



Colorado Economic Chronicle

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Tom Dunn
Chief Economist

Natalie Mullis
Economist

Josh Harwood
Economist

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National Economy

Despite six interest rate increases by the Federal Reserve Board over the past fourteen months, the national economy continued to expand briskly through June and July. Inflation-adjusted **gross domestic product** (GDP) grew 5.2% in the second quarter of 2000, after growing at a revised rate of 4.8% during the first quarter. Strong growth in business investment, government spending, and a build-up in business inventories more than offset slower growth in consumer spending. Consumer spending grew 3.0% in the second quarter, down from a 7.6% growth rate in the first quarter. The slowdown occurred primarily in spending on durable goods and auto sales. Due to high prices for imported oil, the trade deficit hit a new record in June at \$30.6 billion.

“...consumer confidence remained high in July. Consumers believed that the labor market would provide jobs...”

Personal income exhibited steady growth in June, accompanied by a slight increase in **consumer spending** and a decline in the **saving rate** to 0.1%. Meanwhile, **consumer confidence** remained high in July. Consumers believed that the labor market would provide jobs, but lowered their future buying plans for durable goods and automobiles from where they had been in recent months. Although this could indicate a future slowdown in **retail sales**, they remained strong in July, growing 0.7%. Retail sales on

the **Internet** are growing; \$5.26 billion in sales, or 0.7% of all retail sales in the first quarter of 2000, were made on the Internet, up from \$5.20 billion, or 0.63% of all retail sales in the fourth quarter of 1999.

“...the manufacturing sector has been expanding for eighteen consecutive months...”

With the layoff of an additional 290,000 Census workers, overall **employment** fell by 108,000 jobs in July. Lower-than-expected private job gains were more indicative of the low availability of skilled labor than the ability of employers to create new jobs. While the **unemployment rate** remained very low at 4.0%, average hourly earnings increased 0.4%, indicating potential upward pressure on wages. The business services sector added only 2,000 jobs in July after averaging job increases of 40,000 per month over the past six months, a strong indicator that the economy is slowing.

The **manufacturing** sector provided mixed news through July. The National Association of Purchasing Management index remained level at 51.8% in July, indicating weak growth in the manufacturing sector. An index above 50% indicates expansion. While the manufacturing sector has been expanding for eighteen consecutive months, it has been on a downward trend since September 1999. Industrial production at U.S. factories, mines, and utilities ex-

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hibited slightly higher growth in July, growing 0.4% after a growth rate of 0.2% in June. However, factory orders rose 5.5% in June and orders for durable goods soared 10% in June, after growing 7.0% in May.

Activity in the **construction** sector has clearly slowed in recent months. Rising mortgage rates and a volatile stock market initiated a longer-term downward trend for **housing starts**. Housing starts declined 3.3% in July, but year-to-date were 11.3% lower than a year ago. In addition, while rising mortgage rates have impacted new home sales, existing home sales have proven to be more resilient. New home sales declined 3.7% in June, after declining in the previous two months. Existing home sales, however, grew 2.8% in June after growing 4.3% in May. Overall construction spending declined 1.7% in June, a result of decreased activity in single-family housing completions, public buildings, and industrial buildings.

Inflation was relatively benign in July after a strong increase in June due to increases in gasoline and other energy prices. **Consumer prices** rose 0.2% in July, both before and after excluding the volatile food and energy sectors. However, energy prices ceased their upward climb in July; after increasing 8.8% in June, gasoline prices declined 2.0% in July. Although **producer prices** also rose substantially in June as a result of volatile energy prices, they re-

mained unchanged in July, and grew only 0.1% after excluding food and energy prices. Meanwhile, **productivity** increased 5.3% in the second quarter of 2000, after a 1.9% gain in the first quarter. Higher productivity allows wages to grow without putting additional pressure on inflation. Indeed, labor costs per-unit of production declined 0.1% in the second quarter. In addition, the **employment cost index** increased by only 1.0% in the second quarter, following a 1.4% increase in the first quarter.

The national economy is sending mixed signals. Concern that the Fed's interest rate increases have not been enough to reign in the consumer-driven economy may be justified by stronger-than-expected growth in GDP and consistently low levels of unemployment. While consumer spending has moderated when compared with the first quarter, consumer confidence remains high, retail sales continue to grow, and personal income is growing steadily. However, the manufacturing sector, while still expanding, is slowing, the construction sector has clearly embarked on a cooling trend, and inflation remains relatively benign. Whether or not the economy is headed for the soft-landing desired by the Fed will depend upon how much of the interest rate increases have already been absorbed by the economy.

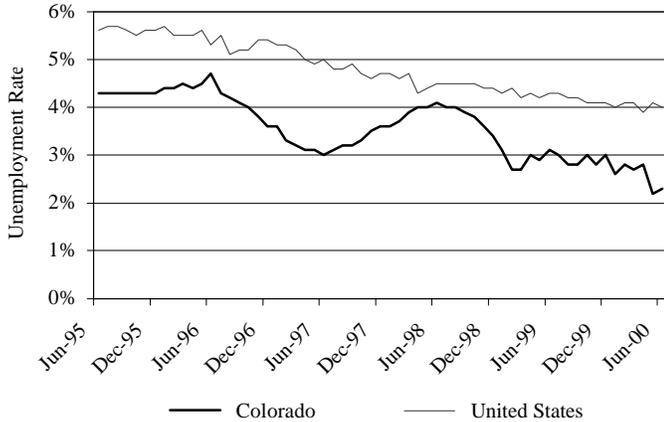
Colorado Economy

The Colorado economy extended its period of unprecedented growth in June, as employment growth remained robust and labor shortages kept the unemployment rate near record low levels. Despite a slight dip from a year ago, residential construction figures have stayed at very high levels. Residential home prices continued to rise steadily statewide. Meanwhile, inflation was on the rise during the first six months of 2000 as the Denver-Boulder-Greeley price index increased 3.8% over the first six months of 1999.

Employment

The Colorado seasonally-adjusted unemployment rate ticked up slightly in June to 2.3% from a record low 2.2% in May, but still was significantly lower than the 2.9% rate seen in June 1999. In June, Colorado had the second-lowest unemployment rate in the country. Meanwhile, nonfarm wage and salary employment has increased 3.7% through June 2000, slightly weaker than the 3.8% gain during the same period in 1999.

Figure 1 - Seasonally Adjusted Unemployment Rate (June 1995 - June 2000)



The number of new businesses in Colorado was on the upswing through the second quarter of 2000. The Department of Commerce reported that while new business starts were relatively stagnant nationwide, Colorado saw 10.2% more business starts than a year ago.

Further expansion in the advanced technology and construction sectors continues to drive employment growth in the state. Intel will invest over \$1.5 billion in a chip manufacturing plant opening in November in Colorado Springs. Company officials have already hired 650 employees, but expect that up to 2,500 new workers could come on board as the plant reaches full production by the end of next year. Meanwhile, 1,500 workers are involved in construction at the new facility.

Employment in the other major sectors was mixed, with the largest announcements occurring in the transportation, communications, and public utilities sector. Among the largest expansion announcements was VoiceStream Wireless Corporation's announcement that it will hire 550 people in Colorado Springs over the next two years to staff its new operations and customer-care center. The 70,000-square-foot center, which is under construction in the Briargate Business Complex, is expected to open by November. Also, Touch America, a Butte, Montana-based telecommunications company, will move its sales and marketing headquarters to the Denver Tech Center. The company, which owns a portion of Qwest Communication's western long distance business, plans to hire an additional 200 employees by the end of the year.

