLORADO ELECTRIC POWER INDUSTRY GENERATION BY PRIMARY ENERGY SOURCE
2002–2009
(In Millions of Megawatt Hours)

Year	Coal	Natural Gas	Hydroelectric	Wind	Solar	Biomass	Petroleum	Other[a]	Total
2002	35.4	9.0	1.2	0.1	0.000	0.030	0.023	0.003	45.8
2003	36.1	9.2	1.3	0.1	0.000	0.031	0.034	0.004	46.8
2004	35.8	10.7	1.2	0.2	0.000	0.035	0.014	0.002	48.0
2005	35.6	11.9	1.4	0.8	0.000	0.034	0.017	0.002	49.7
2006	36.3	11.9	1.8	0.9	0.000	0.031	0.021	0.003	50.9
2007	35.9	15.0	1.7	1.3	0.002	0.031	0.028	0.043	54.0
2008	34.8	13.5	2.0	3.2	0.018	0.045	0.019	0.033	53.6
2009[b]	31.6	13.8	2.1	2.9	0.017	0.051	0.020	0.030	50.5

[a] "Other" includes blast furnace gas, propane gas, other manufactured and waste gases derived from fossil fuels, non-biogenic municipal solid waste, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tire-derived fuels, and miscellaneous technologies.

[b] Preliminary.

Source: U.S. Energy Information Administration.

Mining and Logging

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Consumption and Generation

Colorado electricity consumers use more than 20 million tons of coal annually. Most of the coal comes from Wyoming (54% in 2009), with the remainder from Colorado coal mines. Electric generation at Colorado's coal-fired power plants dropped from 37.5 million megawatt-hours in 2008 to 34.2 million megawatt-hours in 2009 due to increased natural gas and renewable energy generation.

Global

Despite coal's reputation for higher carbon dioxide emissions, the DOE/EIA projects that long-term global coal consumption will still increase 1.6% per year between 2010 and 2035. EIA predicts that coal will remain the second fastest-growing source for electricity generation after renewables. By 2035, more than 95% of these increases will be in Asia as the demand for energy to fuel electrical generation and industrial production will be met by coal. Coal accounts for 27% of world's energy consumption, and electricity generation consumes 62% of the coal produced. In the United States, coal-fired electricity represents 49% of the total market. EIA estimates that while production will increase, the percentage share will decrease to 47% by 2030. However, inherent in that assumption is that the United States can attain successful carbon reduction at coal-burning power plants.

Unconventional uses for coal include coal-to-liquids, coalbed methane, and coal gasification technologies. Colorado is one of the nation's largest coalbed methane producers, and its potential for coal gasification from deep unmineable beds is significant.

Minerals and Uranium

The mining sector began to rebound in 2010, led by the metals segment. According to CGS, the total value of nonfuel mineral production in Colorado in 2009 was $1.0 billion, a 52% decline compared to the 2008 total of $2.1 billion. As economies recover worldwide and commodity prices rebound in Colorado, nonfuel mineral production and employment will pick up, with an estimated value of $1.5 billion—a 41% increase—in 2010.

VALUE OF COLORADO NONFUEL MINERALS AND URANIUM PRODUCTION 2002–2011 (In Millions of Dollars)

Year	Nonfuel Minerals	Uranium	Total
2002	$629	$0.0	$629
2003	702	0.4	702
2004	949	2.0	951
2005	1,782	7.3	1,789
2006	1,762	0.0	1,762
2007	1,886	<1.0	1,886
2008	2,084	16.0	2,100
2009	1,024	6.0	1,030
2010[a]	1,466	0.0	1,466
2011[b]	1,400	0.0	1,400

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

The molybdenum market has the greatest impact on the Colorado mineral sector. After reaching $33.50 per pound in 2007, the price dropped precipitously, to as low as $8 per pound in 2008. In 2009, the price inched back to $17 per pound and remained there throughout 2010. Gold is again a bright spot as the price reached $1,370 per ounce in late October 2010.

The slowdown in construction across the state affected the industries that supply natural materials for that industry, such as cement, aggregate, and gypsum. The industrial mineral sector is flat again in 2010, at $520 million, with little promise for recovery in 2011.

Freeport-McMoRan Copper and Gold, Inc. operates the Henderson Mine in Clear Creek County—North America's largest primary producer of molybdenum. The mine and ore processing mill employ approximately 550 people. In 2009, the mine produced 28 million pounds of molybdenum, with an average value of $10.65 per pound, for a total value of $288 million. The company is on schedule to produce 40 million pounds in 2010, at an average price of $16.62 per pound, for a total estimated value of $665 million—a gain of 130% over 2009. The 2011 production target will depend upon the price of the commodity.

Gold prices rose fairly steadily through 2010, from $1,100 per ounce in January to $1,370 per ounce in October, with an average price of about $1,175 per ounce. Production at the Cresson Mine in Teller County, which is owned by the Cripple Creek and Victor Gold Mining Company, is projected to increase in 2010, to 231,000 ounces from 210,000 ounces in 2009. The mine, which employs 320 workers, will produce around 69,000 ounces of silver in 2010. The company projects a similar level of production in 2011. Several other smaller gold mines in the state are in the process of opening to take advantage of the favorable gold price. The value of gold was $250 million and $1.4 million for silver.

A spike in the price of uranium in 2007 generated a flurry of activity in that industry. The economic slowdown made financing difficult for small exploration companies, and the price dropped back to $50 per pound from a high of $139 per pound, resulting in cessation of much of the activity in Colorado. Denison Mines produced uranium and vanadium in 2009, with values of approximately $6 million for uranium and $9 million for vanadium. The mines were inactive in 2010. Their resumption in 2011 will depend on prices.

Construction aggregates include crushed stone, gravel, and sand. In 2009, aggregate operations in Colorado produced more than 38 million tons with a value of $311 million. This amount is lower than the 2008 level, mainly owing to the slowdown in construction. This trend continued in 2010, with a projection of flat sales.

Other geologic materials for construction have been down for the most part in 2010. Cement, gypsum (used for wallboard), and clay (for bricks) have experienced slowing activity, reflecting the general state of the construction industry. Companies anticipate no improvement in 2011. One significant trend in the construction materials industry is the reduction in lead time for orders. Rather than maintaining a significant stockpile, most companies are producing by order. Lead time for production has been reduced from 12 to 18 months to as short as 3 months.

Renewables

Colorado's abundance of renewable energy resources includes wind, solar, hydroelectric, and biomass resources. These electricity resources accounted for nearly 10% of the net generation in 2009. Despite the economic downturn, modest gains in the renewable energy sector occurred because of recent federal stimulus funds. Colorado's renewable energy standard of 30% potential renewable electricity by 2020 is one of the most aggressive in the nation. The state, which has the nation's fifth-largest installed capacity of solar electrical generation and the ninth-largest installed wind capacity, is home to the National Renewable Energy Laboratory (NREL). Renewable energy in the United States achieved a cumulative five-year renewable energy market growth rate of 24%. The New Energy Economy initiative remains strong, and its potential for job creation and economic development is substantial.

Legislation

On March 29, 2010, Governor Ritter signed into law HB10-1001, which increases the Colorado renewable energy standard from 20 to 30% by 2020 for investor-owned utilities like Xcel Energy and Tri-State Generation and Transmission (Tri-State G&T). The Governor's Energy Office predicts that this initiative will create tens of thousands of jobs over the next decade. Colorado's renewable portfolio standard is the second-highest in the nation.

Wind Energy

As of January 2010, Colorado wind facilities had installed 1,246 megawatts (MW) of generating capacity, with 554 MW of new wind power projects under construction. The Danish company VestasWind Systems A/S, the world's largest maker of wind turbines, constructed four plants in Colorado—a blade factory in Windsor, an engineering center in Louisville, an assembly plant for nacelles (wind turbine generator motors) in Brighton, and a wind tower factory in Pueblo. The 13-million-square-foot wind tower factory is the world's largest facility and can process 200,000 tons of steel annually.

The Pueblo Towers project in Pueblo County is a 1.8-MW capacity structure by Vestas. Other new projects currently under construction are two BP Energy Cedar Creek II projects in Weld County: a 100.8-MW capacity project with 63 turbines, and a 150-MW capacity, 60-turbine Nordex site. The Cedar Point wind facility in Lincoln and Elbert counties is a 250-MW capacity project under construction by RES Americas. All three projects are planning to sell power to Xcel Energy. Duke Energy is building a wind power facility, with 51-MW capacity, in Kit Carson. This 34-turbine facility will supply power to Tri-State G&T. Other new sites for future development in 2011 include

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the 30-MW capacity Haxtun project in Logan and Phillips counties being developed by National Wind. Eon's Cordova Wind project in Huerfano County is a 200-MW site, and Compass Wind has a project called Galien, a 30-MW facility in Logan County. Each of these projects is being financed with federal stimulus funds.

Solar Energy

Colorado ranks fifth in solar capacity, with 23-MW installed in 2009. Tri-State G&T, a power supplier based in Westminster, has negotiated a 25-year power purchasing agreement for a new 30-MW thin-film plant in northeast New Mexico (Cimarron I Solar Project). Tri-State, in cooperation with First Solar, an Ohio-based company with a division in the Denver Tech Center, developed the facility. In March 2010, Southern Company bought the project from First Solar under an agreement that First Solar will stay on board for 25 years to provide operation and maintenance services. The plant will include 500,000 photovoltaic (PV) panels, which will provide enough power to serve 9,000 homes in Tri-State G&T's area of service. The plant is expected to be fully operational by the end of 2010.

The state's only commercial solar power plant was constructed in 2007 north of Alamosa. The 8.2-MW PV Solar Plant near Mosca, operated by SunEdison LLC, is the ninth-largest solar plant in the nation. Iberdrola Renewables is developing a new 30-MW plant in northern Alamosa County. Its power output will be purchased by Xcel Energy. Ascent Solar Technologies in Thornton sells thin-film PV products that are sold to areas that are already off the grid. Currently, a lack of transmission capacity from the San Luis Valley limits the amount of solar energy development that Xcel Energy can provide.

NREL is currently working on improving economic efficiency related to thin film PV technology. In 2010, both NREL and Electric Power Research Institute (EPRI) signed a membership agreement to operate one of the nation's leading research sites for renewable energy at the SolarTAC facility in Aurora.

Geothermal Energy

In 2010, geothermal gradient drilling by Mount Princeton Geothermal LLC expanded the known area of the Mount Princeton geothermal anomaly at least a half-mile to the west in the Chalk Creek Valley. A borehole there encountered the hottest known average geothermal gradient in the state at shallow depths, with the temperature rising 17°F per 100 feet of increasing depth. Near Trinidad, Pioneer Natural Resources identified a location containing temperatures exceeding 300°F in 1,000 feet of sedimentary deposits. Many of Colorado's geothermal anomalies occur in sedimentary rock layers (instead of crystalline bedrock), allowing oil and gas industry methods to be adapted for geothermal development.

In 2010, the Governor's Energy Office provided $300,000 in competitive grant funds to six local government and private geothermal projects. The funding will help implement direct use of geothermal water at a number of sites and new exploration efforts for electrical generation projects. With matching funds included, these projects represent more than $520,000 in geothermal development for Colorado.

In 2010, the Governor's Energy Office reported a 70% savings from the geoexchange-heat-pump system at the Governor's mansion. Drilling of two, 900-foot wells began at the state capitol in late October. This $6 million project should also provide significant energy savings in the capitol.

Hydroelectric Power

Colorado's hydroelectric power has been stable for many years. In 2009, 3.9% of the state's total electrical output came from 48 hydroelectric generating stations. Aspen, Telluride, Durango, Ouray, Nederland, and other mountain towns and ski resorts supply much of their power needs from local hydroelectric stations. This renewable resource provides a constant but seasonably variable source for electricity. The industry employs several hundred individuals for operations and maintenance.

Construction

The Construction Supersector has historically been one of the first industries to recover from a recession; however, after experiencing huge declines in volume and large job losses, the sector is still struggling and will lag the recovery. Residential work is likely to increase in both 2010 and 2011 but only modestly from a very low base. The other construction sectors retreated in 2010 and will see only similar volumes in 2011. Statistics on Construction activity often mask true volumes due to the timing of new permits, which are tracked and reported, while work frequently extends beyond the year in which the permit was pulled. The problem will be suppressed in 2010 and into the next year as work on projects permitted in prior years is relatively small.

Residential

Single-Family Housing

Slow economic growth, and in particular the lack of job creation, is preventing new housing construction from healthy improvement. The sector appears to have stopped its decline with slightly higher permit numbers. Federal income tax credits for both first-time and repeat home buyers initially boosted sales activity in early 2010, with the number of new contracts increasing nearly 15% through April. However, this activity amounted to "borrowing from the future" as housing demand fell sharply once the tax credit programs expired. A continuing weakness that impacts new building is that 2010 home sales of *new* and *existing* units is expected to drop at least 10%, marking the fifth consecutive annual decline.

The financial crisis and the multiyear decline in housing demand are also taking a toll on the *supply* capacity of the housing industry. Some regional and national builders have failed, while others exited the Colorado market. Numerous small homebuilders have gone out of business, and others still in business are not able to finance new construction. However, several of the nation's largest homebuilders with Colorado operations are surviving through dramatic downsizing, charging off the value of high-priced land holdings, and operating only in choice markets. Homebuilders now are competing with the resale market by cutting prices and focusing on smaller homes.

The Construction Committee expects 2010 will finish with an increase to 8,750 single-family permits, which will be a 21% gain over 2009, but a 78% decline from 2005. Virtually all of this improvement will be in the more populated Front Range and Grand Junction areas. Demand for second homes has plummeted, so smaller resort

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VALUE OF CONSTRUCTION IN COLORADO BY TYPE
2002–2011
(In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding	Total Construction
2002	$6,357.3	$2,787.4	$9,144.7	$2,161.5	$11,306.2
2003	6,258.2	2,712.9	8,971.1	1,731.8	10,702.9
2004	8,050.3	3,291.4	11,341.7	1,753.8	13,095.5
2005	8,803.4	4,221.2	13,024.6	1,787.8	14,812.4
2006[a]	8,708.1	4,641.1	13,349.2	3,446.3	16,795.5
2007	7,417.0	5,259.5	12,676.5	2,003.6	14,680.1
2008	4,041.8	4,116.7	8,158.4	2,542.4	10,700.8
2009	2,501.3	3,126.2	5,627.4	1,648.4	7,275.8
2010[b]	2,460.0	2,100.0	4,560.0	1,700.0	6,260.0
2011[c]	2,770.0	2,100.0	4,870.0	1,700.0	6,570.0

[a]Figures revised from 2006 through 2009.

[b]Estimated.

[c]Forecast.

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

Construction

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counties in particular will see sharp declines in single-family permit activity for 2010.

In 2011, continued weak housing demand will be further limited by continued chronic oversupply from a combination of distressed home sales by individuals who have suffered job losses or other economic setbacks and by foreclosure properties owned by lenders. The committee anticipates only modest improvement in supply and demand conditions from 2010 levels, and forecasts 9,500 single-family permits for 2011.

The housing downturn affected the upper-price segments as well as the lower end of the market. As a result, the average permit value of new homes slowed from annual increases of 6% to 10% from 2002 through 2008 to a decline of 1.6% in 2009. A further decline of 2.5%, to $250,000, is projected in 2011. With low demand acting to limit material and labor cost increases, and with any improvement in demand likely to emerge first in lower price ranges, only a modest 2% increase in permit value per unit, to $255,000, is projected in 2011.

It is recognized that Colorado has been spared the worst of the national home price declines over the past five years. According to the S&P Case-Shiller Index, the country's 20 largest metropolitan areas experienced a 23.8% drop in single-family home prices for the five-year period through August 2010. The Denver Metro area was in the best performing 20% of these areas, experiencing only a 6.3% drop in home prices.

Context is called for in this narrative as higher numbers of permits are expected in 2010 and the following year. Compared with historic norms, the new housing market has been devastated. Starting from a peak of more than 40,000 Colorado single-family building permits in 2004 and 2005, the number of permits fell each year. In 2009, only 7,231 permits were issued, an 82% decline in five years.

Despite the very low level of new housing activity, Colorado remains a desirable place to live, and the population of the state will continue to grow. In 2009 alone, the state added 87,856 people. Once employment growth recovers, new housing creation will again be demanded for an increasing population. When that happens, a dynamic housing industry will reemerge that will be leaner and better able to supply the demand for new and changing consumer demographics and housing preferences.

Multifamily

Multifamily permit activity regained some ground in 2010 but failed to meet even modest expectations. The total for the year is expected to be 2,400 units, up 15% from the previous year but well below the levels typical of the early part of this decade. The modest rebound in 2010 was driven almost entirely by a small increase in apartment construction in the Front Range. Apartment

RESIDENTIAL BUILDING PERMITS BY TYPE
2002–2011

Year	Single Family	Multifamily	Total Housing Units
2002	34,993	12,878	47,871
2003	33,837	5,732	39,569
2004	40,753	5,746	46,499
2005	40,140	5,751	45,891
2006	33,000	7,978	40,978
2007	21,087	9,333	30,420
2008	11,147	7,851	18,998
2009	7,231	2,087	9,318
2010[a]	8,750	2,400	11,150
2011[b]	9,500	3,000	12,500

[a]Estimated.

[b]Forecast.

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

construction in the remainder of the state and condominium construction statewide remains limited.

Rental markets firmed up throughout the state in 2010. The Denver area rental vacancy rate was below 6% by Q3, and most other metro area markets are not observing excess supply. Grand Junction and Pueblo are exceptions, although vacancies in both are dropping. The "shadow market" of single-family homes and condominiums for rent is stabilizing. These properties normally would not be available as rentals if the resale market was stronger but are offered for rent as an alternative to foreclosure. As rental vacancies have declined, rents have begun to climb, and the average in most major markets is higher compared to a year ago.

In the face of increasing rents and declining vacancies, project feasibility is improving but developers are struggling to put deals together. A rush to beat the deadline for stricter underwriting standards at HUD boosted applications for insured apartment loans. A recovery in the market for tax credits further bolstered the feasibility for many of these projects. Nevertheless, a major resurgence in apartment construction is not expected in 2011. Multifamily permits should increase to about 3,000 units, virtually all in apartment projects.

The lack of multifamily construction in resort areas and limited condominium and luxury apartment activity kept the per unit value for multifamily units at approximately $113,000 in 2010. Only a small increase in per unit value, to about $115,000, is expected in 2011 but the modest increase in activity should push the total value of multifamily construction up to $345 million.

Nonresidential Building Construction

The value of nonresidential construction continued to weaken across Colorado in 2010, with construction volume at approximately $2.1 billion, down about 33% from 2009. Multiyear declines in work should finally end in 2011, with a flat volume forecast of $2.1 billion. Activity for this sector now stands at 40% of the 2007 volume. The nonresidential construction workforce has been reduced by one-third since the start of the recession in 2008.

Colorado nonresidential construction remains burdened with a shrunken real estate industry. Dependent on real estate development as well as state and municipal expenditures, this sector's short-term outlook is pessimistic, reflecting diminished public expenditures, restrained private development prospects, reduced credit availability, and significantly lower profits.

The positive news for 2011 is that several major projects announced in 2009 and 2010 will finally begin construction. Private developments include a new hospital in Castle Rock for Centura Health, along with a new medical office building.

In the face of increasing rents and declining vacancies, project feasibility is improving but developers are struggling to put deals together.

University Hospital at Anschutz Medical Campus will start on a patient tower expansion valued at $400 million, and Mesa State College has plans for another new campus building. Work is likely to begin on ConocoPhillips' long-planned $500 million Louisville campus, although this is not certain since the Louisville planning approval process is not yet complete.

More than one-third of the permit values in 2011 are expected from one project with 12 different buildings. The Veterans Administration Hospital at Fitzsimons Medical campus has chosen a contractor and should begin construction. The value of this project has been announced to be over $800 million. In addition, the General Services Administration (GSA) will begin work on a new parking structure at the National Renewable Energy Laboratory in Golden, and the GSA is planning new projects near the Federal Center in Lakewood.

School construction will increase in 2011 as voters recently approved nearly $200 million in bond issues in Holly, Salida, and several Front Range school districts. Work at military facilities, including Fort Carson, will see some construction, including a new $25.6 million Warrior in Transition Barracks and the $27 million Fort Carson Wilderness IBCT Brigade Battalion Headquarters.

These new projects are expected only to replace current activity. Note that much of the new work is for government entities. The potential is modest for new work in the private sector, such as for DaVita and Vestas. New commercial office

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Construction

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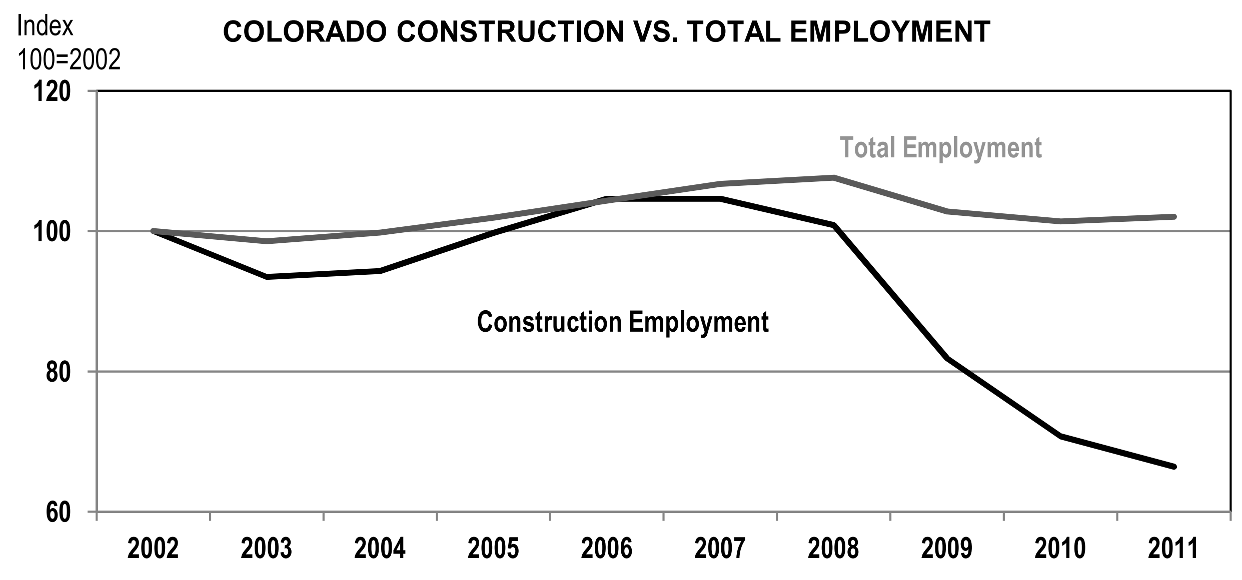
construction is at a stand-still, and only 1.2 million square feet of commercial office tenant finish will keep that sector active in 2011, although one new building is expected to start at Union Station. It is anticipated that work at DIA, such as construction of a new hotel, will occur beyond 2011 as will any significant remodel of the downtown Denver building being vacated by Qwest. The same is true for timing of transit-oriented developments, and the committee does not foresee starts in mountain resorts in 2011.

In recent years the troubled commercial mortgage-backed securities (CMBS) markets were identified as a source of serious declines in the commercial real estate market. Moving into 2011, a continued reluctance and sheer inability to confront the mountain of legacy asset problems will continue to hamstring lenders, delay market repricing, and hobble chances for a faster real estate market upturn. It is generally understood that wholesale asset write-downs cannot be allowed to shock credit markets. The current "extend and pretend" practices avoid taking balance-sheet losses that would force foreclosure on stressed borrowers. The new practices will stress regional and local banks that are weighed down with failed land and construction loans and therefore still undercapitalized. However, the "extend and pretend" practice may buy time for other financial institutions, including large banks, life insurers, and some special CMBS servicers. They will step up write-downs and workouts as a prelude to disposing of assets when loans mature. Given the large number of loans maturing and up for financing in 2011, the process of deleveraging to lower values could take years to complete. The process of resetting prices will finally begin in 2011.



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

Nonbuilding Construction

Government funding for transportation is relatively flat. The committee believes activity reached its trough in 2009, and it is not optimistic that 2011 will show any increase. This sector is anticipated to finish 2010 with $1.7 billion in activity and remain flat in 2011.

Continued uncertainty in the financial market has delayed privately financed projects. Almost all nonbuilding projects are now funded by some level of government.

Federal reauthorization of a six-year transportation plan has not occurred, and federal transportation funding to Colorado is flat. American Recovery and Reinvestment Act (stimulus) funded projects are nearly completely obligated, and most contractors ended 2010 with low backlogs and little prospects for a robust start in the new year. Any state legislation to create another stream of spending for transportation, if passed, would not affect 2011.

Recent ballot measures to increase funding for street improvements passed in Fort Collins, but were defeated in Greeley and in Elbert County.

Statewide issues to restrict taxes failed, keeping in place the newly enacted transportation taxes from vehicle registrations.

Construction expenditures for the Regional Transportation District's FasTracks program will total more than $300 million in 2010, and are anticipated to remain at this level in the next year.

Infrastructure projects other than highways, roads, and bridges are not expected to contribute increased levels of activity. Funding for municipal water projects may even decline, and there will be less work on natural gas pipelines and water reservoirs. Airport work is not picking up yet.

Employment Outlook

The frenetic pace of layoffs in the Construction industry eased in the second half of 2010 but hiring did not head upward. Average employment is projected at about 113,500 workers in 2010, down 13.6% (17,800 jobs) from the prior year. Although this loss is smaller than the decline in 2009 (a loss of 30,500 jobs), it puts 2010 on record with the second-largest annual loss in Construction employment. Contractors reluctant to fire their better, more experienced people have tried to keep them on staff, but with continuing weakness in the Construction industry, companies are finally releasing redundant positions. Many experienced workmen are surviving as independent contractors, so official payroll numbers will be artificially depressed.

The small increase in residential activity for 2011 is not likely to generate any resurgence in hiring, particularly in the first half of the year. The anticipated lack of growth in nonresidential and nonbuilding new contracts will lead to continued, albeit smaller, cutbacks in these sectors during 2011 as projects are completed. Cutbacks in the Construction workforce should be over by the end of 2011 but losses in the first half of the year will pull the annual average for 2011 down to 106,500 jobs, a decline of 6.2% (7,000 jobs). Meaningful gains in Construction employment are not likely to return until 2012. ✥

CONSTRUCTION EMPLOYMENT
2002–2011
(In Thousands)
Base Year: 2002=100

Year	Employment	Percentage Change
2002	160.4	-4.4%
2003	149.9	-6.5
2004	151.3	0.9
2005	160.0	5.8
2006	167.8	4.9
2007	167.8	0.0
2008	161.8	-3.6
2009[a]	131.3	-18.9
2010[b]	113.5	-13.6
2011[c]	106.5	-6.2

[a]Revised.

[b]Estimated.

[c]Forecast.

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

Manufacturing

According to the latest Institute for Supply Management's (ISM) *Manufacturing Report On Business*, U.S. economic activity in the Manufacturing Sector expanded in October 2010 for the 15th consecutive month, with both new orders and production making significant gains. Survey respondents noted that the recovery in autos, computers, and exports were the key drivers of growth. The Purchasing Managers Index (PMI), which is a component of the survey, is a broad measure of expectations in business activity for the next 12 months among purchasing managers in the manufacturing sector. A reading over 50 predicts economic expansion. The PMI increased to 56.9 in October, up from 54.4 in September, reaching the highest PMI reading since May 2010. According to the ISM, with 14 of 18 industries reporting growth in October, manufacturing continues to outperform the other sectors of the economy.

Looking beyond the U.S. borders, manufacturing in India and China is also picking up steam. China's official Purchasing Managers Index rose to a six-month high in October, especially striking since China's index historically moves down in that month. India's manufacturing performance has been as strong as China's, supported by robust domestic consumption. Britain and Germany are also posting manufacturing rebounds, but activity in Japan and South Korea remains constrained. While some may be concerned that this increasing global activity will pose competitive challenges for Colorado, the data suggest that a global economic recovery may be gaining strength, a situation that benefits Colorado companies.

Global recession and the lack of credit drove Colorado manufacturing employment down by a staggering 10.2% between 2008 and 2009. With the exception of a minor 0.8% increase in 2000, Colorado manufacturing employment has declined every year beginning in 1999. Severe job losses continued in 2010, with manufacturing employment shrinking by 5,100 positions While 2011 is expected to be yet another year of Manufacturing employment losses, the loss of only 600 positions will seem small compared to prior years.

The manufacturing survey by the Federal Reserve Bank of Kansas City that includes Colorado and six Midwestern states reveals that manufacturing activity continued to expand moderately in October. Survey results reveal changes in 13 indicators of manufacturing activity, including production, shipments, average workweek, prices of raw materials, and capital expenditures. Of particular note, the new orders index jumped to its highest level since early 2007, and the employment index edged higher. Most future factory activity indexes increased for the second straight month.

These indexes point to potentially improving conditions for Colorado's Manufacturing Sector. This is welcome news as manufacturing in Colorado is a $15.9 billion industry, representing about 6.4% of the value of all goods and services produced in the state. Colorado is home to about 5,500 manufacturing companies employing roughly 129,600 workers in 2009, representing 5.8% of the total employment base in the state. Most of these companies are small businesses. Indeed, nearly 80% of the manufacturing companies employ fewer than 20 workers, whereas only 30 companies have 500 employees or more. These numbers only take into account those businesses with employees.

In addition, another 6,600 manufacturing businesses are classified as "nonemployer businesses," the majority of which represent self-employed individuals. About one-quarter of these nonemployer businesses fall into the miscellaneous manufacturing category, which includes a diverse range of products including medical equipment and supplies, jewelry, sporting goods, toys, and office supplies. Fabricated metal manufacturing, printing and related support activities, apparel manufacturing, and wood product manufacturing round out the five largest nonemployer manufacturing industries. While these nonemployer businesses provide an important entrepreneurial base for the Manufacturing Sector in Colorado, it is important to note that the nonemployer businesses are not included in the employment statistics described in the sections that follow.

Nondurable Goods

About 35% of the employment in the Manufacturing Sector is found in nondurable goods industries, which include the production of goods that generally last for less than one year. After declining 2.2% in 2010, employment will climb by 100 workers to a total employment level of 44,200 in 2011. This represents a 0.2% increase between 2010 and 2011, the first annual increase in nondurable goods employment since 1998.

COLORADO MANUFACTURING EMPLOYMENT BY INDUSTRY
2002–2011
(In Thousands)

Industry	2002	2003	2004	2005	2006	2007	2008	2009[a]	2010[b]	2011[c]
Food	19.3	18.3	17.8	17.1	16.7	17.5	18.3	18.4	18.2	18.2
Beverage and Tobacco	5.9	5.8	5.9	5.7	5.7	5.7	5.6	5.3	5.2	5.2
Printing and Related	9.2	8.6	8.1	8.0	7.8	7.6	7.2	6.1	5.5	5.3
Other Nondurables	19.5	19.2	19.1	19.1	19.3	18.2	17.3	15.3	15.2	15.5
Subtotal, Nondurable Goods	53.9	51.9	50.8	49.9	49.5	49.0	48.4	45.1	44.1	44.2
Nonmetallic Minerals	9.8	9.1	9.1	9.5	9.8	9.8	9.2	7.2	6.8	6.7
Fabricated Metals	15.8	15.1	15.4	14.9	15.0	15.4	15.3	13.0	12.4	12.6
Computer and Electronics	38.1	33.6	31.6	30.1	28.3	26.3	25.5	23.3	22.4	21.5
Transportation Equipment	10.4	9.7	10.0	10.7	10.3	10.2	9.5	9.2	8.9	8.7
Other Durables	35.8	34.5	34.9	35.3	36.2	36.3	36.2	31.8	29.9	30.2
Subtotal, Durable Goods	109.9	102.0	101.0	100.5	99.6	98.0	95.7	84.5	80.4	79.7
Total, All Manufacturing	163.8	153.9	151.8	150.4	149.1	147.0	144.1	129.6	124.5	123.9

[a]Revised.

[b]Estimated.

[c]Forecast.

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

The largest nondurable goods industry is food manufacturing. Food exports from Colorado declined 22.7%, to $749 million, in 2009 compared to $968 million in 2008. This left the sector with a great deal of idle capacity. Business activity has improved, with state food exports running 30% above June 2009 but the sector is still anticipated to lose 200 jobs in 2010. Production for the expanding global economy will be helped by a weakening dollar. In addition, demand will also grow domestically, especially for organic food lines. The expected increase in business output will be accomplished via productivity gains in 2011, leaving food processing employment unchanged, at 18,200.

Colorado's beverage industry produces soft drinks, ice, bottled water, beer, and wine. The industry is located principally on the Front Range, with three large breweries, one large soft drink manufacturer, and numerous microbreweries. According to the Brewers Association, craft breweries continue to grow despite many challenges, currently providing an estimated 100,000 jobs in the nation. The volume of craft-brewed beer sold grew 9% for the first six months in 2010, even as overall U.S. beer industry volume sales were down 2.7%. With 103 breweries, Colorado ranks fifth in the nation for number of breweries per capita. The Western Slope hosts small wineries, mostly in Mesa County. Despite gradual improvements in the economy, cost control efforts and productivity gains are expected to constrain employment growth in 2010 and 2011. Employment is expected to remain unchanged, at 5,200, in 2010 and 2011. Production

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consolidation efforts in the sector could alter job projections in the future.

The growing popularity of electronic readers has delivered another blow to the printing and publishing industry. As an example, Stanford University's new engineering library opened in August 2010, with 10,000 engineering books on the shelves—a decrease of more than 85% from the old library—citing the fact that students can now browse periodicals and reference books from their laptops or mobile devices. According to electronic-reader.com, "These are trying times for the publishing industry, with many newspapers, magazines, and publishers struggling to adapt or closing their doors. Just as the Gutenberg printing press forever changed the way that literature reaches the masses, so too are e-readers. The publishing industry will not die—it will continue to reinvent itself to be relevant in the digital age." Furthermore, the electronic readers industry touts the shift to "green" as all media no longer has to be disposable. Combining these trends with advances in electronic desktop publishing means that traditional printing jobs are no more. The increased competition among commercial printers for the reduced number of print jobs has accelerated the need for technical innovation and increased efficiency, reducing the number of employees in the industry. The projected slow recovery will aggravate the industry's business environment. The steepest job losses in nondurable goods will occur in this industry, with printing and publishing employment declining by 600 and 200 jobs in 2010 and 2011, respectively.

Textiles, clothing, paper, petroleum, chemicals, and plastics manufacturing are included in the other nondurable goods industries. Chemical manufacturing job losses are expected to impede job growth in the industry and lead to a net loss of 100 jobs in 2010. Growth in the economy in 2011 will contribute to more job stability for most nondurable goods industries. Petroleum/coal, chemicals, and plastics/rubber are each expected to add 100 jobs for a total gain of 300 positions in 2011, bringing employment in other nondurables to 15,500.

Durable Goods

About 84,500 people were employed in the durable goods industries in 2009, a dramatic 11.7% decline from 2008. While the size of the loss was smaller in 2010, another 4,100 jobs were trimmed from this sector. Challenges will continue for many of the durable goods industries in 2011, especially for those that are tied to the construction and computer manufacturing industries. On the plus side, companies producing components and final products for the energy industry are expected to grow due to the emphasis on Colorado's new energy economy. The net result is that durable goods employment will contract by another 700 positions in 2011, with employment totaling 79,700.

The nonmetallic minerals industry has great diversity of products, but outputs from the industry are closely tied to construction activity of all types—residential, commercial and industrial, and heavy construction. This industry includes everything from pottery, plumbing fixtures, and glass products, to brick and tile, to concrete and stone products, as well as high-tech porcelain electrical products. Due to its strong ties to construction, the nonmetallic minerals industry lost about 400 jobs in 2010. Both residential and nonresidential construction projections are still very weak for 2011. New products within this industry, such as the emergence of energy efficient building materials, may buoy it to some degree, but not enough to support employment gains. The nonmetallic minerals industry should see a negligible drop of 100 positions in 2011, averaging 6,700 jobs for the year.