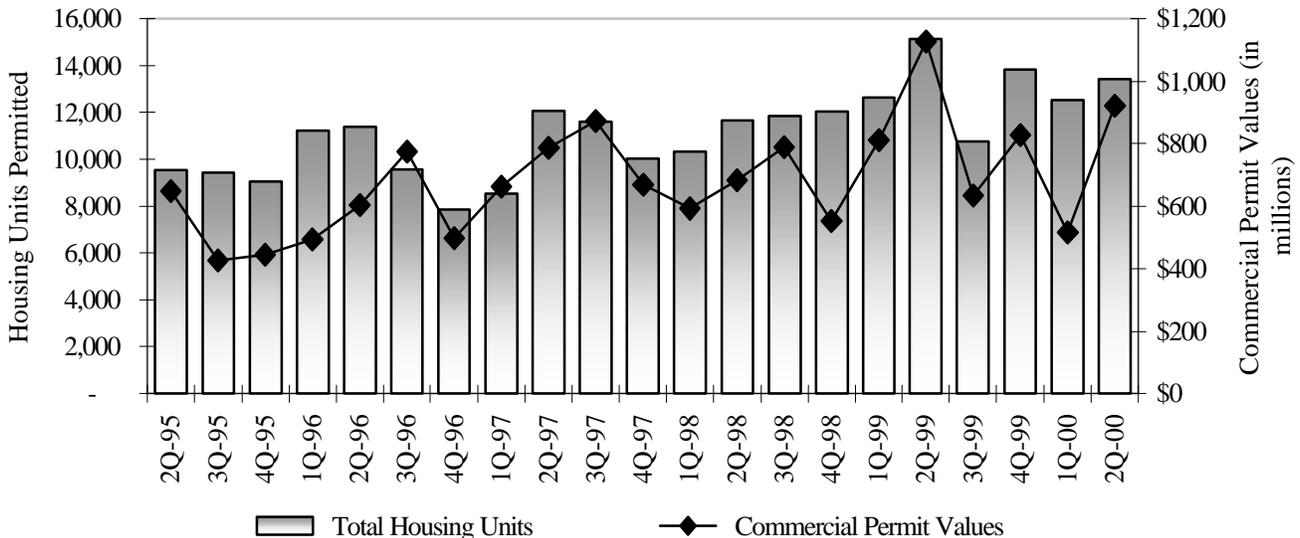
By contrast, Qwest has reported that up to 4,000 jobs throughout its service region may be cut as a result of the restructuring following its acquisition of USWest Communications.

Additional information on job announcements can be found throughout this section and the special section on the metro-Denver economy.

Residential Construction

Permit activity has been mixed as of late. According to F.W. Dodge, the number of housing permits fell

Figure 2 - Major Construction Indicators (2nd Quarter 1995 - 2nd Quarter 2000)



by 6.6% through the first six months of 2000, compared with the same time period in 1999. Permits for single-family housing declined statewide by 4.5%, while permits for multi-family units dropped by 10.9%.

Colorado's Economy at a Glance

<i>Key Indicators</i>	<i>Direction</i>	<i>Assessment</i>
Nonfarm Employment Growth		Good
Unemployment Rate		Good
Mortgage Rates		Good
Retail Trade Sales		Good
Home Prices		Good
Nonresidential Construction		Neutral
Colorado Inflation Rate		Neutral
Overall Rating		Good

Both Denver and Colorado Springs are enjoying sustained real estate booms. Home prices in Colorado Springs have soared 11.5% over the last twelve months, while a survey completed by the University of Denver found that apartment vacancies during the second quarter dropped to a five-year low of 3.9%. These low vacancy rates have pushed rents in Colorado Springs up 7.2% over the second quarter of 1999.

“...the tight housing markets are creating a developer-friendly environment...”

In both cases, the tight housing markets are creating a developer-friendly environment as projects continue to move forward throughout the state. One of the largest projects is continuing at the former Stapleton International Airport, where approximately 10% of the eventual 12,000 homes to be built are expected to come onto the market by the end of next year. This first phase of development will include 425 detached homes, 325 condominiums and townhomes, and 450 rental apartments.

Nonresidential Construction

The value of nonresidential construction fell 29.1% through June relative to figures from 1999, according

to F.W. Dodge. Each of the major sectors declined with the exception of the office market which is rebounding from a sluggish 1999. Office construction increased 13.5%, while overall commercial building, which is the largest sector, fell 16.2%. Large declines were experienced in the education, manufacturing, and hospital sectors.

The U.S. 36 corridor has also been a hotbed of commercial activity, bringing more than 2.5 million square feet of office space to the area in the past three years. Those additions have brought the total amount of multi-tenant office space to 4 million square feet, with another 1 million square feet currently under construction, according to CB Richard Ellis. Despite the construction boom, office vacancy rates remain below 3% as the area's high-tech explosion has made quality office space a hot commodity in the northwest corridor.

FlatIron Crossing in **Broomfield** officially opened on August 11. The new regional shopping center will employ roughly 8,000 in its 170 shops and restaurants. The \$200 million project is expected to generate \$16 million in annual sales tax revenue, almost double what Broomfield took in a year ago.

Inflation

The Denver-Boulder-Greeley inflation rate is on the rise. The local inflation rate, often used as a proxy for the state, increased 3.8% through the first half of 2000. Inflation was 2.4% in 1998 and 2.9% in 1999. Inflation increased at a 3.6% annual pace from 1990 to 1999. As expected, transportation cost increases were the highest during the first six months, jumping 6.7% from a year ago. Medical care costs increased 5.4%, while housing costs rose 4.4%. Apparel and upkeep costs declined 2.8%. Excluding the volatile energy sector, the local inflation rate was 3.1% through the first half of 2000.

Advanced Technology

Colorado ranked fifth in technology growth in the 1990s, according to a study completed by California's Milken Institute. The study, which looked at a wide

range of demographic and financial information, also found that four of the nation's 50 fastest growing metropolitan areas are located in the state.

“Software employment in Colorado is among the highest in the nation.”

Software employment in Colorado is among the highest in the nation. A study completed by the Software & Information Industry Association looked at software employment as a percentage of all jobs and found that four of the top 20 cities with the highest software employment density were in Colorado, with the Boulder-Longmont area heading the list.

The study also found Colorado ranked fifth in venture capital funding. Colorado companies raised a record \$843.5 million from venture capitalists during the second quarter of this year, more than double the amount from the first quarter. Nearly all of the record influx went to internet companies, with the most popular being companies that develop tools for connecting and surfing the web.

Despite this boom, venture capital has been hard to come by for many new-economy companies following the slowdown on the NASDAQ stock market, especially the once red-hot dot-com companies. A national study released by Webmergers.com tracked 238 web-based companies as they have struggled in the midst of the slumping NASDAQ. Forty-one Internet companies closed up shop this year, while 83 withdrew their initial public offerings. Many of these companies are now turning to merger or acquisition, while several others have used layoffs to avoid bankruptcy.

Internet infrastructure giant Cisco Systems will triple its Boulder employee base as it relocates to a new facility over the next six months. Cisco's purchase of Compatible Systems in Boulder in January has led to the hiring of 17 new employees so far this year with hopes of tripling its current total of 85 employees in the next three years.

Manufacturing

Colorado's manufacturing economy slowed in July but continued to outpace the national manufacturing sector. The Front Range Purchasing Managers' Index dropped to 53.9 in July, surpassing the National Purchasing Managers' Index of 51.8. Colorado's index was down 7.4 points from June, but still indicates expansion. The indices for the availability of skilled and unskilled labor indicate that labor shortages remain a constant challenge for manufacturers.

“...labor shortages remain a constant challenge for manufacturers.”