Output from the fabricated metals industry provides products and materials for many other industries, 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. The firms in this category range from small suppliers to producers of industrial machinery. A notable exception is the new Vestas Towers plant in Pueblo. Dedicated in October 2010, the plant has the capacity to produce 1,090 wind towers per year, utilizing more than 200,000 tons of steel. Still, weakness in other industries resulted in this sector taking a hit in employment in 2010, losing over 600 jobs to end 2010 with 12,400 workers. Despite some increases in the value of manufactured goods, increased output has so far been achieved with a lean workforce. If manufacturing sustains some of its momentum into 2011, firms will have to increase hiring as confidence builds. Thus, a small gain is projected in fabricated metals. Fabricated metal products employment will average 12,600 for 2011.

Colorado ranked third nationally in per capita high-tech employment for the fourth consecutive year, according to the annual *Cyberstates 2010* report by TechAmerica. This high concentration is critical because average wages for high-tech workers in Colorado are 92% higher than the overall private sector average. Despite these rankings, Colorado's largest durable goods industry of computer and electronic products continues to shed workers. After peaking at 46,000 employees in 2000, this industry will dwindle to an estimated 21,500 positions in 2011, a 53% decline in 11 years. For these companies, profitability depends on large volume, so they are still finding it cheaper to outsource to other parts of the world. Despite a 41% drop in the total value of computer and electronic products exported in 2009, to $1.7 billion, these products remain the state's largest export sector. Colorado exports totaled $5.9 billion in 2009, and computer and electronic products represented over 29% of this total. For the first six months of 2010 compared to the same period in 2009, high-tech exports from the state increased 6.3%. Still, employment in this industry is expected to fall by 900 positions in both 2010 and 2011.

The transportation equipment industry includes the manufacture of everything from aircraft parts to spacecraft and satellites to mountain bike frames. NASA's early 2010 cancellation of the Constellation Program to launch astronauts into orbit and return Americans to the moon negatively affected Colorado's employment in this sector. Lockheed Martin is the prime contractor for Constellation's Orion space vehicle, which was not cancelled but scaled back as a rescue craft for the International Space Station.

Despite some setbacks in the industry, research dollars and projects continue to flow into the state as recent contract awards highlight the importance of federal laboratories and research universities to the aerospace industry. For example, NASA has given the go-ahead to a $438 million mission led by the University of Colorado at Boulder to investigate Mars and the likelihood that it once harbored life. The university's Laboratory for Atmospheric and Space Physics is leading the mission, and Lockheed Martin will build the spacecraft. As another example of this synergistic relationship, Ball Aerospace & Technologies Corp. was awarded a $248 million contract to design, build, and test a satellite that will track weather and climate changes for the Boulder-based National Oceanic and Atmospheric Administration as part of the Joint Polar Satellite System. While these aerospace operations are classified across a variety of manufacturing and service industries, a significant portion of the employment is classified in transportation equipment. Due to the uncertainty of federal funding, employment will decrease by 300 and 200 workers in 2010 and 2011, respectively, bringing total transportation equipment employment to 8,700 in 2011.

The other durable goods industries include wood products, primary metals, machinery, electrical equipment and appliances, furniture, and miscellaneous manufacturing. This diverse group of industries is faced with varying demand issues, ranging from sluggish new home construction to the growing demands of the energy and health-care industries. The net result of the various issues faced by the other durable goods industries is an expected reduction of 1,900 positions in 2010, followed by a 300 job gain in 2011.

About 25% of the employment in other durable goods is found in the wood products and furniture and related products industries. These industries are anticipated to post the largest declines within other durable goods due to minimal new home construction, still lower-than-normal home sales, and conservative consumer spending levels. These industries will be flat in 2011.

Roughly 2,000 people are employed in the primary metals industry, which includes steel and aluminum refining, as well as the manufacture of metal alloys and superalloys. Output from the primary metals industry provides materials for many other industries, especially the fabricated metal industry. Another 9,500 are employed in machinery manufacturing. These two industries posted minor contractions in 2010 but should see small growth in 2011. The main driver of industry trends includes companies in the renewable energy sector, ranging from Vestas Wind Systems and its suppliers producing wind turbine blades and nacelle structures to SMA Solar Technology, which opened the largest solar inverter production facility in the nation in Colorado. This facility is also the company's first manufacturing plant outside of Germany. Increased employment within the state's renewable

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Manufacturing

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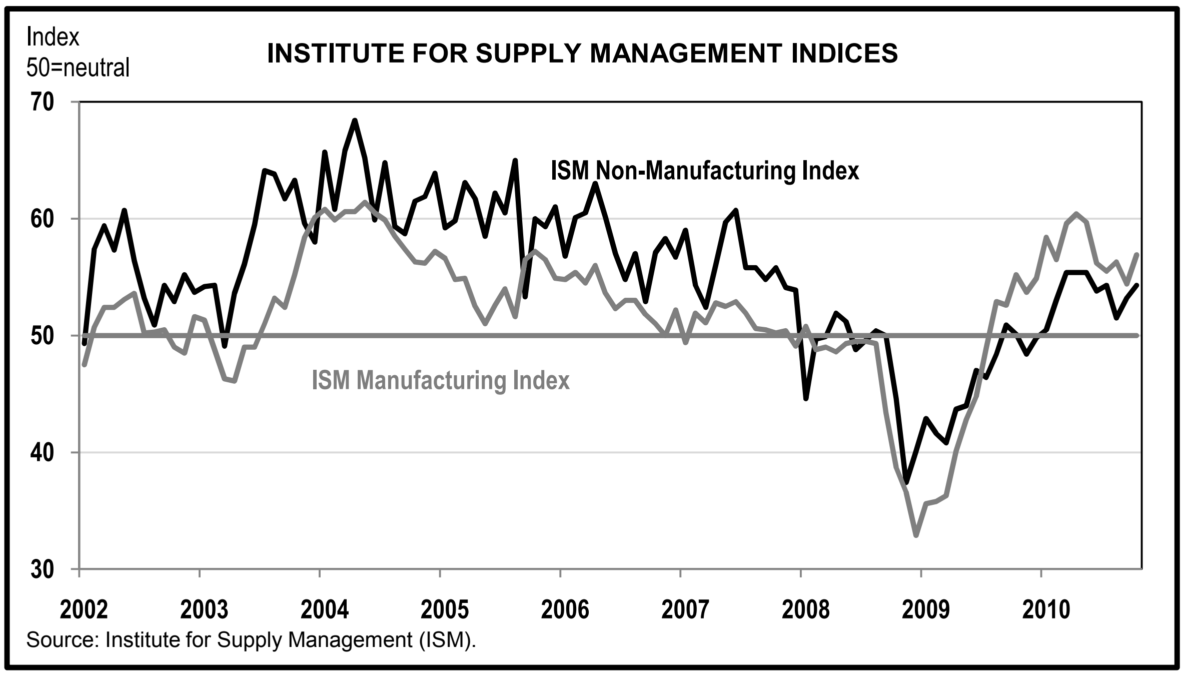
energy companies will also depend on the availability of capital, which is still constrained.

The miscellaneous manufacturing category is quite broad and includes several industries that are very important to Colorado's manufacturing base, such as medical and dental equipment and supplies, surgical instruments and appliances, and sporting goods production. Miscellaneous manufacturing employment will be relatively flat in 2010 and 2011.

Summary

Employment in the manufacturing industry declined an average of 3.6% per year for the 10 years from 2001 to 2011, representing a loss of 55,600 jobs over the period. The 5,500 manufacturing establishments in Colorado are expected to employ about 124,500 workers in 2010, a 3.9% decline in employment from 2009. Manufacturing employment will continue to shrink in 2011 but at a substantially slower pace, falling by an additional 0.5%, to 123,900.

The importance of manufacturing should not be overlooked. U.S. manufacturing contributes more than $1.6 trillion to the nation's GDP. The second annual *Public Viewpoint on Manufacturing* survey, released in September 2010 by Deloitte and The Manufacturing Institute, indicated that 78% of Americans believe that manufacturing is very important to U.S. economic prosperity. Furthermore, 76% believe that manufacturing is very important to the standard of living in the United States. While the United States remains the world leader in manufacturing value added, a different Deloitte survey revealed that CEOs around the world believe that the United States is no longer the most competitive location for manufacturing. According to Deloitte, "innovation of products, processes, services, and sales will be the most important competitive differentiator of leading manufacturers around the world." Given Colorado's strong tradition of innovation, it is time for our manufacturing companies to meet the global challenge. ✤



Trade, Transportation, and Utilities

The Trade, Transportation, and Utilities Supersector is the largest provider of jobs in Colorado. With less demand for transportation and slow growth in wholesale and retail sales, sector firms cut jobs in 2010. The number of jobs fell by 1.8%, to 396,500. Sales are expected to improve with the economy in 2011, pushing employment up by 0.9%, to 400,000.

Trade

Wholesale

Colorado's wholesale trade sector employs more than 90,000, most of whom work for merchant wholesalers (i.e., firms that sell to retail outlets). These firms provide 90% of all wholesale jobs. Firms selling durable goods, particularly computers, peripherals, and electronic equipment, account for 60% of the merchant wholesaler employers. The largest number of jobs among nondurable wholesalers is with businesses selling groceries and related products. The remaining wholesale jobs are with business-to-business sellers, electronic marketers, and agents and brokers. Wholesale jobs pay well. According to the Bureau of Economic Analysis, the average Colorado worker in this industry, including self-employed proprietors, earned 47% more in 2009 than the average for all industries.

WHOLESALE TRADE EMPLOYMENT
2002–2011
(In Thousands)

Year	Wholesale Trade Durable Goods	Wholesale Trade Nondurable Goods	Other Wholesale	Total
2002	56.0	33.3	5.8	95.1
2003	52.7	32.3	7.1	92.1
2004	51.5	31.9	8.5	91.9
2005	52.4	32.0	9.1	93.5
2006	53.4	32.9	10.1	96.4
2007	54.4	33.7	11.2	99.3
2008	54.8	33.4	11.9	100.1
2009	50.1	31.3	11.7	93.1
2010[a]	49.0	30.1	11.8	90.9
2011[b]	50.0	30.0	11.8	91.8

[a]Estimated.

[b]Forecast.

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

By September 2010, Colorado's wholesale sector had lost more than 11,000 jobs or almost 11% of its peak recorded in the spring of 2008. However, modest gains have been recorded since spring 2010. Wholesale employment typically fluctuates widely with the business cycle. As the economy improves, the sector will add more jobs. Although wholesale is expected to decline by 2,200 positions in 2010, a gain of 900 is projected in 2011.

Retail

Retail trade employs almost one-quarter million workers, accounting for more than 10% of the state's total jobs. It includes all firms whose primary business is selling products to the public. The retail sector includes retail chains that are some of the state's largest employers, as well as many very small firms. Many of the retail employees work part-time, and overall wages in the sector are relatively low. Average earnings in state retail in 2009 were 44% below average earnings for all industries.

Colorado retail sales are those reported to the Department of Revenue by stores classified as retail under the NAICS industry code. The largest category is food stores, which comprised more than 20% of sales in 2009. Sales by auto dealers and general merchandise store each made up 17% of the total; sales in the former category were severely depressed by the economic downturn. Non-store retailers, which include online sales reported to the department, were 5% of 2009 sales. Sales in this area have tripled since 2002. Colorado retail sales rebounded in 2010 and were up 6.2% from the

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Trade, Transportation, and Utilities

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previous year through July compared with a 14% drop in 2009. National retail sales increased 6.9% during the same period. The largest gains in Colorado were in the motor vehicles and parts, food and beverage stores, service stations, and non-store retailers. Strength in service stations is largely due to higher gas prices, while food service gains reflect new stores.

In early 2010, sales were boosted by such programs as energy and income tax credits. Sales in late 2010 and in 2011 will be affected by the end or phasing out of stimulus programs, and sales gains are expected to slow. The outlook will also depend on changes in consumer confidence, households' efforts to restore balance sheets, the job market, and inflation trends.

Consumer confidence receded from its levels in the early part of 2010. Consumers, especially those in upper middle income households, have become more cautious, due, in part, to uncertainties about possible tax increases in 2011. The September Reuters/University of Michigan Consumer Sentiment Survey found that upper income households, those with incomes over $75,000, reported less favorable financial prospects and reduced spending plans. Vehicle buying plans fell sharply. However, stronger sales for some luxury goods have been reported. The overall index through the summer and early fall 2010 remained below levels earlier in the year. While the perception of current economic conditions improved, the Index of Consumer Expectations Index was down 17.1% from a year earlier. Consumer confidence will improve in the coming months. The economic outlook is expected to brighten, and the outcome of the November election may remove some of the uncertainty about future taxes.

In response to the recession, households have reduced borrowing and attempted to restore their balance sheets. The national personal saving rate has risen from less than 2% to 6%, and consumer borrowing has fallen steadily. No development has damaged households' financial well being as much as the collapse of the housing market. In Q2 2010, 28% of mortgage holders in Colorado owned more on their mortgage than the value of their home, according to CoreLogic. The increase in consumer net savings is expected to slow if not level off, but weakness in the housing market will persist.

A very weak job market and modest income gains have limited consumers' ability and willingness to spend. Through September 2010, the state has yet to post significant job gains, and the unemployment rate is the highest in more than 20 years. Colorado's personal income for the first half of 2010 was up only 1.9% over a year earlier. In 2011, a modest improvement in the labor market is projected, along with somewhat stronger income growth compared to 2010.

Current dollar sales figures reflect flat or declining prices, as well as cutbacks in real spending. Based on the national consumer price index (CPIU),

RETAIL TRADE EMPLOYMENT
2002–2011
(In Thousands)

Year	Motor Vehicle and Parts Dealers	Food and Beverage Stores	General Merchandise Stores	Other Retail	Total
2002	33.0	42.7	44.0	123.0	242.7
2003	32.4	42.2	44.2	120.7	239.5
2004	32.4	42.4	45.0	121.5	241.3
2005	32.0	43.9	46.7	123.2	245.8
2006	31.5	44.1	47.6	125.1	248.3
2007	31.8	44.8	50.9	126.0	253.5
2008	31.2	45.9	51.6	123.9	252.6
2009	28.0	44.8	50.5	115.0	238.3
2010[a]	27.8	45.5	50.2	114.0	237.5
2011[b]	28.1	46.0	50.8	115.0	239.9

[a]Estimated.

[b]Forecast.

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

commodity prices are up 0.8% for the 12 months ending in September 2010. Costs for food at home rose 1.4%, and gasoline climbed 5.1%. Commodity prices will outpace other goods in 2011, while gasoline prices may slow.

Holiday spending will be an important determinant of sales over the last few months of 2010. Most forecasters do not expect shoppers to spend much more this holiday shopping season than they did a year ago, which showed only a marginal increase compared to 2008. The National Retail Federation predicts a gain of 2.3% over 2009 Christmas sales. Retailers will likely hire a few more temporary workers during the holiday season. A survey by the retail finance company CIT found 68% of retailers expect to hire more workers in 2010 than the previous year. Gains in online sales will lead to more hiring of customer service staff who work out of their homes.

As a result, retail trade sales are expected to post a 4.5% gain in 2010 and grow by a similar amount in 2011. This forecast implies slower sales growth in late 2010, followed by a mild rebound in 2011. Motor vehicle sales will not match growth of 7.8% in 2010, although general merchandise is expected to improve. Food and beverage store sales will also slow in 2011.

According to current Bureau of Labor Statistics data, Colorado's retail sector lost more than 15,000 jobs from 2007 to 2009. The retail sector is forecast to register the third consecutive annual job decline in 2010, with a net loss of 800 jobs. Another year of positive sales growth will mean a small gain of 2,400 jobs in 2011.

RETAIL SALES
2002–2011
(In Billions of Dollars)

Year	Motor Vehicle and Parts	General Merchandise	Other Retail	Total Retail Trade Sales[a]	Percentage Change
2002	$13.5	$8.2	$31.2	$52.9	0.0%
2003	13.7	8.5	30.6	52.8	-0.2
2004	14.0	9.1	32.7	55.8	5.7
2005	13.6	9.8	35.3	58.7	5.2
2006	13.3	10.3	38.2	61.8	5.3
2007	14.1	11.0	42.2	67.3	8.9
2008	12.1	11.3	43.2	66.7	-0.9
2009	10.2	11.0	37.2	58.5	-12.3
2010[b]	11.0	11.0	39.1	61.1	4.5
2011[c]	11.5	11.2	41.2	63.8	4.5

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

[b]Estimated.

[c]Forecast.

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

Transportation and Warehousing

The Transportation and Warehousing Sector includes air, railroad, and water transportation; trucking; taxi service; urban transit; couriers; warehousing; and pipeline companies. These industries are expected to contribute nearly 59,700 jobs in 2010—a loss of 4,100 positions. Significant declines in air transportation dropped job totals in this sector in 2010. Job prospects should improve marginally in 2011 with a rebounding economy, adding 100 positions.

Transportation

Colorado Air Transportation

Commercial air transportation for the last several years has been punctuated by the merger of major airlines: Delta Airlines/Northwest Airlines, United Airlines/Continental Airlines, the completion of the Frontier Airlines/Midwest Airlines merger as part of Republic Airways Holdings Inc., and more recently the announcement of a Southwest Airlines/AirTran Airways merger. In general, the major airlines have become profitable through

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Trade, Transportation, and Utilities

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these consolidations, beneficial fuel prices, and reduced labor costs.

Total national passenger enplanements are currently forecasted by the U.S. Department of Transportation's Bureau of Transportation Statistics (BTS) to reach 708.2 million—up 1% from 2009. Revenue passenger miles are expected to increase by an equivalent level, to 780.2 billion. National freight and cargo is expected to increase slightly, 0.2%, to 6.8 billion revenue freight ton-miles. (Air mail is no longer identified as a subcategory of freight and cargo.)

U.S. scheduled passenger airlines employed 1.7% fewer workers (-2,205) in August 2010 than a year earlier, according to BTS. This is the 26th consecutive decrease in full-time equivalent employee (FTE) levels for the scheduled passenger carriers from the same month of the previous year (FTE calculations count two part-time employees as one full-time employee).

Denver International Airport (DIA) continues to hold its position in the National Air Transportation System as the fifth-most active airport despite a 2.1% decline in passenger traffic and a 10.6% decline in freight and cargo in 2009. Passenger traffic is expected to increase in 2010 and 2011. Colorado Springs Airport continues to decline in passenger traffic and is now ranked 87th in the nation. Colorado Springs Airport is expecting a slight 1.2% increase in freight and cargo in 2010, which may extend into the next year. Grand Junction's Walker Field has declined to the 164th-ranked airport from 159th in 2009.

Seven of Colorado's 13 nonhub airports continued to experience modest passenger growth in 2010. Among these, Eagle County Regional Airport rose 2.7% (ranked 177th), and Yampa Valley Regional Airport climbed 2.9% (ranked 205th). In general, the Colorado nonhub airports are collectively experiencing modest passenger growth.

All legacy airlines serving Colorado hub airports have declared FTE decreases. Since DIA is a hub for several major airlines, Colorado airline jobs are expected to participate in airline labor reductions. As such, the number of airline jobs is not expected

TRANSPORTATION AND WAREHOUSING EMPLOYMENT 2002–2011 (In Thousands)

Year	Truck Transportation	Couriers and Messengers	Warehousing and Storage	Air Transportation	Other Transportation	Total
2002	16.9	9.7	8.7	14.2	16.7	66.2
2003	16.5	9.7	8.0	13.7	17.1	65.0
2004	16.9	9.4	7.4	14.1	17.7	65.5
2005	17.8	9.3	7.0	13.6	18.0	65.7
2006	18.4	9.4	7.2	13.3	18.3	66.6
2007	19.0	9.7	7.0	14.2	18.6	68.5
2008	18.6	9.5	6.8	14.6	18.8	68.3
2009	17.2	8.6	6.6	13.3	18.0	63.8
2010[a]	16.6	8.4	6.4	12.8	15.5	59.7
2011[b]	16.7	8.5	6.5	12.6	15.5	59.8

[a]Estimated.

[b]Forecast.

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

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

to change significantly in the near future. Those jobs related to air freight and cargo are expected to continue to decline for several years, or until Colorado research and manufacturing trends improve significantly.

Denver International Airport

DIA is owned and operated by the City and County of Denver. The city's Department of Aviation employs approximately 1,000 people at the facility.

With nearly 50.2 million passengers in 2009, DIA ranked as the fifth-busiest airport in North America and the 10th busiest in the world. Passenger traffic at DIA declined by 2.1% in 2009 compared with 2008 (the busiest year in Denver aviation history). The slight decline in passengers was the result of the struggling economy and shifts in capacity by airlines to respond to both mergers and market conditions. DIA's passenger traffic has rebounded in 2010. Consistent growth in 2010 has brought the year-to-date passenger traffic through September 2010 to 39.5 million, an increase of 3.1% over the same nine-month period in 2009. The airport is expected to end 2010 with 51.4 million passengers, and 2011 with 52.5 million passengers.

DIA's largest carrier, United Airlines, closed a merger with Continental Airlines on October 1, 2010, to create the world's largest airline. The integration of the two carriers is expected to take at least a year. United and Continental combined account for 45% of DIA's passenger traffic, and the airlines provide nonstop service to more than 120 destinations from Denver. Denver is expected to remain as a key hub in the merged carrier. Frontier Airlines, a wholly owned subsidiary of Indianapolis-based Republic Airways, maintains its ranking as DIA's second-largest carrier. Frontier's largest hub remains in Denver, and the carrier also operates a smaller hub in Milwaukee. Southwest Airlines is DIA's third-largest carrier. Since entering the Denver market in January 2006, it ranks as Denver's fifth-largest station in the carrier's 70-city network. In late September 2010, following the industry trend, Southwest announced its intention to merge with low-cost rival AirTran. When it is completed in approximately two years, the Southwest-AirTran merger will likely result in a modest increase in flights at DIA.

In total, 15 airlines provide scheduled commercial passenger service at DIA, including four foreign-flag carriers (AeroMexico to Mexico City, Air Canada to Montreal and Toronto, British Airways to London, and Lufthansa to Frankfurt). Continued strong airline competition is responsible for DIA having one of the largest domestic markets in the nation and some of the lowest fares among major U.S. airports. Of the top 50 airports in the United States based on originating passengers, Denver recorded the largest percentage decrease in average fare over the past 10 years (2Q 2010 compared with 2Q 2000). The 34% decline has dropped Denver's average round-trip domestic fare to $294.

In July 2010, DIA unveiled details for the South Terminal Redevelopment Program. The program is comprised of independent yet physically integrated projects, which include the construction of a planned 500-room hotel and conference center, an RTD FasTracks commuter rail station, and improvements to the existing concourse baggage and train systems. In addition, the program includes the design for a signature rail bridge over Peña Boulevard and an open-air plaza, complete with new concessions and leasable space that connects the development to the existing Jeppesen Terminal. In conjunction with RTD's FasTracks East Corridor, the South Terminal Redevelopment Program is expected to create more than 6,600 jobs short-term jobs. The on-site hotel is anticipated to open in 2014, with the FasTracks link in service before the end of 2015. In addition, DIA is in the final stages of updating the Airport Master Plan that will lay out development concepts for the airport through 2035.

Motor Freight Transportation and Warehousing

Nationally, the trucking industry is comprised primarily of independent and small carriers. The industry has had difficult times over the past two years, with the fuel spikes of 2008 and the recession. These events spurred less demand for consumers, and as a result, less demand for the movement of goods. However, as the consumer makes a slight resurgence in 2010, the outlook for the trucking industry is looking up. The industry is anticipated to reach equilibrium again between trucking capacity and trucking demand in 2011.

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Trade, Transportation, and Utilities

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COLORADO AIRPORT STATISTICS
2003–2011
(In Thousands)

Passengers and Cargo	2003	2004	2005	2006	2007	2008	2009	2010[a]	2011[b]
Passengers (in thousands)[c]									
Denver International Airport (DIA)	37,505.1	42,393.8	43,387.4	47,327.0	49,863.4	51,245.4	50,167.5	51,421.7	52,450.1
Colorado Springs Airport (COS)	2,023.3	2,069.5	2,061.7	1,995.5	2,087.8	1,993.0	1,836.0	1,809.4	1,809.4
Aspen/Pitkin County Airport (ASE)	379.8	368.5	387.9	403.3	364.4	426.6	409.0	391.4	391.4
Eagle County Regional Airport (EGE)	336.7	338.3	426.5	434.1	463.4	426.0	400.0	410.7	410.7
Walker Field Airport - Grand Junction (GJT)	255.2	288.1	319.4	319.0	340.9	425.2	447.0	435.5	445.8
Yampa Valley Regional Airport (HDN)	204.8	240.6	259.5	262.9	279.3	273.2	245.0	252.2	252.2
Durango-La Plata County Airport (DRO)	172.4	194.2	203.5	227.0	232.6	268.7	279.0	306.9	307.9
Montrose Regional Airport (MTJ)	138.8	144.9	157.3	164.6	185.1	171.8	175.0	162.5	162.5
Gunnison-Crested Butte Regional Airport (GUC)	75.4	76.8	89.7	96.1	85.2	72.1	78.0	81.9	81.9
Fort Collins-Loveland Municipal Airport (FNL)	20.6	63.9	69.3	65.7	56.6	62.2	62.0	57.2	57.2
Telluride Regional Airport (TEX)	30.8	37.0	36.3	32.9	32.9	26.7	19.9	30.9	30.9
Cortez Municipal Airport (CEZ)	13.5	15.7	16.4	18.5	20.4	16.8	14.3	16.5	16.5
San Luis Valley Regional/Bergman Field (ALS)	7.7	10.4	10.9	14.4	15.0	14.3	13.1	13.0	13.0
Pueblo Memorial Airport (PUB)	7.8	9.0	8.1	9.9	9.8	8.7	7.8	8.7	8.7
Total Passengers	41,171.9	46,250.7	47,433.9	51,370.9	54,036.8	55,430.7	54,153.6	55,398.5	56,438.2
Cargo, Freight, and Air Mail (in millions of lbs.)									
DIA Freight and Express	610.1	621.0	615.0	580.2	573.9	527.1	468.2	523.8	503.1
DIA Air Mail	107.4	78.8	67.6	41.4	15.5	26.4	26.6	26.5	26.4
DIA Total	717.5	699.8	682.6	621.6	589.4	553.5	494.8	550.3	529.5
Colorado Springs Cargo	36.3	35.5	33.1	32.6	27.0	24.0	23.0	23.2	23.5
Colorado Springs Air Mail	1.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Colorado Springs Total	37.4	36.5	33.4	32.6	27.0	24.0	23.0	23.2	23.5

[a]Estimated.

[b]Forecast.

[c]Passengers include enplanements and deplanements.

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

COLORADO NATURAL GAS CONSUMPTION
2002–2011
(In Billions of Cubic Feet)

Year	Total Gas Consumption	Percentage Change
2002	459.4	0.9%
2003	436.3	-5.0
2004	440.4	0.9
2005	470.3	6.8
2006	450.8	-4.1
2007	504.8	12.0
2008	504.8	0.0
2009	497.3	-1.5
2010[a]	508.4	2.2
2011[b]	508.5	0.0

[a]Estimated.

[b]Forecast.

Source: Colorado Business Economic Outlook Committee.

COLORADO ELECTRIC POWER CONSUMPTION
2002–2011
(In Millions of Kilowatt Hours)

Year	Nonresidential	Residential	Total	Percentage Change
2002	30,512	15,425	45,937	3.8%
2003	30,770	15,725	46,495	1.2
2004	31,192	15,532	46,724	0.5
2005	31,917	16,436	48,353	3.5
2006	32,782	16,952	49,734	2.9
2007	33,665	17,634	51,299	3.1
2008	34,422	17,720	52,142	1.6
2009	32,770	17,406	50,176	-3.8
2010[a]	34,045	18,065	52,111	3.9
2011[b]	33,848	18,184	52,032	-0.2

[a]Estimated.

[b]Forecast.

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

Utilities

Natural gas and electric rates in 2010 have proven to be less volatile than the prior year, with the utilities industry seeing demand growth. The continued evolution of the renewable resource market, in conjunction with increased demand-side management and the stabilization of natural gas prices, have worked to improve the market.

As expected, the theme of energy conservation has carried through the 2010 legislation. The Colorado 2010 spring legislative session produced solar and natural gas initiatives aimed at transitioning from less efficient means of power generation to clean processes on the edge of technology. Utilities have continued efforts to meet the Renewable Energy Standard set by the state and upheld by the Public Utilities Commission, including higher percentages of on-site solar, renewable energy credit requirements, and a reduction in greenhouse gas emissions.

In March 2010, HB10-1365 created new legislation, titled the Clean Air-Clean Jobs Act, which stipulates that utilities that own or operate coal-fired generating plants reduce emissions through the replacing or repowering of coal plants with natural gas or through the adoption of low-emitting resources. In essence, the bill calls for retiring coal-fired generating plants, retrofitting them to reduce emissions, repowering them with natural gas, or replacing power sources with renewable energy alternatives. Xcel has multiple scenarios on the board, and the Public Utilities Commission (PUC) is expected to rule on Xcel's preferred scenario in December 2010. Depending on the PUC's ruling, the result of Xcel's compliance may be a combination of scrubbers, natural gas conversions, and power plant retirements, at a compliance cost in excess of $1 billion spread over decades. The impact of compliance will lead to Xcel purchasing less Colorado coal and more Colorado gas for energy generation.

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Trade, Transportation, and Utilities

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TRADE, TRANSPORTATION, AND UTILITIES EMPLOYMENT
2002–2011
(In Thousands)

Year	Wholesale Trade	Retail Trade	Total Trade	Transportation and Warehousing	Utilities	Total TTU
2002	95.1	242.7	337.8	66.2	8.1	412.1
2003	92.1	239.5	331.6	65.0	7.9	404.5
2004	91.9	241.3	333.2	65.5	7.9	406.6
2005	93.5	245.8	339.3	65.7	8.0	413.0
2006	96.4	248.3	344.7	66.6	8.0	419.3
2007	99.3	253.5	352.8	68.5	7.9	429.2
2008	100.1	252.6	352.7	68.3	8.2	429.3
2009[a]	93.1	238.3	331.4	63.8	8.4	403.8
2010[b]	90.9	237.5	328.4	59.7	8.4	396.5
2011[c]	91.8	239.9	331.7	59.8	8.5	400.0

[a]Revised.

[b]Estimated.

[c]Forecast.

Note: Components may not sum to total due to rounding.

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

The utilities industry has maintained the work it began in 2009 and continues to increase its renewable portfolio with additional solar and wind generating facilities. The state currently has generation in wind, central and on-site solar, biomass, and hydro resources. Utilities, in conjunction with state and federal agencies, are offering more programs and rebates to entice customers to reduce load, utilize energy-efficient appliances, and operate more efficiently.

Along with the increase in research in renewable energy options, Colorado has seen an increase in the exploration of natural gas, which goes hand in hand with higher nationwide natural gas production. The abundance of natural gas both nationally and locally has dropped natural gas prices to new lows. The increased pipeline capacity, including the near-completion of Colorado Interstate Gas's Raton Lateral line and the creation of new natural gas storage facilities east of Denver, have kept Colorado natural gas prices in line with national price levels. Colorado retail natural gas and electricity consumers have benefited as wholesale natural gas prices have stabilized around $4 per MCF. Natural gas prices in the state are expected to continue to move with national hub prices now that the Colorado market is more fully integrated into the national pipeline system.

The stabilization of natural gas prices and increased capacity to the Rocky Mountain regions has provided the opportunity for rural areas in the state to take advantage of natural gas for power generation and residential heating. Natural gas power generation continues to play a role in the renewable portfolio, with peaking facilities and the ability to balance load with renewable energy such as solar and wind generating facilities. Research and pilot activities for alternative uses for natural gas, including fuel cells and the use of liquefied natural gas as a substitute for diesel fuel, is also on the rise.

The rebounding economy and more favorable seasonal weather increased demand in 2010. Utilities recorded an increase in both electricity and natural gas consumption from 2009. Colorado electricity consumption increased from 50,176 million kWh in 2009 to an estimated 52,111 million kWh in 2010, an increase of approximately 4%. Colorado natural gas consumption climbed from 497.3 BCF in 2009 to an estimate 508.4 BCF in 2010, an increase of 2.2%.

Longer term the demand for electricity and natural gas is expected to continue to grow thanks to the combination of increases in distributed generation renewable resources and demand-side management, as well as a stabilized natural gas outlook. Colorado utilities will continue to respond to government and public concerns as they provide clean, reliable power.

Utilities employment is expected to be flat in 2010 and increase by 100 in 2011. ✜

Information

Overview

The Information Supersector is comprised of companies that communicate and deliver content in a variety of channels or media to diverse audiences. They facilitate the daily informational and cultural exchanges for personal and professional consumption. Since 2000, the Information Supersector has recorded employment growth only twice—in 2000 and 2007. Information will lose 3,400 jobs in 2010, a decline of 4.6%, and an additional 1,400 jobs in 2011, or 2%.

Publishing

As the second-largest information sector, Publishing employed just under 24,100 people in 1,067 establishments in 2009. The industry includes any firm that issues print or electronic copies of original works for which they own a copyright (excluding Internet). Products include newspapers, periodicals, books, directories, databases, calendars, greeting cards, and software. The publishing industry is increasingly producing material in formats other than traditional print, such as audio, downloadable files, digitized books, smart phone applications, and CD-ROM.

The rise of the Internet and its attendant new social media explosion has had industry-changing implications for twentieth-century traditional publishers. With the increasingly rapid change in communications platforms and preferences comes industry convergence among traditional publishers and fragmentation with the rise of electronic blogs and forums. Consumers' preferences are relentlessly moving away from traditional print products toward electronic products and the Internet. Print advertising budgets will continue to decrease in the next few years, and content will continue to move online and onto mobile applications. Although the state and nation are emerging from recession, further consolidation and business failures are expected to persist.

The industry lost nearly 31% of its jobs between 2001 and 2009, with 85% of those losses occurring in the software and newspaper publishing sectors. Book publishers have also lost 30% of its job base since 2001, but because Colorado's book publishing sector is very small, these losses represent only 4% of the jobs lost by the overall publishing industry since 2001. Employment in Publishing (excluding internet) is expected to decrease 5.8% in 2010 and 2.2% in 2011.

Newspaper Publishers

The recession has accelerated the dilemma faced by newspapers in Colorado and nationwide. Newspaper readers are accustomed to receiving low-cost information subsidized by advertisers. Circulation of print editions and local advertising revenue are diminishing each year as people increasingly turn to the Internet for news and to post and respond to classified advertisements. The economic downturn accelerated this trend, with businesses and consumers substantially reducing spending on traditional advertising. This suggests that the traditional newspaper's business model has become obsolete. Industry observers suggest that a consortium of journalist bloggers have already begun to replace them, especially in larger markets.

The Publishing industry lost nearly 31% of its jobs between 2001 and 2009

Newspapers and television are attempting to respond to new media trends by interacting on mobile applications, blogs, Facebook, and Twitter in an attempt to reach audiences that are increasingly getting their news online. Convergence may be another viable model whereby television stations join forces with newspapers, sharing their content across broadcast, online, and print media. While these movements are taking place, it is not clear what the revenue model will be.

Employment at Colorado newspapers has been declining since 2005. Colorado newspapers employed 4,929 people in 2009 in 182 establishments, down from 7,080 people in 2005. Newspaper employment continued to decrease in 2010 and is expected to continue doing so, though at slower rate, in 2011.