Agriculture

According to the Colorado Agricultural Statistics Service, corn was the state's leading crop in terms of value in 1999. Corn production accounted for \$358 million, representing nearly 30% of the value from all field crops. Nearly all field crops experienced significant growth in production, but lower prices led to the lowest total field crop value in six years

Freezing temperatures in April 1999 led to drop of more than 80% in fruit production compared with 1998. However, a warm winter and spring in 2000 has created optimism for many fruit farmers. The 2000 peach crop is predicted to be the largest in 27 years. Farmers are expecting a peach harvest of 21 million pounds. The unusually large crop is creating both lower prices and a labor shortage for harvesting. Livestock values appear to have bounced back in 2000 from a down year in 1999. Colorado is now the nation's leading provider of lamb. Cattle prices this year are at a six-year high, though they have recently dipped while production costs for beef continue to rise.

Mining

Beginning in November, American Soda Mines will hire up to 90 new employees to staff and monitor its new facility in **Parachute**. The \$250 million project

is being built to mine and process soda ash and sodium bicarbonate, commonly called baking soda.

Last month, **Teller County** approved a permit to allow The Cripple Creek & Victor Gold Mining Company to increase their output by over 35%. If approved by state regulators, the mine, which employs 300 people, would stay in operation until 2012 instead of its planned closure in 2005.

Tourism

The massive brush fires at **Mesa Verde National Park** have slowed the tourism industry there. However, reports from neighboring counties show that tourism is up in the region. Until the fires are controlled and the park is able to reopen, an overall downward trend is expected as people divert vacations away from southwestern Colorado entirely while its main attraction is closed

“Colorado’s gaming industry brought in a record \$52.8 million in June...”

Colorado’s gaming industry brought in a record \$52.8 million in June from the 46 small-stakes casinos in Cripple Creek, Black Hawk, and Central City. For the fiscal year ending in June, casinos took in \$595.3 million in adjusted gross proceeds, also a record.

Energy

Winter heating bills for people who use heating oil or natural gas could be more than 50% higher this coming winter than last, according to an Energy Department forecast. Because of a falloff in production, short supplies, and high demand by industry and electric utilities, natural gas prices have doubled since last year.

According to a study of world oil and gas supplies by the Denver office of the U.S. Geological Survey, Colorado ranked seventh nationally in natural gas production and 11th in oil production.

Public Service Company of Colorado announced that it will nearly triple its use of wind-generated power. Currently, wind generation serves approximately 6,000 households. PSC hopes to raise their output to serve nearly 17,000 households, while supplying approximately 25% of the power used by the University of Colorado.

Metropolitan Denver

Please see Regional Economic Review beginning on page 10.

Boulder County

Following the opening of FlatIron Crossing, **Broomfield** is poised to become the fastest growing city in the state. The Broomfield Economic Development Corporation (BEDC) reported that through June it had already received more new business inquiries than it did in all of 1999. According to the BEDC, 45 new projects and numerous other expansions and renovations have created 943 new jobs and nearly \$150 million in investments in the city.

“Following the opening of FlatIron Crossing, Broomfield is poised to become the fastest growing city in the state.”

Another Broomfield software firm eSoft Inc. plans to hire up to 50 new employees by the end of the year to staff its new division called SmartDSL. The new division will sell digital highspeed internet service and will be backed by a \$10 million marketing campaign by eSoft.

Cooley Godward, the state's largest technology and venture capital law firm, is tripling its space by moving to Broomfield's Interlocken business park. Cooley plans to move its Boulder office to a 75,000-square-foot space in January and expects to hire over 100 new employees, many of them attorneys, over the next three years.

Achieve Communications, based in Broomfield, laid off 20 employees in an attempt to restructure the

company. Achieve, a provider of web-based tools that allow parents and teachers to communicate, says it will change its focus to content in an effort to move toward profitability.

Mobile Storage Technology, a maker of hard disk drives, laid off its 60 **Boulder** workers and closed its local office late last month as the market for its lap-top computer products softened. So far, Mobile Storage has subleased about 15,000 square feet of its 30,000-square-foot offices.

Construction began on the first phase of the **Lafayette** Corporate Campus. The new business park, located in the U.S. 36 corridor, will consist of three single-story buildings totaling 132,000 square feet and should be completed by the end of the year. The Etkin Johnson Group, the project developers, will invest \$150 million in the first phase and plan to eventually bring up to 1.3 million square feet of new office space to the business park.

Xilinx, a programmable chip manufacturer, announced it will build a new 136,000-square-foot building in **Longmont**. The building is expected to cost roughly \$27 million. The building is on 50 acres owned by the company, which will allow them to expand in the future.

Southern Region

Colorado Springs has continued its unprecedented growth in 2000 and is poised to enjoy further expansion. Retail sales have jumped nearly 13% since July 1999. Overall, city sales tax collections are up 11.4% year-to-date, totaling \$46.6 million. According to a national study released by Coldwell Banker, Colorado Springs also ranks as the most affordable housing market in Colorado. The average price for a 2,200-square-foot, four-bedroom home was \$157,900 in May 2000.

Goldmine Software Corporation announced it will expand its Colorado Springs headquarters. The software company will build a two-story, 45,000-square-foot building adjacent to its existing headquarters. The company is expected to hire as many as 200 new

employees to fill positions in its software development, sales, and administrative departments.

“Colorado Springs has continued its unprecedented growth in 2000 and is poised to enjoy further expansion.”

A \$3.4 million expansion of Powers Boulevard is underway in Colorado Springs. City officials are hoping the improvement will alleviate traffic congestion on the fast-growing eastside.

Pine Creek Village Center, a \$15 million, 140,000-square-foot shopping and office complex, is under development by Signature Companies. The eight-building center will sit on eleven acres in the Briar-gate section of the city and includes a 1.5 acre park for community events.

Construction began on Premier Health Plaza, a 100,000-square-foot medical office building scheduled to open next summer. Building tenants will include Premier Orthopedics, the Colorado Center for Otolaryngology, and the Center for Plastic Surgery.

Channel Point, Inc. laid off 50 employees, largely from their sales and marketing departments. The business-to-business insurance software provider cited too rapid growth as the cause. The company has grown from 250 to over 1,500 employees nationwide in the last nine months.

“Fountain is experiencing one of its biggest development booms in town history.”

Fountain is experiencing one of its biggest development booms in town history. Over 11,000 new housing units have been proposed in addition to two retail centers totaling over 200,000 square feet and a new 20,000-square-foot medical office building. Construction is expected to begin early in 2001 and take roughly ten years to complete. The town’s current estimated population is 14,200.

Northern Region

A 45-acre retail complex has been proposed in **Fort Collins** that would generate an estimated \$120 million in retail business annually. The project, which would have approximately 450,000 square feet of retail space, is awaiting zoning approval for part of the land.

ConAgra Beef Company released plans to build their new headquarters in **Greeley**. The \$13.5 million construction project will offer a three-story, 105,000-square-foot office building on a 26-acre site in Promontory Point. Development will begin in the fall and is expected to be completed by summer 2001. ConAgra considered other locations for its new headquarters before deciding to remain in Greeley. Meanwhile, State Farm Insurance has begun development of its \$60 to \$70 million office campus in Greeley. The first phase of the construction, a 500,000-square-foot building located on 130 acres, should be completed by mid-2001.

Western Slope

Montezuma County finds itself preparing for a dramatic fall off in tourism, as wildfires at Mesa Verde National Park kept the park closed for extended periods. Mesa Verde typically gets 40% of its annual visitors in July and August. It is estimated that tourism usually brings about \$10 million to the area during this two-month peak period.

Hearings are continuing in **Glenwood Springs** regarding a proposed mixed-use development. The project, which is being met with some local opposition due to its size, would bring approximately 1.2 million square feet of retail and office space, as well as 1,000 new homes and apartments.

Also, expanded residential development is occurring in the area surrounding Glenwood Springs. Over 250 single-family homes have been proposed or planned this year, with the largest of these being Oak Meadows, an 86-unit subdivision that gained preliminary plan approval in May.

Plans were announced to break ground in **Bayfield** on infrastructure improvements to a 38-acre site for the purpose of creating 38 lots for retail, commercial, or light industrial use.

Mountain Region

In **Aspen**, construction is nearly complete on the \$230 million, 248-unit Aspen Highlands Village. In addition to the luxury units, the development also boasts nearly 50,000 square feet of retail and restaurant space. Many of the units are sold as fractional ownership through the Ritz Carlton Club.

The Grand Summit Resort Hotel in **Steamboat Springs** is now scheduled to open on October 2. The Grand will be a luxury timeshare resort and has sold approximately 50% of its shares. City officials hope the hotel will bring additional development to the area.

Vail Resorts officials recently presented plans to remodel part of Vail Village. Preliminary plans indicate improvements including underground parking and services, as well as a new entrance to the development. The project is expected to cost roughly \$50 million and would be funded by the sale of 18 new timeshare condominiums.

Eastern Plains Region

Lincoln County saw its unemployment rate fall to 0.8 percent in June, the lowest of any county in Colorado. Credit for the boom is being given to the fact that Lincoln County acts as a gateway for many tourists to the front range.

The largest employer in the county remains the Limon Correctional Facility with 310 employees, though the minuscule unemployment rate has been largely attributed to a boom in highway retail and service businesses.

Regional Growth Cumulative Year-to-Date Growth Rates

	Alamosa	Boulder	Colorado Springs	Metro Denver	Durango	Fort Collins	Grand Junction	Greeley	Lamar	Montrose	Pueblo	Ski Counties (Eagle, Pitkin, and Summit)	Steamboat Springs	Sterling
Employment Growth (through June 2000)	4.4	3.1	3.3	3.8	1.5	3.5	4.0	2.4	7.2	5.5	-0.8	3.7	6.6	9.0
Unemployment Rate (not seasonally adjusted) (in June 2000)	4.9	2.9	3.7	2.5	4.3	3.3	3.9	3.7	3.2	4.3	4.6	2.5	2.6	3.7
Retail Trade Sales Growth (through May 2000)	12.3	12.1	7.9	14.8	6.7	14.2	8.7	15.0	15.3	15.2	7.0	6.8	8.0	11.9
Housing Permit Growth * (through June 2000)	-35.3	11.6	6.0	-9.7	-13.3	-15.9	-46.2	8.6	-38.6	12.3	-25.2	-39.5	0.0	-63.3
Growth in Value of Non-residential Construction* (through June 2000)		-17.6	-18.5	-30.4	41.1	-76.3	-58.6	-21.0		-42.0	14.1			

Actual level not growth rate.

Colorado Department of Labor and Employment data.

* F.W. Dodge data.

Colorado Department of Revenue data.

\$60.3 million was contracted through June 2000, while \$32.7 million was contracted through June 1999.

\$350,000 was contracted through June 2000, while nothing was contracted through June 1999.

Nothing was contracted through June 2000, while \$2.3 million was contracted through June 1999.

\$172,000 was contracted through June 2000, while \$5.0 million was contracted through June 1999.

\$9.6 million was contracted through June 2000, while \$3.9 million was contracted through June 1999.

Colorado Indicators Year-to-Date Growth Rates

Indicator	June 2000	May 2000	1999 Annual Average
Nonfarm Employment Growth	3.7%	3.9%	3.7%
Unemployment Rate (seasonally adjusted)	2.3	2.2	2.9
Housing Permit Growth §	-6.6	-7.2	14.2
Single family	-4.5	-0.8	3.7
Apartments	-10.9	-19.2	53.0
Growth in Value of			
Nonresidential Construction §	-29.1	-32.2	25.1
Retail	-29.2	-29.3	22.4
Offices	13.5	14.1	-3.4
Factories	24.2	3.6	131.6

Actual level, not growth rate.

§ F.W. Dodge data.

Colorado Department of Labor and Employment data.

Note: An inflation rate is not calculated for the state. The Denver-Boulder-Greeley inflation rate is often used as a proxy for Colorado's inflation rate. The Denver-Boulder-Greeley inflation rate was 3.8% through the first half of 2000, following a 2.9% rate in 1999.

**NOTE: Legislative Council Staff previously published a comprehensive review of Colorado's regional economies in the September issue of Focus Colorado. The office will now publish the reviews of individual regions in this and upcoming issues of the Colorado Economic Chronicle.*

The metro-Denver economy has continued to flourish amid widespread industry expansion. Led by extended growth in the advanced technology and construction sectors, the metro-Denver region's employment base continued its growth in June. Inflationary pressures may be taking shape in the region as price inflation levels through the first half of 2000 are at their highest point since 1995, though still near the average for the 1990s. Residential home prices continued to rise dramatically, up over 15% from prices in June of last year. Large development centers include the former Stapleton International Airport, Lowry Air Force Base, and much of Douglas County.

Population and Income

Based on data from the state demographer, metro-Denver's population increased 2.6% in 1999, slightly higher than the compound average annual growth rate of 2.5% from 1990 to 1999. While metro-wide growth was strong, Douglas County continues to be the growth leader. Though its population base represented only 8% of Denver's population, the addition of nearly 16,000 new residents in Douglas County accounted for over 30% of the population increase in the metro area in 1999 (see Table 1).

Incomes have steadily increased throughout the second half of the 1990s. Real per capita personal income for the metro-Denver region raced ahead by 4.7% in 1998, the greatest increase in a decade. The largest jumps have occurred in the last four years, at least in part due to the abundance of high-paying advanced technology jobs available in the region. Incomes are expected to continue to rise as employers in the Denver area expand their demand for high-skilled labor.

Table 1: Metro-Denver Population Components By County

County	Total Population (1999)	Percent of Population (1999)	Percent of Growth (1998-99)
Adams	330,285	16.2%	15.1%
Arapahoe	488,368	24.0%	18.7%
Denver	532,066	26.2%	19.9%
Douglas	162,023	8.0%	30.5%
Jefferson	520,390	25.6%	15.8%

Employment

During the 1990s, overall employment in the metro-Denver region averaged 3.5% annually. Though a bit weaker than the statewide growth rate of 3.8% during that period, it is still roughly twice the rate in the 1980s. Metro-Denver employment grew by 3.8% through June 2000, compared with 3.8% in 1999. The construction industry experienced the strongest employment growth of any sector during the last decade, increasing at an annual average rate of 10.1%. Mining and manufacturing experienced employment losses during the same period.

“A Colorado Department of Labor survey in April showed that there were 1.6 vacant positions for every unemployed worker in the metro-Denver area plus Boulder County.”

Employment growth has been so strong during the 1990s that many sectors, such as construction, advanced technology, retail trade, and services, are now experiencing significant labor shortages. A Colorado Department of Labor survey in April showed that there were 1.6 vacant positions for every unemployed worker in the metro-Denver area plus Boulder County. More than half of the vacancies required no education or training, while two-thirds of

the unfilled positions were in the retail trade and services sectors. The worker shortage looms as the biggest constraint on the strong expansion of recent years.

The presence of the *mining* sector continued to diminish in the metro area. In 1999, the sector comprised just 0.5% of the region's work force, falling from 1.3% in 1990 and over 3.5% in the early 1980s. Employment in the sector declined 3.4% through June 2000. The sector tapered off at an annual average rate of 6.4% from 1990 to 1999.

Recently, oil and gas firm Santa Fe Snyder Corp. announced that it will close its Denver office under a proposed \$3.2 billion acquisition by Devon Energy Corporation. Santa Fe Snyder has 55 employees in its downtown Denver divisional office and another 50 field workers spread throughout Colorado and Wyoming. Devon officials said some employees will lose their jobs, while others will be offered positions at Devon's Oklahoma City headquarters.