Book Publishers

The U.S. book publishing industry has traditionally been dominated by a handful of large firms, most of which are headquartered in New York City. The Internet is causing the industry to undergo significant change. Barriers to entry for an author's

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or small publisher's niche market have increasingly diminished. Google Books is one example of the growing online availability of free or inexpensive digitized books. New electronic products, such as e-readers like Kindle and the Nook, have made it increasingly easy for readers to comfortably enjoy digitized books.

Book publishers in Colorado tend to be fairly small firms that specialize in certain subject areas. Book publishing establishments totaled 103 in Colorado in 2009. Employment in these firms has fallen every year since 2001, from 1,439 jobs in 2001 to 1,006 jobs in 2009. Jobs in these firms generally include editors, marketers, production staff, and general administrators. (Most authors are freelance workers and are classified in the services industry. Authors who publish their own books have an ever-increasing presence in Colorado, and are not represented in these figures.) Employment in Colorado's book publishing industry will decrease in both 2010 and 2011.

Periodical Publishers

Colorado's periodical publishers employed slightly more than 2,500 people in 257 establishments during 2009, down significantly from 2008 levels. Other than a few fairly flat years during the economic expansion in 2004 through 2007, employment and the number of establishments in Colorado's periodical publishing sector has been falling since 2001. This trend is expected to continue in 2010 and 2011.

Directory Publishers

Colorado's directory publishers shed 199 jobs in 2009. The trend away from print directories toward Internet directories and the recession has affected advertising sales.

Software Publishing

Companies in the software publishing industry design, provide documentation of, install, provide support services for, and distribute software. The developed economies of the world now rely on computer and information technology to operate and grow. Much of the recent development in this sector has been concentrated on small and inexpensive online applications, such as those produced for iPhones. Nationwide, employment in

Media Revolution

The upheaval in twentieth-century communications continues with ongoing integration of digital and social media into existing media outlets. The latest casualty of the seismic media shift is the pending closure of the CU journalism school, illustrating the ongoing obsolescence of entities that include printing company A.B. Hirschfeld Press and the *Rocky Mountain News*. The *Denver Post* now advertises itself as a media outlet with the largest audience in print, online, mobile, and social media in Colorado. Denver's other media outlets such as KCNC, KMGH, and KUSA are similarly positioning themselves as fully integrated media channels or networks. KUSA, for example, is marketed as the "networks of 9News," displaying the logos of various broadcast and online content channels. All have aggressively adopted the social media platforms of Twitter and Facebook.

With this increasingly rapid change in communications platforms and preferences comes industry fragmentation. The rise of the internet and its attendant new social media explosion has real implications for the twentieth-century traditional media. The internet, combined with the national economic downturn, has cut into traditional advertising revenue from classified ads and car dealers. Meanwhile, fewer financial resources translate into fewer staff to create the content to feed the daily news cycle. This has resulted in The *Boulder Daily Camera* and The *Denver Post* sharing content. It is not unusual to have the online versions of both news outlets repurposing local stories by the same author. Television is also experiencing rapid consolidation due to the influence of the internet. Denver television news outlets now share resources, including pooled cameras and helicopters for certain events. This is a move unheard of back in the days of abundant resources and the fierce competition between papers and stations.

Radio is not immune from the communications revolution, perhaps because radio strategists saw how the music industry first ignored and then fought the software publishing industry has considerable promise in the long run as technology continues to drive efficiencies in the industry. In Colorado, however, employment has decreased every year since 2001. The software publishing sector, the largest sector in Colorado's publishing industry, employed 11,200 people in 436 firms during 2008. While select firms interviewed for this report indicated they are aggressively hiring to accommodate domestic and international growth, others are in a state of flux. Overall, employment is expected to slump 4.2% in 2010 and an additional 1.8% in 2011.

Telecommunications

Despite the economic vagaries that dominated 2009 and 2010, telecommunications companies in Colorado appear financially stable due to measures taken to reduce employment and investment costs. The prospects for expansion and hiring in the industry are at best relatively distant. Companies are conserving cash and cutting expenses, including capital outlays and employment. With this reluctance to increase capital investment, as well as the continuing trend to reduce payroll, expectations that the telecom industry will somehow lead a charge out of the current recession are probably misplaced.

Year-end employment in telecommunications will contract by 1,800 jobs in 2010, and employment is expected to slide another 1,100 jobs in 2011. New private investment remains stagnant. Capital investment in telecom is almost uniformly down. Companies are moving cautiously, at least in the short term, slowing the pace of capital investments, aggressively managing operating costs, and protecting cash flow positions.

With the infusion of stimulus money in rural broadband, there is hope that deployment of additional facilities and capital investment will, to some extent, resuscitate Colorado's rural economy.

Broadband Deployment: The American Recovery and Reinvestment Act of 2009

In 2009, the most significant development in the area of broadband deployment came as the result

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digital downloads. Radio in Colorado has already extended its reach to the internet, and most major stations have an online presence to complement over-the-air offerings. They, too, are heavily investing in Twitter and Facebook. Broadcast radio is not immune to ongoing online and satellite competition, such as Rhapsody, Pandora, and satellite service Sirius. Industry observers now predict that Apple may soon roll out a music streaming service.

Meanwhile, the social media trend is being fueled by its adoption at the corporate level—witness large brands launching blogs, Facebook pages, and Twitter accounts. Social media is also going hyper-local with local businesses using blogs, Facebook, and Twitter to amplify products and services. Essentially, they are adopting these platforms as replacement for traditional advertising platforms such as newspapers, radio, and television. Now, through such customizable solutions such as Minnpost.com, advertisers can republish their Twitter feed, blog headline, or even an e-mail to update their online advertising in real time. This puts them in direct control of their advertising messaging; plus, because these platforms allow for the immediate tracking of media response rates, advertisers can adjust campaigns on the fly.

Social and digital media innovations are also at the heart of a technology start-up boom in Boulder. With the city's new status as the number one city for technology start-ups comes an influx of new development talent from around the country and the world. Increasingly, tech entrepreneurs are flocking to Colorado, and Boulder in particular, hoping to be the next big thing—whatever that might be. ✤

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of passage of the federal American Recovery and Reinvestment Act (ARRA), which allocated $7.2 billion in grant money to be awarded to broadband infrastructure and other investment projects nationwide. The ARRA created two programs for the evaluation of grant proposals: the Broadband Technology Opportunities Program (BTOP), administered by the National Telecommunications and Information Administration of the Department of Commerce, and the Broadband Initiatives Program (BIS), administered by the Rural Utilities Service of the Department of Agriculture.

BIS will fund $2.5 billion in grants targeting rural broadband projects, while BTOP will distribute another $4.7 billion to unserved and underserved areas. The BTOP Program is divided into separate funding categories: $3.9 billion for infrastructure, $250 million for programs encouraging sustainable broadband connections, $200 million for public computer centers, and $350 million for a nationwide broadband mapping project.

In September 2010, the BTOP program awarded nearly $200 million in grants to Colorado applicants, including the Adams County Communications Center ($12 million), the Centennial Board of Cooperative Education Services ($100.6 million), the Colorado Board of Education ($2.28 million), the Colorado Governor's Office of Information Technology ($5.38 million), Communications Service for the Deaf ($14.9 million), and the University Corporation for Advanced Internet Development ($62.5 million). In addition, BIP awarded another $10.5 million for Colorado rural broadband projects, including Delta County Tele-Comm ($1.8 million), Nunn Telephone ($3.9 million), Peetz Cooperative Telephone ($750,000), Wiggins Telephone ($2.2 million), Stoneham Telephone Cooperative ($230,000), and Plains Cooperative ($1.6 million).

Private Broadband Investment

As of Q2 2010—the most recent figures available at the time of this report—Qwest and Comcast each reported a drop in 2010 capital expenditures. Qwest's capital expenditure for the Q2 2010 stood at $330 million, down from $348 million in Q2 2009. Comcast pegged its first half 2010 capital expenditures at approximately $2 billion, down about 10% from the same period the previous year. As a result, the grants from BTOP and BIP will be even more important for developing infrastructure and growing jobs in the state. Still, Qwest states that it continues to fund key strategic capital projects, including additional fiber to the node (FTTN) deployment, which it says now reaches four million homes in its 14-state serving area, compared to two million at the end of 2008.

Telephone

The biggest single story in 2010 telecom in Colorado was the merger of Qwest with CenturyLink, based in Monroe, Louisiana. As a rule, mergers of this kind result in job loss rather than creation. Still, in mid-October 2010, the Communications Workers of America (CWA) and the International Brotherhood of Electrical Workers (IBEW) both withdrew their opposition to the merger in exchange for concessions relating to maintaining call centers and job stability. CWA is the dominant union at Qwest, and IBEW is the dominant union at CenturyLink. The merger is reportedly valued at $10.5 billion, and is expected to receive regulatory approval by mid-2011. (As of fall 2010, about nine states and the FCC had not approved the transaction.) In addition, if Qwest's agreement with CenturyLink is approved, it has been agreed that more than $70 million in investments will be made over five years.

Qwest's telephone access lines continue to decline in number, together with associated revenues. Q2 2010 figures show Qwest's total access lines fell

Information Technology Cluster

Information technology (IT) is arguably every industry. It has been one source of productivity gains for companies looking to cut costs and capitalize on efficiencies. With the decline in software publishing, many computer and information scientists have leveraged their skills in companies in other industries. Based on occupational employment statistics, Colorado IT jobs, which earn higher-than-average wages, increased 2.5% from May 2008 to May 2009, to 90,460 employees. ✤

12.9% from the previous year, to approximately 9.4 million lines across its 14-state territory. Qwest reports a 12% drop in revenues for its "legacy" services from 2009 to 2010. Comcast, on the other hand, continues to report growth in its digital voice product. Its Q2 2010 voice revenues climbed 14% from the same quarter in 2009, with subscribership up 16%, from 7 million to 8.1 million. Penetration is now at 35% of its video customer base.

While Qwest and AT&T try to predict when their access line numbers will stop shrinking, Verizon's response to the continuing decline is reportedly to assume that its landline telephone business will eventually go away. Speaking to Goldman Sachs investors in 2009, Verizon's CEO Ivan Seidenberg said the company is "no longer concerned" with telephones that are connected by wire, and instead is moving its voice services to voice over internet protocol (VoIP) connected through Verizon's fiber network, known as FiOS. If Qwest were to take a similar approach to providing voice service, it would require the company to make a substantial additional capital investment in fiber facilities.

Television

One would have thought that the recession would drive an increase in cable subscribership, together with a decrease in revenue per subscriber. The reason for this is because when money is tight people stay home and watch television, but they also do not have the money to purchase the full premium cable package. So the result should be an overall decrease in revenue. However, that is not the way it is actually happening. True, Comcast reports that its digital video subscribership is up

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INFORMATION EMPLOYMENT
2002–2011
(In Thousands)

Year	Publishing	Telecommunications	Other	Total[a]
2002	31.1	39.1	22.7	92.9
2003	30.3	34.5	19.8	84.6
2004	29.7	32.5	19.0	81.2
2005	29.0	29.3	18.6	76.9
2006	28.5	28.2	18.7	75.4
2007	27.9	30.2	18.3	76.4
2008	26.6	31.0	19.2	76.8
2009	24.1	31.9	18.7	74.7
2010[b]	22.7	30.1	18.5	71.3
2011[c]	22.2	29.0	18.7	69.9

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

[b]Estimated.

[c]Forecast.

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

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nearly 10% from fall 2009. As well, its analog video subscriber base remains fairly constant (down only 2.8% from last year). So the first half of the theory seems correct. However, the second half is wrong: Comcast reports that average monthly revenue per customer is up 8% over a year ago, to $127.78. People are staying home, and they are also beefing up their cable packages.

Comcast is using much of its capital to buy NBC Universal, which means that money did not go to infrastructure, and it did not grow jobs. (Although it might appear that Comcast is out-investing Qwest, do not forget that Comcast's capital investment is over a much larger number of states than Qwest's.) At this point, the FCC and the Department of Justice are closely examining the Comcast-NBC Universal transaction, and each agency seems concerned over the effects the deal will have on content distribution. Regulators fear that Comcast may price the programming produced by NBC Universal so high that Comcast's competitors will not be able to afford it.

Wireless

As part of the 2008 auction of spectrum in the 700 MHz bandwidth, the FCC imposed some fairly mild build-out requirements in an effort to speed investment and development of new services. Two of the categories of licenses offered in Auction 73 require that signal coverage be up and running to at least 35% of the geographic areas of the licenses by 2012, and to at least 70% of the geographic areas of the licenses at the end of the license term. As a result, investment in additional wireless facilities is proceeding and may be a more significant factor in 2011 than it was in 2010.

Along with additional wireless facilities, the telecommunication industry is investing and developing a new generation of speed for consumers. Fourth-generation (4G) wireless data network technology has already affected major phone carriers, including Sprint and T-Mobile. Verizon plans to launch high-speed 4G in Denver and 37 other major metro areas in early 2011.

Through its wholesale markets business segment, Qwest is investing in fiber optic service connections to cell sites. As of Q2 2010, it had completed these upgraded connections to some 600 cell sites, with another 2,000 sites under plan for the remainder of the year.

Internet

Consumer demand for broadband services from Qwest appears to have declined significantly in Q2 2010. Qwest added 40,000 customers in Q1, but that number sank to only 7,000 in Q2, capping almost steady growth over the previous four quarters. The company's total broadband subscribership now stands at approximately three million. Early in 2008, Qwest committed to an investment of approximately $300 million in FTTN build-out to provide higher speed Internet connections for customers in 23 markets in 10 states. Deployment of those facilities continued in 2010. Qwest says customers on its FTTN platform receive downstream connection speeds up to 40 Mbps. As of midyear 2010, Qwest had approximately 500,000 customers on the platform.

Comcast added 118,000 new high-speed Internet subscribers in Q2 2010. Its overall subscribership grew from 15.3 million in Q2 2009 to 16.4 million in Q2 2010.

People are staying home during the recession, and they are also beefing up their cable packages.

The Year Ahead

Overall, new investment in telecom facilities is likely to come from two sources: (1) stimulus money and grants, mainly for broadband deployment to rural areas, and (2) construction of wireless facilities as the result of the FCC's 700 MHz spectrum auction in 2008. Other telecom investment will not begin prior to resurgence in consumer confidence. The impact of these investment dollars will begin to be felt in 2011. However, deadlines for build-out of wireless facilities go into 2012 and beyond. As a result, while some new investment is on the horizon, it will be slow to arrive. Employment in the telecom sector is likely to be equally slow to improve.

Other

Film, Television, and Media

Colorado's film industry benefited from slight gains in employment due to a rebounding of television commercials in 2010 compared to 2009. The auto industry and a few other market segments began producing commercials again. Coupled with the political campaign season, the number of commercial production jobs in the state increased.

The industry is expecting small gains in this sector due to changes made in the film incentive legislation that took effect in July 2010. The number of applications for the Colorado Production Incentive is up significantly over prior years. Applications submitted by production companies for the film incentive are projected to generate approximately 600 new short-term jobs over the next two years.

The most significant success of the incentive program, so far, is the relocation of a television show from California to Colorado. That production is expected to be filming in Colorado by early 2011.

One of the largest content providers for the cable television industry, High Noon Entertainment, is based in Colorado. The number of shows it produces continues to increase, which could create additional jobs in the state.

Broadcasting (except Internet)

The broadcasting subsector includes television and radio broadcasting, as well as cable and other subscription programming. Like newspapers, television is experiencing rapid consolidation due to the influence of the Internet. Denver television news outlets now share resources, including pooled cameras and helicopters for certain events. This is a move unheard of back in the days of abundant resources and the fierce competition between stations.

Radio in Colorado has extended its reach to the Internet, and most major stations have an online presence to complement over-the-air offerings. Over-the-air radio is not immune to threats, however, as satellite radio has taken a bite out of its market. ✥

Creative Industries

186,000 Colorado Jobs in Creative Economy Study defines fifth-largest cluster of Colorado's economy

Effective July 1, 2010, Colorado has created a new emphasis to grow the state's creative industries by establishing the Creative Industries Division within the Office of Economic Development and International Trade.

A 2008 study by Regional Technology Strategies of North Carolina categorized the state's creative industries into six subgroups: design, film and media, heritage, literary and publishing, performing arts, and visual arts and crafts. Colorado's strengths are design, literary and publishing, and film and media, which represent 73% of all creative industry jobs.

Colorado's creative enterprises alone employed more than 122,000 individuals in about 8,000 establishments. This accounts for 3.9% of the state's estimated 3.2 million employer and nonemployer jobs, making it Colorado's fifth-largest employment sector, almost as large as biotechnology/biomedical and IT and telecommunications and larger than defense and security and agribusiness, food processing, and technology. Employee earnings in these jobs, including employee benefits, were about $5 billion. Another 64,000 individuals worked in creative occupations in noncreative enterprises.

Colorado is a magnet for creative talent, ranking fifth among all states for concentration of artists. Only New York, California, Massachusetts, and Vermont have a higher concentration of creative talent. Colorado ranks second in concentration of architects; seventh in concentration of writers, designers, entertainers and performers; and eighth in concentration of photographers.

For more information visit the Colorado Creative Industries website, www.coloarts.org. ✥

Financial Activities

Approximately 45% of the employees in the Finance and Insurance Sector work at credit intermediaries, such as banks, credit unions, and other consumer savings and lending organizations. About 37% of the workers are employed at insurance carriers. The remainder work at securities or investment firms or other miscellaneous finance-related firms.

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

In 2009, Finance and Insurance Sector employment fell 3.6%, or 3,900 jobs, and employment in the Real Estate and Rental and Leasing Sector declined 7.7%, or 3,700 jobs. While showing signs of stabilizing, the Financial Activities Supersector is anticipated to lose 4,000 jobs in 2010. In 2011, the supersector is expected to gain 700 jobs or 0.5%.

Finance and Insurance

Financial Markets

In contrast to the dramatic upheaval of the last several years, 2010 *was* tame domestically. But how tame was 2010? Are we firmly on the road to recovery, or has 2010 foreshadowed future upheavals?

As of early November 2010, the three major equity indices were well in the green, with the NASDAQ doing the best, up more than 13% year-to-date, and the Dow and S&P both up over 9% year-to-date. Since there seems to be a growing disposition to point to the level of the stock market as a proxy for the health of the economy, one could see how 2010 could be viewed as validating the recovery after stringing together back-to-back positive returns and how the enthusiasm over a Dow above 11,000 could instill some exuberance.

However, one must remember to question market price action, and it is useful to look in the rearview mirror to see where we have been. All three major equity indices hit post-2001 recession highs in October 2007: the Dow was 14,164 versus a Dow that was trading above 11,000 in November 2010, the S&P was 1,565 versus a S&P that was trading around 1,200, and the NASDAQ was 2,859 versus 2,500.

FINANCIAL ACTIVITIES EMPLOYMENT
2002–2011
(In Thousands)

Year	Finance and Insurance	Real Estate and Rental and Leasing	Total
2002	103.5	46.1	149.5
2003	107.1	47.1	154.1
2004	107.3	47.3	154.6
2005	110.3	48.3	158.5
2006	111.4	49.1	160.4
2007	110.1	49.4	159.5
2008	107.4	48.2	155.6
2009[a]	103.5	44.5	148.0
2010[b]	101.4	42.6	144.0
2011[c]	101.9	42.8	144.7

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

In May 2010, Europe faced the first round of a sovereign debt crisis—one that was not assuaged until an €110 billion EU/IMF bailout for Greece was cobbled together. This bailout required Greece to implement a wide range of austerity measures. As to the impact of this upheaval on the U.S. markets, one means of viewing these effects is to examine the price action of the VIX, which represents a market estimate on future volatility in the S&P 500, over that same period. In April 2010, the VIX hit a low of 15.58 and then rapidly spiked to 45.79 in May before settling back down below 20 where it was in November 2010. Greece is but one member of a group of economically troubled countries—Portugal, Italy, Ireland, Greece, and Spain. Greece's austerity measures have led to social unrest, and there is a growing expectation that it will default within two years.

It seems reasonable to expect that a new round of market volatility will go hand in hand with the ongoing sovereign debt problems. For the time being, global investors have been focused on these troubled nations. This affords other nations, the United States among them, an opportunity to get their own financial houses in order before they fall prey to an awakening of the market to their own fiscal deficiencies. Much like the superstitious dread of mentioning a specter's name for fear of awakening it, the United States arguably has its own looming sovereign debt crisis that gets limited attention. Will our own deficit issues be addressed via the implementation of austerity measures or will meaningful economic growth take hold to drive the economy sufficiently to begin absorbing the 14.8 million unemployed, not to mention the 9.2 million who are reported as involuntary part-time workers? If it is the former, what does that mean for economic growth? If it is the latter, what will be the catalyst for such growth and what might be hindering its appearance?

Since government spending is dictated by elected representatives, it is worth noting that the GOP narrowed the gap with the Democrats in the Senate, and they took control of the House of Representatives. Will this result in a more balanced approach to legislation or simply gridlock? Whatever the outcome, this adjustment will give investors increased certainty that no additional stimulus spending measures will be passed by Congress in 2011.

Given the probable lack of additional government mandated stimulus spending in 2011, are there any other distortions in the capital markets? Yes, several. Notably, there continue to be distortions in the housing market. Congress voted to extend the emergency measures that permit Fannie Mae and Freddie Mac to fund mortgages as large as $729,750 until October 2011 because the privately funded jumbo mortgage market has yet to recover. Then there is the on-again off-again moratorium on home foreclosures—not to mention the question of who has the right to foreclose since while the securitization of home loans led to lower borrowing costs, it also clouded the chain of ownership of the loans. Additionally, the Federal Reserve has just announced the details of the second round of quantitative easing. Between Q4 and the end of Q2 2011 the Fed will purchase $600 billion in U.S. Treasury securities, nearly 90% of which will have maturities between 2 and 10 years. Furthermore, it was announced in August 2010 that rather than allow the winding down of the portfolio of securities from the first round of quantitative easing, the Fed will instead reinvest those proceeds. Based on projections, this will bring total Fed purchases to $850-900 billion through the first half of 2011.

The Fed's rationale for quantitative easing round two (QE II) can be summed up by its statement that the unemployment rate is elevated and that inflation measures are low. It went on to say that "…progress toward its objectives has been disappointingly slow."

The purpose of QE II is to keep interest rates low. The idea is that the low rates will facilitate lending and encourage risk taking. For those borrowers credit worthy enough to be able to obtain credit, the word of the day has been *refinance*. Corporations have been capitalizing on the low interest rate environment and the seemingly limitless appetite

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FINANCE AND INSURANCE EMPLOYMENT
2002–2011
(In Thousands)

Year	Credit Intermediation and Related Activities	Securities, Commodities, and Other Activities	Insurance Carriers and Related Activities	Other Finance and Insurance Activities	Total
2002	47.4	15.1	39.3	1.7	103.5
2003	50.7	13.9	39.5	3.0	107.1
2004	51.5	13.4	39.5	2.9	107.3
2005	53.3	13.7	40.2	3.1	110.3
2006	53.7	14.7	40.0	3.0	111.4
2007	51.8	15.8	39.2	3.3	110.1
2008	48.6	16.5	38.9	3.4	107.4
2009[a]	46.7	15.5	37.9	3.3	103.5
2010[b]	45.6	15.0	37.6	3.2	101.4
2011[c]	46.0	15.2	37.6	3.1	101.9

[a]Revised.

[b]Estimated.

[c]Forecast.

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

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

Financial Activities

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in the capital markets to issue bonds. IBM borrowed $1.5 billion for three years at 1%. Corporations with a below-investment grade rating have been issuing debt at a mind-numbing pace as they race to refinance and roll-over maturing debt. This is a boon to those companies able to access the capital markets as they are able to lower their cost of borrowing and push their maturities into the future—by which time they hope the economy will be better.

However, the Fed's Senior Loan Officer Opinion Survey on Bank Lending Practices in July 2010 indicated that despite relaxed underwriting standards, loan demand remained relatively unchanged. Could it be that those companies too small to access the capital markets are experiencing a different reality? It is perceived that the liquidity being injected into the economy via the Fed is chasing liquid assets due to uncertainty related to tax rates, healthcare, and a host of other issues that arose out of the financial crisis that have yet to be resolved. Could it be that this liquidity is inflating the value of liquid assets and distorting the perception of the health of the economy? An ancillary issue is that entrepreneurs are unable to obtain capital because those with capital to lend want to stay in liquid assets due to legislative and economic uncertainty.

Kansas City Fed President Hoenig, the repeat dissenting voter, referred to QE II as "a pact with the devil" due to the risks of runaway inflation and speculative bubbles, and the concern that lower interest rates will take pressure off Congress to address the deficit. Meanwhile, Bill Gross, the Co-Chief Investment Officer of PIMCO, an asset management firm with $1.2 trillion under management, suggested in his November 2010 newsletter that the United States is in a *liquidity* trap (Keynesian term, where monetary policy is unable to stimulate the economy either through lower interest rates or increasing the money supply), and that QE II is like a hypodermic to the heart of the economy with no guarantees that it will jump start spending and growth. He went on to compare the ever-increasing issuance of national debt at lower and lower interest rates to have Ponzi-scheme characteristics.

With all of this distortion, can there be any degree of certainty concerning valuations in the housing market, the stock market, the bond market, or the commodities market? Yet with this uncertainty, is it any wonder that investable cash is predisposed to liquid assets?

Fighting the trend in the markets is akin to stepping in front of oncoming traffic, but one must constantly question the sense of the price action. As dollars chase after returns and inflate liquid assets like a balloon, those assets can deflate rapidly, too. Ask holders of Greece's debt as its credit rating fell from "A-" in December 2009 to "junk" in April 2010 or owners of NASDAQ stocks in early 2000.

The economy got here compliments of more than a decade of cheap and readily available credit. Its easy access enabled consumers to continually extract value from real estate to fuel consumption lust. Its abundance enabled consumers to increase

FINANCIAL MARKETS: STOCKS
2001–2010 YTD
(Year-End Close)

	Value				Index (2001=100)			
Year	S&P 500	Dow Jones	NASDAQ	Bloomberg Colorado Index	S&P 500	Dow Jones	NASDAQ	Index of Bloomberg Colorado
2001	1,148.8	10,021.6	1,950.4	204.4	100.0	100.0	100.0	100.0
2002	879.8	8,341.6	1,335.5	167.2	76.6	83.2	68.5	81.8
2003	1,111.9	10,453.9	2,003.4	237.0	96.8	104.3	102.7	115.9
2004	1,211.9	10,783.0	2,175.4	278.9	105.5	107.6	111.5	136.4
2005	1,248.3	10,717.5	2,205.3	326.0	108.7	106.9	113.1	159.5
2006	1,418.3	12,463.2	2,415.3	382.5	123.5	124.4	123.8	187.1
2007	1,468.4	13,264.8	2,652.3	450.2	127.8	132.4	136.0	220.3
2008	903.3	8,776.3	1,577.0	220.5	78.6	87.6	80.9	107.9
2009	1,115.1	10,428.1	2,269.2	310.3	97.1	104.1	116.3	151.8
2010[a]	1,213.4	11,346.8	2,563.0	435.0	105.6	113.2	131.4	212.8

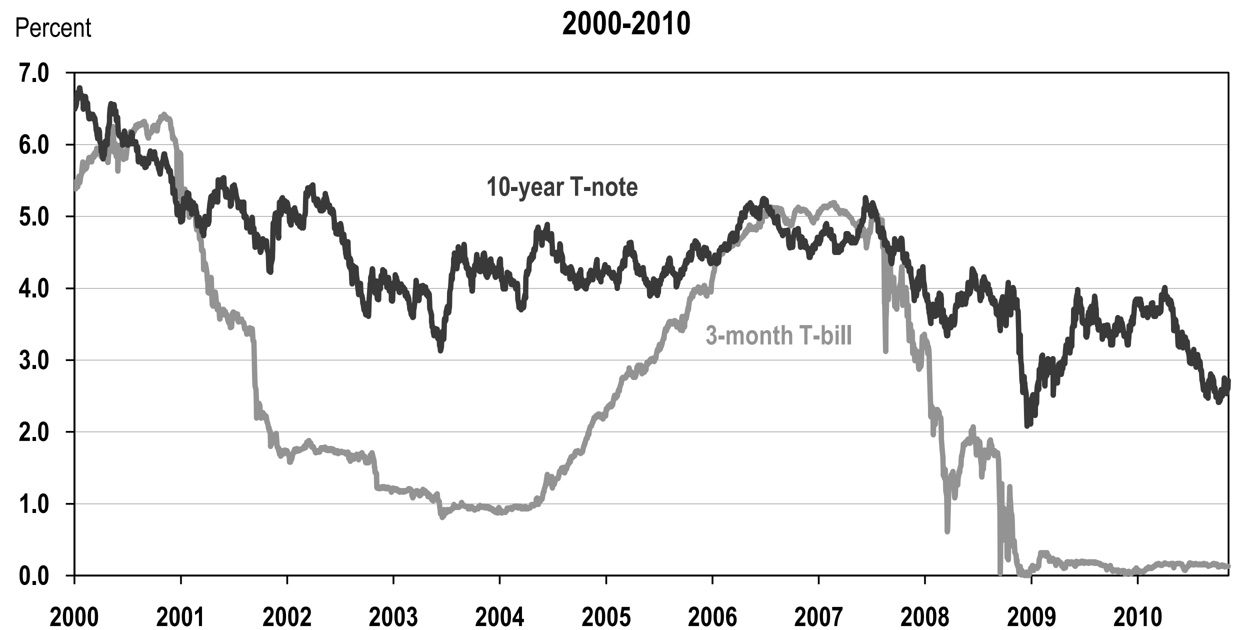
[a]Year-to-date value at market close on November 9, 2010.
Source: Bloomberg and Colorado Business Economic Outlook Committee.

their debt level while their leverage was masked by ever-inflating asset values. Asset values are attempting to adjust, and consumers are attempting to reduce their debt levels. Their ability to consume has been curtailed. The consumption lust may still exist, but the means to act upon it has been greatly diminished. Consequently, consumer demand may remain lethargic for an extended period of time, only to surge periodically due to consumers having saved for purchases or as legislative programs like 2009's cash-for-clunkers and 2010's home-buyer tax credits bring future purchases into the present.

The one certainty is that between now and the end of Q2 2011 the Federal Reserve will have pumped nearly $1 trillion into the U.S. Treasury market. Follow the liquidity, and you will find investment returns. Focus on those entities, corporate or sovereign, that are managing their balance sheets, investing in their futures, and creatively innovating and providing products that people want/need and you should do well.

To that end, Colorado has excelled. Having learned from prior recessions, the economy is diverse and continues to attract new people and businesses drawn by the unique outdoor and urban lifestyle opportunities Colorado provides. In late 2010, the Bloomberg Colorado Index of stocks posted a year-to-date return of more than 35%. Global uncertainty may continue to be on tap for 2011, but there is no better place to ride it out than Colorado.

INTEREST RATES
2000-2010



Source: U.S. Treasury.

Commercial Banking

In 2010, U.S. banks continued through the necessary and difficult process of recognizing loan losses and cleaning up their balance sheets as they emerged from the worst credit-driven recession since the Great Depression. This process was helped by a steep upward sloping yield curve the first half of the year, increasing the profitability of their existing loan portfolios. However, banks continued to feel the pressure from regulators forcing them to continue to increase their reserves for loan losses and reduce exposure to commercial real estate (CRE). As they worked through this process, a significant number of banks needed to raise additional capital through debt and equity offerings. Large banks were able to do so as equity markets improved through 2009 and 2010, but smaller regional banks and community banks were often forced to seek alternative funding sources like private placements during challenging times. Those institutions not able to recapitalize are likely under a written letter from regulators, or they were one of the 149 FDIC insured institutions that failed through November 19, 2010. No banks failed in Colorado in 2010 year-to-date (compared to three in 2009).

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The Q2 2010 *FDIC Quarterly* showed continued improvement in the banking sector with insured institutions reporting a $21.6 billion industry profit, a vast improvement compared to the $3.7 billion loss posted in Q2 2009. While total bank charge-offs and noncurrent loans fell for the first time since 2006, the credit card and CRE segment losses continued to rise. This ongoing trend of increasing CRE charge-offs and noncurrent loans was felt harder in Colorado because of the state's large community bank presence. Provisions for loan losses, still at a high level from historical standards, fell to the lowest levels in two years. These reductions likely benefited larger banks domiciled outside of Colorado as only 40% of the community banks actually reported year-over-year declines. The Colorado community bank representatives interviewed for this report believed that although the worst of the write-downs and losses were likely behind them, they were very reluctant to increase payrolls with their limited ability to write new loans and the heightened scrutiny of regulators and new investors. As a sign of possible improvement, the Federal Reserve Open Market Committee's November meeting notes deleted the mention of "contracting bank lending." This could be a signal that the liquidity engine required for economic growth has finally bottomed.

Deleveraging of the consumer continues through a slowing of new loans written, bank charge-offs, and decreased net loan and lease balances. As a result, bank industry assets (loans and credit card balances) declined as consumers and businesses deleveraged five of the last six quarters. Home lending is expected to fall below $1 trillion in 2011 (the lowest level since 1996) as the refinance boom runs out of eligible borrowers under more stringent lending standards, as property values decline, and as the securitization market for nongovernment-backed loans fails to rematerialize. However, with the new 5% retention rule, securitization may resurface, allowing for new issuances by otherwise risk-averse banks.

The Dodd-Frank Wall Street Reform and Consumer Protection Act made permanent the maximum FDIC Insurance increase of $250,000 for all interest bearing accounts and provided unlimited coverage for noninterest bearing accounts through 2012. It also raised the minimum reserve ratio of the FDIC fund from 1.15% to 1.35% of insured deposits, but gave the FDIC board until 2020 to attain it. This extra time and the downward revision in costs resulting from bank failures prompted the FDIC to adopt a revised restoration plan, which may include revoking its planned increase in premium rates at year-end 2010. This premium savings means that banks could have an estimated $2.5 billion next year, and every year, to leverage their loan portfolios in the communities they serve.

The Dodd-Frank Act appears to be the government's response to two decades of deregulation and outdated rules failing to keep pace with the innovation and creativity in the financial sector. While this act may be viewed by some as the appropriate governmental response, it appears to have far-reaching affects and could have severe unintended consequences. Outside of the most needed provisions of the act (too big to fail and systemic risk), much of its content is unrelated to financial meltdown or its underlying causes. The ultimate effects and rules are still unknown as the formal rule making and drafting of regulations were left to the new Consumer Financial Protection Bureau. The American Bankers Association (ABA) estimates the law will result in more than 5,000 pages of new regulations and 89 industry report filings. This will present a significant compliance burden on banks, especially the state's community banks still working through their CRE exposure.

Some key provisions of the act include the following:

- The creation of new counter-cyclical capital requirements that increase reserve requirements in economic expansions and decrease them in economic contractions as needed for impairments and loan losses.
- The establishment of a Consumer Financial Protection Bureau (CFPB), which is expected to be among the most powerful stand-alone government agencies. The CFPB has extremely broad powers with a single person deciding policies. It has unconditional funding through the Federal Reserve, yet lacks effective oversight or checks and balances. Ironically, the agency's broad powers have little or no authority over exempted nonbanks (insurance, securities) that likely contributed more to the meltdown than banks.
- A new cap on interchange fees for debit card transactions. A win for large retailers, the government will now fix these transaction fees below their actual true costs, making banks absorb the difference as a decrease in revenue.

The expected 30%-75% drop in interchange fees will likely end customer benefits such as free checking. It is not clear if the so-called exemption for small banks will be effective.

- The creation of a Financial Stability Oversight Council to identify, monitor, and assist in the management of systematic risk that may pose a threat to the country's financial stability.
- The enhancement of powers to allow the government to seize and wind down an institution ("too big to fail") if its pending failure poses a risk to the financial system. Resolution powers include the ability to wipe out equity shareholders, terminate executives, and partially satisfy or disallow claims of creditors.
- Necessary guidance for residential mortgage-backed securitizations, requiring 5% risk retention for nonqualified residential mortgages by any bank that securitizes or originates and then sells the loan to a securitizer. This important guidance could reestablish the real estate securitization market.
- The possible application of a fiduciary standard (currently applied to registered investment advisors and trust companies) to brokers, registered representatives, insurance agents, or anyone else giving financial planning or investment advice under the more limited "suitability standard."

Although the Dodd-Frank Act contained several important and much-needed key provisions, others were either too complex or controversial to include final rules. As a compromise, final rulemaking was left to one appointed person, who, critics argue, has limited accountability and few checks and balances. They also believe that the act may have missed the intended goal of consumer protection as it appears to have minimal oversight over Wall Street securities and real estate markets. The additional consumer, operational, and lending regulations that were included appear to be redundant and costly with their focus on the one area of finance that already adhered to the most government oversight. For the most part, the act exempted the nonbanks that created and distributed the majority of the financial products that caused the meltdown.

Credit Unions

The not-for-profit credit union industry is in the midst of massive regulatory changes that could affect the long-term structure of the industry. The credit union mantra of "people helping people" has taken the form of credit unions banding together and recapitalizing the National Credit Union Share Insurance Fund (NCUSIF) without any governmental bailout. For the consumer, this means the credit union industry will remain strong in the future without any taxpayer funded assistance.

All financial institutions, including the credit union industry, have focused on improving capital levels in 2010. To that end, Colorado credit unions have increased their capacity to manage risk by raising their average net worth, as a percentage of total assets, from 9.83% in June 2009 to 10.09% in June 2010, well above the regulatory guideline of 7%. This gain was driven by a modest return-on-assets of 46 basis points after the NCUSIF recapitalization expense. To achieve positive return-on-assets, credit unions controlled expenses while taking advantage of lending opportunities, such as the Cash-for-Clunkers Program that drove borrowers into the market for auto loans in 2009. As consumers continue to focus on their individual balance sheets by paying down debt and increasing savings, the deposit growth in Colorado credit unions continues at a rapid pace of 11.43%. Credit union loan volume continues to be lower than pre-recession levels; however, Colorado credit unions are starting to see a slight uptick in lending transactions. This gain in lending is illustrated by the 1.79% year-over-year growth in loans as reported in the June 2010 call reports. The deposit growth versus loan growth leads to a drop in the loan-to-deposit ratio from June 2009 levels of 81.82% loaned out to 74.74% loaned out in June 2010. What this means to consumers is that credit unions have money to lend and will keep rates low to increase lending volume over the short term.

Consolidation in the credit union industry continued in 2010. This trend is primarily driven by tight interest margins, increasing costs, and the need to create sustainable economies of scale. These consolidation pressures are not expected to ease much in 2011. Therefore, employment levels within the credit union industry will remain relatively flat based on small job losses due to consolidation balanced out with slight job gains in the compliance side of the credit union business model.

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Insurance

Unprecedented, tumultuous, and historic are all words recently used to describe recent events that may affect the insurance industry into the future. The property and casualty (P&C) market continues to experience a softening from a rating standpoint. Rates are expected to level off in 2011. However, the factors, which multiplied by rates equate to actual premiums, will continue to feel the effect of a struggling economy, giving the impression that a soft P&C market persists. Throughout 2011 and 2012 corporate sales, wages, and number of insured units will be lower than in the past, causing premiums to continue a downward spiral.

Nationally, as real estate prices fall, insureds question why property coverage amounts are not falling proportionally. Coverage is related to the replacement or repair costs, not market value.

Insurers are hoping for a transition in the market that allows for increases in premiums, which consequently increases insurers' surpluses and reserves. Insurers' earnings are down, especially given the lack of investment options that provided the magnitude of returns seen over the last decade. Insurers are compensating through very aggressive pricing, which allows them to "buy" new business when competing against other insurers.

The Colorado Workers' Compensation Insurance marketplace continues to be dominated by Pinnacol Assurance. In 2011, the company will most likely come under additional scrutiny regarding its status as a quasi state entity. Workers' compensation claim amounts and the return-to-work strategies, which Workers' Compensation utilizes, are being significantly influenced by U.S. societal health issues.

Companies are growing more attuned to the connection between health risk and worker productivity. A 2007 study by Duke University found a linear relationship between body mass index and costs of workers' compensation claims. For individuals who are mildly to severely obese, medical claims costs can be up to seven times those for individuals of recommended weight.

In 2010, legislation has not been limited to healthcare insurance reform. Professional liability coverage premiums were profoundly affected for building contractors when HB10-1394 was signed into law by Governor Bill Ritter on May 21, 2010. The new law changes the definition of construction defect to an "accidental occurrence," allowing for coverage when it was previously excluded. This provides greater protection to the consumer, but drives up premium costs for contractors.

In summary, short of a quicker economic recovery or significant catastrophic claims losses, the soft P&C premium market conditions should continue for the next several years.

Both locally and nationally, the employee benefits world has been dominated by the passage of the Patient Protection and Affordable Care Act (PPACA). Even though the new law's major components are scheduled for implementation in 2014, Colorado is no different than other states in that it is already seeing the effects of healthcare reform. PPACA's expanded dependent age definition, elimination of annual and lifetime policy limits, along with the preventative coverage mandate, are anticipated to increase premiums upon implementation in 2010. Additionally, several insurers have ceased writing individual health policies for children due to the elimination of preexisting conditions exclusion for insured under the age of 19.

Most employers have developed opinions about their coverage strategy post implementation of the individual mandate in 2014. Some employers believe they may be better off paying the penalty and placing their employees' coverage through the "State Health Insurance Exchange" rather than paying the ever-escalating premiums for a private health insurance program. Others think that by purchasing coverage outside the government exchange, a competitive hiring and employee retention advantage will be created. Unfortunately, a great deal of the detail and how process and procedure will be implemented for the exchanges has yet to be determined.

Additional items on the horizon that individuals and employers may want to make a note of include the following:

- **2011**—Employers must report health coverage cost on W-2s.
- **2011**—New definition of Qualified Medical Expenses must be used for tax deductions.
- **2011**—Simplified cafeteria plans for small businesses to be created.
- **2013**—Health flexible savings accounts (FSAs) will be limited to $2,500 annual contribution.
- **2013**—Medicare Part D subsidy deductions will be eliminated.

- **2014**—Individual coverage mandate begins.
- **2014**—Employers with 50 or more employees must provide access to health coverage or they will be subject to penalty.
- **2014**—Individual and small business tax credits will be implemented.
- **2014**—Preexisting condition exclusion to be eliminated for adults.

In addition to PPACA, Colorado HB07-1355 has had a profound effect since its passage in April 2007. Fully enacted in 2010, this small group rate reform will continue to cause significant premium increases for employers with fewer than 50 employees. At the center of the act is a modified community premium rating. This means that the variance between the rates for healthy employee groups must be within a narrow corridor when compared to those for high claim usage employer groups. The result is that most employers' rates will increase to help subsidize those with a less attractive claims history.

The life, accident, and disability segment of the industry has been experiencing a very competitive market cycle. Until recently, most employers could expect a premium reduction or a multiyear rate guarantee. Going forward, employers should expect a slightly increasing pricing for these types of insurance coverage. In an environment of escalating health insurance costs and a challenging economy, employers continue to eliminate certain coverages from their benefits programs and are increasing the employee's level of contribution to the premiums. This has created significant growth in the employer-sponsored, employee paid, or voluntary benefits market.

The insurance industry remains fluid with significant changes caused by economic, legislative, and societal pressures. All of these factors make it even more critical that all insureds work with a trusted and qualified strategic advisor to receive valuable guidance in this very important financial discipline.

Real Estate and Rental and Leasing

Overall, this sector was impacted by decreases in employment and consumers' reduced spending. Real Estate and Rental and Leasing is expected to shed 1,900 jobs in 2010, but add 200 in 2011.

Real Estate

Commercial Real Estate

During 2010, Colorado's CRE industry started to show signs of life. The Front Range is attracting companies working in the renewable energy space, such as Vestas and ConocoPhillips, who, in turn, are drawn by quality universities, an educated labor pool, and the state's investment in and commitment to this industry. Buffering the local economy as well are job gains in the federal government and healthcare sectors. The effect of a sluggish national economy weighs on the state, but national and international companies are drawn to Colorado. Consequently, trends in commercial vacancies and lease rates are bottoming out and, in some cases, turning slightly positive.

Metro Denver CRE fundamentals are exhibiting steady, albeit slow, improvement despite a "jobless" recovery. By comparison, Metro Denver is acknowledged as a region that is poised for a strong and swift rebound. Across the CRE spectrum, large companies with comparatively strong balance sheets, more borrowing power, and the ability to acquire other businesses are driving the leasing market. According to CB Richard Ellis, the *office market* is benefiting from a "flight-to-quality" trend as companies seek more attractive rents and space, especially Class A buildings, which is helping to stabilize the office sector. Direct office vacancy rates decreased to 16% at Q3 2010, from about 16.5% at Q4 2009—a third-consecutive quarterly decline. The *industrial market* is showing signs of recovery due to a diverse business industry base. Although the industrial vacancy rate climbed to 7.7% at Q3 2010 from about 7.2% at Q4 2009, since January 2010 it has actually declined over three quarters due to an increase in out-of-state activity with new tenants entering the market. Additionally, metro *retail market* fundamentals are stabilizing. Improved consumer confidence, pent-up demand, and stable prices are critical to this recovery. Retail direct vacancy rates decreased to 8.9% at Q3 2010 from about 9.5% at Q4 2009. This is the third quarterly decline in vacancy. Continued job creation and income growth are necessary to sustain this momentum.

The **Northern Colorado** economy is percolating. Large employers like Leprino Foods, JBS USA, Vestas Wind Systems, and Abound Solar are adding jobs, which is aiding smaller businesses as well. Oil and gas drilling at the Niobara field near

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Financial Activities

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Grover is driving demand for industrial space in northern Weld County. Median prices for homes and condos are rising. The health of local banks is stabilizing as the increase in delinquent loans and foreclosed property eased. In general, asking lease rates are down, but this is helping occupancies. Employment is a basic driver of any economy, which explains why leasing activity is up; however, until lenders warm to CRE, sales and new construction activity will remain sluggish.

Southern Colorado and Colorado Springs were ranked sixth nationwide in Forbes' Best Housing Markets for Investors based on an outlook for strong job growth, rapid population expansion, and current home prices at or near the market bottom. Arguably, strong job growth and an improving housing market will also benefit the CRE market. In fact, Sierra Commercial Real Estate notes that CRE vacancies and rents are generally flat at Q3 2010 from year-end 2009. Office vacancy rose slightly, to 17.4% from 17%, and rents slipped to $11.52 per square foot from $11.90 per square foot; however, landlords have stopped lowering rates, which may signal a strengthening of the market. Industrial vacancy decreased to 11.5% from 12.1%, and similarly, rents decreased to $6.10 per square foot from $6.30 per square foot. A resurgence of data centers, such as HP's 250,000-square-foot campus on Rockrimmon Boulevard, is helping. Like Metro Denver, improving consumer confidence and pent-up demand is essential for a retail recovery. Retail vacancy was flat, at 11.6% from about 11.5%, and lease rates declined, to $13.06 per square foot from about $13.50 per square foot. If Forbes is correct, a continued gradual improvement in local demographics will eventually help the CRE market.

The **Western Slope** economy depends heavily on energy exploration and development. This sector has cooled, and along with it the CRE and residential markets. Understandably, commercial and residential building permits are down as much as 50% from 2009. The median price of a home has fallen 10%, from $206,678 in 2009 to $185,300 in 2010. San Juan and Mesa county foreclosure filings have not slowed either. Through Q3 2010, the Heritage Title Company reports that transaction volume year-over-year is down 6%, to $447.5

Sustainable Real Estate

How does Colorado stack up in sustainable real estate when compared to other states? The state is leading in the area of conservation across the nation; however, it is in the middle of the pack when it comes to green buildings and urban conservation. Within the Rocky Mountain region, Colorado is leading the pack in green buildings, urban conservation, and conservation of large landscape.

Green Building Measures

One measure of how Colorado ranks in the area of green buildings is the Green Building Opportunity Index©, which compares green building factors that influence successful development, such as retro-fitting, leasing, and sales of investment grade "green" office buildings in the 25 largest U.S. central business districts. For the purposes of the index, *green buildings* are defined as those that are certified through third-party verified standards on the basis of their sustainability and energy efficient programs, including the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) and the Environmental Protection Agency's Energy Star® label. Of the 25 cities, Denver received a score of 75.2, ranking 14 out of 25, behind leaders such as San Francisco, Oakland, New York City, Los Angeles, Washington D.C., San Diego, and Portland. Denver ranked higher than its peers in the area of green adoption and implementation (second), which refers to a city's ability to execute green development and/or redevelopment.

Governor's Energy Office

"Energy efficiency first" is the mantra of the real estate sector of Colorado's nationally known new energy economy. The Governor's Energy Office has a number of initiatives that affect the energy efficiency of real estate, including energy performance contracting that allows building owners to finance energy improvements at a paid-from-savings cost; the Main Street Efficiency Initiative, which helps small businesses statewide realize areas where they are losing energy and take steps to address them; and the High Performance Building Program, which provides training and instruction on how to incorporate energy efficiency into new construction practices.

million from $478.6 million. Energy companies are dealing with increased regulation, lower price fundamentals that make some projects unfeasible, and the ending of some tax breaks, which effectively increase the cost of doing business. When the energy sector resumes on the Western Slope, expect CRE to benefit.

Diversifying Colorado's economy with a focus on new industries, such as renewable energy, has attracted the attention of national and international businesses. Gains in above-average salaried jobs, however small, has broad positive impacts on the office, industrial, and retail markets. Market momentum in 2010 should extend into 2011; however, lenders will remain cautious of new construction, and landlords will continue to focus on keeping vacancies low, covering fixed expenses and debt, and issuing short leases in order to weather the storm.

Residential Real Estate

Colorado's residential markets experienced similar fundamentals in 2010 as in prior years. After record home sales in 2005, home sales slowed in the state. Unemployment, foreclosures, minimal new construction, and tight credit markets supported the rental market. The for-sale market continues to enjoy low interest rates if buyers can satisfy the more stringent credit requirements, although expired homebuyer tax credits took a toll on residential markets in the summer of 2010. Looking ahead, 2011 will see continued stabilization in foreclosures, a small increase in building activity, and upward price pressure in the for-sale and new home markets.

The Colorado Association of Realtors reports that just under three-quarters of Colorado's residents are homeowners.

For-Sale Existing

Residential markets nationwide and in Colorado exhibited signs of weakness again since the government-sponsored homebuyer tax credits ended in April 2010. Home purchases needed to close by June 2010 to be eligible for the tax credit, and preliminary data indicate that home sales in the summer of 2010 were softer than in the prior

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On the residential side, Colorado is a consistent Energy Star® Partner of the year, and in 2009 the state achieved a 44% market penetration rate for Energy Star® home starts. The business model for increasing energy efficiency in buildings continues to be assisted with rebates from utilities and from the state for insulation, appliances, and others. There is increasing focus on finding efficiency in existing buildings—a trend that is likely to continue for the foreseeable future.

Urban Conservation

The City and County of Denver has long had a local and national perception for having one of the nation's largest park systems. However, the city has much less park land than many cities of similar size. Although Denver added more people than any other county in Colorado in 2009, the acquisition and creation of new parks has not kept pace with population growth. Denver's ratio of parks to population has consistently slipped, year after year, so currently the parks system ranks well below the average size reported by similarly dense cities like Phoenix, San Diego, and Houston. Furthermore, the need for new parks is especially acute in parts of Denver, where the acres per resident figures are even lower.

Conservation Real Estate

Colorado is one of a handful of states in the country with a statewide dedicated funding source for land conservation. Created by Colorado voters through a state constitutional amendment in 1992, Great Outdoors Colorado (GOCO) receives a portion of lottery dollars for "preserv[ing], protect[ing], enhanc[ing] and manag[ing] Colorado's wildlife, park, river, trail, and open space" resources. Since its formation, GOCO has awarded grants for more than 3,000 projects in each of Colorado's 64 counties. Since GOCO funding requires a cash match, many communities across the state have created local funds for conservation through sales and property taxes and bond measures. Colorado voters have passed 105 municipal, county, and special district measures creating more than $3.7 billion in funding to support land conservation. ✜

Financial Activities

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year despite robust sales in Q1 2010. The number of existing homes under contract in the first three quarters of 2010 was down a sharp 11.1% from the same nine-month period in 2009, according to Metrolist. The number of home sales closed fell 4% compared to the same year-to-date period, while inventory levels were up 15.4%. Metrolist data include the seven-county Metro Denver region; Elbert, Park, Gilpin, and Clear Creek counties; and a portion of the Loveland area.

Minimal new construction has allowed for slight upward price pressure for single-family detached homes in Metro Denver despite weaker sales volume. The median single-family detached home price in September 2010 increased 2.2% year-over-year, to $230,000. Condominiums suffered an 11.1% decline in median home price, to $129,000.

Days on the market for both single-family homes and condominiums in Metro Denver were up in September 2010, to 102 days from 96 days a year earlier.

Dissecting the data reveals strong market fundamentals in Metro Denver for luxury homes priced at $1 million and above. Denver County led with 35 luxury homes purchased in September 2010, compared to 34 the prior year. The average sales price for luxury single-family homes was $1.8 million in September, representing a 6% year-over-year increase. The average days on the market for high-end real estate decreased to 218 days from 276 in 2009.

The latest S&P/Case-Shiller Index of home prices nationwide revealed a broad deceleration in annual growth rates for 17 of the 20 Metropolitan Statistical Areas tracked. The 20-city composite home price, which included the Denver-Aurora MSA, was up 1.7% from August 2009 to August 2010.

VACANCY RATES IN NORTHERN COLORADO COMMERCIAL REAL ESTATE MARKETS

	2009	2010[a]
Fort Collins		
Industrial	6.4%	7.6%
Retail	10.4	10.0
Office	16.8	13.1
Greeley		
Industrial	9.6	9.0
Retail	15.0	13.9
Office	18.3	22.6
Loveland		
Industrial	7.8	8.1
Retail	7.9	7.9
Office	10.5	13.3
Metro Denver		
Industrial	7.2	7.7
Retail	9.5	8.9
Office	16.5	16.0
Southern Colorado		
Industrial	12.1	11.5
Retail	11.5	11.6
Office	17.0	17.4

[a]As of Q3.

Source: Realtec and Colorado Business Economic Outlook Committee.

According to the Federal Housing Finance Agency Purchase-Only Index, Colorado home prices were down 0.25% from Q2 2009 to Q2 2010. The Colorado nonseasonally adjusted data All-Transactions Index declined for the fifth consecutive quarter, while the national index was down 1.6% year-over-year. The Q2 Colorado index was off 5.8% from the high of 370.0 in Q1 2009.

On the positive side, national price declines have made home ownership more affordable according to the National Association of Realtors Housing Affordability Index.

New Home Sales

New home sales nationally slowed 29% from August 2009 to August 2010. According to the U.S. Department of Commerce, the Midwest and West regions led the slowdown, with 38.2% and 33.6% declines in total sales, respectively.

The Genesis Group's latest *Housing Overview* reported a 21% increase in Q1 2010 new home sales in Metro Denver from the same quarter the previous year. Unfortunately, expired tax credits contributed to a disappointing 0.9% gain in new home sales from Q2 2009 to Q2 2010. Inventory (started, but unsold) levels for new homes continued to decline to 2,064 homes in Q2 2010, a 32.1% improvement from same period last year. Detached housing is faring better than attached housing in Metro Denver in terms of inventory levels and sales.

New residential construction activity has been consistently low the past few years and although there are some signs of new developments in the pipeline, 2011 is projected to be another slow year for new building. The Colorado Division of Housing reported that in both 2008 and 2009 the number of new units added was well below the number of new households formed. Looking ahead, Colorado is on pace to issue roughly 11,000 residential permits in 2010, which will be about 55% of the total new households formed in the state. The National Association of Home Builders/Wells Fargo Housing Market Index on homebuilder confidence was disappointingly low, at 13, in September (a "good" rating is 50 or more), indicating continued stagnation.

The number of single-family detached building permits issued in Metro Denver is up 54.8% on a year-to-date basis through August 2010. Single-family attached permits climbed 40.4%, while multifamily permits dropped 10.2% in 2010.

As discussed in the Construction section of this book, statewide single-family and multifamily permits are expected to end 2010 up 21% and 15%, respectively.

Foreclosures

Foreclosures throughout Colorado have generally slowed since mid-2009; however, some analysts caution that the perceived improvement may be attributed to banks either forcing a slowdown in processing to counter allegations of review errors or to encourage market stabilization. On the other hand, strategic defaults may be on the rise nationally as falling home prices continue to erode borrower's equity positions.

Total foreclosure filings in the first half of 2010 compared to the first half of 2009 in Colorado were down 5.6%, according to the Colorado Division of Housing. Several counties outside of the major metropolitan areas have seen increased foreclosures from 2009 to 2010, including Mesa, Delta, Montezuma, Summit, and Eagle. The highest foreclosure rates through the first half of 2010 were found in both urban and rural counties, including Grand, Archuleta, Ouray, Weld, Park, Adams, and Mesa. Through August 2010, foreclosures in the seven-county Metro Denver region were down 13.3% from the same period in 2009, with the City and County of Denver showing the strongest improvement, a 22.1% year-to-date decline.

REAL ESTATE AND RENTAL AND LEASING EMPLOYMENT
2002–2011
(In Thousands)

Year	Real Estate	Rental and Leasing	Total
2002	32.2	13.9	46.1
2003	32.9	14.2	47.1
2004	33.3	14.0	47.3
2005	34.4	13.9	48.3
2006	35.1	14.0	49.1
2007	35.4	14.0	49.4
2008	34.3	13.9	48.2
2009[a]	31.8	12.6	44.5
2010[b]	30.5	12.1	42.6
2011[c]	30.6	12.2	42.8

[a]Revised.

[b]Estimated.

[c]Forecast.

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

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

Rental Market

Tight credit markets, minimal multifamily construction, foreclosure activity, and population growth supported the rental market in Colorado in 2010, allowing for lower vacancy rates and increased rents. According to the statewide vacancy and rent survey published by the Colorado Division of Housing, the Q2 vacancy rate of 6.2% was down significantly from 9.1% a year earlier. *The Denver Metro Apartment Vacancy and Rent Survey* reported a 6.1% vacancy in Q2 2010, which was the lowest quarterly rate in three years. The average Q2 rental of $900 was 3.4% more than the previous year. Also in Q2 2010, Colorado Springs reported the lowest vacancy rate since Q3 2001, 5.8%. Average rental rates were up modestly, from $717.65 in Q2 2009 to $719.22 in Q2 2010.

Rental and Leasing

Given that NAICS categories are defined by process, Rental and Leasing is one of the more diverse sectors in the NAICS structure. It includes a variety of companies tied together by their renting/leasing function, but that are otherwise unrelated. Companies classified within the sector include those that rent or lease equipment, cars, formal wear, and other goods. The sector is consumer-driven and tends to mirror general economic and population growth trends. Given this, employment is expected to decline by 500 jobs in 2010 and increase only slightly in 2011. ✤

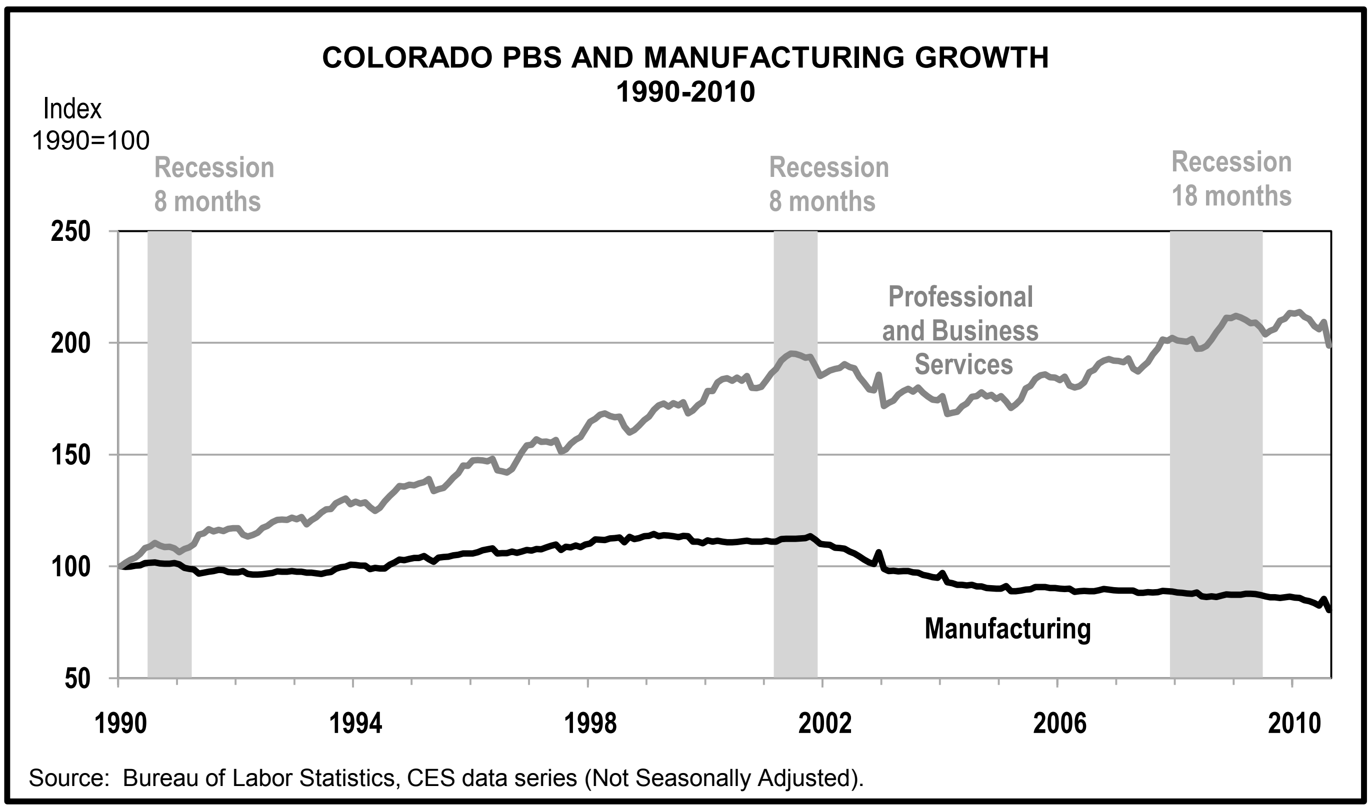
Professional and Business Services

Overview of Service Industries

During the 1990s, the Professional and Business Services (PBS) Supersector could be counted on to add about 14,000 jobs per year to the Colorado economy, creating a base that totaled about 320,000 in 2000. PBS seemed recession proof. Then during the recession of 2001-2003, PBS shed nearly 27,000 jobs. The sector rebounded for the next several years, adding an average of 12,000 jobs per year. Then the Great Recession hit. The sector lost nearly 24,000 jobs from 2008 through 2010, with more than 21,700 job losses in 2009 alone. The PBS Supersector as a whole is forecast to shrink by about 0.6% in 2010 and grow by a historically low 2.1%, or 7,000 jobs, in 2011. PBS will return to a steady growth path for many years to come, but may not match the extraordinary growth of the 1990s.

Two factors are restricting the growth of PBS employment: a lack of business confidence and a mismatch in labor market skills. According to nationally known economist James Paulsen,

> . . . perhaps the most valuable asset for future economic growth is a slow but steady rise in economic confidence. . . . In this recovery, similar to the last two recoveries, despite more than a full year of economic revival, consumer confidence hovers at "bottom-of-recession" like readings. Consequently, like the last two recoveries, the contemporary recovery will likely prove more back-end loaded as a steady rise in confidence



eventually allows the impact of improvements in household and business fundamentals to be realized (*Economic and Market Perspective*, November 2010).

The skills mismatch, which is reinforced by the lack of labor force mobility caused by the weak housing market, has two primary causes. First, higher education institutions are not graduating enough highly qualified professionals to fill future job needs. Second, it is very difficult to get skilled immigrant labor on a permanent basis. These issues have been discussed in nearly every PBS report for the past 20 years.

However, Colorado has advantages in the current workforce. It is second in the nation for residents with a bachelor's degree or higher and eighth in the nation for doctorate degrees as a percentage of the workforce. The state's high school students boast some of the nation's highest ACT and SAT scores.

PBS versus Manufacturing

Contrasting PBS employment with Manufacturing employment reveals two industries on very different growth trajectories in Colorado. Manufacturing, once the crown jewel of Colorado employment, seems to be on a never-ending downward path. In 1990, Manufacturing and PBS employed about the same number of people (roughly 169,000). In 2009, PBS employed 200,000 more than Manufacturing. There are two main reasons for this: productivity improvement and off-shoring of jobs. PBS jobs can certainly succumb to these risks, but over the past couple of decades, it has resisted.

The recent record of the employment services subsector, however, is concerning. This subsector is relatively small, employing about 30,000 people, but it is often a leading indicator of job growth in other sectors as employers cautiously hire temporary employees before bringing on permanent workers. Employment services contracted by more than 25% in 2009 after a loss of 9% the previous year. Employment is expected to increase about 3% in 2010 and 5% in 2011, albeit from a much smaller base.

Administrative and Support and Waste Management and Remediation Services

Another hard-hit sector of PBS is Administrative Support and Waste Management and Remediation Services, which shed 10% of workers in 2009. This sector contains establishments that perform

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ADMINISTRATIVE AND SUPPORT AND WASTE MANAGEMENT AND REMEDIATION SERVICES SECTOR EMPLOYMENT
2003–2011
(In Thousands)

Year	Employment Services	Services to Buildings and Dwellings	Business Support Services	Other	Total[a]
2003	36.2	35.0	16.3	40.1	127.6
2004	38.5	36.9	16.7	39.5	131.6
2005	40.2	37.9	17.9	39.5	135.5
2006	42.6	39.0	19.8	40.5	141.9
2007	44.0	40.3	22.4	42.6	149.3
2008	40.1	40.6	23.7	42.0	146.4
2009	30.0	38.0	23.9	40.0	131.9
2010[b]	30.9	37.2	24.1	38.8	131.0
2011[c]	32.4	37.2	24.6	38.6	132.8

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

[b]Estimated.

[c]Forecast.

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

Professional and Business Services

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support activities for the day-to-day operations of other organizations. Activities include office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services. These services are typically performed on a contract basis. This sector is expected to contract slightly in 2010, followed by growth of 1.4% in 2011.

Professional, Scientific, and Technical Services

The largest growth in 2011 is projected to come from the Professional, Scientific, and Technical Services (PST) Sector of PBS, adding 4,200 jobs in 2011, after losing 8,500 jobs from 2008 to 2010. This sector includes engineers, accountants, attorneys, advertisers, computer systems designers, and scientific consultants. Colorado will remain a good venue for professional firms due to the state's high quality of life and educated workforce. The sector continues to have high-salary positions.

The legal services subsector provided steady, small job growth during the 1990s and 2000s. Job growth occurred throughout the high-tech bust. In 2009, legal services lost 1.7% of employment. This is evidence that the recession was both deep and wide, affecting all sectors of the economy. The committee expects legal services to be flat for the remainder of 2010 and resume growth in 2011, rising 1.1%.

PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES SECTOR EMPLOYMENT
2003–2011
(In Thousands)

Year	Legal Services	Architectural and Engineering Services	Computer Systems Design Services	Management, Scientific, and Technical Consulting Services	Other	Total[a]
2003	16.3	35.4	33.1	12.6	44.4	141.8
2004	16.6	36.8	34.1	13.7	46.9	148.1
2005	17.2	39.0	35.7	15.1	49.0	156.0
2006	17.4	41.1	37.1	16.0	51.2	162.8
2007	17.9	43.3	39.3	16.4	53.4	170.3
2008	18.1	44.8	41.3	17.4	55.1	176.7
2009	17.8	41.6	40.1	16.7	53.3	169.6
2010[b]	17.8	40.9	39.7	16.4	53.4	168.2
2011[c]	18.0	41.6	40.5	16.8	55.6	172.4

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

[b]Estimated.

[c]Forecast.

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

Many of the large corporations in the PST Sector continue to support higher education programs. For example, Vestas in Pueblo has developed an advanced-technology program with Pueblo Community College. The green training program at Arapahoe Community College continues to thrive, along with the Renewable Energy Technology program at Red Rocks Community College. Moreover, Colorado State University (CSU) and University of Colorado (CU) both possess various grant-funded research programs. As well, CU, CSU, the Colorado School of Mines, and the National Renewable Energy Laboratory collaborate to advance the study and development of biomass for biofuel and biorefining applications through the Colorado Center for Biorefining and Biofuels (C2B2).

Architectural, Engineering, and Related Services

Architectural, Engineering, and Related Services is a component of PST Services. The Architectural, Engineering, and Related Services subsector is represented by numerous small firms, along with such larger firms such as CH2M Hill, ARCADIS, Merrick & Company, Raytheon, and Lockheed Martin. Engineers and architects provide much of the front-end design work for urban development. With residential and commercial site development still very slow, sector employment is expected decline by 1.7% in 2010.

Mergers and acquisitions have been occurring in this subsector at a relatively high pace since 2009, constraining employment growth. Even though employment at engineering firms has been flat for 2010, employment levels are more volatile than in the past. The development of residential and commercial site projects is an important part of the engineering and architectural business. New residential and commercial construction fell significantly in 2009. A turnaround is not projected to occur until 2011, and then any increase in demand is expected to be slow. The *redevelopment* of residential subdivisions and commercial property is anticipated to step up starting in 2011. These types of projects may be the new normal for this portion of the sector's growth in 2012 and for the foreseeable future. Many of these projects are also expected to include a renewable energy/sustainability component, which may increase their attractiveness to consumers and the demand for design and operation services.

Environmental projects are very active. These types of projects are expected to remain strong for many years to come.

Federal, state, and local governments use a large number of contract architects and engineers. Sales tax revenues for state and local agencies have plummeted since 2008. However, since mid-2010 state and local government budget projections have stopped their decline and are projected to increase over the next year. That said, the federal stimulus money that backfilled unemployment benefits, higher education, transportation, and renewable energy projects will have run its course by the end of 2010. Without federal stimulus money, the budgets of state and local agencies, and hence spending on local infrastructure, will be greatly challenged.

The federal stimulus money that backfilled unemployment benefits, higher education, transportation, and renewable energy projects will have run its course by the end of 2010.

Federal appropriations will still have momentum for maintaining services employment in the areas of defense and intelligence. Companies located in the metro areas and suburbs of Denver, Colorado Springs, and Pueblo provide services to military and intelligence agencies. Even though the levels of appropriations nationally are expected to be lower than in 2009, spending in 2010 and 2011 is anticipated to increase in Colorado. Raytheon's Aurora-based Intelligence and Information Systems Division landed large contracts in 2010 from the Air Force and NASA for designing and building new satellite systems. These projects will increase employment for this sector for many years. Lockheed Martin, Northrop-Grumman, and L3 also continue to grow with diverse military and defense projects. Colorado has the nation's third-largest aerospace economy, with space projects including Iridium NEXT, Kepler Mission, and GPS III. With Colorado's major military facilities and recognized academic programs, the sky is no limit for the space programs in the state.

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Professional and Business Services

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The level of overall design services performed for public agencies in 2010 increased over the 2009 levels. However, the future of building, highway, and bridge construction still looks bleak for privately funded projects. Many contractors will be able to maintain their employment levels with work created by federal stimulus funds through the end of 2010. However, if the economy does not pick up when this work is finished, job losses will result since these funds will likely be depleted after year-end 2010.