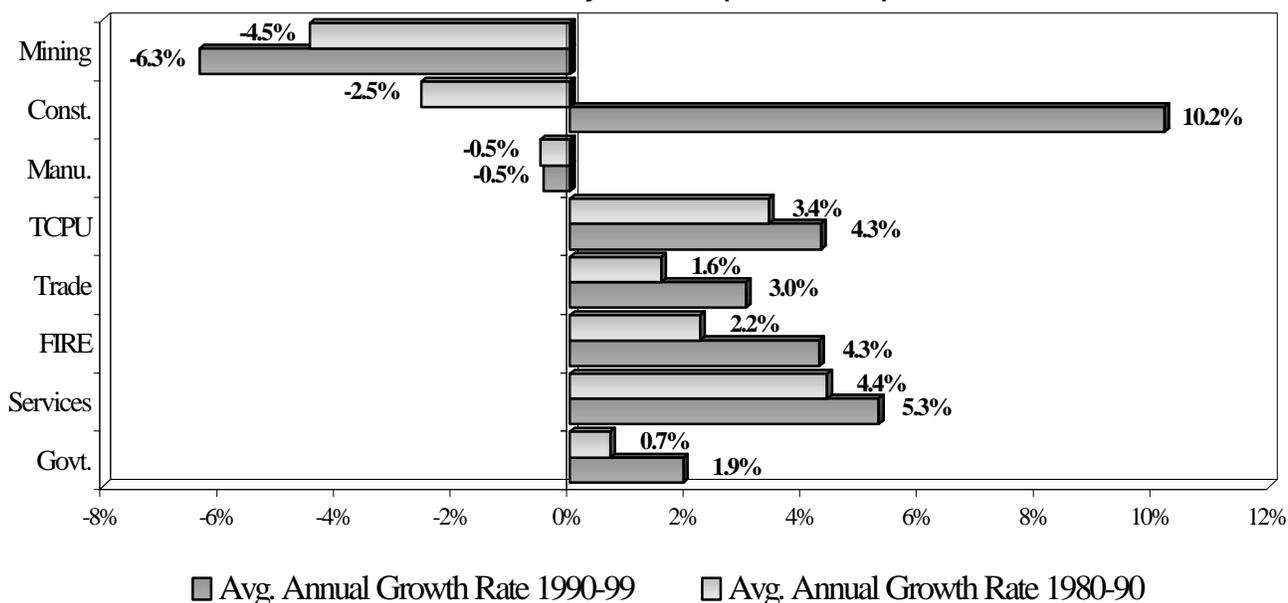
Through June 2000, the *construction* sector, which was the fastest growing sector in the metro economy during the 1990s, had increased 13.4% compared with the same period a year ago. This followed employment increases of 13.3% in 1999 and 11.7% in 1998. In fact, the sector grew at an average annual

rate of 10.1% from 1990 to 1999. This fast growth increased the sector from 3.9% of the work force in 1990 to 6.9% in 1999. Significant highway and residential construction are expected to help fuel continued growth in the construction sector.

Thus far in 2000, *manufacturing* employment has fallen 1.4% over the same period last year. Weak growth in manufacturing employment during the 1990s caused the sector to shrink from 11.3% of the workforce in 1990 to only 7.9% in 1999. Two factors have contributed to this decline: increased worker productivity and an Asian economic slump in the later part of the decade. Still, the decline in the share of total employment is mirrored by state and national statistics.

Within the manufacturing sector, significant activity is coming in the *aerospace* industry. Lockheed Martin will layoff between 90 and 120 people in the Denver area as part of a nationwide restructuring that will cause 2,800 to lose their jobs companywide. Also part of the restructuring was the company's announcement that its Jefferson County plant will be the new headquarters for its space-systems division. On the positive outlook, Adam Aircraft Industries will lease 32,000 square feet of hangars, factory space, and office space at Centennial Airport in Arapahoe County. They hope to employ up to 200

Figure 1 - Metro-Denver Employment Growth By Sector (1980-1999)



people to produce “push-pull” planes that offer engines at the front and rear of the aircraft.

The **transportation, communications, and public utilities** sector increased slightly more rapidly than total employment throughout the 1990s, growing at an average annual rate of 3.9% from 1990 to 1999. The sector has been expanding rapidly during the last 1½ years, increasing 6.9% in 1999 and 5.9% during the first half of 2000.

Though recent reports have said up to 4,000 jobs may be cut across its service area as a result of the restructuring following the acquisition of USWest Communications by Qwest Communications International, Qwest will hire 600 workers to staff the company’s service centers throughout the west. Recently, Qwest opened a 111,000-square-foot center for data storage in the Highlands Ranch Business Park that ultimately will hold up to 360 employees.

Several other major telecommunications companies also announced expansions into the Denver area. Nextlink Communications announced that it will move its headquarters from Virginia to Denver and hire 200 to 300 people by the end of the year. Additionally, Douglas County’s Time Warner Telecom plans to hire at least 300 people to fill expanding needs in their software engineering, systems analysis, marketing, and general administrative departments. Touch America, a Butte, Montana-based telecommunications company, will move its sales and marketing headquarters to the Denver Tech Center. The company, which owns a portion of Qwest Communication’s western long distance business, plans to hire an additional 200 employees by the end of the year. Also, World Wireless Communications will move from Salt Lake City to Denver and hire 40 new employees to staff its corporate headquarters.

There were several negative employment announcements as well. New Century Energies said that it will cut 400 jobs through attrition and layoffs in preparation for its merger with Northern States Power Company of Minnesota. Also, Arapahoe County’s Convergent Communications Inc. announced plans to close offices in Wisconsin, Michigan, Iowa and Ohio. In an effort to cut costs, Convergent said it will layoff 250 employees nationwide

and 67 locally. Finally, Atlas Air announced it will move its headquarters from Golden to New York. However, the company says it expects to offer nearly all of its employees the opportunity to move with the company.

Meanwhile, continued expansion at DIA will help bolster the transportation sector. A new \$100 million cargo complex, for tenants such as Federal Express and United Parcel Service, is expected to bring approximately 1,600 new jobs to the area. Meanwhile, United Airlines will expand its presence at DIA. Already in 2000, the airline has announced that it will build a new 36-gate terminal for its United Express shuttles, and will offer expanded nonstop service to several North American destinations including Toronto and Albuquerque.

“...continued expansion at DIA will also help bolster the transportation sector.”

The **trade** industries increased at an annual average rate of 3.1% between 1990 and 1999, with gains of 3.4% in retail and 2.2% in wholesale trade. Retail trade employment increased 3.8% in 1999, while wholesale trade jobs moved up only 2.1%. June 2000 figures show that employment in the trade industries increased 2.6% over the last year, following a 3.3% expansion in 1999 and a 1.7% advance in 1998. The sector employed 23.6% of the work force in 1999.

Looking ahead, the opening of several large-scale retail centers will drive employment in this sector. The Colorado Mills Mall in Lakewood will open in the fall of 2001 and is expected to produce nearly 3,000 new jobs. In addition, retail space is being constructed as part of a variety of mixed-use developments across the region. Due to the substantial influx of retail space projected to come on line by the end of 2001, the sector is expected to see larger than normal growth rates over the next two years.

Employment growth in the **finance, insurance, and real estate** sector has also enjoyed consistent growth during the 1990s. Between 1990 and 1999, the sector experienced average annual growth of 4.1%. In

1999, the finance, insurance, and real estate sector employed 8.2% of metro-Denver's employees, compared with 7.7% of the employees in 1990. The sector lost 0.6% of its workers through the first six months of 2000.