The appropriation of stimulus finds has been a double-edged sword. Anecdotally, the public agencies that distribute the funds have tended to use these funds first to maintain their current in-house levels of technical staff, then second to contract with the private sector. With the stimulus funding ending in 2010, it is expected these agencies will cut off outsourcing to the private sector in 2011. Indeed, some of the effects are already being felt as technical staffs in Colorado Springs, Aurora, and Summit County have been reduced.

Future development projects will likely have sustainable and renewable energy and energy-conservation components, adding additional design work. The building of new infrastructure, along with commercial and residential sites, is expected to decrease as infill, renovation, and renewal will be the preferred alternative for future development. This will create new opportunities for the professions in this sector.

TOTAL PROFESSIONAL AND BUSINESS SERVICES SUPERSECTOR EMPLOYMENT 2002–2011 (In Thousands)

Year	Professional, Scientific, and Technical Services	Management of Companies and Enterprises	Administrative and Support and Waste Management and Remediation Services	Total[a]
2002	144.5	20.9	130.8	296.2
2003	141.8	22.5	127.6	292.0
2004	148.1	24.5	131.6	304.1
2005	156.0	25.3	135.5	316.8
2006	162.8	27.2	141.9	331.8
2007	170.3	28.4	149.3	347.9
2008	176.7	28.9	146.4	351.9
2009	169.6	28.6	131.9	330.2
2010[b]	168.2	29.0	131.0	328.1
2011[c]	172.4	29.8	132.8	335.1

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

[b]Estimated.

[c]Forecast.

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

The visionary large projects of 25 years ago—new sports stadiums, a big convention center, and an airport—have all been completed. Ancillary or extension-type projects are being planned for these facilities as no large visionary projects are on the drawing board, with the exception of the grounds of the National Western Complex.

Federal funding of projects will maintain some momentum through 2011. However, as 2012 is an election year, it is expected that additional public funding will appear. Typically, all levels of government administrations fund projects during an election year for the purpose of putting people to work so that voters will have a favorable view of incumbents.

Employment in this sector is expected to decline 1.7% in 2010, then rebound by 1.7% the following year.

Management of Companies and Enterprises

A relatively small component of PBS is the Management of Companies and Enterprises. This sector is composed of companies that hold the securities of other companies, or establishments that manage a company. By consolidating the performance of these activities of the enterprise at one establishment, economies of scale are achieved. The committee expects this sector to grow 1.4% for the remainder of 2010 and climb 2.8% in 2011.This is due, in part, to the strong cash position of many companies that will be looking for management opportunities as the recovery proceeds. Colorado is an appealing state in which to have offices because of its central location, strong communications infrastructure, exceptional quality of life, and low corporate income tax rate. Colorado's income tax rate of 4.63% is among the nation's lowest, and is comparable to Mississippi, South Carolina, and Utah. Colorado also has a low sales tax rate, primarily benefiting businesses and consumers in unincorporated areas as urban centers typically have additional city and special tax rates.

This sector also has high wages, with average employee earnings above $100,000 annually. Some of the largest company headquarters include CH2M Hill, EchoStar, United Launch Alliance, Sports Authority, and Rock Bottom Restaurants. Health firm DaVita will relocate its headquarters to the Union Station area of Denver in 2012, and Vestas and ConocoPhillips also have major expansions planned in the state.

Summary

Although the PBS Supersector has suffered along with the larger economy, it contains many bright spots. Colorado's well-educated population, unique quality of life, and independent spirit bode well for the future growth of this sector. The committee expects a small decline in 2010, followed by slow growth in 2011. On the long-term horizon: higher and steady growth. ✜

Education and Health Services

Educational Services (Private)

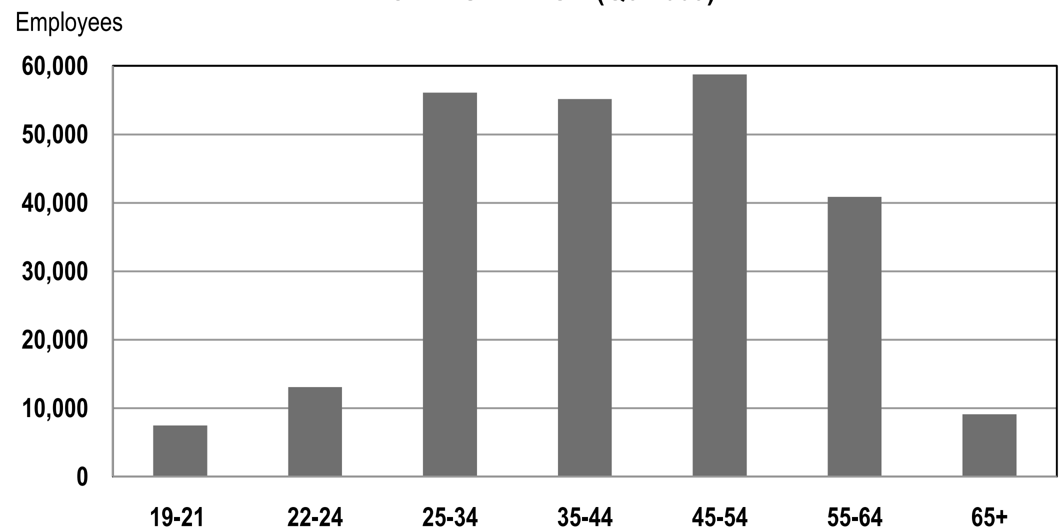
In 2010, the private educational services subsector will consist of approximately 2,500 organizations and employ approximately 32,400 individuals. By comparison, roughly 185,000 individuals will be employed in public-sector education, which is recorded in the state and local government sections. (Elementary and secondary educators are included in local government, while higher education is in state government.) Over the long term, educational services is expected to grow 8.3% between 2009 and 2019. In 2010, the sector will add about 1,000 jobs, but contract by roughly 1,500 in 2011.

The largest employers include the state's private colleges: the University of Denver, Regis University, Colorado College, the University of Phoenix, Naropa Institute, and Colorado Christian University. Other organizations include companies that provide instruction in a variety of venues—sports camps, acting schools, horseback-riding academies, and driver training institutes, for example.

The Colorado Department of Education's 2009 Non-Public School Pupil Member data indicate that enrollment in traditional K-12 private institutions has experienced a sharp 18% decline between the fall 2007 and fall 2009 enrollment periods. This may be a result of parents avoiding the higher tuition and activities fees incurred at private schools during the economic downturn and electing to send their children to open, more affordable public schools. While traditional private institutions may suffer declines, more specialized education programs, like vocational schools, can potentially see growth during recessionary periods. This is due to an increase in demand for educational programs as unemployed workers often update their skills in an effort to find employment.

Furthermore, sector employment is driven by both business demand for continuing education programs and consumer demand for training that improves quality of life. As the economic recovery accelerates over the next few years, the declines private education employment are currently experiencing may eventually be recouped.

COLORADO HEALTHCARE AND SOCIAL ASSISTANCE EMPLOYEES BY AGE (Q3 2009)



Source: U.S. Census Local Employment Dynamics Program.

Healthcare Sector

Three of the major forces that will drive the future economic and workforce dynamics of this sector include the demographics of the state's population, the demographics of the healthcare workforce, and health reform. Health reform involves changes in how healthcare services are organized and delivered. Colorado is expected to add 6,200 healthcare workers in 2010 and 4,800 in 2011.

The private Healthcare and Social Assistance Sector employed 1 of every 10 Colorado employees in 2009. As well, this sector directly generates more than 10% of the state's payroll, or $10 billion per year. In addition, the goods and services that healthcare employers purchase from other businesses create additional revenue and employment in the state. Taking into account these ripple or multiplier effects, each healthcare job supports about two additional jobs, and every healthcare dollar spent supports roughly $2.30 of additional business activity. Including direct and indirect employment, the Healthcare and Social Assistance Sector is responsible for supporting at least 20% of Colorado's employment and revenue base. Given this, the healthcare sector should be of particular importance to economic and workforce development.

In 2004, the most recent year for which state level data are available, Colorado residents directly spent $21.7 billion for healthcare services, or $4,717 per capita. According to the Kaiser Family Foundation, roughly one-third of these payments were for hospital expenses, and another third for doctor and other ambulatory expenses. According to a 2008 Lewin Group study, Colorado's total healthcare expenditures were $30.4 billion in 2008. After adjusting for inflation in healthcare costs, the Colorado Health Institute projects that Colorado will spend roughly $33 billion on healthcare in 2010.

With 541,000 residents currently over the age of 65, Colorado's boomer generation will have a very significant impact on the demand for healthcare services. By the end of 2011, Colorado's total population is projected by the State Demography Office to grow by 79,100 residents, and the over-65 population will climb by 24,000. The percentage of Colorado's population that is over 65 years old will increase steadily, from just over 10% in 2010 to 17% in 2025, effectively doubling in size.

During this same 15-year time period, the state's total population is projected to grow by 1.5 million to a total of 6.7 million. Assuming for analytical purposes that the state retains the same ratio of healthcare employees to its overall population, this total population growth will create a demand for 5,000 new healthcare employees each year into the foreseeable future. This number does not include the new employees that will be required to replace retiring healthcare employees (the replacement issue is discussed in paragraphs that follow). The growth rate of Healthcare and Social Assistance Sector employees in Colorado has been very steady and at a consistent pace since 2000, and parallels the state total population growth rate.

It is understood that older individuals spend more on healthcare than younger individuals, but how much more is not commonly appreciated. According to a Lewin Group 2008 analysis, the average Colorado resident spent $6,620 on all health-related expenses in 2007. On the low end, a Colorado resident in the 10-19 age bracket spent $1,700 on average per year on healthcare expenses, compared to more than $22,100 by an individual older than 65.

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COLORADO EDUCATION AND HEALTH SERVICES EMPLOYMENT
2002–2011
(In Thousands)

Year	Educational Services	Healthcare and Social Assistance	Total
2002	24.6	183.9	208.5
2003	25.0	188.0	213.0
2004	26.1	192.4	218.5
2005	27.5	197.1	224.6
2006	28.6	202.6	231.2
2007	29.6	210.9	240.4
2008	30.6	219.9	250.5
2009[a]	31.3	226.0	257.2
2010[b]	32.3	232.2	264.5
2011[c]	30.8	237.0	267.8

[a]Revised.

[b]Estimated.

[c]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.

Education and Health Services

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It is the 1,300% difference between low and high healthcare per capita expenses that is important. As Colorado's over-65 population continues to increase steadily by 0.5% per year over the coming decade, the state's total healthcare expenses and the required healthcare workforce will climb at a much higher rate than in the past as a result of this unprecedented demographic sea change (assuming that the system of healthcare delivery is unchanged).

A second major factor that will affect the healthcare sector is the very significant number of healthcare employees who will leave the workforce during the coming decade. Twenty percent (or 50,000) of the state's Healthcare and Social Assistance Sector workers are over the age of 55; 4% (9,000) are already over 65. Although predicting individual behavior is not possible, one can assume that roughly 10%, or 5,000, of the state's healthcare employees will retire each year over the coming decade. These individuals will need to be replaced.

A third fundamental factor driving the behavior of the healthcare sector is the emerging impact of healthcare reforms resulting from both state- and federal-level legislation that are designed to increase access to healthcare. The Colorado Health Institute (CHI) estimates that approximately 800,000 Coloradans—17% of the state's population—were uninsured in 2008, a rate that has remained relatively stable over the past few years. State and federal legislation enacted in the past few years will reduce the number of uninsured Colorado residents to roughly 250,000.

The Colorado Healthcare Affordability Act of 2009 was targeted at generating more federal funds for financing healthcare in Colorado. The legislation directs the Colorado Department of Health Care Policy and Financing to assess a fee on all Colorado hospitals. The estimated $600 million in fee revenue will be matched by an equal amount of federal funds, thus generating $1.2 billion to expand Medicaid coverage to adult Colorado residents previously not eligible, as well as to expand health coverage for low-income children and pregnant women. In addition, this legislation will increase reimbursements that hospitals receive for providing healthcare to individuals on Medicaid and the Colorado Indigent Care Program. According to CHI research, more than 27,000 parents and 119,000 adults without dependent children will become eligible for Medicaid as a result of this state legislation.

In addition, CHI estimates that if health reform were fully implemented today, an additional 153,000 Colorado residents may gain coverage through the individual market facilitated by the implementation of health insurance exchanges, and 175,000 are expected to receive coverage through their employer. All told, approximately 542,000 uninsured Colorado residents are projected to receive health insurance, although the full impact of health reform will not be felt until 2018. Even with these reforms, CHI estimates that approximately 258,000 Coloradans will remain uninsured after implementation.

Making a very rough assumption that one additional healthcare employee is required to support 20 additional healthcare-insured individuals, this expansion in healthcare access may generate a need for an estimated 28,000 additional healthcare employees between 2010 and 2018. This estimate suggests an annual need of around 3,500 new healthcare employees.

In summary, Colorado's healthcare workforce needs to increase by at least 8,500 per year, in addition to the 5,000 individuals per year to replace retiring healthcare employees. The quality of healthcare in Colorado will be unavoidably affected by the ability or inability of the state's

AGE OF COLORADO PHYSICIANS AND NURSES

	Age					
	25 and Younger	26-35	36-45	46-55	56-65	Older than 65
Physicians	0.0%	8.5%	29.2%	27.1%	22.9%	12.2%
Nurses	3.2	18.9	20.6	28.1	23.0	6.4

Sources: Colorado Department of Regulatory Agencies, Division of Registrations for Colorado-based physicians and the Colorado Board of Nursing for Colorado-based nurses.

healthcare providers to secure and retain these needed employees.

Two Healthcare Workforce Case Studies: Physicians and Registered Nurses

The healthcare workforce field is characterized by a wide range of job descriptions and licensed professionals. In Colorado, the top 54 healthcare occupations employ more than 150,000 individuals. Two of the largest groups of licensed healthcare professionals are the approximately 58,000 registered nurses and 13,000 physicians. A significant number of these are over 55 years old, and will be retiring during the coming decade. Specifically, 29% of the state's registered nurse population (nearly 20,000 individuals) and 35% of the state's physicians (4,700) are over 55.

One of the most difficult challenges facing Colorado's healthcare system is to replace these approximately 25,000 individuals as they leave the workforce. This will be difficult for all communities and regions, but especially so for rural areas. Finding the next generation of healthcare providers will present a special challenge for these regions. Given the continuing pressures on the state's higher education system, there should be real concern about the capacity of our healthcare professional education schools to meet Colorado's future healthcare workforce needs. Approximately 42% of the state's nursing school faculty is age 55 and older. Given that there is and will be a national shortage of healthcare professionals, the state's ability to import professionals from other states will be much less effective than in past years.

**HEALTHCARE AND SOCIAL ASSISTANCE EMPLOYMENT
2002–2011
(In Thousands)**

Year	Ambulatory Care	Hospitals	Nursing Care	Social Assistance	Total[a]
2002	74.7	45.4	33.8	30.0	183.9
2003	77.4	46.4	33.9	30.3	188.0
2004	78.7	48.1	34.3	31.3	192.4
2005	80.7	49.1	35.1	32.3	197.1
2006	83.1	50.1	35.7	33.7	202.6
2007	86.7	52.0	36.5	35.6	210.9
2008	90.5	53.7	37.7	38.0	219.9
2009	93.0	54.9	39.3	38.8	226.0
2010[b]	94.8	56.0	41.5	40.0	232.2
2011[c]	95.2	57.0	42.9	41.9	237.0

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

[b]Estimated.

[c]Forecast.

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

The Importance of Healthcare to Rural Colorado

For Colorado as a whole, the Healthcare and Social Assistance Sector is responsible for one in eight jobs. However, this statewide average conceals a very wide county variation in the economic importance of this sector. For rural Colorado, the healthcare sector plays an extremely important economic role in terms of employment and total payroll.

The state average is one in eight jobs are in the healthcare sector. Colorado has 10 rural counties for which one of every six jobs are in this sector: Logan, Phillips, Fremont, Alamosa, Bent, Delta, Pueblo, Huerfano, Otero, and Baca. In Baca County, one in every four jobs is in the healthcare sector; in Huerfano and Otero counties, it is one in every five jobs. For all of these counties, the stability and strength of their healthcare providers is an essential element of the county's economy. ✣

Leisure and Hospitality

Overview

The Leisure and Hospitality Supersector includes performing arts, entertainment, and recreation, as well as accommodations and food services. This supersector encompasses the recreational and entertainment activities of Colorado residents, tourists, and business travelers. Over the years, Colorado's appeal has expanded beyond the natural environment to include sports, entertainment, cultural attractions, and business.

Because it depends heavily on discretionary spending, the industry was hard hit by the recession. Economic recovery will bring a decrease in job losses and uncertainty, along with an increase in business spending, all of which will help strengthen the tourism industry. Slow and steady improvement is expected as long as employment and consumer confidence improve.

U.S. Travel Association and Tourism Economics figures indicate travel spending is on the rebound, increasing from $704.4 billion in 2009 to a projected $755.6 billion in 2010 and $794.9 billion in 2011.

The Smith Travel Research (STR) lodging forecast projects U.S. 2010 occupancy will be up 4.4%, to 57.1%, by the end of 2010; the average daily rate (ADR) will decline 0.1%, to $97.74; and revenue per available room (RevPAR) will end the year up 4.3%. Supply in 2010 is projected to increase 2.2%, and demand is expected to climb 6.6%. STR's outlook for 2011 includes anticipated increases in all three key metrics. Occupancy is projected to grow by 1.4%, to 57.9%; ADR is forecasted to increase 3.9%, to $101.55; and RevPAR is expected to rise 5.3%. Supply and demand are both projected to grow in 2011. Supply is estimated to be up 1.1%, and demand is expected to increase 2.5%.

Tourism in Colorado

Tourism in Colorado is closely tied to national trends and will continue to mirror them in 2011 as cautious consumers slowly increase expenditures. Receipts in Colorado's travel, tourism, outdoor recreation, leisure, and hospitality economy are projected to increase by 5% in 2010 and 5%-10% in 2011 as prices recover.

Employment

After experiencing job losses in 2009 and 2010, employment gains are anticipated in the Leisure and Hospitality Supersector in 2011. The strong employment performance of the sector came to an abrupt halt in 2009—while a total of about 27,300 jobs were added between 2003 and 2008, approximately 10,500 positions were lost in 2009. Additional losses of 2,800 jobs are projected in 2010. Sector employment is expected to increase by 3,000 jobs, or 1.2%, in 2011.

LEISURE AND HOSPITALITY EMPLOYMENT
2002–2011
(In Thousands)

Year	Arts, Entertainment, and Recreation	Accommodations	Food Service	Total Accommodations and Food Service[a]	Total Leisure and Hospitality[a]
2002	41.1	39.8	166.2	205.9	247.0
2003	40.5	39.3	165.8	205.1	245.6
2004	42.2	39.1	170.0	209.1	251.3
2005	43.3	39.8	174.4	214.2	257.5
2006	44.1	41.1	179.8	220.9	264.9
2007	44.6	41.7	184.1	225.8	270.4
2008	45.7	42.3	184.9	227.2	272.9
2009	44.5	40.1	177.9	218.0	262.4
2010[b]	43.6	39.6	176.4	216.0	259.6
2011[c]	45.1	39.0	178.5	217.5	262.6

[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.

Food service dominates the employment picture for this supersector, accounting for roughly two-thirds of total leisure and hospitality employees.

Accommodations

According to the STR Analytics (www.STRanalytics.com) projections for 2010 hotel occupancy across the state will rise by 5.5%, to 56.5%, by the end of 2010, while ADR will drop by 0.4%, to $102.50, and RevPAR is expected to end the year up 5.2%, to $57.88. These changes are consistent with national trends.

Growth is forecast for Colorado lodging and hospitality in 2011. Occupancy rates are expected to increase by 3.4%, ADR will rise by 3.5%, and RevPAR will climb 7%.

Tourism in Denver

Accommodations

Denver has continued to fare better than many other parts of the country. STR Analytics projections show increases in occupancy (9.4% increase, to 63.0%), ADR (0.5% increase, to $93.60), and RevPAR (9.9% increase, to $58.93) in 2010. Metro Denver accommodations are expected to continue to show improvement in 2011 with occupancy increasing to 65.7% (up 4.3%), ADR climbing to $96.89 (up 3.5%), and RevPAR growing to $63.64 (up 8%).

The new 230-room Four Seasons Hotel opened in October 2010 in downtown Denver. In addition, an Embassy Suites project adjacent to the

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COLORADO LODGING AND HOSPITALITY FORECASTS

	2010			2011		
	Occupancy	Average Daily Rate	RevPAR	Occupancy	Average Daily Rate	RevPAR
Denver Metro Area						
Downtown	67%	$139.25	$93.08	67%	$146.21	$97.39
Airport/East	62	77.25	48.23	66	79.95	52.72
West	62	79.25	48.79	65	80.04	51.99
North	62	80.75	50.06	65	83.98	54.18
South	61	81.25	49.79	65	82.88	54.18
Subtotal	63	93.60	58.93	66	96.89	63.64
Percentage Change	*9.4%*	*0.5%*	*9.9%*	*4.3%*	*3.5%*	*8.0%*
Total Colorado Springs	57	$92.50	$53.15	58	$93.89	$54.16
Percentage Change	*7.5%*	*-2.7%*	*4.6%*	*0.4%*	*1.5%*	*1.9%*
Resorts						
Vail/Beaver Creek	50	251.75	125.68	50	261.82	129.90
Aspen/Snowmass	49	253.00	123.09	51	259.33	131.60
Steamboat Springs	48	114.00	55.10	49	115.14	56.90
Other	49	139.50	67.96	51	140.90	72.02
Subtotal	49	188.70	92.46	50	193.08	97.30
Percentage Change	*4.2%*	*-1.2%*	*3.0%*	*2.9%*	*2.3%*	*5.2%*
Other Colorado Cities						
Boulder/Longmont	62	111.00	68.76	65	114.89	74.52
Fort Collins/Loveland	50	82.00	41.40	54	83.64	45.12
Durango	56	106.50	59.96	58	109.16	63.00
Glenwood Springs	48	85.25	40.92	48	86.10	41.74
Grand Junction	56	79.50	44.60	56	79.50	44.73
Other Colorado areas	51	81.15	41.18	52	88.17	45.57
Colorado Total	56.5%	$102.50	$57.88	58%	$106.09	$61.92
Percentage Change	*5.5%*	*-0.4%*	*5.2%*	*3.4%*	*3.5%*	*7.0%*

Source: STR Analytics (www.STRanalytics.com), and Colorado Business Economic Outlook Committee.

Leisure and Hospitality

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Colorado Convention Center will add 400 rooms. Projects still on the drawing board are a new 200-room hotel project at 15th and California and a 180-room W Hotel near Larimer Square in downtown, as well as a 500-room Westin Hotel attached to the terminal at the Denver International Airport (DIA).

Convention Business

While Denver fared better in 2009 than many parts of the country, it was still a very tough year for the city's travel industry. Denver lodger's tax collection slid 18.3% in 2009 versus 2008. The 2009 convention calendar was relatively strong, but could not offset the loss of the business traveler, which mirrored a national decline of 19%.

Meeting and convention business generally mirrors the national economy. If the economy should falter or the recession continues, this will impact short-term business meetings and corporate business, as well as the lucrative business-traveler market.

Competition is intense in hard economic times for the meetings business, with some destinations literally giving away their facilities at free or greatly reduced rates to attract business. Association meetings are the "bonds" of the convention industry. They are less susceptible to changes in the economy or current events. When times are bad, attendance at association meetings can actually increase as people in various industries try to grapple with the situation and find solutions. For this reason, the bulk of convention sales efforts by VISIT DENVER (the Denver Convention and Visitors Bureau) are targeted at association meetings, which are booked three to five years or more in advance.

A total of 66 groups, hosting 209,548 delegates, used the Colorado Convention Center in 2009, down from the record-setting year of 2008. Some 464 other groups held meetings in Denver in 2009, with 103,992 total delegates, down from 489 groups and 113,354 delegates in 2008.

Q4 2010 is looking especially brisk, with nine citywide groups bringing 70,000 delegates, which means the year should finish well above 2009. A strong convention calendar was one of the principal reasons for the increase. In 2010, a total of 70 groups were on the books bringing an estimated 271,725 delegates—a 6% and 30% increase over 2009, respectively. Sixty groups are already confirmed in 2011, bringing an expected 246,690 delegates.

The increase may also be partially attributable to what is known as the "AIG effect"—the bailing out of firms by the U.S. government led many corporations to reassess how and where they conduct business meetings. Many corporations transferred meetings from upscale resorts to more moderately priced destinations. Denver's perception as a safe, business city with first-class amenities and a central location served by the fifth-busiest airport in the nation all worked to the city's advantage.

At the same time, flooding in Tennessee, the BP oil spill disaster, the boycott of Arizona over the immigration issue, and hurricanes all forced the relocation of some meetings. The impact of these events should not be overstated, however. Most meeting business is booked far in advance and is not subject to rapid changes by current events. Denver was indirectly able to secure limited smaller short-term business from these issues; however, when compared to a strong, consistent sales and marketing effort, the amount of business generated from topical issues was insignificant. Cities that had more capacity and availability in the summer, which is Denver's peak season, benefited more.

Downtown Denver is also experiencing a boom in new restaurants and retail, and is seeing significant improvements with the development of the 14th Street Theatre District, the widening of the sidewalks on Larimer between 15th and 17th Streets, the (anticipated) restoration of the 16th Street Mall, the Union Station redevelopment, the West Line Light Rail to Golden (opening in 2013), and the new 23-mile rail line from downtown to DIA (completion anticipated by 2016). As mentioned, Denver also saw the opening of two downtown hotels. In other good news, the Ritz-Carlton Denver was awarded a AAA Five Diamond designation in September 2010—a first for any Denver hotel.

Competition for convention business remains intense. Cities such as Phoenix, Philadelphia, Indianapolis, and San Diego are expanding their centers, and many cities are adding new hotels as well. The decline in the number of business travelers has resulted in an overall drop in hotel rates that have been slow to rebound, and many cities have been willing to lower or even forego convention center rentals in an effort to attract business. However, 2011 should be a strong year for conventions in Denver, and business travel is also expected to increase, although it will be very rate sensitive.

Leisure Tourism

Denver was one of only a few destinations in the United States to see an increase in the number of leisure visitors in 2009, according to Longwoods International. Denver attracted 10.1 million overnight pleasure visitors in 2009, up 4% over the record-setting 9.7 million visitors in 2008 and considerably better than the national average, where pleasure travel fell 5%. Overall, Denver attracted 12.1 million total pleasure and business visitors in 2009, about the same as a year earlier. However, due to budget tightening, these total visitors spent $2.8 billion, down 9% from the record $3.1 billion spent in 2008.

Denver's increase in leisure visitors came from a 4% gain in "marketable" visitors, defined as someone who could visit anywhere yet chose Denver, and a 4% rise in people visiting friends and relatives. Nationally, marketable visitors slid 5% in 2009. Marketable visitors spent $89 per day versus $40 per day for those visitors who stayed with friends and relatives.

By the end of 2010's first three quarters, the Mile High City's tourism industry was seeing some signs of recovery. Denver Restaurant Week was a huge success, setting a new record with 282 restaurants participating and a total of 335,580 meals served, up 26% and 13%, respectively. A blockbuster summer of events, including the King Tut exhibit at the Denver Art Museum, Body Worlds at the Denver Museum of Nature & Science, Moore in the Gardens at the Denver Botanic Gardens, and the Biennial of the Americas celebration presented Denver with a world-class tourism product that helped drive up website visits. The number of visits to the VISIT DENVER website, surged 45% in the first nine months of 2010, recording more than 15 million page views.

Denver's tourism product will build on these successes with the construction of a new Colorado History Museum, a new symphony hall, the Clyfford Still Museum, and the $50 million Asian Tropics exhibit at the Denver Zoo. Major exhibits in 2011, including Real Pirates at the Denver Museum of Nature & Science, will continue to drive tourism.

DIA had the busiest September in its history in 2010, and consistent growth the remainder of the year brought the year-to-date passenger traffic through September to 39.5 million. This is an increase of 1.2 million passengers, or 3.1%, over the same nine-month period in 2009. The successful emergence of Frontier from bankruptcy and the growth of Southwest in adding new routes have combined to keep airfares to Denver very low relative to the rest of the country.

Denver competes against all vacation options, including the cruise industry, which is seeing dramatic growth in new product. Competition is also driving down rates. The economy has fueled unprecedented travel bargains. Travel writer Arthur Frommer, who has covered the industry for 50 years, states there has never been a cheaper time to travel. This, of course, creates a highly competitive situation. A city vacation, which is not easily packaged and requires a complex set of choices in hotels, restaurants, transportation, attractions, and tours, can be at a competitive disadvantage compared to the relative ease and sometimes bargain expense of booking an all-inclusive cruise or beach resort.

Nonetheless, Denver's tourism industry experienced a recovery in 2010 and should see continued increases in 2011.

Casinos and Gaming

Colorado's casino and gaming industry has continued to experience a small increase in revenues through the first nine months of 2010, due in part to new legislation passed in 2009. On July 2, 2009, the betting limit increased from $5 to $100, and casinos were allowed to stay open 24 hours per day, and add craps and roulette.

Those changes resulted in a large, temporary jump in adjusted gross proceeds (AGP) for July 2009, $76.1 million versus $65.7 million the previous year. (AGP is defined as the amount wagered by bettors less payout from the casinos.) By July 2010, however, AGP was $70.0 million as enthusiasm surrounding the advent of new games, higher betting limits, and longer hours waned. The new legislation, plus consumers seeking entertainment closer to home and the beginning of a modest economic recovery, is expected to lead to a gain of about 1.2% in AGP for 2011.

Black Hawk continues to dominate the Colorado casino sector with 18 casinos, approximately 9,000

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Leisure and Hospitality

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gaming devices, and about 73% of the industry's AGP. Cripple Creek has approximately 4,400 gaming devices and 18% of AGP, while Central City has 7 casinos and roughly 9% of AGP.

Restaurants

The 2008-10 period was the most challenging in the modern history of the restaurant industry, both on national and state levels. As the economy was mired in its worst slump since the Great Depression, restaurant sales and patronage suffered accordingly.

The negative trends were not necessarily industry-wide, however. Some restaurants and segments were impacted more than others, depending on the demographics of their core customer base. The restaurants that remained relatively successful during the challenging economic period were those that were able to maintain their core customer base. Repeat customers represent a sizable proportion of sales for most restaurants, and an establishment's survival typically depends on those customers.

With the worst of the economic downturn over, Colorado's restaurant operators are likely to see an improving operating environment in 2011, with the second half of the year stronger than the first.

The strength of the restaurant industry's recovery in 2011 is largely contingent on an improving employment situation in Colorado. Jobs give households the disposable income necessary to support restaurant spending, and they also create the need for convenience that the restaurant industry provides.

Population growth is also a strong driver of restaurant sales, and Colorado will continue to add residents in 2011. Colorado is projected to increase 1.5% in 2011, compared to 0.9% for the nation. Additionally, Colorado is expected to add jobs at a faster rate than the nation in 2011, and incomes are anticipated to grow. Overall, economic and demographic indicators point toward an improving year for Colorado's restaurant industry in 2011.

COLORADO CASINOS
2002–2011

	Colorado	Colorado	Adjusted Gross Proceeds[a] (In Millions)			
Year	Casinos Open	Devices (000s)	Black Hawk	Central City	Cripple Creek	Total
2002	43	15.5	$524.5	$52.8	$142.4	$719.7
2003	44	15.5	506.5	49.9	142.5	698.9
2004	45	15.7	524.0	53.2	148.7	725.9
2005	47	16.4	531.9	72.6	151.0	755.5
2006	46	17.1	554.5	74.5	153.1	782.1
2007	43	16.8	581.4	79.8	155.0	816.1
2008	41	16.8	508.7	67.1	140.1	715.9
2009	40	16.1	530.0	64.3	140.3	734.6
2010[b]	40	15.5	552.6	64.8	135.3	752.7
2011[c]	40	15.5	559.4	65.6	137.0	762.0

[a]AGP calculated on an annual basis, hence different from the state fiscal year.

[b]Estimated.

[c]Forecast.

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

To help spur consumer confidence in 2011, restaurant operators will continue to take steps to provide value to guests. In addition, smart operators will build sales by marketing healthful menu items, environmentally friendly practices, and responding to consumer demand for convenience and variety.

On the whole, demographics are destiny when it comes to restaurant sales. The operating environment for restaurants will improve sooner and more significantly for restaurants in regions of Colorado where population, employment, and income growth are the strongest.

While 2011 will not be a magic bullet to restored prosperity, the future is positive despite the economic challenges. Consumers who have been forced to cut back on spending still have the desire to dine out and incorporate restaurants into their lifestyle. Consumers' pent-up demand to dine out more often, combined with a variety of consumer incentives, likely will nudge consumers into Colorado's restaurants and help the industry continue to recover and add steam to state's economy.

As the industry continues to offer consumers a growing spectrum of options to meet their varying desires, restaurants remain an essential and important component of American lifestyles despite economic uncertainties.

Parks and Outdoor Recreation

Colorado has an incredible outdoor recreation system that is anchored by four premier national parks: Rocky Mountain, Mesa Verde, Great Sand Dunes, and Black Canyon of the Gunnison. These four parks, along with five national monuments, a national historic site, and a national recreation area, receive more than 5 million visits annually and are an important component of tourism and the overall outdoor recreation system in the state.

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COLORADO NATIONAL PARKS VISITS
2004–2011
(In Thousands)

Parks	2004	2005	2006	2007	2008	2009	2010[a]	2011[b]
Bent's Old Fort NHS	31.0	27.8	26.5	24.0	25.0	28.2	28.2	28.6
Black Canyon of the Gunnison NP	175.6	180.8	160.5	219.6	160.2	171.5	168.1	170.8
Colorado NM	352.6	347.1	332.7	395.3	391.0	400.3	421.1	427.9
Curecanti NRA	1,006.1	882.8	936.4	964.6	1,007.4	953.2	963.8	979.2
Dinosaur NM[c]	240.7	266.8	206.1	170.9	149.3	150.9	147.4	149.8
Florissant Fossil Beds NM	61.3	59.5	56.1	56.0	57.0	64.3	65.2	66.2
Great Sand Dunes NP	267.2	279.6	258.7	285.1	273.9	290.0	283.5	288.0
Hovenweep NM[c]	11.8	11.7	11.6	11.6	11.2	12.3	12.0	12.2
Mesa Verde NP	446.8	498.3	557.2	541.1	551.4	550.4	556.8	565.7
Rocky Mountain NP	2,781.9	2,798.4	2,743.7	2,895.4	2,757.4	2,822.3	3,002.9	3,005.0
Total Visitors to Parks and Sites[d]	5,374.9	5,352.8	5,289.5	5,563.6	5,383.8	5,443.4	5,649.0	5,693.4

[a]Estimated. [b]Forecast.

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

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

Note: Yucca House National Monument does not report visitations, therefore it is not included.

Definition: NHS = national historic site, NP = national park, NM = national monument, and NRA = national recreation area.

Sources: National Park Service, *Statistical Abstract 2009* and Colorado Business Economic Outlook Committee.

Leisure and Hospitality

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National park area visits are on track to climb 3.8% in 2010 (205,600 visits), helped in part by exceptionally mild weather in September through November. Visits to national parks in Colorado are projected to rise 0.8% (44,400 visits) in 2011.

The state's outdoor recreation system also includes national forests and Bureau of Land Management lands; state, county, and city parks; and open-space areas. Historically, these areas have attracted more visitors than the state's national parks. Colorado's state parks alone attract more than 11 million visitors each year.

As the economy recovers, the outdoor recreation industry will continue to benefit from consumers' interest in finding affordable ways to relax and spend time with family. Outdoor recreation visitation in the state is forecast to increase 1.5%-2.0% in 2011.

Skiing Industry

After a slow start, Colorado's ski areas recorded 11.85 million skier visits in the 2009-10 ski season—essentially the same as the previous season. With good late snows and an uptick in destination visitors seeking lower travel costs, what had been nearly a 4% drop in visits through the end of December rebounded. Colorado's ski areas did particularly well from late March to the end of the season. On a national level, the National Ski Areas Association reported a total of 59.8 million skier visits, up 4.2% from the 2008-09 season. The Rocky Mountain region, which includes Colorado, was up 20%, with 23.7 million skier visits. (Each skier visit represents one person participating in the sport of skiing or snowboarding for any part of one day at a mountain resort.) While much of that gain occurred in other states with stronger snowfall last season, Longwoods International's latest study reported that Colorado enjoyed a 19.7% U.S. market share of overnight ski trips.

COLORADO SKIER VISITS
2000–2011
(In Millions)

Season	Total
2000-01	11.67
2001-02	11.12
2002-03	11.61
2003-04	11.25
2004-05	11.81
2005-06	12.53
2006-07	12.56
2007-08	12.54
2008-09	11.85
2009-10	11.85
2010-11[a]	11.85

[a]Forecast.

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

Snowfall was lower than average in Colorado for most of the season. However, the weak U.S. dollar, an increasing awareness and willingness of international visitors to come to the United States to ski, and the longstanding presence of Colorado ski resorts in key markets contributed to a 6.5% increase in international skiers in the state.

Domestic skier numbers were also up slightly, perhaps due to ski vacations viewed as an economic alternative to more expensive vacations. Good snows toward the end of the season helped drive a recovery in the number of Front Range and other skiers in the last month of the season. Indeed, from late March until the close of the season, visitor numbers were 14% above the previous year. Finally, more than $107 million in capital investments, much of it in additional lift capacity, resulted in more skier visits.

For the 2010-11 season, the presence of the La Niña wind pattern is expected to result in good snow conditions throughout much of the state as has already been seen in November and December. When snow conditions are strong, in-state visits tend to be especially strong.

According to Melanie Mills, CEO of Colorado Ski Country USA (CSCUSA), there is a growing sense that international skiers in markets beyond those of the traditional European markets are aware of the positive reputation of the Colorado ski product and are choosing to visit the United States for ski holidays. Combined with the weak dollar, new improvements in visitor services at many resorts, a somewhat brighter Colorado and national economy, and a late Easter, it is realistic that skier visits may likely reach or modestly exceed the levels of the last two years. This would result in 11.5 million or more skier visits for 2010-11.

To boost the skiing experience and draw more crowds, CSCUSA reported that numerous capital improvements have been made at many of its resorts for the 2010-11 season. New lifts were added at Arapahoe Basin and Eldora, and lift improvements were made at Monarch and Silverton. Terrain was added or expanded at Crested Butte, Echo Mountain, and Purgatory at Durango. Aspen/Snowmass added a 12-foot pipeline to complement its 22-foot Olympic-size superpipe at Buttermilk, making the area one of five resorts where athletes can train for the Olympics. Other enhancements include new snowmaking capacity, improved facilities and parking, additional services, new children-oriented programs, and terrain and grooming upgrades.

Air Travel

Air travel is very important to the Leisure and Hospitality Supersector. DIA is the 5th-busiest airport in the United States and the 10th busiest in the world. In 2009, DIA served 50.2 million passengers, despite a drop of 2.1% from the banner year in 2008.

Total DIA passengers are expected to increase to 51.4 million in 2010 and 52.5 million in 2011. In addition to DIA, Colorado Springs, and Grand Junction, seven mountain airports provide service to many resorts. Passenger traffic at Colorado's major airports and regional hubs are expected to total 55.4 million in 2010. Refer to the Trade, Transportation, and Utilities section in this book for more information on air transportation.

Challenges

The biggest challenges facing the Leisure and Hospitality Supersector include the following:

DENVER INTERNATIONAL AIRPORT PASSENGERS
2002–2011
(In Millions)

Year	Enplanements	Deplanements	Total Passengers[a]
2002	17.8	17.8	35.7
2003	18.7	18.8	37.5
2004	21.1	21.1	42.4
2005	21.6	21.7	43.4
2006	23.7	23.7	47.3
2007	24.7	24.7	49.9
2008	25.6	25.6	51.2
2009	25.0	25.1	50.2
2010[b]	25.7	25.8	51.4
2011[c]	26.2	26.3	52.5

[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.

- *A slow economic recovery.* Although improvements are on the economic horizon, consumer confidence remains low, resulting in weak spending. The trends of shorter distance and lead times, and more budget conscious decisions are the new norm.
- *Discounting*. Price erosion has a detrimental effect on profitability. Pricing strategies will continue to be a challenge in 2011.
- *The hassle factor.* Increased security lines, late flights, packed airplanes, and congestion in the skies have made air travel an ordeal. Highway congestion continues to be an issue, and the combination of all of these elements makes travel less pleasant and causes visitors and locals to question whether they should just stay home.
- *The tight state tourism promotion and marketing budget.* Budget cuts made in 2009 continue to have an impact, requiring the industry to make its marketing dollars work harder. ✤

Other Services

The Other Services Supersector is comprised of three sectors: Repair and Maintenance; Personal Laundry Services; and Religious, Grantmaking, Civic, Professional, and Similar Organizations. Employment in the sector is traditionally driven by changes in population since it tends to provide services for the local population. Paradoxically, sector employment decreased in 2009 and is expected to end 2010 down 1.9%, or a loss of 1,300 jobs. Sector growth is expected to resume in 2011, adding 1,400 positions.

Repair and Maintenance Services

Repair and Maintenance Services is composed of four subsectors: automotive repair, commercial machinery, electronic equipment, and other household goods. This sector has been negatively impacted by the stagnant construction industry.

During difficult economic times, consumers often hold off on repairs, choosing to save all but pertinent expenses and wait for a better time. This has led to declines or only limited growth in Repair and Maintenance Service's subsectors. As the nation recovers slowly from the recession, look for sector employment to rise as consumer confidence does.

Automotive repair and maintenance accounts for nearly 74% of all Repair and Maintenance Services Sector employment. Although it is by far the largest subsector, auto repairs has not seen employment growth since 2002 and was struck especially hard by the recession, losing 900 jobs in

OTHER SERVICES EMPLOYMENT
2002–2011
(In Thousands)

Year	Repair and Maintenance Services	Personal and Laundry Services	Religious, Grantmaking, Civic, Professional, and Similar Organizations	Total[a]
2002	23.5	21.1	41.0	85.6
2003	22.8	21.1	41.9	85.9
2004	22.7	21.5	43.2	87.4
2005	22.7	21.9	44.0	88.5
2006	22.6	22.3	45.9	90.8
2007	22.7	23.0	47.3	92.9
2008	22.7	23.6	48.6	94.8
2009[a]	21.4	22.6	49.7	93.7
2010[b]	21.6	22.6	48.2	92.4
2011[c]	22.1	22.6	49.1	93.8

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

2009. Small in comparison, electronic equipment repair and maintenance represents 8.3% of the sector's employment, while other household goods accounts for 6.3%.

Commercial machinery repair and maintenance makes up roughly 11.4% of this sector. Commercial machinery includes agricultural and other heavy industrial machinery and equipment (e.g., forklifts, machine tools, construction equipment, and mining machinery). The overall strength of the mining and construction industries has had a direct negative impact on the sector's rate of growth.

In 2010, repair firms total roughly 4,300 in Colorado, a 100 firm decrease from the previous year. Average annual wages for this sector are approximately $38,000.

Personal and Laundry Services

Four main groups are included in the Personal and Laundry Services Sector: death care services, dry-cleaning and laundry, personal care services, and other personal services. All four subsectors are directly impacted by consumer's disposable income. This is due in part to many consumers spending money on what are considered only essential services, such as death care services, and postponing spending on nonessential services during the recession. As the economy improves and disposable income increases, consumers may start to purchase more of these nonessential services once again.

Religious, Grantmaking, Civic, Professional, and Similar Organizations

Religious, Grantmaking, Civic, Professional, and Similar Organizations is the largest sector in Other Services. It is comprised mainly of nonprofits; grant and scholarship foundations; and business, civic, and professional organizations. The sector is projected to employ 48,200 workers in 2010, which accounts for just under 50% of the supersector. It is expected to experience a severe drop in employment in 2010, losing 1,700 jobs. However, a gain of 900 is anticipated in 2011. The sluggish economy has curbed personal discretionary spending and business investment, both of which are important sources of revenue for many of this sector's organizations. Despite employment decreases for the first time in more than 10 years, average annual wages for employees continue to rise, albeit at a slower than usual rate.

Many organizations are feeling pressure from the slow economy. Religious entities have cut their national budgets, while Colorado-based organizations have endured job and salary cuts. Although some groups may enjoy increases in membership and funding, the majority of organizations throughout the state will experience instability and financial trouble throughout 2011.

Many homeowner associations are having difficulty collecting dues and fees because of the large number of foreclosures. Foreclosures are a nuisance for the associations because the vacant homes and unpaid dues leave the remaining residents with higher bills to cover all of the excess costs.

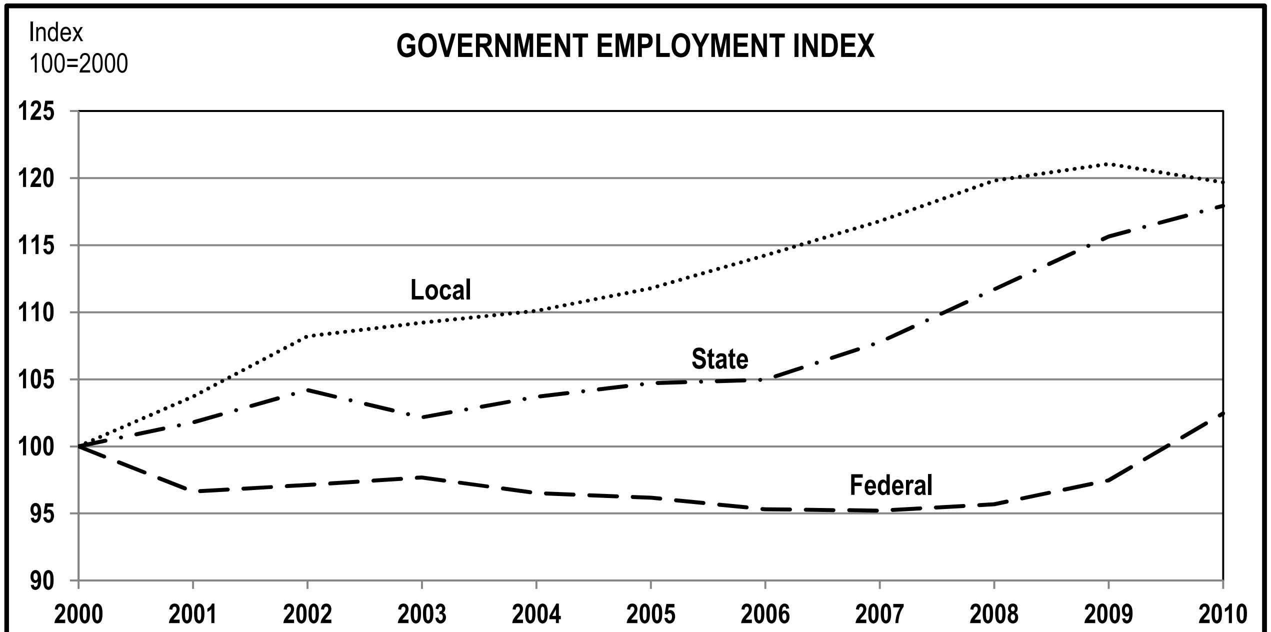
Despite the gloomy outlook, there is a bright spot: volunteerism within the state. As Colorado residents are laid off, many are choosing to donate their time to nonprofits. Colorado was ranked 16th in the nation for the percentage of the population who volunteered in 2009, as well as 8th for total hours donated per resident. Both of these figures are up from the previous year, and numbers are expected to increase in the future.

Government

The Government Supersector is comprised of several levels of government, including federal civilian, state, and local. Roughly 63% of the workers in the supersector are employed in local government, which includes municipalities, counties, school districts, and special districts. About 23% of the workers are employed in state government, including executive, legislative, educational services, justice, public order, and other state governmental support. The remaining 14% are employed in the federal government, working in fields such as urban planning and community development, natural resources and environmental quality, national security and international affairs, and human resources across Colorado.

Between 2005 and 2009, the Government Supersector grew at a compound annual growth rate of 1.9%, with the strongest employment growth occurring in state educational services. State government employment grew an average of 2.5% per year between 2005 and 2009. Local government employment climbed an average of 2% per year, driven primarily by annual average growth of 1.9% in educational services. Federal government employment increased at an average of 0.3% per year over this same period.

The Great Recession depleted approximately 4.5% of the state's employment base in 2009. The Government Supersector tends to lag private industry during recessionary periods; thus, total Government employment in Colorado is expected to increase 0.4%, to 392,500, in 2010 and then decline 0.5%, to 390,700, in 2011.



Source: Colorado Department of Labor and Employment.

The combination of population growth and the rising demand for state programs, such as unemployment benefits, continues to drive demand for government services. However, given state government budget cuts, state workers are being asked to do more with fewer resources. Although they have been spared job cuts, there have been mandatory furlough days, wage freezes, and greater employee contributions to the state pension program (effectively reducing incomes).

In general, federal government employment will be affected by funding in federal programs and research-related programs, the political environment, and budget pressures. State government employment may be influenced by the change in legislative leadership and a new governor, and ongoing budget struggles. County budgets tend to be more predictable, because they are determined by property tax collections and fees. Similarly, municipalities and special districts depend upon local sales tax, which have led to declining employment levels and furloughs in difficult budget years.

Federal Government

Federal government employment in Colorado has remained relatively steady over the past decade. Total federal government employment in Colorado is forecast to climb 5.1%, to 56,100, in 2010. The increase in temporary U.S. Census hiring through September 2010 and a relatively flat growth path for the rest of the year has contributed to this increase. As the impact of the American Recovery and Reinvestment Act (ARRA) is removed in 2011 and federal agencies come under pressure to continue to cut spending, total federal government employment is forecast to decrease 2.3%, to a total of 54,800, in 2011.

The Department of Defense and the U.S. Postal Service have historically made up nearly 40% of total federal government employment in Colorado. The U.S. Postal Service has been significantly impacted by declining mail volumes as continued technological advancements drive the nation toward electronic correspondence. It is estimated that the Colorado-Wyoming district will lose nearly 40% of its employees over the next few years. The Department of Defense has become Colorado's largest federal employer, with more than 10,800 jobs through 2009. Strong growth in Colorado's 24 federal research labs will help support a 2.3% forecasted growth rate in Department of Defense employment in Colorado through 2011.

Nearly one in eight government jobs in Colorado come from the federal government's presence in the state, diversifying the state's economy with world-renowned research facilities, defense institutions, and other public-service entities.

State Government

The impact of the most recent recession forced the General Assembly and Governor Ritter to make difficult budget decisions over the past three fiscal years. Caseload demand for many state programs increased amid the economic downturn, while tax and fee revenue available to fund these programs decreased. As of October 2010, actions by the General Assembly and the Governor to address budget shortfalls have included cutting programs, suspending and eliminating tax credits and exemptions, tapping into reserves, and transferring funds. As mentioned, state government employees have largely been spared job cuts, though many employees were required to take furlough days and experienced wage freezes and retirement benefit reductions. Additionally, many job vacancies have been left unfilled. ARRA funds have assisted in cushioning the impact of the recession through FY 2010-11. With a projected $1 billion budget shortfall in

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GOVERNMENT EMPLOYMENT IN COLORADO
2002–2011
(In Thousands)

Government Sector	2002	2003	2004	2005	2006	2007	2008	2009[a]	2010[b]	2011[c]
Local General	106.5	107.2	108.4	109.9	112.8	115.4	117.9	119.4	116.1	112.5
Local Education	113.8	115.2	115.8	117.7	119.8	122.4	126.1	126.9	127.6	130.1
Total Local	220.3	222.4	224.2	227.6	232.6	237.8	244.0	246.3	243.7	242.6
State General	31.9	30.1	29.7	30.0	30.3	31.3	32.6	32.6	32.7	32.8
State Education	50.0	50.2	51.8	52.3	52.2	53.4	55.4	58.3	60.0	60.5
Total State	81.9	80.3	81.5	82.3	82.5	84.7	88.0	90.9	92.7	93.3
Total Federal	53.2	53.5	52.9	52.7	52.2	52.1	52.4	53.4	56.1	54.8
Total Government	355.4	356.2	358.5	362.6	367.2	374.7	384.1	390.5	392.5	390.7

[a]Revised.

[b]Estimated.

[c]Forecast.

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

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

Government

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FY 2011-12, state government job losses are more likely in 2012.

Higher Education

An increase in the number of public university and college positions dominated state government employment growth of 2% in 2010. Employment by state colleges and universities climbed 5.2% in 2009 and 2.9% in 2010. This trend will continue into 2011, though at a more modest pace. Public higher education institutions have historically employed the majority (about 63%) of state employees. These workers include administrative staff, instructors, support staff, and student work-study positions. The recession pushed many employees out of the labor force and into schools for training and retooling amid a poor employment market. The slow rate of job growth in the Colorado economy will most likely keep higher education enrollment up in 2011 and continue moderate growth in hiring for instructional, support, and work-study positions. As a result, state higher education employment is expected to grow 0.8% in 2011. The continued growth in public university and college positions will drive an expected increase in total state government employment of 0.6% in 2011.

While higher education institutions have not been impervious to budgetary pressures through 2010, tuition and fee-for-service revenue has sustained employment growth. Higher education institutions receive funding from state and federal sources and from students via tuition revenue and fees. Combined state General Fund and federal ARRA funding in FY 2010-11 are expected to total $61 million, or 8.7%, lower than the prior fiscal year. However, this budget pressure will be partially offset by an increase in tuition rates at most higher education institutions. As a result of the passage of Senate Bill 10-003, starting FY 2011-12, higher education institutions will have greater flexibility in setting tuition rates, and the University of Colorado and Colorado State University will be exempt from the limitation on nonresident enrollment. This flexibility will allow institutions to collect more tuition revenue when state funds to higher education decline in FY 2011-12.

In Colorado, higher education includes 470 institutions educating approximately 375,000 students. These institutions include two- and four-year public, for-profit, nonprofit, and seminary private-accredited institutions; area technical institutions; and private occupational institutions. During the 2008-09 school year, 40,987 degrees and certificates were awarded from public higher education institutions, a 1.2% increase from the previous school year. Baccalaureate degrees accounted for more than half of the total degrees and certificates awarded, followed by 17.6% for certificates; 17.2% for masters, doctoral, and other graduate degrees; and 14.9% for associate degrees.

While higher education institutions have not been impervious to budgetary pressures through 2010, tuition and fee-for-service revenue has sustained employment growth.

Colorado ranks third, behind only the District of Columbia and Massachusetts, in the percentage of residents with a bachelor's degree or higher, according to the U.S. Census Bureau 2009 American Community Survey. About 35.9% of Colorado residents earned at least a bachelor's degree in 2009, an increase of 0.8% over 2008.

Local Government

General

More than 3,000 local governments in Colorado provide a variety of services through counties, school districts, special districts, cities, and towns. Their powers and duties are defined by state law and range in authority from overseeing K-12 education, maintaining parks, and providing police and law enforcement protection to determining land use and zoning. Local governments derive their revenues generally from several different sources: property taxes, sales and use taxes, fees, and intergovernmental revenues.

The state and federal government transfer various revenues to local governments, such as state-collected highway revenues derived from gas tax and motor vehicle registration fees for counties and municipalities. A state-run lottery returns net proceeds back to parks and recreation districts for open space and recreation programs. The most significant state-funded program is the school finance act that annually appropriates state revenues back to the school districts. At the federal level, the ARRA funds have been a major boost to various municipalities and special districts for water and wastewater treatment facilities. While these programs provide significant local funding, the majority of revenues available to local governments are collected locally in Colorado through local property and sales and use taxes.

Throughout the economic downtown, municipal finances have struggled. Staffing levels have been reduced and local government continues to trim the existing workforce. According to the annual *State of Our Cities and Towns Report* published in 2010 by the Colorado Municipal League, nearly one-third of municipal governments have cut staff positions and more than 40% have imposed hiring freezes. Additionally, ARRA funding is winding down, and sales taxes have declined. For example, a recent report issued by the Colorado Association of Ski Towns indicates year-over-year sales tax drops in 14 of 20 reporting communities. Where increases have occurred, they have generally been flat, ranging between 1% and 2%. In a 2010 report released by the U.S. Bureau of Labor Statistics, local governments are shedding jobs at the fastest rate in 30 years. According to the Nelson A. Rockefeller Institute of Government at SUNY-Albany, state and local government employment has declined for 19 of the last 25 months, and local government noneducation employment is down nearly 3% from a November 2008 peak.

Another near-term challenge facing local governments across Colorado will be impending statewide drops in assessed valuations. This is evidenced by reduced home prices, foreclosures, and a slowdown in new housing starts. However, Colorado will likely straddle the low-point in valuations. Assessed valuations translate to the revenues raised from locally collected property taxes. While impacts may vary among and between taxing jurisdictions, this policy issue bears close scrutiny over the months ahead. An October 2010 national report prepared by the National League of Cities found 87% of city finance officers across the country reported that their cities are worse off financially than they were a year ago. Of regional interest, finance officers in the West are slightly more likely to say that their cities are worse off in 2010 than finance officers in other regions.

As a result of these ongoing downward trends, it is projected that local noneducation government employment in Colorado will decline 2.8% in 2010 and 3.1% in 2011.

Education

In Colorado, K-12 school enrollment continues to increase. Enrollment has grown every year since 1989, with the largest increase occurring in the 2008-09 school year when it climbed nearly 2% over the prior year. The Colorado Legislative Council estimates that in the 2010-11 school year overall K-12 school enrollment will rise by 11,131 full-time equivalent (FTE) students—a 1.4% increase over the prior year—bringing the statewide total to 786,302. In the 2009-10 school year, statewide enrollment in FTE students grew 1.6%, to a total of 775,171, over the prior year.

Colorado has 178 school districts and the bulk of their funding is provided through the Public School Finance Act. Although education funding was generally unaffected by the state budget shortfall in FY 2009-10, it was reduced by $119.1 million in FY 2010-11. Federal legislation buttressed K-12 education funding by offsetting reductions that otherwise would have likely occurred in FY 2010-11. This legislation—the federal Education Jobs Fund Program—provides $10 billion to states to save or create jobs for the 2010-11 school year, authorized in Public Law No. 111-226. In determining each state's share, the U.S. Department of Education evaluated states on the basis of population size of individuals ages 5-24 relative to total state population. Colorado's share of the $10 billion is $159.5 million, of which up to 2% may be used for state-level administration. The remainder was distributed to Colorado school districts and local educational associations.

Colorado ranked 17th in the nation in the percentage of residents with a high school degree or equivalent, according to the U.S. Census Bureau 2009 American Community Survey. About 89.3% of Colorado residents had earned at least a high school diploma in 2009, up from 88.9% in 2008. According to the National Center for Education Statistics' *Projections of Education Statistics to 2018*, public enrollment in elementary and secondary schools across the nation is expected to increase 9% between 2006 and 2018, compared to more than 19% estimated growth for Colorado. Colorado ranks 9th in the largest projected gain among the 34 states with forecasted enrollment increases between 2006 and 2018.

Statewide, local education employment will grow 2% in 2011, to 130,100 employees. ✜

International Trade

Export Performance in 2010

Colorado's merchandise and commodities exports have recovered somewhat, rising 9.9% in U.S. dollar terms for the first eight months of 2010 after a sharp decline of 23.9% in 2009. U.S. exports rose 22.6% for the same period, more than recovering from the 19% loss in 2009. Overall global trade suffered its steepest drop since World War II in 2009, but trade flows are likely to grow 13.5% in 2010 supported by improved economic activity in developed and developing markets and governments' shunning trade protectionism policies in the midst of the recession. It is important to keep in context that the high growth rates in percentage terms in 2010 come on the back of the steepest decrease in global trade in 2009 since 1950.

The International Trade Committee originally forecast Colorado exports to rise 10% for 2010. However, in light of the recent acceleration of exports from Colorado and higher commodity prices as global demand rises, the committee has revised this forecast to 12% growth in U.S. dollar terms for 2010.

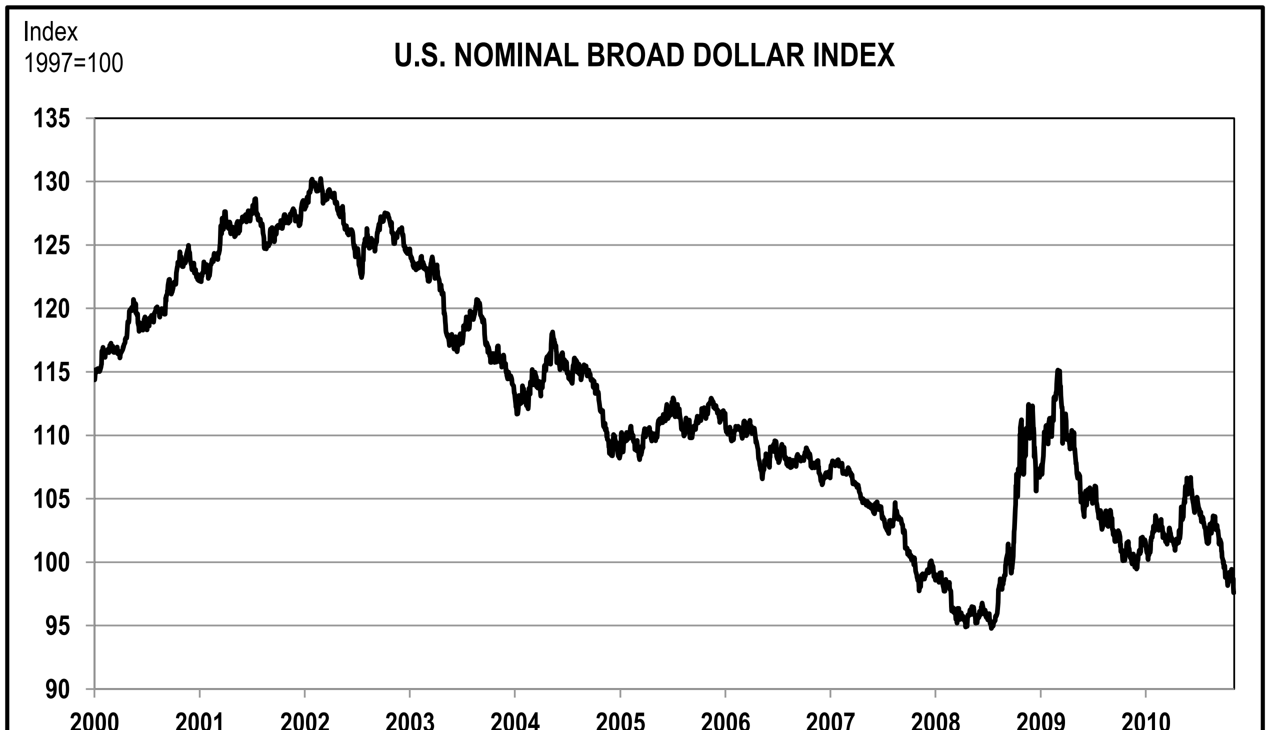
Colorado's exports might have recovered more in 2010 except for the continued decline in exports to its two traditionally largest markets—Canada and Mexico. Substantial increases in other markets including mainland China, South Korea, the Philippines, and traditional Western European markets—the Netherlands, Germany, and the United Kingdom–only partially offset the continued drop in exports to Canada and stagnant exports to Mexico.

Colorado's top exports in 2010 include electronic integrated circuits, meat, medical equipment, crude oil, and photo film. After declining significantly in the past three years, electronic integrated circuits and automatic data process machine exports stabilized and rebounded somewhat. Commodities, both agricultural and metals, remain important exports for the state.

Trade and Global Output Forecasts

The World Trade Organization forecasts global trade volumes will continue to rise 10% in 2011. This is based on an International Monetary Fund (IMF) global output growth forecast of 4.2% in 2011, assuming economic growth in the developed world of 2.2% and 6.4% growth in developing markets. Global forecasts take into account the winding down of government fiscal stimulus packages, low global inflation as a result of continued high unemployment, and growing household demand in developing market economies.

In the United States, exports have been widely recognized as an important factor in the U.S. economic recovery as unemployment rates remain



Source: Federal Reserve Board.

high and as lower household income and weak consumer confidence hold down private domestic consumption. The U.S. government has put in place the National Export Initiative (NEI) to support an export-led growth initiative. The NEI's objectives are to double U.S. exports by 2015, which could support approximately 2 million jobs in the United States. Key markets for the initiative include developing countries where domestic demand is rising significantly.

Foreign Exchange Rate

Many factors determine the competitiveness of a country's exports and the direction of world trade flows. One of those is currency exchange rates. The products of countries with weaker currencies can be more attractive for countries with stronger currencies because they are less expensive to buy. Thus, a weaker currency can help boost exports and economic growth. Because of this, several countries, most notably the United States, are either pursuing or considering a policy of currency devaluation. This development has led to tension among countries regarding exchange rate and monetary policies.

The value of the U.S. dollar, measured against the currencies of the nation's trading partners, has been volatile over the past year. The dollar rose in June 2010 as sovereign debt concerns in Europe caused investors to seek safety in U.S. investments. However, as European debt worries subsided, the dollar has been on a downward trend, especially given the lackluster economic recovery and the Federal Reserve's pursuit of further quantitative easing. Through the middle of November, the dollar was down about 8% since its 2010 high in June.

A weaker dollar could help boost Colorado exports, especially if the state's trading partners post stronger economic growth. However, larger declines in the dollar may begin to produce more drawbacks than benefits. Most notably, it may cause further business and investor uncertainty, higher interest rates, and heightened global currency and trade tensions.

Colorado Exports Forecast

Due to the uncertainty in federal policy in the aftermath of the mid-term elections, the G-20's inability to come to an agreement on exchange rate policies, and the rebalancing in the global balance of payments that is needed to spur productive growth globally, worldwide economic recovery is expected to continue at a moderate pace. Given these external factors, the continued high unemployment and low manufacturing in the state will be partially offset by demand overseas and higher commodity prices, leading the committee to forecast Colorado export growth of 8% for 2011.

Colorado's exports could exceed this modest forecast if the U.S. dollar weakens and commodity prices rise higher than expected. Also, if the Canadian and Mexican economies perform better than anticipated and state exports to these NAFTA partners accelerate, Colorado's exports will rise higher in 2011. At the same time, significant downside risks remain to the committee's baseline forecast. There is a significant call for rebalancing in the global economy, with developed markets needing to strengthen private demand to support fiscal consolidation and also to boost exports to reduce trade deficits. Sovereign and banking vulnerabilities could also negatively impact the global recovery.

**VALUE OF COLORADO EXPORTS
2002–2011
(In Millions of Dollars)**

Year	Total Exports	Percentage Change
2002	$5,525.1	-9.8%
2003	6,086.9	10.2
2004	6,659.8	9.4
2005	6,773.3	1.7
2006	7,954.7	17.4
2007	7,352.2	-7.6
2008	7,668.0	4.3
2009	5,597.0	-27.0
2010[a]	6,157.0	12.0
2011[b]	7,126.4	8.0

[a]Estimate.

[b]Forecast.

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

Colorado Imports Forecast

Just as Colorado exports many products, it also imports a variety of goods from around the world.

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TOP 20 COLORADO EXPORTS 2008–2010 YTD (In Millions of Dollars)

Description	2008	2009	Aug 2010 YTD
Optic, Photo, Medical or Surgical Instruments	$1,005	$957	$687
Industrial Machinery, Including Computers	1,837	896	641
Electric Machinery; TV and Sound Equipment and Parts	1,106	778	621
Meat and Edible Meat Offal	609	545	441
Photographic or Cinematographic Goods	337	283	212
Mineral Fuel, Oil; Bitumin; Mineral Wax	293	328	178
Organic Chemicals	190	424	129
Raw Hides and Skins (No Furskins) and Leather	143	108	127
Aircraft, Spacecraft, and Parts Thereof	214	224	122
Plastics and Articles Thereof	127	111	103
Ores, Slag and Ash	300	86	100
Pharmaceutical Products	109	52	74
Aluminum and Articles Thereof	87	107	72
Articles of Iron or Steel	124	105	64
Vehicles, Except Railway or Tramway, and Parts	103	81	55
Iron and Steel	57	45	43
Printed Books, Newspapers; Manuscripts	52	48	35
Miscellaneous Chemical Products	41	38	35
Ceramic Products	44	44	33
Textile Art Nesoi; Needlecraft Sets; Worn Text Art	40	41	33
Total Top 20 Commodities	6,818	5,301	3,805
All Others	894	566	443
Total All Commodities	$7,712	$5,867	$4,248

Source: World Institute for Strategic Economic Research (WISERTrade).

This exchange of goods allows Colorado to focus its resources on the products it has a comparative advantage in—to do what it does best—while importing products from other countries that produce those goods more efficiently and at the most attractive price.

The U.S. Census Bureau recently began providing data on the imports of goods by state. Following the trend in exports, the value of goods that Colorado imports rebounded dramatically in 2010, climbing 37.5% through August, after a sharp contraction in 2009 as global trade collapsed. This increased demand for goods is a positive indicator that the state economy is recovering.

Based on 2008 and 2009 import data reported by WISERTrade, Colorado's largest import is crude oil from Canada, comprising 16% of the value of the state's imported goods in those two years. The remainder of the state's imports is made up of a large number of goods, each making up a small share of the total. The largest of these in terms of value are various electronic-related products (such as data process machines, television-related equipment, and cell phones), medicines and medical-related equipment, and medium-sized aircraft. Imports from Canada, Mexico, and China represented more than half the value of all imports in 2008 and 2009. These countries are also the largest markets for Colorado products.

Regional Outlooks and Market Opportunities for Exporters

The Americas

Latin America has not escaped the global economic crisis, but has withstood it with resilience. The region's quick rebound from the worst economic crisis in decades can be credited to stronger institutions, a better use of financial markets, and diversification of its trade structures. For large industrialized nations such as Canada, the rebound has lost momentum due to the end of fiscal stimulus programs. A World Bank report demonstrates Latin America's globalized and dynamic performance as it moves toward 5%-6% growth for 2010, while Canada is slated for 3%.

Exports to the Western Hemisphere made up approximately 38% of all Colorado exports through August 2010, a decrease of 6% from the same period the prior year. While exports to major South American nations such as Brazil, Argentina, and Chile were up, exports to Canada and Mexico fell 12% and less than 1%, respectively. A drop in aerospace and agricultural goods accounts for the decrease in exports to the NAFTA markets.

Despite the drop in exports to countries in the Americas, they are expected to rebound to these markets in the last months of 2010 and into 2011. With the upcoming World Cup and Olympics taking place in 2014 and 2016 in Brazil, many opportunities for infrastructure-related products and services are available. The clean-tech sector is receiving a lot of attention across the region, and governments are supporting products and services that can help address local environmental issues. With Colorado's leadership in clean-tech, exports in this sector should increase in the years to come. Currently, top export commodities to this region of the world include medical devices, machinery, pumps, equipment for the oil and gas sector, and agricultural goods. Looking forward, clean technology, automotive parts, mining equipment,

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AGRICULTURAL EXPORTS FROM THE STATE OF COLORADO
FISCAL YEARS 2007–2011
(In Millions of Dollars)

Product	2007	2008	2009	2010[a]	2011[b]
Live Animals and Meat, exc. Poultry	$582.4	$722.9	$558.3	$675.6	$675.6
Wheat, Feed Grains, Fodders, and Products	533.3	513.1	473.3	473.3	639.0
Other Food Products	72.9	71.5	139.9	143.5	156.6
Hides and Skins	147.9	144.2	109.4	137.8	145.5
Vegetables, Fruits and Products	80.5	99.6	102.8	112.1	118.2
Fats, Oils, and Greases	42.7	70.5	43.2	49.7	51.4
Dairy Products	25.3	29.4	26.1	35.8	33.4
Seeds, Sunflower Seed and Oil	15.2	14.5	17.8	18.3	18.3
Total	$1,500.2	$1,665.8	$1,470.8	$1,646.1	$1,838.0

[a]Estimated projections based on USDA Economic Research Service Outlook for U.S. Agricultural Trade.