Several key firms in this sector have contributed greatly to the real estate boom seen in recent years in Denver. Janus Capital Corporation has made plans to develop a 35-acre office complex at the former Lowry Air Force Base site. The project could total between 800,000 and 1.2 million square feet. Charles Schwab, the discount brokerage firm, announced that it will double the size of its southeast Denver offices, hiring up to 500 new employees over the next 18 months.

“Janus Capital Corporation has made plans to develop a 35-acre office complex at the former Lowry Air Force Base site.”

Schwab will lease a new 140,000-square-foot office building in the Panorama Corporate Center. Also, Invesco Funds Group continues its rapid growth as it will build a 28-acre campus that could host 2,000 employees in more than half a million square feet of buildings in the Denver Tech Center. Finally, Denver will be a new hub for McDonald Investments Inc., the investment banking arm of KeyCorp. The Denver office will now run corporate finance activities west of its Cleveland headquarters, and plans to hire as many as 20 bankers during the next two years.

Extended growth in the sector will be led by Teachers Insurance and Annuity Association - College Retirement Equities Fund, a pension management firm, which is continuing its plan to hire 800 new workers by the end of 2002. Also, Safeco Insurance Company of America is moving to Denver West Office Park and hiring 170 new employees over the next few years. Finally, Transamerica Capital will put its new national headquarters in the Denver Tech Center and plans to hire at least 100 new employees.

The largest sector in the metro-Denver economy is the *service* sector, employing 31.1% of the metro area's work force. The sector grew at an average annual rate of 4.9% during the 1990s, increasing its

portion of the work force from 27.5% in 1990 to 29.9% in 1999. Service employment increased by 5.7% during the first half of 2000, fueled by the continued expansion of the *advanced technologies* and *medical* services sectors.

The Department of Commerce recently ranked Denver sixth in a national study of technology-related salaries. Software developers, programmers, and network engineers average \$62,000 a year, 6.9% higher than the national average. A shortage of high skilled workers may prevent the advanced technology sector from growing as fast as is possible. In fact, there are an estimated 6,000 to 7,000 unfilled jobs in the sector in metro-Denver. This will have a positive impact on wages, however.

Among the variety of current and future employment opportunities, EHPT, a software firm that is a joint venture between Ericsson mobile phone and Hewlett-Packard, will move its headquarters from Sweden to Denver and bring 120 new jobs to the area. Meanwhile, Jefferson County's High Speed Access Corporation will hire between 100 and 150 workers over the next few years, with a substantial portion of these commanding salaries over \$60,000.

Advanced technology giant Cisco Systems has made plans to hire up to 350 new sales and support staff by 2002. The positions will draw from the ever-dwindling pool of high-skilled workers and will have salaries nearing \$70,000.

The recent recall of tires installed on many Ford vehicles has caused Denver-based TeleTech Holdings to rapidly hire 360 new customer communication and service workers. It is expected that these are largely temporary employees to meet immediate demand from consumers.

Ogilvy Public Relations Worldwide, a New York public relations firm, is adding 15 new employees to its Alexander Ogilvy technology practice in Denver in an effort to expand its client services. The expansion marks the first substantial inroad by a multinational agency into Colorado.

There were a few downsizings announced with the most significant occurring at J.D. Edwards and Tick-

etmaster. Due to poor earnings last quarter, J.D. Edwards will lay off 242 people in the Denver area. Meanwhile, Ticketmaster's parent company USA Networks has announced it will close its Denver call center, displacing 94 full-time and 186 part-time employees. The company, which provides Internet and phone service to small and mid-sized businesses, also plans to close offices in Wisconsin, Michigan, Iowa, and Ohio to reduce costs.

“Cooling in the NASDAQ stock market has made it more difficult for the once flourishing dot-com companies...”

Cooling in the NASDAQ stock market has made it more difficult for the once flourishing dot-com companies, with several local internet start-ups recently announcing shutdowns or layoffs. BedandBreakfast.com, which provides online listings and reservations for 24,000 bed-and-breakfast inns, laid off 25 of 40 people in Denver. Also in Denver, Boulder-based PlanetOutdoors.com laid off another 25 of its 88-person staff and agreed to be bought by MVP.com. In more dismal news, both KickStart.com in Denver and Broomfield online delivery company Groceries-Plus.com closed their doors citing an increasing inability to raise money from investors.

In *medical* services, Colorado Hospital has cut nearly 100 jobs this year as a result of an \$8 million shortfall it reported in January; however, two other area hospitals will expand. Centura Health announced a

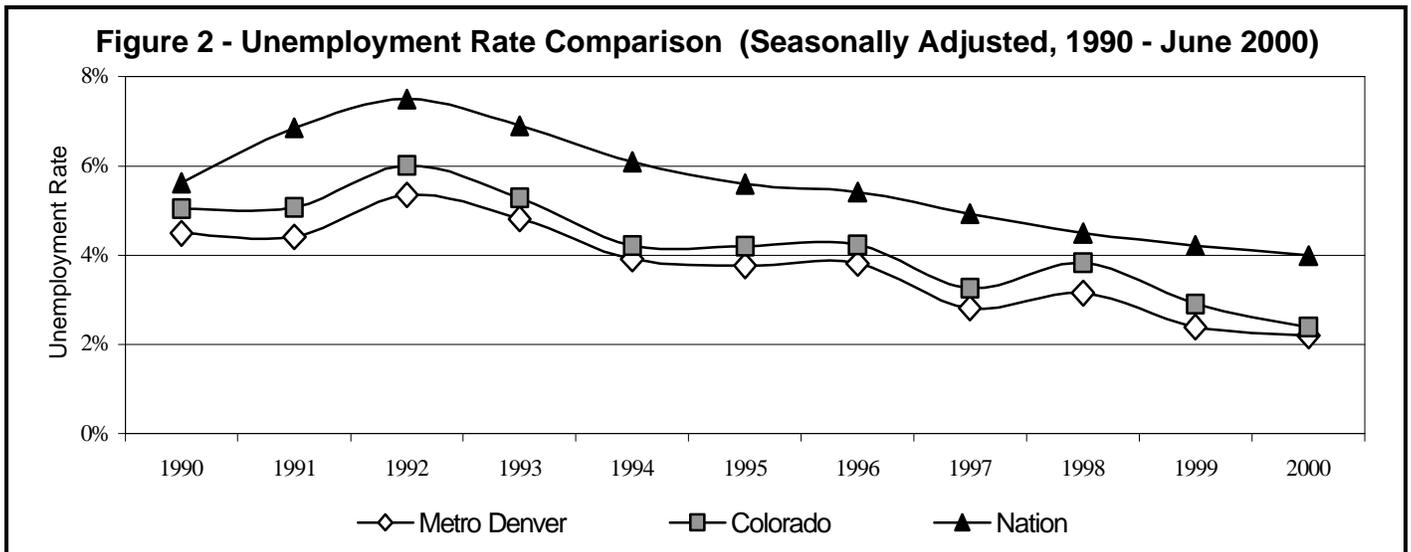
\$38 million expansion of Littleton Adventist Hospital, the current primary hospital serving the fast-growing southern and southeastern suburbs. The project will get under way this fall, adding 100,000 square feet, which will increase Littleton Adventist's size by nearly 50%. Additionally, HealthOne plans to build a 125-bed hospital at Interstate-25 and Lincoln Avenue.

The *government* sector grew at a 1.7% annual average rate from 1990 to 1999. Because the sector was growing slowly while the economy was booming, its share of the local work force decreased from 15.4% in 1990 to 13.2% in 1999. Through June 2000, the government sector grew by 1.5%.

The unemployment rate for the Denver region continued to stay below both the state and national levels (see Figure 2). Unemployment rates for both the state and region remain among the lowest in the country. In metro Denver, the June 2000 seasonally-adjusted unemployment rate was 2.2%, just under the statewide figure of 2.3%, which was the second lowest in the country. Meanwhile, the national unemployment rate was 4.0% in June.

Nonresidential Construction

According to F.W. Dodge, the value of nonresidential construction permits in metro Denver through June 2000 has fallen off dramatically, down over 30% as compared with the first half of 1999. The de-



crease was a result of widespread slowing in both commercial and education/science construction. Despite this apparent downturn, it is important to note that typically the most significant permit activity occurs later in the year, so the market is expected to stabilize. The one bright spot was the rebounding of the office market. Office permit values are up 21.4% through June.

Retail

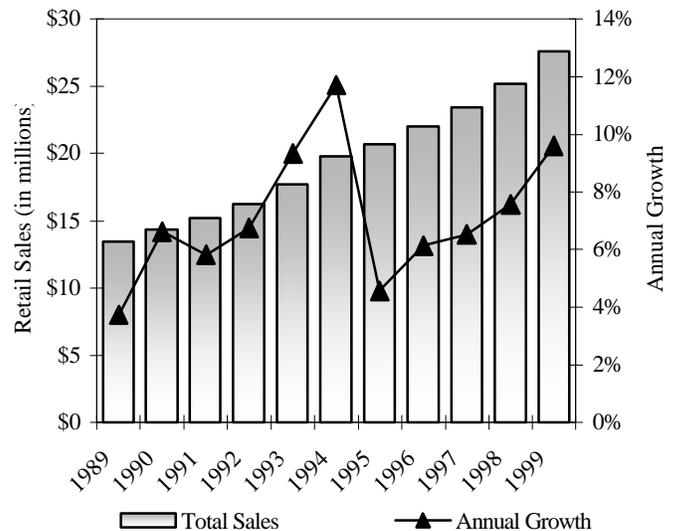
Broad consumer spending mixed with a continued boom in the local economy is helping to maintain the health of the metro-Denver retail market. With large strip malls continuing to drive the market, 1.2 million square feet of space was absorbed during the first six months of the year, according to Frederick Ross Research Services. With just over 1 million square feet of retail space coming on line thus far in 2000, the vacancy rate declined by 0.3 percentage points over the first six months to 5.5%. This slight drop in vacancy has not prompted rental rate increases so far in 2000.

“Broad consumer spending mixed with a continued boom in the local economy is helping to maintain the health of the metro-Denver retail market.”

New construction has been widespread throughout the region. Despite a slightly negative absorption rate through June 2000, Cherry Creek remained the tightest submarket, as vacancy rates have stayed below 2% during the last year. Potentially, over 2.5 million square feet could come on line by the end of the year, which would represent the fastest growth in the retail market since the mid-1980s. The largest portions of this growth will be found in the southern metro area.

Retail sales in the metro-Denver area have grown by an average of 7.5% during the 1990s, and by 9.6% in 1999. Through May 2000, sales have continued to expand, growing by 14.5% compared with the same period in 1999. The largest growth over the last several years has come in Douglas County, matching its increasing population base. Douglas County has enjoyed eight consecutive years of retail sales growth topping 20%.

Figure 3 - Metro-Denver Retail Sales (1989-1999)



Lakewood is seeing the most dramatic influx of retail construction in the metro area. At least six projects, including Colorado Mills Mall and JCRS Shopping Center (will be renamed Bell Tower Plaza), have been completed this year or will be by the end of 2001. These projects could bring in close to two million square feet of new and renovated retail space to Lakewood.

Other projects in the area include the \$25 million renovation of the Tabor Center in **downtown Denver**. The renovation will add street-level storefronts and 26,000 square feet to its current 110,000 square feet of retail space. In **Thornton**, a \$13 million, 126,000-square-foot retail center called Northland will include a grocery store, restaurants and other small retail outlets.

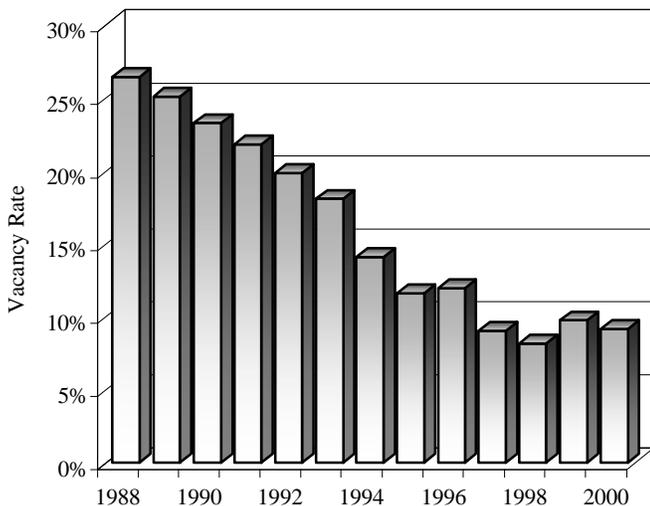
Retail development in the region is also coming as part of larger mixed-use projects. With retail space totaling over 300,000 square feet each, the largest of these projects are Centennial Interport, Stapleton Airport, Park Centre, and Lowry Air Force Base. Stapleton, pending city council approval, will begin with the development of 3,000 acres by Forest City Corporation that will include approximately one million square feet of retail space. Also, a Wal-Mart, as well as several smaller retailers will be part of the City Center redevelopment project in Englewood that will

include residences, a civic center, and government buildings. In the long term, the redevelopment of the Bandimere Speedway area will also add significant retail space.

Office

The Denver office market has reached new heights in 2000, as lower vacancy rates have bolstered new construction and high absorption rates. According to Frederick Ross Research Services, the office market absorbed nearly 1.7 million square feet, while adding less than 1.3 million square feet to its inventory during the first six months of 2000. This allowed the vacancy rate to drop from 8.3% at the end of 1999 to 7.6% in June 2000. The continued tightening of the office market has led to slight rental rate increases, with the most significant jumps occurring in the Central Business District and Midtown submarkets.

Figure 4 - Metro Denver Office Vacancy (1988 - June 2000)



Office construction is expected to explode in the second half of the year, with another potential 3 million square feet entering the market. Though this is a significant boom in space, over 50% of it has already been pre-leased. The Southeast Suburban submarket is in the midst of the largest office boom on record, as over 2.5 million square feet of office space will enter the market in 2000.

Widespread tightness of the office market has led to development in nearly every submarket. In Downtown Denver, Hines Development Co. has announced plans for a 600,000-square-foot, 40-story office tower. The Denver Technological Center will see the addition of Invesco Funds Group's first phase of a new 28-acre business park. The first phase will include 275,000 square feet in two buildings set to be completed by late 2001. Finally, one million square feet is being built with another 400,000 planned at Highlands Ranch Business Center. Companies that have already pre-leased some of the space include Avaya Communications (split off from Lucent Technology), Qwest Communications, and Visa Corporation.

“Widespread tightness of the office market has led to development in nearly every submarket.”

Douglas County is enjoying a boom in its office market. The 150-acre Stonegate Business Park hopes to attract high-tech tenants similar to the successful Interlocken development. Construction on the new buildings may begin as early as 2001, with up to 2 million square feet of office space, as well as additional residential, retail, and open space. Near Park Meadows Mall, construction began in June on a \$32 million, 161,200-square-foot office building. Developers are still looking for tenants for approximately 105,000 square feet. Meanwhile, American Century Investments will move into its new 161,000-square-foot headquarters currently under construction at ParkRidge Corporate Center. In addition to the American Century building, ParkRidge developers are building a 190,000-square-foot speculative office building.