[b]Forecast based on USDA Economic Research Service Outlook for U.S. Agricultural Trade.

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

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aerospace, and products in the safety/security sectors will be potentially strong export prospects.

Asia

According to the World Bank, in 2010 most countries in the Asia-Pacific region began recovering from the economic crisis in increasingly meaningful ways, enabling greater confidence in and spending by the private sector, and leading to decisions by national governments to begin cautiously ending their stimulus programs. Governments throughout the region seem to be experiencing soft landings as they simultaneously take steps to prevent destabilizing inflation and imprudent risk taking by global investors looking for yield.

After consecutive decreases in Colorado's total exports of manufactured goods to the Asia-Pacific region in 2008 (-13.2%) and 2009 (-17.0%), shipments of Colorado's manufactured exports to the region are on track to realize double-digit increases as year-to-date numbers indicated in August 2010. Given that many of Colorado's physical exports to the region are inputs for finished manufactured goods, or are used in quality control processes, this growth is likely attributable, in part, to the resurgence in manufacturing output throughout much of East Asia. However, according to the World Bank, given the recent or scheduled conclusion of several countries' economic stimulus measures, and the apparent tightening of China's monetary policies, it is estimated that the region's GDP growth rate in 2011 will decrease to 7.8%. As such, Colorado exports to Asia-Pacific will most likely climb by a double-digit rate again in 2011, but may not reach the total dollar value realized in 2007 until 2012 or later.

Several product categories have exhibited measurable rates of sales growth in the Asia-Pacific region as of August 2010 year-to-date, including electronic integrated circuits; instruments for measuring physical and chemical attributes of liquids, gases, and solids; medical, surgical, dental, and veterinary instruments; and specific types of photographic film. For these and other products, China has proven to be a relatively robust and stable market for Colorado companies. As with several other countries in the region, China recently embarked on an effort to develop its clean-tech industry in an attempt to profit from exporting clean-tech-related goods and services globally and also to address widespread environmental degradation within its borders. Assuming that China's strong growth continues, and that U.S.-China trade relations are left largely unchanged, Colorado companies will likely realize significantly greater export sales to the market in 2011 compared to the annual values seen in 2008-2010.

As of August 2010, 70.1% of Colorado's total exports to Asia-Pacific were shipped to five countries: China (26.6% of the total), Japan (14.7%), the Philippines (10.1%), South Korea (10%), and Malaysia (8.7%). According to U.S. Department of Commerce estimates, goods and services that will be in high demand by Chinese buyers in 2011 include clean-tech, clean coal technology, automotive components, higher education, and construction equipment. The U.S. government has forecast similar industry-specific demand from Japan in 2011, including bioscience, IT, aerospace, clean-tech, and cosmetics.

Europe

The economic recovery is underway in the European Union, although it is a gradual one. GDP growth is projected at 1.7% and 1.6% in 2010 and 2011, respectively, following a contraction of 4% in 2009. The IMF projects higher growth rates, driven by exports, in emerging economies, including many countries from the former Soviet Bloc. These economies are forecast to expand 3.9% in 2010 and 3.8 % in 2011 after a 6% contraction in 2009. Three aspects of European policy that need special attention include fiscal policy, which will be pressured by countries' need to reduce budget deficits after implementing stimulus packages; bank capitalization and confidence; and improving the flexibility of labor, product, and service markets.

Colorado exports to Europe totaled $983 million through August 2010, up 26% over 2009. Europe's overall percentage as a regional market for the state's exports increased to 23% in August compared to 20% in 2009. The leading markets for Colorado products in Europe in 2010 were (in rank order): the Netherlands, Germany, United Kingdom, Switzerland, and Belgium. Europe remains a strong market for Colorado exporters of medical devices and pharmaceuticals. Additional opportunities in Europe include franchising, green building products, security equipment, and aviation products.

Middle East and Africa

The economies in the Middle East and Northern Africa are rebounding on higher oil prices and strong government fiscal stimulus in infrastructure projects. The IMF forecasts growth of 4.1% and 5.1% in 2010 and 2011, respectively. Countries in that region that do not produce oil and those in Sub-Saharan Africa weathered the global recession relatively well as they are not strongly tied to global financial markets. In Sub-Saharan Africa, output is forecast to rise 5% in 2010 and 5.5% in 2011 owing to the recovery in exports, higher commodity prices, and strong domestic demand. Combined sales to the Middle East and Africa made up just over 4% of Colorado's exports.

Colorado companies sold $67 million in products to the African continent through August 2010, an increase of more than 70% over 2009. Colorado's largest African markets are Nigeria, Egypt, and the Republic of South Africa. The African continent offers opportunities for exporters of electrical power systems, industrial equipment, and civilian aircraft; it is also a strong market for Colorado agricultural commodities.

For the first eight months of 2010, exports to the Middle East fell 21%. Colorado's largest market in the region, Israel, reached $25 million in sales, down 7% over the same period in 2009. The Middle East has traditionally been a good export market for Colorado manufacturers of aircraft parts and industrial machinery. Additional opportunities in the Middle East for exporters include medical devices, water treatment, and pollution control equipment.

MAJOR DESTINATIONS FOR COLORADO EXPORTS OF MANUFACTURED GOODS, MINERALS, AND AGRICULTURAL PRODUCTS
2006–2009
(In Millions of Dollars)

Country	2006	2007	2008	2009	2009 Percentage of Total
Canada	$1,850	$1,774	$2,191	$1,772	30.0%
Mexico	1,018	949	961	583	10.0
China (Mainland)	583	488	508	439	7.0
Netherlands	180	294	404	174	3.0
Germany	370	315	283	220	4.0
Japan	399	359	336	275	5.0
Philippines	131	204	220	150	3.0
Korea, Republic of	239	181	174	122	2.0
United Kingdom	221	253	231	141	2.0
Malaysia	242	206	185	179	3.0
Switzerland	147	137	157	159	3.0
Taiwan	706	328	130	108	2.0
Australia	217	157	162	128	2.0
Belgium	84	133	179	145	2.0
Hong Kong	216	188	123	121	2.0
Total Top 15 Countries	6,603	5,966	6,244	4,716	80.0
All Other Countries	1,351	1,386	1,468	1,151	20.0
Total All Countries	$7,954	$7,352	$7,712	$5,867	100.0%

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

Agricultural Exports

Colorado's 2009 agricultural exports of $1.5 billion ended down 12% from record-high exports in 2008. Colorado's drop in exports was led by the global slide in demand for meat products (U.S. total exports down 14%) and a lower wheat harvest in Colorado.

Colorado's 2010 agricultural exports are projected to rebound 12%, to $1.7 billion. Globally, beef exports are projected up 21% for the United States

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and Colorado. Colorado's meat and live animal exports are anticipated to also increase 21%, to $675.6 million. Colorado hide exports are projected to climb, up 26%, to $137.8 million. Wheat and grains exports are increasing in volume but lower global grain prices will hold Colorado's grain exports to 2009 export values of $473.3 million.

Exports of Colorado beef in the first half of 2010 rose 27%, and top markets include Canada, Japan, South Korea, Mexico, Russia, and Vietnam. All of these, except Mexico, experienced significant increases. In the first six months of 2010, Russia became Colorado's fifth-largest beef market, increasing from $90,000 to more than $19 million. Korean imports climbed $17 million and Japan, $13 million.

Forecasts for 2011 predict agricultural exports will rise for the state and the nation. While beef is forecast to remain steady, at $675.6 million for Colorado, hides will grow 6%. Colorado's major increase will be from grains, up 35% in value and 19% in volume. These gains will be largely the result of higher world market prices resulting from sharply reduced competition due to crop failures caused by drought in Russia, Kazakhstan, and the Ukraine.

COLORADO'S TOP AGRICULTURAL EXPORTS REGIONAL DESTINATIONS 2007–2009 (In Millions of Dollars)

Region	Exports 2007	2008	2009
Canada	$248.4	$309.3	$287.9
Mexico	376.1	387.4	222.1
Japan	153.6	203.2	204.2
Korea	43.1	92.5	70.0
China	52.7	73.0	66.0
Taiwan	77.0	53.1	49.3
EU	10.9	10.9	12.5

Source: World Institute for Strategic Economic Research (WISERTrade).

Select Service Sectors

International Visitors to Colorado

The U.S. Department of Commerce anticipates growth in the number of international visitors as the nation rebounds from the economic downturn. In 2009, the United States welcomed 55.0 million visitors, a 5% decline compared to visitor arrivals in the prior year. Foreign visitor volume is expected to climb by 6% in 2010, which will completely offset the decline of 2009. Arrivals of foreign visitors are forecasted to steadily increase by 6%-9% annually through 2015. Colorado is projected to account for approximately 1.5% of international visitors to the United States in 2011 (excluding Canada and Mexico). Traveler spending is also expected to improve as spending typically moves in the same direction as visitor volume.

The forecast for 2010-2015 indicates that the record for total arrivals will be broken in each of the five years of the forecast. International arrivals will reach almost 83 million, an increase of 51% from 2009 through 2015.

Forecast Highlights by Region

North America—The top two markets generating visitors to the United States—Canada and Mexico—are forecasted to increase 10% and 9%, respectively, in 2010 and to climb 47% and 49%, respectively, from 2009 to 2015. Canada and Mexico will both set new records annually beginning in 2010.

Europe—The number of visitors from Europe is expected to rise 1% in 2010, followed by additional slow growth for the next three years. By 2015 arrivals from Europe will be 25% higher than the 2009 total, largely due to anticipated strong impact of the Travel Promotion Act of 2009 marketing beginning in 2014.

Asia-Pacific—Asia is projected to generate a visitor increase of 19% in 2010, followed by smaller but steady annual increases over the next several years for a total 97% increase from 2009 to 2015. The largest Asian market and second-largest overseas market, Japan, is forecast to gain 13% in 2010 and post much slower growth through 2015. Very high growth rates are expected for China (40%), South Korea (35%), and India (15%). Similarly, these three countries are expected to have among the largest total growth rates of any country over the 2009-2015 period. China is anticipated to surge a total of 346% through 2015, even higher than South Korea (171%) and India (123%). As a region, Asia is expected to increase 101%, and Oceania is expected to post 71% growth in visitors through 2015. Australia dominates the Oceania region, gaining 19% in 2010 and 78% between 2009 and 2015.

Trends in International Students in Colorado

International education is often overlooked as a contributor to the state's economy, both as an export industry and as a crucial component of building a globally competitive workforce. Colorado's higher education institutions continue to succeed in this arena and are developing plans to increase their international education participation even more in years to come.

Colorado higher education institutions enrolled 6,980 international students in 2009-10, the most recent year for which complete data are available. This represents a gain of 1.8% over the previous year. Colorado's international student population ranked 29th in the nation, down from 26th last year. While Colorado's increase was more than double the national rate in 2008-09, the state's increase in international students was one point lower than the national total (3%) in 2009-10.

The top home countries of international students studying in Colorado are China, Saudi Arabia, and India. These countries now make up more than two-fifths of all international students in Colorado.

The expenditure of international students in Colorado was estimated at $202 million, an increase of $15 million, or 8%, compared to the previous year. The majority of student expenses, which are paid by parents and home-country governments, represent an important service export for Colorado.

In the 2009-10 school year, the University of Colorado at Boulder once again enrolled the highest number of international students in the state, 1,360 (up 1.4%). Colorado State University recorded 1,127 international students, or 14.5%, over the previous year.

Students enrolled in Colorado institutions increased their participation in academic study abroad programs in 2009. A total of 4,463 Colorado students studied abroad for a semester or longer period, an increase of 4% compared to the previous year. ✜

INTERNATIONAL STUDENT ENROLLMENT AT SELECT COLORADO INSTITUTIONS

Institution	Number of Students 2007-08	Number of Students 2008-09	Number of Students 2009-10	Percentage Change
University of Colorado at Boulder	1,264	1,341	1,360	1.4%
Colorado State University	1,046	984	1,127	14.5
University of Denver	870	919	1,081	17.6
University of Colorado at Denver	635	729	734	0.7
Colorado School of Mines	423	511	523	2.3

Sources: Institute of International Education and Colorado School of Mines.

Summary

From 2000 through 2010, Colorado experienced two recessions with far-reaching results—the net employment *loss* was 2,900 jobs over the period. Despite six growth years, with the number of new jobs varying from 13,100 to 53,100, the four years with employment declines ranged from -31,400 to -104,700. While employment losses were status quo in every state in 2009—and 80% lost jobs the following year—Colorado lagged the nation in creating new jobs.

The Colorado Business Economic Outlook committees estimated 2010 to be a net employment loss for the state of 34,700, or 1.5%, despite adding 83,000 to the state's population. The consensus of the 2011 estimating committees is that Colorado will experience modest employment growth of 10,100 new jobs—the first net employment gain since 2008.

The structural shift away from goods-producing sectors was profound from 2000 through 2010. Goods-producing sectors lost a net 102,700 jobs, compared the gain of 99,800 jobs in services-producing sectors. In 2011, this trend is expected to continue, with goods declining by 5,600 jobs and services increasing by 15,700 jobs.

Mining and Logging, Construction, and Manufacturing—all goods-producing sectors—are particularly susceptible to economic cycles. Mining and Logging is impacted both by consumption and speculation on commodities, and is anticipated to add 2,000 jobs in 2011. Foreclosures, financing, and aggregate employment are all weighing heavily on the Construction industry, which is expected to decline by 7,000 jobs in 2011. Losses in Manufacturing will slow to 600 positions, with a slight gain of 100 in Nondurable Goods and a loss of 700 in Durable Goods.

The 2011 employment outlook for the services sectors is mixed. Professional and Business Services, typically a bellwether for state employment, will return to growth in 2011 of about 7,000 jobs, building on gains in the Professional, Scientific, and Technical subsectors. Trade, Transportation, and Utilities will show marginal gains after Retail and Wholesale Trade begin to rebound, adding 3,500 jobs in 2011.

The Education and Health Services Supersector will continue its march forward, climbing by

ESTIMATED NET JOBS CREATED IN NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT SECTORS 2000–2011 (In Thousands)

Sector	2000-2010[a]	2009[a]	2010[b]	2011[c]
Mining and Logging	11.8	-4.3	-0.2	2.0
Construction	-50.1	-30.5	-17.8	-7.0
Manufacturing	-64.4	-14.5	-5.1	-0.6
Total Goods Producing	*-102.7*	*-49.3*	*-23.1*	*-5.6*
Trade, Transportation, and Utilities	-22.4	-25.5	-7.3	3.5
Information	-37.1	-2.1	-3.4	-1.4
Financial Activities	-3.0	-7.6	-4.0	0.7
Professional and Business Services	9.3	-21.7	-2.1	7.0
Education and Health Services	71.7	6.7	7.3	3.3
Leisure and Hospitality	13.6	-10.5	-2.8	3.0
Other Services	12.2	-1.1	-1.3	1.4
Government	55.5	6.4	2.0	-1.8
Total Services Producing	*99.8*	*-55.4*	*-11.6*	*15.7*
Total Jobs Created	-2.9	-104.7	-34.7	10.1

[a]Revised.

[b]Estimated.

[c]Forecast.

Sources: Colorado Department of Labor and Employment and Colorado Business Economic Outlook Committees.

3,300 positions, with Heathcare stemming losses incurred in Private Education. Leisure and Hospitality will add 3,000 jobs in 2011 as business travel and conventions increase and as consumers gain confidence and increase leisure travel. Other Services will rise by 1,400 jobs as households and companies step up spending on Repair and Maintenance Services. Financial Activities will add 700 jobs, with marginal increases in both the Finance and Insurance Sector, and the Real Estate and Rental and Leasing Sector.

Government and Information are the two services-producing sectors that are projected to shed jobs in 2011. Government typically lags the economy in cutting jobs, but the employment prospect is especially grim in 2011 as the financial crisis catches up with local government and the calls to reel in the federal government swell. Information will continue shedding jobs as Publishing restructures and adapts to changing media.

The following observations summarize the thoughts of committee members for 2011 and beyond:

National and International

- The likelihood of a double-dip recession is low.
- On a trade-weighted basis, the dollar's decline will likely benefit export.
- The U.S. expansion will remain sluggish in 2011.
- Stimulus spending impacts have peaked, and power shifts in Congress will result in reduced spending.
- International debt crisis and austerity measures will lead to global economic unease.
- Business and consumer confidence will continue to improve.
- Businesses will increase investment due to renewed confidence and wealth of cash holdings.
- Banks will continue tight lending practices, negatively impacting small businesses and households.
- Consumers continue to deleverage and increase savings, despite record low interest rates.
- In the short term, inflation is expected to remain low, and the Fed will continue quantitative easing to stimulate the economy.
- High unemployment levels in all states will have significant long-term economic and social impacts.

Colorado

- Colorado lagged the U.S. recovery in 2010, but will pick up growth in 2011.
- Employment gains derived from renewable energy will continue to be offset by the impact of pricing and policy decisions associated with traditional energy sources.
- Rebounding commodity prices will benefit farmers and ranchers, as well as the extraction and energy sectors.
- Continued population growth and renewed employment growth means Colorado housing and commercial markets will remain an attractive long-term investment.
- State and local governments will experience further deterioration in their revenue sources, leading to employment and education cuts.
- Many Coloradans are underwater in their homes, decreasing employment mobility.
- Colorado will continue to be a popular place to live, with projected population growth above 1.5%.

The effects of the national recession will be felt well beyond 2010. Colorado remains home to extraordinary thought leaders and entrepreneurs, high-tech companies and abundant natural resources, eager citizens and world-class recreation. While the committees expect only marginal employment improvement in 2011, the foundation is set and the conditions are primed for Colorado to accelerate employment growth for the next decade. ✜

Around the Region

The neighboring states of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, Utah, and Wyoming make up the western region. This review compares economic activity, as measured by total employment, per capita income, and real GDP, in this region and in some of the top metropolitan statistical areas (MSAs) in these states.

Over the past decade (from 2000 to 2009), Wyoming, Utah, Montana, and New Mexico led employment growth with annualized rates of 2%, 1.1%, 1%, and 1%, respectively. Colorado lagged behind these states, with only 0.2% growth annually. Regarding MSAs, Grand Junction led with 2.3% growth, while Cheyenne and Greeley placed second and third with 1.7% and 1.6%, respectively.

However, when employment growth is analyzed more recently (2008 and 2009), staggering losses were observed. Arizona and Utah experienced the greatest percentage declines in employment, 7.3% and 4.8%, respectively. Nebraska outperformed the other regional states, with a decline of 2.1%. State GDP grew in only three of the eight regional states from 2008 to 2009, led by Wyoming at 5.4%. Arizona's economy shrunk by 3.9%.

In 2009, Colorado's $46,861 average annual earnings surpass all others in the region, including Arizona, at $42,832. Boulder and Denver have maintained their place with above average annual pay levels exceeding $50,000. This is far above the next-largest MSAs in the region, which fall within the $40,000-$45,000 range. ✜

REGIONAL STATES

States	2009 Total Employees (In Thousands)	Employment CAGR 2000-2009	Employment Percentage Change 2008-09	2009 Unemployment Rate	2009 Average Annual Pay	2009 Real GDP (Millions of Chained 2005 Dollars)	GDP Percentage Change 2008-2009
Colorado	2,245.6	0.2%	-4.5%	7.7%	$46,861	$231,890	-0.9%
Arizona	2,426.4	0.9	-7.3	9.1	42,832	232,915	-3.9
Kansas	1,344.6	0.0	-3.3	6.7	38,154	114,615	-1.1
Montana	429.3	1.0	-3.7	6.2	33,762	32,091	0.0
Nebraska	944.4	0.4	-2.1	4.6	36,644	79,033	0.3
New Mexico	812.5	1.0	-4.1	7.2	38,529	68,441	-2.2
Utah	1,191.8	1.1	-4.8	6.6	38,614	102,168	-0.9
Wyoming	286.4	2.0	-4.0	6.4	40,709	32,943	5.4

Source: U.S. Census Bureau, Bureau of Economic Analysis, Bureau of Labor Statistics (CES and QCEW data).

COLORADO METROPOLITAN STATISTICAL AREAS (MSA)

MSAs	2009 Total Employees (In Thousands)	Employment CAGR 2000-2009	Employment Percentage Change 2008-09	2009 Unemployment Rate	2009 Average Annual Pay	2008 Real GDP (Millions of Chained 2001 Dollars)[a]	GDP Percentage Change 2007-2008
Boulder	159.7	-0.3%	-4.8%	6.4%	$52,433	$16,533	3.2%
Colorado Springs	248.4	-0.1	-4.0	8.3	41,885	20,178	3.2
Denver-Aurora-Broomfield	1,198.5	-0.1	-4.4	7.9	51,938	125,448	2.0
Fort Collins-Loveland	133.4	0.9	-3.1	6.6	40,251	9,685	4.2
Grand Junction	61.7	2.3	-6.4	8.8	38,450	4,160	12.3
Greeley	78.8	1.6	-4.9	8.7	37,656	5,625	1.9
Pueblo	57.4	0.4	-2.4	8.7	34,889	3,150	3.6

[a]MSA GDP most current data is 2008.

Source: U.S. Census Bureau, Bureau of Economic Analysis, Bureau of Labor Statistics (CES and QCEW data).

REGIONAL METROPOLITAN STATISTICAL AREAS (MSA)

MSAs	2009 Total Employees (In Thousands)	Employment CAGR 2000-2009	Employment Percentage Change 2008-09	2009 Unemployment Rate	2009 Average Annual Pay	2008 Real GDP (Millions of Chained 2001 Dollars)[a]	GDP Percentage Change 2007-2008
Albuquerque	379.1	0.7%	-4.0%	7.4%	$40,301	$32,111	2.2%
Cheyenne	44.1	1.7	-2.4	6.5	38,378	3,296	3.5
Kansas City	430.5	0.4	-3.5	8.6	44,331	86,312	1.3
Lincoln	171.0	0.5	-1.9	4.3	36,281	11,233	1.7
Phoenix-Mesa-Glendale	1,719.6	1.0	-7.9	8.5	44,838	162,749	-1.1
Salt Lake City	610.8	0.9	-4.7	6.4	42,613	51,827	0.7
Tucson	361.9	0.5	-5.1	8.3	40,071	26,594	0.7
Wichita	292.2	-0.1	-5.1	8.1	40,138	22,942	2.7

[a]MSA GDP most current data is 2008.

Around the State

Boulder County

The Boulder County economy is showing signs of recovery from the recession and continues to outperform the state and national economy in many areas.

The county has many assets that help position it for economic growth, including the main campus of the University of Colorado, several major federal research facilities, a high concentration of entrepreneurial activity and advanced technology companies, and a well-educated and highly skilled workforce.

The area continues to receive national recognition for its lifestyle and business climate. In 2010, Boulder was:

- ranked fourth on the *Kiplinger Personal Finance* list of 10 "Best Cities for the Next Decade,"
- named one of the nation's best places for high tech startups by *BusinessWeek,*
- recognized as one of the top cities for business and careers by *Forbes*, and
- named the top city for well-being and quality of life in the national Gallup-Healthways Well Being Index.

Population, Employment, and Income

Boulder County continues to experience steady population growth, below-average unemployment, and above-average employment growth and income. An estimated 302,162 people resided in Boulder County in 2009. Population growth in the county has remained fairly constant from 2004 to 2009, increasing an average of 1.1% annually. Boulder, Longmont, and Lafayette, the county's three largest cities, experienced the most growth between 2008 and 2009.

Employment in the county is slowly showing improvement. Year-over-year comparisons show total nonfarm employment rose by 0.5% between September 2009 and 2010 after decreasing 5.2% between September 2008 and 2009. In September 2010, the Boulder County nonseasonally adjusted unemployment rate was 6.2% compared to state unemployment of 8% and a national rate of 9.2%.

A high concentration of jobs in sectors that pay higher than average wages, including the Information industry and the Professional, Scientific, and Technical Services industry, contribute to above-average incomes for Boulder County residents. According to the American Community Survey, the median household income for the county in 2009 was $63,431 compared to the state median of $55,430 and national median of $50,221 (inflation-adjusted dollars).

Real Estate, Housing, and Construction

The office vacancy rate for the Boulder-Longmont market showed improvement, falling from 11.8% in Q2 2009 to 10.7% in Q2 2010, according to the Frederick Ross Company. The industrial vacancy rate rose slightly, from 13.4% to 13.5%, during the same period. The City of Longmont had higher vacancy rates (Q2 2010 office—17.1%, warehouse—17.8%, R&D/flex—25.8%) than the City of Boulder (Q2 2010 office—10.1%, warehouse—8.2%, R&D/flex—9.8%).

Residential real estate activity picked up during 2010. The number of single-family homes sold in Boulder County for the 12 months ending in September 2010 was 11% higher than the same period in 2009. The number of single-family homes sold in the city of Boulder rose 19.3%, and the median sales price gained 1%. By comparison, the number of single-family homes sold in the city of Longmont increased 9%, and the median price rose by 3%. The city of Superior saw the greatest increase in median sales price (10.5%) and the largest decline in number of homes sold (14.4%).

After holding steady through the recession and outperforming state and national averages, home values in the county have started to decrease slightly. The Federal Housing Finance Agency house price index for Boulder County fell by 1.9% from midyear 2009 to 2010. During the same period, the house price index for Colorado fell by 0.3%, and the national index decreased by 1.6%.

The number of nonresidential building starts in Boulder County from January through September 2010 increased 6.5% over the same period in 2009, while the value of those starts dropped 1.8%. In the first nine months of 2010, residential building starts in Boulder County climbed 31.4% compared to the same period in 2009 while valuation fell by 2%.

Financial Services and Investment

Boulder County has 31 FDIC-insured financial institutions, with 115 offices and $6.2 billion in deposits, representing 6.8% of the state total. From midyear 2009 to midyear 2010, deposits in Boulder County's banks rose $202 million, or 3.3%.

The high concentration of advanced technology and entrepreneurial activity in the area has continued to help fuel venture capital investment in Boulder County companies. According to the PwC/NVCA MoneyTree™ Report, $78 million of VC funding was received by Boulder County companies during the first three quarters of 2010, representing 40.1% of the state total.

Retail Sales

Retail sales activity in Boulder County is showing positive signs and is expected to continue to increase as consumer confidence improves.

Retail activity in Boulder County increased in the first five months of 2010, totaling $64 million, or 2.2% higher than in the January through May 2009 period. In contrast, retail sales for the same period in 2009 were down $204 million (6.5%) from 2008 levels. Retail sales for Colorado rose by 3% during the first five months of 2010 compared to the same period in 2009. From January through May 2009, the state's retail sales were down 13.3% from 2008 levels.

Key Clusters

Boulder County has the facilities, programs, suppliers, and workforce that enable the local economy to benefit from continued growth in several key industry clusters, including aerospace, biotechnology, clean tech, information, natural and organic products, outdoor recreation, and tourism.

Aerospace

Several aerospace companies are headquartered in Boulder County including Ball Aerospace and DigitalGlobe, and the area has a high concentration of aerospace employment. Several federally funded labs in the area conduct space research, including the Laboratory for Atmospheric and Space Physics (LASP), the National Oceanic and Atmospheric Administration (NOAA), and the University Corporation for Atmospheric Research (UCAR). Nineteen astronauts are graduates of the University of Colorado at Boulder. The university, a member of the Universities Space Research Program, offers nationally recognized aerospace academic programs and receives major funding from NASA. Boulder-based eSpace: The Center for Space Entrepreneurship, a joint venture of the University of Colorado and Sierra Nevada's SpaceDev, assists in creating new aerospace companies.

Biotechnology

Boulder County has a very high concentration of companies and employment in the biotechnology, pharmaceuticals, and medical devices industry clusters. Major employers include Covidien, Amgen, Roche, GlobeImmune, and Array BioPharma. The University of Colorado at Boulder has a distinguished record in biotechnology research that has attracted major research funding and generated numerous startups. One-third of the 49 biotechnology companies established in Colorado from 2006 to 2009 are located in the county, and the area is expected to play a key role in the growth of biotechnology in the state.

Construction continues on the Jennie Smoly Caruthers Biotechnology Building on the east campus of the University of Colorado at Boulder, a world-class research facility that will be home to the Colorado Initiative in Molecular Biotechnology (CIMB) headed by Nobel laureate Dr. Tom Cech. The building will house 60 senior faculty researchers and more than 500 research and support staff spanning eight departments. Phase I of the $195 million 261,800-square-foot building is expected to be completed in 2011.

Clean Tech

Boulder County has a high concentration of clean-tech companies and employment. Employers include GE Energy Control Solutions, Tendril Networks, and Siemens. Continued growth in the industry is supported by the area's federal labs, the University of Colorado, planned development of ConocoPhillips' Corporate Learning Center, and the Global Technology Center focusing on renewable energy.

Information Technology

Boulder County has a long history of involvement in the information technology cluster and a very high concentration of employment in software, data storage, and web-based services. Major employers include IBM, InfoPrint Solutions, Seagate, Intrado, Google, HP, Microsoft, and Wall Street on Demand. A number of successful companies got their start in Boulder, including Rally Software, Tendril Networks, and Webroot. The

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Boulder area is home to Tech Stars, a highly successful mentorship and seed-funding program, and Boulder continues to be one of the hottest markets for tech startups.

Natural and Organic Products

Many leaders in the natural and organic products cluster got their start in Boulder, and the area is expected to play an important role in the continued development of the industry. Numerous natural and organic products companies in the area are growing and expanding, including Rudi's Organic Bakery, Justin's Nut Butter, Eco-Products, Whole Foods, Sunflower Markets, Evol Burritos, and Pangea Organics. New cluster companies continue to be launched in the Boulder area. The industry is supported by a number of entities with specialized programs, among those Naturally Boulder, the University of Colorado, and the Boulder Innovation Center.

Outdoor Recreation

Boulder is widely recognized as a center for the growing outdoor recreation industry and is home to the Outdoor Industry Association and the International Mountain Biking Association. The area has a high concentration of manufacturers, distributors, retailers, event and marketing, media companies, and medical and other services providers focused on the industry. Local companies include Spyder Active Sports, GoLite, Newton Running, and Sea to Summit. Interest and participation in outdoor recreation has remained strong during the recession, and the industry is expected to grow as consumer confidence and spending rebounds.

Tourism

The Boulder area continues to be a popular destination, recognized for its scenic beauty, recreational and cultural amenities, and shopping and dining choices. In 2010, *Bon Appetit* named Boulder America's Foodiest Small Town.

Tourism in Boulder County is showing signs of improvement. Year-over-year comparisons show hotel occupancy rose 11.8%, the average room rate increased 4.6%, and revenue per available room was up 17% for September 2010 over 2009. In contrast, year-to-year comparisons for September 2008 to 2009 show occupancy fell 8%, average daily room rates slid 10.3%, and revenue per available room declined 17.6%. The industry is expected to continue its recovery as the economy improves.

La Plata County

The Office of Economic Analysis and Business Research in the School of Business Administration at Fort Lewis College measures and reports on economic activity in La Plata County. The La Plata County economy is highly seasonal, related to the impact of tourism. Although winter tourism, associated with winter sports, is significant, most La Plata County tourism occurs during the summer. This summer concentration causes an annual Q3 seasonal upswing in economic indicators such as retail sales and employment. However, the majority of the economy is service-based tourism, and there was a dampening of these seasonal fluctuations even before the recession. La Plata County is the home of Fort Lewis College, which provides both long- and short-term (seasonal) stability to the local economy. Students attend classes and live in the county from September through April, when tourist activity is relatively low. However, the student body has been steadily shrinking, from a high of approximately 4,300 in 2002 to about 3,864 in 2010. The effect of this is a decline in La Plata income and reduced job creation because of lower out-of-town student spending.

Another concern is the decline in county revenues generated through natural gas extraction. Gas prices are down considerably from their highs in 2008, and it is projected that county gas tax revenues will drop to 43% of total county revenues in 2011 (compared to 62% in 2004). The county reduced its budget to $66 million in 2011—a decrease of $4 million, or 6%, compared to last year.

Employment and Unemployment

The nonseasonally adjusted unemployment rate in La Plata County was 6.2% in September 2010, compared to 8% in Colorado, and 9.2% nationally. In September 2010, the La Plata County labor force was 29,952, or about 3.6% below the same time 2009, even as county population is growing, albeit at a declining rate. The number of employed workers totaled 28,101 in October, 4.7% below 2009.

Employment patterns within La Plata County are somewhat different from those found in the national and state economies. Manufacturing employment is more concentrated in the nation and in Colorado compared to La Plata County.

Income

As with the rest of the nation, total income in La Plata County fell from Q2 2009 to Q1 2010 (the most recent available data). In Q1 2010, total income in La Plata County was $213.6 million, down 6.4% from Q1 2009. Over the same period, Colorado's total income grew 3.9%. This is an aberration as La Plata County's historical income growth rate is a quarterly average of 1.2% compared to Colorado's 0.5%. This is borne out in the 2009 average income data. La Plata's average income was $38,587 in 2009, or about 82% of the state average. The county's average income was 69% of the state average in 2001.

Sector income is also changing. Construction as a share of total private income was 7.7% in 2009, a decline from the peak of 10.1% recorded 2006. Services have been rising over the same period, accounting for about 45% of total income in 2009. Mining and Agriculture are just under 5% of total income, down from a high of 5.5% in 2007. However, the decline in local taxes are contributing to losses in the public sector, particularly at the county and city level. Overall, La Plata County is diversifying its production, which helps buffer the local economy against idiosyncratic sector shocks.

Tourism

Although the La Plata economy is becoming more diversified, tourism continues to play a large role. Retail, accommodation, and food combined account for a considerable percentage of private income. The diversification of the local economy has reduced Leisure and Hospitality's share of total area income, falling from 6.9% in 2001 to 5.3% in 2009. Part of this is attributable to the recession; however, this share has been dropping steadily over the past 10 years, implying less reliance on this sector in the county economy.

Tourism indicators are somewhat mixed. Although total passenger traffic is up 12.4% year-to-date through October, visits on the Durango-Silverton train are down 2.9% through July, as are visits to Mesa Verde National Park, down 0.2% through September. (The park is in Montezuma County; however, many visitors stay in La Plata County.) On the other hand, sales taxes were up 21% from May 2009 to May 2010.

Real Estate

Like many Colorado resort communities, La Plata County's economy is closely tied to real estate. The median home price in Durango is $325,000—a drop of early 30% from a high of $455,000 reached in 2007. With sales volumes decreasing and inventories rising, 2011 will be critical for local real estate.

Southwest Colorado Price Index

Since late 2008, the Office of Economic Analysis and Business Research at Fort Lewis College and the Region 9 Economic Development District of Southwest Colorado, Inc. (Region 9 EDD) have combined resources to construct and maintain a consumer price index for Southwest Colorado, Southwest Colorado Price Index (SCPI). The index allows for the comparison of price changes in the southwest region of Colorado with those in Denver and the nation. Since Q4 2008, prices have been collected on nearly 60 goods and services in the region. The main categories include groceries, housing, utilities, transportation, healthcare, and miscellaneous.

The SCPI indicates the cost of living in the region has fallen 3.6% since late 2008 versus a drop of 1.5% in the CPI for the nation and Denver prices contracting 1.7%. The region's grocery tab has decreased 7%, housing rents have climbed 0.4%, utilities have fallen 28%, transportation expenses have declined 18%, healthcare costs have increased 6%, while miscellaneous goods and services have increased 4%.

Recent and Future Trends

Unfortunately, many of the projections made in 2009 proved to be correct. The economy did continue to weaken over 2010, and there is no reason to believe that the current trends will reverse course. Moreover, given the county's propensity to economically lag the rest of the country, slackness

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in the regional economy may continue, even if the rest of the nation strengthens. The local economy will most likely remain weak—perhaps weaker than the state and nation.

Falling demand for construction and a weak real estate industry will continue to hamper the economy's ability for robust growth. Although unemployment should stay below that of the nation and state, it will continue to rise. An increase in the level of underemployment, which is not unlike other resort communities that rely on seasonal construction jobs and low value-added service jobs, is also projected.

Given the rise in the importance of building and natural gas in the La Plata County macroeconomy, it is expected that the slide in the employment and the slowing of income growth will continue in 2011 next year as these two sectors operate well below their peak. The relatively high foreclosure rate and the large inventory of homes for sale will remain, particularly given most of the growth in the housing market has been fueled by nonresidents. Bureau research has found a close relationship between housing markets in San Diego and Durango with a one year lag, which translates into real estate remaining flat in 2011 and perhaps 2012.

A decline in gas revenues will impact local county public expenditures. If gas prices remain at current values, adjusted for inflation, further belt-tightening is likely.

Mesa County

As expected, economic recovery has been slow for Mesa County. Both the total labor force and available jobs have decreased, unemployment has held steady at about 9%, and area wages have slightly declined. It is not all bad news, however. The energy industry (a critical component of the local economy) is healthy and balanced, and the real estate market is slowly picking up pace both in terms of home values and units sold. The holiday shopping season is likely to increase retail sales, and hence sales tax revenue to the City of Grand Junction. Tourism will continue to bring visitors to the Western Slope, and the addition of new direct flights to Houston will provide growth opportunities. Moreover, the Grand Junction area nurtures and attracts innovation and entrepreneurship—the key to economic sustainability.

Employment

The Grand Junction area labor force has slightly decreased throughout 2010. The current labor force is 78,781, a 2.5% drop from the total labor force of 80,833 this time in 2009. According to the Mesa County Workforce Center, the ratio of applicants to open jobs is 49:1. This is an improvement from Q2 2010 when the ratio was 54:1. The unemployment rate hovered around 9% for most of 2010. The highest unemployment rate for Mesa County came in March 2010, at 10.3%. While Mesa's September rate of 9% is higher than the state's (8%), it remains lower than the national unemployment rate of 9.2%, nonseasonally adjusted. Perhaps the largest drop in employment and number of available jobs came from the Energy and Construction industries, as well as those associated services. However, the Manufacturing Sector experienced a small uptick.

Wages

Average wages showed a slight decline in Mesa County in 2009, decreasing 2% from 2008, to $38,449. Figures through Q1 2010 show average wages contracted even further.

GDP

As economists projected, the Grand Junction area's GDP in 2008 was the fastest-growing of any metro area due to the growth of Mining and Logging. In fact, the area's GDP grew 12.3%, from $4.5 billion in 2007 to $5.2 billion in 2008 (Bureau of Economic Analysis). While 2010 figures are not available for Mesa GDP, the Mining and Logging industries have slowed, surely affecting the area's GDP.

Energy

The energy industry, particularly exploration and production of oil and gas, plays a very large role in the local economy. October 2008 saw a peak of 102 oil rigs operating in the Piceance Basin. Within approximately 90 days, the number of rigs plummeted to 27. From that point on, rigs have been added back slowly to the current count of 33. During the dramatic decline in rigs, the industry fleet was improved with newer "high-efficiency" rigs. The net effect of the new rigs is a more efficient operation. In fact, the local industry is drilling 70% as many wells with only one-third of the original rig count. Experts believe that the industry is operating at a very healthy level, with a balance between operators and their suppliers. According to Clover Energy Services, it is further expected that the rig count will remain relatively flat for the next few years.

Real Estate

Throughout the past two years, Grand Junction area home prices have decreased from a high in Q2 2008 to the Q3 2010 average home price of $192,500, according to Advanced Title Company. This price, however, represents a 4% increase from Q2 2010. In fact, this gain is the first time the median price has increased in nine quarters. The Grand Junction area has seen significant increases in foreclosure filings, which is the primary reason for the decline in home values. In Q3 2010, foreclosure filings in Mesa County totaled 1,127, compared to 1,128 in 2009, according to the Mesa County Public Trustee.

Taxes

Grand Junction's sales and use tax revenues have climbed steadily from a low point in October 2009. Overall, collections are down 6.8% from 2009. As of September 2010, the City of Grand Junction has collected nearly $34 million in revenue from sales and use tax. A bright spot was a significant rebound, 17%, in sales tax collections in late summer 2010, partially attributable to the opening of Cabela's, Inc.'s first Colorado store.

Tourism

Like most areas in Colorado, tourism has a large impact on the local economy. Unfortunately, in 2010 lodging tax and hotel occupancy rates once again decreased. According to the Grand Junction Visitor and Convention Bureau, lodging tax collections are down 6.9% from 2009. Hotel occupancy rates also fell. The current rate of 58.7% is a 7% decrease from 2009 (Rocky Mountain Lodging Report). The bureau also reports the average daily rate for a hotel room in Mesa County dropped $1.47, to $83.32.

Air Travel

Commercial passenger enplanements at Grand Junction Regional Airport decreased nearly 11% from year-to-date 2009 relative to the same period in 2010—156,948 and 140,104, respectively. Although traffic fell 14% in August 2010 from August 2009, it remained higher compared to July 2010. With the news that a new nonstop from Grand Junction to Houston will soon be online, it is expected that enplanement figures will increase.

Summary

The Grand Junction MSA's economy has experienced its share of ups and downs as we all cope with the global recession. The area was late to enter the recession, and by some indications it appears the rebound will likely take time and the overall economic recovery will be slow. Many economists believe the recovery will be "jobless," and therefore the area's unemployment figures are expected to remain around 9% for 2010. The region's GDP will also be slow to grow, while large projects have been placed on hold or cancelled altogether. As well, national commodity prices have affected the local economy. That said, it is unlikely the Grand Junction area economy will fully rebound until commodity prices increase. However, even in uncertain economic times, opportunities for future growth remain.

Northern Colorado

Some good economic news is coming out of Northern Colorado—the region has finally stopped bleeding jobs.

Since the pre-recession employment peak in September 2007, Larimer and Weld counties combined lost approximately 9,700 jobs (4.3%). Although Northern Colorado was able to stave off the downturn for nearly a year, it eventually hit with a vengeance—between Q4 2008 and Q4 2009 the region's job losses totaled more than 10,000.

Like the national economy, however, the region seems to have stabilized. The latest estimates from the Current Employment Survey indicate that the region's three-month average job total in September was only 200 less than 12 months earlier. However, this stability is fragile. Just four months earlier the region's annual three-month average job total was down about 3,500. It is premature to declare that the local job market has turned around in any meaningful way.

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The recession's path of destruction was widespread. Like their national counterparts, the Construction and Manufacturing industries were hard hit. Yet other, more traditionally stable sectors were also affected, with notable job losses in Professional and Business Services and Retail Trade. Indeed, Healthcare, Government, and Education were about the only sectors that avoided significant job losses.

In 2011 and beyond, the region's greatest economic challenge will be climbing out of a very deep and very wide jobs hole.

Although expected growth in the U.S. economy should help, the region's near-term outlook remains muted. Part of this is due to the relative importance of government employment in the region, especially in Larimer County. With national, state, and local governments each experiencing substantial revenue shortfalls, historic economic drivers, such as Colorado State University, the University of Northern Colorado, and a variety of federal research agencies, are unlikely to expand in significant ways.

A few sectors do offer seeds of optimism. Healthcare employment is expected to continue its steady, if unspectacular growth, as the federal government continues to implement the Affordable Care Act. Among the provisions likely to add jobs are a host of newly free preventative care services (e.g., wellness visits) for seniors covered by Medicare.

Clean energy manufacturing remains a bright spot. Despite tight credit markets that are affecting energy capital expansion projects nationwide, Vestas and Abound Solar continue to grow. Vestas has reported a steady stream of new projects and broadened its Colorado-based operations by adding a research facility in Louisville. Abound was recently awarded a $400 million, seven-year loan guarantee from the U.S. Department of Energy to help expand its manufacturing capabilities in Indiana and Colorado. Both companies are also building local supply chains, which creates jobs in supporting companies.

Finally, the retail sector seems to have turned the corner. After two years of decline, the region's major cities have reported increases in year-to-date sales tax revenues, although collections remain below 2007 levels. Retail employment has also stabilized.

However, other sectors continue to struggle, especially residential construction. Although foreclosures have slowed, housing prices continue to drop. According to the Federal Housing Financing Agency, the average price of a Larimer County home in the Q2 2010 was down 2.7% from 12 months earlier. In Weld County, the decline was 7.8%. As long as sales prices are sliding, new builders will have a hard time competing.

A compounding problem is that much of the new housing inventory "overhang" needs to be eliminated. One key outcome of the housing market bubble was a speculative boom in new housing construction. As a result, the region overbuilt, and many of the spec homes built over the past four years remain vacant. Until the surplus of new homes is reduced, new construction will remain spotty.

Reading the tea leaves, the Northern Colorado economy is expected to continue its painfully slow and unspectacular recovery. Although unemployment has declined, much of this can be attributed to reductions in the labor force rather than job growth. As the region does add jobs, labor force participation rates should also increase. Translation: expect the regional unemployment rate to remain stubbornly high, though lower than the nation.

The longer-term outlook is more bullish. Once the national economic recovery begins in earnest, it is anticipated that the region will follow suit. Indeed, Northern Colorado's demonstrated leadership in technology and clean energy, and its young and educated workforce should serve as the basis of an entrepreneur-based growth. Unfortunately, this may not happen until 2012 or beyond.

Pueblo County Outlook

Although the problems of high unemployment and a depressed housing market alluded to in 2010's economic outlook report continue to paint a somber picture, there is a somewhat greater basis for optimism in assessing Pueblo's anticipated economic performance in 2011. To borrow a metaphor from the oil industry, the leak of jobs from Pueblo has been plugged, and the housing market is beginning to show some signs of recovery. This, coupled with a reduction in the rate of home mortgage foreclosure filings, gives some basis for belief that as far as the Great Recession in Pueblo is concerned, the worst is over—maybe.

Job Trends

Preliminary September 2010 data indicate that Pueblo's not seasonally adjusted unemployment rate was 9.9%, compared to 8.5% and 6.2% in September 2009 and 2008, respectively. During the 12-month period of September 2009-September 2010, total seasonally adjusted resident employment grew at a minuscule annual rate of 0.1%. During the September 2008-September 2009 interval, employment decreased at an annual rate of 2.2%. Examining the trends of job growth by business sector seems to reveal a pattern of major job losses followed by a moderate resumption of growth or at least a slackening in the rate of decrease. Construction, Retail Trade, and Manufacturing led the field in the number of jobs lost from September 2008 through September 2009—700, 500, and 400 jobs, respectively. Public Administration experienced the greatest numeric growth, 400 jobs. On the other hand, during August 2009-August 2010, no business sector experienced a loss of more than 100 jobs. Professional and Business Services, Educational and Health Services, and Public Administration each showed a gain of 200 jobs. The growth of public sector jobs can be partially, though not entirely, accounted for by the temporary hiring of Census workers.

Construction job losses are due primarily to the contraction of the Pueblo housing market and the completion of the Xcel power plant in 2010. The shedding of Manufacturing jobs is, for the most part, a reflection of a downsizing of Pueblo's Trane plant as approximately 320 workers were laid off or relocated to the company's North Carolina operation. The plant, which manufactures commercial air conditioning systems, employed 800 workers in 2008. Perhaps the best economic news that Pueblo had during 2010 is the announcement that Vestas Towers, which makes tower sections for wind turbines, will be adding 167 workers, bringing the plant's total employment to 450 by the end of 2010. This should ameliorate the recent loss of Manufacturing jobs. Despite a gloomy steel industry forecast, Evraz Rocky Mountain Steel has not been adversely affected—at this point. The Pueblo plant employs just under 1,000 workers. The commodities it produces—petroleum industry tubular goods, railroad rails, and wire stock—are not as susceptible to volatile conditions in the international market.

Retail job losses have been widely dispersed. Several long-established Pueblo restaurants are discontinuing their operations as households have been less likely to spend their recession-limited incomes on dining out. This is reflected in the stagnant growth of eating establishment's retail sales compared to food store sales, which are reported to the Colorado Department of Revenue. In Q2 2010, food stores retail sales grew by 41.5% compared to the same quarter of 2009. Conversely, eating establishment sales climbed by only 2.1%.

Housing Market

Pueblo's housing market is showing signs of recovery after a dismal performance in 2009. The number of new single-family dwelling permits issued through the first nine months of 2010 stood at 168, compared to 148 for the same period of 2009, a 13.5% rate of growth. The local market is still not out of the woods, economically speaking. For the first nine months of 2008, a total of 337 single-family permits were issued. Housing in Pueblo may not return to pre-recession growth levels until 2014, according to Rob Terranova, a RE/MAX analyst. With the exception of 17 apartment units under constructed for students attending Colorado State University-Pueblo, new market-based multifamily housing starts in Pueblo have been negligible in 2010. However, work continues on units under construction at the Villas at Park West complex, where 112 new units have been completed or are nearing completion. The Primrose Retirement Community, located in Pueblo's Eagleridge neighborhood, was finished in summer 2010. The complex offers 78 independent and assisted-living apartments in a five-acre gated community.

The disparity in Pueblo incomes relative to Colorado is somewhat compensated for by the low cost of housing in the region. The 2009 median sales price for existing Pueblo homes was $127,500, 60% of the Colorado figure. Apartment rents are similarly low, with an overall median of $483 according to the Colorado Division of Housing's multifamily vacancy survey for Q2 of 2010. Pueblo's 2009 median household income value of $38,780 was only 70% of the Colorado income of $55,430. Pueblo has a high rate of home ownership—68.5% of all occupied units according to the Census Bureau's American Community Survey—but the housing stock is showing its age. Units built prior

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to 1939 account for 17.6% of all units—twice the rate for the state (8.9%). A report prepared by the American Chamber of Commerce Researchers Association (ACCRA) for the Q2 2010 lists Pueblo as having the 10th-lowest overall cost of living of 314 U.S. urban areas. Perhaps the best bit of good news related to Pueblo's housing market is the substantial reduction in home mortgage foreclosure filings. Pueblo County Public Trustee data reveal a 23.1% drop in the number of Q3 2010 filings compared to the previous year.

Agriculture

Agriculture remains an important, though frequently overlooked, segment of the Pueblo economy. Farmland in Pueblo County accounts for more than 60% of the total county's area. According to the 2007 Census of Agriculture, there were 881 farms in Pueblo County, compared to 801 in 2002. The value of agricultural production was over $49 million. The value of farm production grew by 18.2% relative to 2002. Pueblo County ranks 24th out of the state's 64 counties in the value of its agricultural production. Cattle and calves production, with a value of more than $31 million, accounts for the largest component of Pueblo's agricultural sales. This is followed by the production of vegetables, melons, potatoes, and sweet potatoes, which represents a combined value of $4.7 million.

Clean Energy

Two recent developments enhance Pueblo's integration into an economy increasingly oriented to clean energy production. Vestas has completed its $250 million wind turbine tower production plant. According to the firm's vice president, Erik Iverson, the plant is the world's largest and most efficient factory for making tower sections for wind turbines. The company has the capability to build 1,000 steel towers annually. Within a little over two years of the announcement that Vestas would be locating in Pueblo, the firm had met its commitment to add 450-550 jobs to Pueblo's economy. The official dedication of the new plant occurred on October 13, 2010. Vestas' U.S. operation appears to be bucking the trend, however, with the announcement that the company will be supplying 55 wind turbines to a Sacramento, California, utility. The tower sections will be manufactured in Pueblo, the blades produced in Windsor, and the nacelles manufactured in Brighton and in the company's home country, Denmark.

The groundbreaking ceremony for the new Black Hills Energy power plant, located northeast of the City of Pueblo, took place in August 2010. The $500 million, natural gas-fired power plant will create 400 new jobs during its construction phase, and eventually employ about 20 permanent workers. The number of new construction jobs could conceivably be higher if the designated contractors opt to use Pueblo-area subcontractors for some of the work. The plant is scheduled to become operational by the end of 2011. The state-of-the-art plant will consist of four separate units that have a total power output of 380 megawatts. In the short run, this plant will provide a much-needed boost to local Construction Sector employment. The nearly $10 million in advance sales tax payments that Black Hills has offered to the City of Pueblo and Pueblo County will be a welcome addition to sagging governmental budgets.

Other Developments

On October 7, 2010, Allegiant Air inaugurated air service from Pueblo to Las Vegas. This is a culmination of efforts by Pueblo's Air Service Task Force to improve airline service from Pueblo. In addition to Allegiant, Pueblo is served by Great Lakes Airlines, which offers three flights daily from Pueblo to Denver. Doss Aviation, which has a contract with the U.S. Air Force to offer basic flight training to its candidates, also utilizes Pueblo's airport.

Development of the Historic Arkansas Riverwalk Project (HARP), located in Pueblo's downtown district, continues with the announcement that local architects Anzuini and Associates will be building a $2.5 million retail/commercial project in conjunction with Elk Valley Development. The "Eco-Walk" building will incorporate the latest energy-saving features. HARP recently celebrated its 10th anniversary.

Triumphs and disappointments have checkered Pueblo's economic history. Pueblo has in place an infrastructure that is conducive to clean industry development. It would be a pleasant irony indeed if the recent eco-friendly developments point the way for renewed industrial development that is nonpolluting in contrast to its earlier heavy industrial heritage.

Southern Colorado

During 2009-10, the El Paso County economy was strongly influenced by a national and global recession, the continued importance of the military, and a deteriorating economic base. The military presence has had a positive and stabilizing effect on the economy. The average wage of a soldier at Fort Carson was approximately $58,000 in 2009. This allows for direct wages, plus the value of housing, clothes, and meals provided by the Army. Fort Carson troops have experienced recurring deployments, effectively reducing the military population in the community.

The BRAC05 reallocation added approximately 10,000 troops to Fort Carson. The deployments and arrivals of additional troops have kept the Army population in the community relatively stable since 2003. The Air Force bases in the region add another 15,000 military air personnel. When civilian workers are included, the military bases employ approximately 59,600 people in El Paso County. The direct and indirect economic effects of the military are estimated to be about 27.5% of the region's gross metropolitan product. The area should benefit significantly when all troops return from deployments in Iraq and Afghanistan.

EL PASO COUNTY, INDUSTRY EMPLOYMENT CHANGE 2009

Sector	Employment Change[a]
Construction	-2,367
Manufacturing	-2,226
Retail Trade	-1,391
Accommodation and Food Services	-976
Administration and Waste Management	-845
Information	-693
Wholesale Trade	-671
Other Services	-655
Finance and Insurance	-619
Arts, Entertainment, and Recreation	-369
Transportation and Warehousing	-313
Real Estate and Rental and Leasing	-298
Ag	-66
Mining	-7
Utilities	19
Management of Companies	35
Educational Services	51
Professional Technical Services	135
Government	334
Healthcare Services	419
All Industries	-10,507

[a]Total differs from sum due to rounding.

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Employment, Wages, and Income

El Paso County total employment reported in the Quarterly Census of Employment and Wages (QCEW) fell by 4.3%, or 10,507 jobs, in 2009. This decrease followed losses of 2,255 in 2008 and gains of 1,930 jobs in 2007. In 2009, six sectors saw gains, including Utilities, Management of Companies, Educational Services, Professional Technical Services, Government, and Healthcare and Social Assistance. All other sectors lost jobs.

The loss in jobs propelled the unemployment rate to 8.7% in September 2010, the highest level since the recession began. The gradual employment recovery since January is expected to continue, but at a very slow pace. As additional people enter the labor force in the coming months, the

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unemployment rate is not expected to show significant improvement since more workers will be looking for a relatively scarce number of jobs.

The community shed approximately 16,500 manufacturing/technology related jobs since 2000. These jobs paid very high wages compared to the average wage in the community. However, the jobs were volatile and cyclically sensitive. High-paying Manufacturing and Information jobs were replaced with jobs in services sectors. These jobs tend to be stable and less susceptible to business cycle swings, but they earn lower wages than jobs those that were lost.

According to Colorado QCEW data, the average wage in El Paso County increased in 2009, to $42,189. This is 2.2% above the 2008 average wage of $41,268; however, El Paso County's average wage is now 10% below the state average.

El Paso County's per capita income was 9.3% below national per capita income in 1990. Per capita income grew significantly in the 1990s, propelled by healthy increases in high-wage manufacturing jobs. By January 2001, per capita income was 0.7% below the national average. Then the U.S. and local economies suffered through accounting scandals, the "dot.com" bubble, and the attacks on 9/11/2001. Employment in the sectors El Paso County had attracted over the course of the previous 11 years began to decline. By 2010, El Paso County Manufacturing jobs had declined by more than half from the 2001 peak. This is a much more severe decline in Manufacturing than in Colorado or the nation, down 35% and 31%, respectively. The gap in per capita personal income between El Paso County and the nation is 5%. Although other factors contributed to the rise and fall in local per capita income since 1990, among the largest was the drop in the number of high-tech Manufacturing and Information jobs.

Retail Sales and Sales Tax Collections

El Paso County recorded retail sales of $12.6 billion in 2009, a decline of $1.1 billion (7.8%) from sales of $13.7 billion in 2008. Retail sales were less volatile in El Paso County than the rest of the state because of the strong military presence. The Colorado Department of Revenue reports that taxable retail sales fell by $340 million in El Paso County in calendar year 2009. Declines in taxable retail sales took place in Calhan (-$200,000), Colorado Springs (-$330 million), Monument (-$2 million), Palmer Lake (-$2.3 million) and unincorporated El Paso County (-$4.2 million). However, decreases were not seen across the board—increases in taxable retail sales were seen in Fountain ($11.6 million), Green Mountain Falls ($380,000), Manitou Springs ($80,000), and Security ($1 million).

The City of Colorado Springs' regional share of taxable retail sales declined to 86.4% compared to 91.7% in 2001. More retail activity has moved out of the city limits and into the county. The city's ability to support essential services will continue to deteriorate as long as it depends on sales tax revenues to fund upwards of 50% of its general fund.

Residential Housing and Commercial Activity

The number of permits for new, single-family, detached residential homes in 2009 totaled 1,105, a decline of 9.7% compared to 2008. This was less severe than the 42.7% decline in 2008 (1,223 permits) and 22.3% decline in 2007 (2,135 permits). The decrease in permit activity was accompanied by an increase in permit values. The average single-family, detached permit value in 2009 was $342,485, a gain of $128,503 over the average value in 2008 of $213,982.

Townhome construction also declined 37.4% in 2009—201 permits compared to 321 permits in 2008. Townhome permit values increased in 2009 to an average of $172,354 compared to $114,859 in 2008.

Multifamily vacancy rates shot up to 9.3% in 2002 and continued to climb before reaching a plateau in the 12% range through 2005. Vacancy rates gradually fell to around 9.5% by the end of 2009 as families transitioned to ownership to rental housing during the foreclosure crisis. Persistent multifamily vacancy rates in the 10% range and declines in real apartment rents discouraged investors from building from 2002 through 2009. A total of 30 new multifamily housing units were permitted in 2009. In contrast, 430 units were constructed in 2008 and 414 units in 2007.

By June 2010, multifamily vacancies dropped to 5.8%. The low vacancy rates should increase permit activity in 2011. However, two factors may dampen multifamily permit activity. First, real rents were actually lower in 2009 compared to 2000—$592 and $645, respectively. Second, evidence from the Federal Reserve suggests that banks have not eased credit standards on these types of investment loans.

Commercial construction value decreased to $282 million in 2009 compared to $447 million in 2008 and $390.8 million in 2007. Year-to-date data suggest commercial permit values will be approximately $100 million in 2010, down 64.5%. A small gain in 2011 is expected to accompany the anticipated growth in the economy.

The combination of strong commercial construction earlier in the decade and the recent recession has put pressure on the commercial markets. Vacancies have increased in all classes of commercial and industrial space while real rents declined in all commercial categories. A recovery is not anticipated in the commercial market until well into 2011. Significant job creation is needed to clear out the inventory of vacant commercial space.

A Slow Recovery in El Paso County

In the past, the economy recovered from a recession when consumers and businesses started purchasing deferred goods and services. This led businesses to hire more workers, increase investment, and produce more goods and services. Typically, employment and wages increase during a recovery. Workers use their income to buy more goods and services. The cycle continues as businesses make greater investments in inventory and equipment, which leads to more employment.

There is a significant difference in the 2001 and the 2007-2009 recessions and prior recessions. Today, the U.S. economy has significantly fewer high-multiplier, primary jobs driving direct, indirect, and induced employment levels. For example, in the post-World War II economy about one-third of all workers were employed in manufacturing, an economic sector with a significantly higher employment multiplier than the service sectors. Today, both the national and local economies have lost manufacturing. The remaining services sectors in the region have lower employment multipliers.

In 2011, residential housing construction will slowly pick up but may not return to the record levels seen in 2005 for some time. The commercial markets will recover slowly as employment expands and vacant space is absorbed, but commercial construction will remain weak until the vacant space in office, industrial, and retail is absorbed. Any improvement in state and local government budgets would improve the outlook, although this is not expected to happen. On the positive side, the military will continue to have a stabilizing effect on the region's economy. Taken as a whole, the regional economy will slowly improve into 2011 and 2012, provided there are no unforeseen adverse shocks to the national economy.

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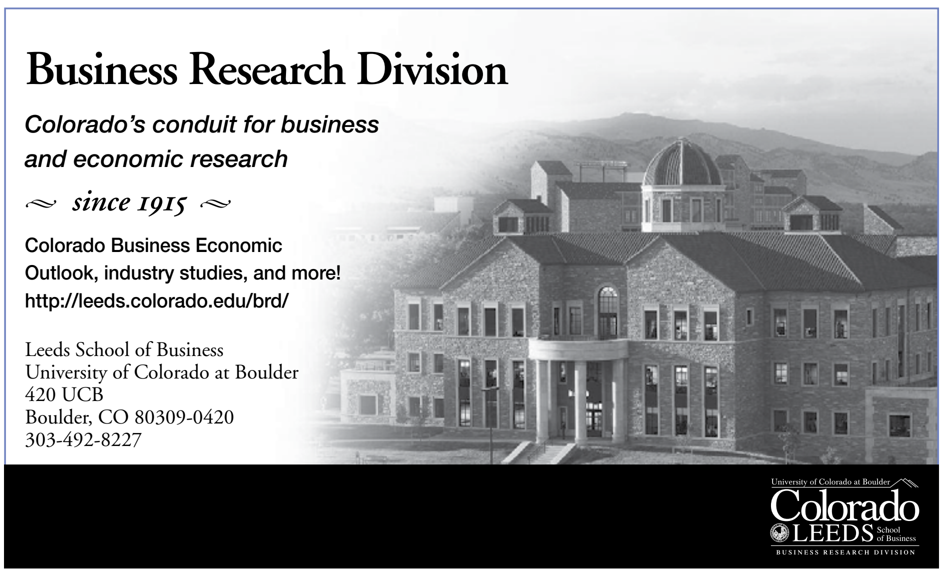
Business Research Division • Leeds School of Business • http://leeds.colorado.edu/brd

Serving Colorado since 1915, the BRD conducts economic and fiscal analysis, market research, and customized research projects that assist companies, associations, nonprofits, and governmental agencies with making sound business and policy decisions. Among the tools offered to organizations are the annual Colorado Business Economic Outlook, which provides a sector by sector forecast for the state's economy, and the quarterly Leeds Business Confidence Index, which gauges Colorado business leaders' opinions about the national and state economies and how their industry will perform in the coming quarter. A quarterly electronic newsletter, the *Colorado Business Review*, also provides in-depth analysis and information about Colorado's economy.

Our premier project is the annual Colorado Business Economic Outlook, which provides business, government, and education decision makers with information to help them focus on the structure of Colorado's economy, both past and present.

Another tool is the quarterly Leeds Business Confidence Index. This forward-looking index measures what local business leaders in a variety of industries are anticipating about the economic conditions and trends that affect their business.



Services

A sample of recent projects includes:

Economic Impact Studies

- Economic Impacts of Implementing the Colorado Clean Air-Clean Jobs Act under Different Scenarios
- The National Western Stock Show on Denver, Colorado
- Recycle America/Waste Management Economic Impact Studies, City of Austin and City of Spokane
- Summary of the Impact of Film Incentives on the Colorado Economy and on Public Revenues
- The Economic and Fiscal Impact of the Proposed Job Creation Program on the State of Colorado
- The Impact of Federally Funded Research Laboratories in Colorado

Local, Regional, and State Research

- Enterprise Zone Benchmarking
- Colorado Workforce Data Mining Project
- Economic Drivers: City of Boulder, Boulder County, and Colorado
- Workforce Boulder County: Business Process Map
- Colorado's Economic Opportunities: Today, Tomorrow, and the Future

Forecasts

- Colorado Business Economic Outlook
- Leeds Business Confidence Index

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Leeds School of Business: Services to Business and Industry

A brief overview of research and student centers at the Leeds School appear on the pages that follow.

Have a project or a business issue that you would like assistance with? Please complete the project form at www.leeds.colorado.edu/projectrequest. We look forward to working with you!

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 the world financial markets with an emphasis on the U.S. financial markets. To this end, the Burridge Center facilitates the exchange of ideas and knowledge between professional investment managers, finance scholars, policymakers, and the investing public. The Burridge Center identifies critical research issues in the theory and practice of security analysis and valuation and encourages and supports rigorous qualitative and quantitative research on topics relevant and useful to money managers, valuation experts, and finance academics.

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Colorado Association for Manufacturing and Technology

The CAMT is a statewide manufacturing assistance center that is partially funded by the NIST Manufacturing Extension Partnership and hosted by the CU. CAMT encourages the strength and competitiveness of Colorado manufacturers through on-site technical assistance and support; collaboration-focused industry programs; and leveraging government, university, and economic development partnerships. CAMT's experienced engineers and business professionals, with skills in manufacturing, management, process, and technology, work closely with manufacturers to provide company assessments, customized training and workshops, and hands-on facilitation and implementation.

Elaine Thorndike, CEO
CAMT
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The Robert H. and Beverly A. Deming Center for Entrepreneurship

The mission of the Deming Center for Entrepreneurship is to educate outstanding undergraduate, MBA, and doctoral students for entrepreneurial careers; facilitate high impact research; and create "productive collisions" among students, faculty, and the dynamic business community. In 2014, the Deming Center for Entrepreneurship at the Leeds School of Business at the University of Colorado Boulder will celebrate its 30th year at the forefront of entrepreneurial education. The Deming Center and the school's world-class faculty have enriched the lives of students through various student groups, made seminal contributions to academia, and strengthened both the University of Colorado and the Boulder community.

Paul Jerde, Executive Director
Deming Center for Entrepreneurship
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Executive Education and Professional Development Programs

The Leeds School's Executive Education and Professional Development Programs (EEPDP) offer custom and open enrollment business education programs to executives and students, providing programs focused on emerging professional development needs and taught by world-class faculty in an incomparable environment. Open enrollment programs are offered in finance and accounting, leadership, and hiring and retaining top talent. The EEPDP recently made a significant commitment to the design and delivery of custom executive education programs to Colorado companies. In addition, plans are underway for several signature open enrollment programs designed around Leeds/CU expertise in the areas of renewable energy, entrepreneurship, and sustainability that will be offered to a national audience.

Cathleen Burns, Director
Executive Education and Professional Development Programs
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University of Colorado Real Estate Center

The University of Colorado Real Estate Center's mission is to provide a world-class real estate curriculum at both the graduate and undergraduate levels that prepare students to be leaders in the real estate industry of tomorrow with emphasis on sustainable development. The center fosters the partnership between the University and the CU Real Estate Council, and creates a dynamic and relevant dialogue that precipitates mutually rewarding opportunities to further research—both theoretical and applied—of subjects related to land use and its appurtenant topics. In addition, the center develops meaningful internship opportunities and offers mentoring for students using the council network, with job placement opportunities as the ultimate goal.

Susan Hebel Watts, Executive Director
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Rocky Mountain Trade Adjustment Assistance Center

RMTAAC is an independent, nonprofit organization offering technical and professional assistance to small and medium-size firms adversely affected by import competition. The center is staffed by professionals with extensive private-sector experience in marketing, management, and engineering. RMTAAC project managers work closely with U.S. firms to identify cost-effective strategies that enable them to compete with foreign firms. Additionally, RMTAAC project managers locate outside technical consultants to implement projects that require specialized expertise. Up to 50% of the total project cost is funded by the U.S. Department of Commerce. Since 1981, RMTAAC has helped firms in a number of industries, including circuit board assembly, recreational equipment, material handling, testing equipment, building materials, apparel, and jewelry.

Edvard Hag, Director
Rocky Mountain Trade Adjustment Assistance Center
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www.rmtaac.org

CUREC: Initiative for Sustainable Development

Operating within the Real Estate Center at the University of Colorado's Leeds School of Business, the Initiative for Sustainable Development's (ISD) mission is to catalyze the shift to excellent real estate development practices by creating cross-sector alliances with key stakeholders across the University as well as in Colorado, the region, and the nation as a whole by identifying, understanding, and sharing best practices. One of the first programs of its kind in higher education, ISD strengthens Leeds' position as a world-class MBA program committed to integrating social and environmental issues into its curricula and research while enhancing the University's standing as a sustainability leader. In partnership with the overarching goals of the Real Estate Center, ISD implements teaching initiatives to develop high-quality MBA and executive education courses.

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Center for Education on Social Responsibility

The mission of the Center for Education on Social Responsibility (CESR) is to assist students in becoming outstanding business leaders of tomorrow by preparing them to meet the ethical challenges of the modern business world. CESR promotes the discussion of values and the role of business in society throughout the curriculum with required and elective courses that challenge students to evaluate business behavior along environmental, social, and ethical dimensions. These courses require students to decide what type of business leaders they will seek to be and the nature of businesses they will run before they enter the business world. CESR is responsible for the required, foundational courses on social responsibility at the undergraduate and graduate levels, and has developed key modules for these courses dedicated to discussion of social and environmental sustainability.

Donna Sockell, Director
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Center for Research on Consumer Financial Decision Making

The mission of the Center for Research on Consumer Financial Decision Making is to support interdisciplinary scholarship that informs theory, practice, and public policy pertaining to consumer financial decision making. The center conducts basic research and more applied work to inform public policy. It also engages in educational outreach aimed at improving consumer welfare by fostering conversations among consumer groups, public policy officials, business people serving financial markets, and researchers.

John Lynch, Director
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Office of Diversity Affairs

The Office of Diversity Affairs is recognized as a cornerstone in addressing the critical need of developing a supportive learning environment for a diverse student body, as well as maintaining a specific focus on the Leeds underrepresented undergraduate experience. The mission of the office is to assist underrepresented students in their pursuit of academic excellence. Diversity Affairs is dedicated to fostering and maintaining partnerships with alumni, as well as local, national, and international business entities. In addition, students' enhanced interpersonal problem-solving skills and ethical leadership practices within diverse environments produce a competitive edge that is attractive to employers.

Aswad Allen, Director
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Undergraduate Student Services

The mission of Undergraduate Student Services is to enhance the education experience of students at the Leeds School of Business. This endeavor is achieved by providing assistance and support to help students attain their academic and future goals; building relationships with students; and developing a culture based on high academic expectations, student engagement, and preparedness for success in business practice. Undergraduate Student Services seeks to reach out to students to provide them with the resources and opportunities available to fulfill the high academic expectations and rigor of the Leeds School of Business.

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University of Colorado at Boulder

FORTY-SIXTH ANNUAL

COLORADO BUSINESS ECONOMIC OUTLOOK 2011

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LEEDS School of Business
BUSINESS RESEARCH DIVISION