Industrial

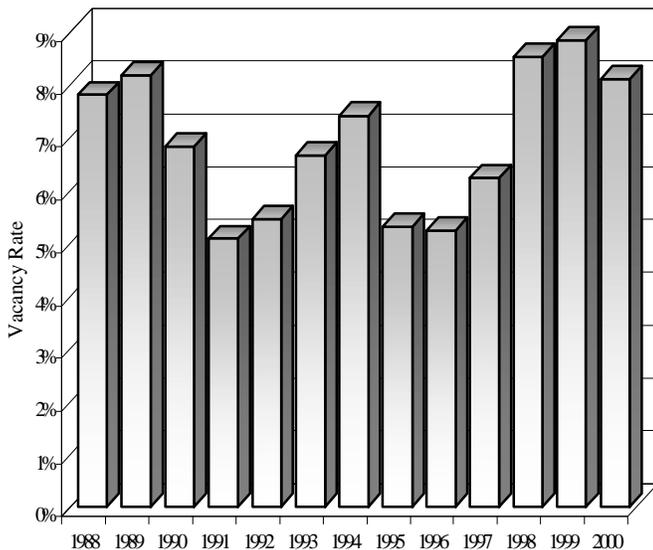
Like most markets, Denver's industrial sector is enjoying the area's booming economy. The first half of 2000 saw 1.75 million square feet of space added to the market, according to Frederick Ross Research Services. Despite this addition, the vacancy rate dropped from 6.4% to 5.4% during the first six months of 2000 as the market absorbed more than 3

million square feet. The west submarket has the lowest overall vacancy rate at 2.7%. Rents showed only slight increases, despite the tight market.

The most active submarkets in 2000 are the east and southeast, which had nearly three-quarters of all newly completed construction. Furthermore, the two submarkets also have roughly 1.2 million square feet of space under construction, which represents nearly 80% of all space currently under construction.

Among the projects currently under development is a plan to build up to 750,000 square feet of new space at Denver International Airport. The first phase consists of 500,000 square feet, with the remaining to be built based on industry demand. Also, Webvan Group Inc. announced that it will build a 350,000-square-foot building at the former Stapleton International Airport. The online grocer will use the building as a distribution center.

Figure 5 - Metro-Denver Industrial Vacancy (1988 - June 2000)



Other Nonresidential Construction

Mixed-use construction projects have continued their popularity this year, especially in **Lakewood**, which is undergoing substantial development. A \$25 million, 120,000-square-foot complex is under develop-

ment at Kipling Parkway and Morrison Road. The new project will comprise retail and office buildings averaging 8,000 square feet per building. Construction is expected to begin in spring 2000 on the Vance Street Promenade, a mixed-use development that will include apartments, townhomes, a park, movie theater, retail and office space. Additionally, a potential \$250 million redevelopment of Villa Italia Mall would bring new stores, offices, and housing to the city. Finally, the \$80 million Lakewood City Common includes new city offices and an adjacent shopping center.

One of the largest mixed-use redevelopment areas continues to be Stapleton Airport in **Denver**. Earlier this year, Forest City Corporation agreed, pending city council approval, to construct 1.3 million square feet of retail and office space. The final development plan also includes 12,000 residential units. Also, The Paseo at North High School at the corner of Federal and Speer is also underway. The 110,000-square-foot urban redevelopment project will house an Albertson's and other retail stores, 10,000 square feet of office space, and 100 to 150 apartments.

One of the larger projects in the metro area will be at **Jefferson County's** Bandimere Speedway. Plans for over 400,000 square feet of office space and up to one million square feet of retail were announced. The Jefferson Economic Council reports that the \$200 million pumped into speedway redevelopment projects over the next five to eight years could create up to 4,750 new jobs and generate \$250 million to \$300 million in retail sales annually.

“One of the larger projects in the metro area will be at Jefferson County's Bandimere Speedway.”

United Airlines released plans to begin construction at **Denver International Airport** on a new 36-gate, \$100 million commuter air terminal for United Express and other commuter carriers. Construction on the new terminal is expected to be completed in 2003. Also, the airport announced plans for an expanded pedestrian tunnel system among all three terminals to help combat increased passenger traffic.

Construction in the *hotel* industry remained healthy during the last year. According to Benton & Associates, there will be about 1,850 new hotel rooms added in metro Denver by the end of 2000, representing a 5.4% growth rate. The industry appears to be slowing down following peak years of 1998 and 1999, where the total inventory of hotel rooms grew by 10.2% and 9.2%, respectively.

Driven by rapid corporate expansion, the northwest submarket is currently experiencing the greatest growth. Two new Marriot hotels will open in the next year in Westminster. A 142-room Spring Hill Suites by Marriot will be located in the Church Ranch Corporate Center, while a larger 278-room full service Marriot will go in across the street from the Westminster Promenade in spring 2001.

The City of Denver also recently announced that it will spend \$22 million on Red Rocks Amphitheater in **Morrison** beginning in fall 2001. The project, to be completed by 2002 will include updating infrastructure and constructing a restaurant plaza above the seating area, as well as a new history and information center. Denver also opened its new South Platte River park system on July 30. The parks extend 1½ miles along the river from the Children’s Museum to North 20th, and include hiking, biking and skating trails amongst the seven current and future park spaces.

The Colorado Department of Transportation announced that it will spend a record \$471 million on

highway projects in the Denver area this summer, \$100 million more than last summer. The department indicated that \$540 million in revenue anticipation notes are expected to be sold in 2000, and that at least four major highway projects in the Denver area will be accelerated as a result. They include an east-bound extension of Interstate-270 between U.S. 36 and Interstate-76, an additional lane in each direction on Interstate-25 between Castle Pines Parkway and Founders/Meadows Parkway, a new interchange at Interstate-76 and 120th Avenue in Adams County, and the widening of 3.5 miles of U.S. 285 between Eagle Cliff Road and Foxton Road.

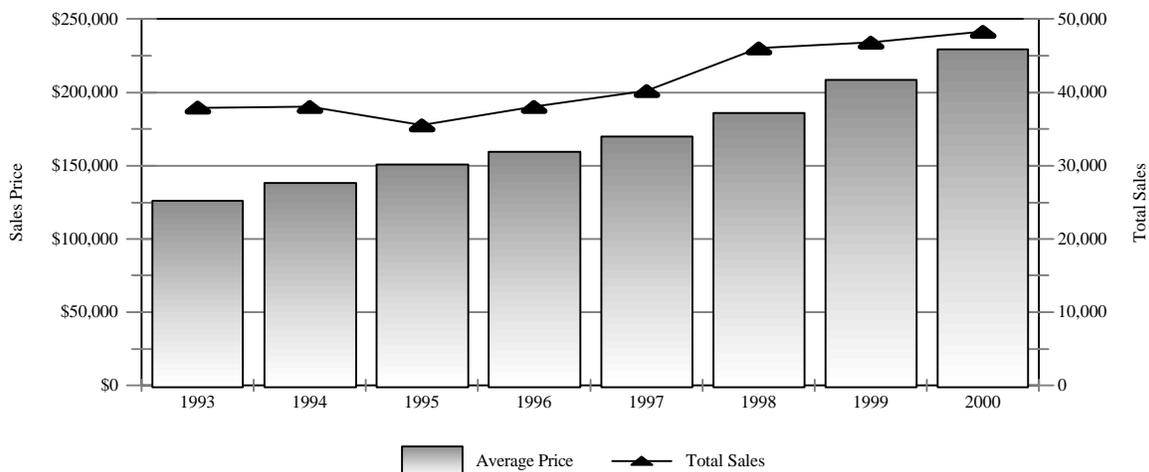
“The Colorado Department of Transportation announced that it will spend a record \$471 million on highway projects in the Denver area this summer...”

Denver Water announced plans to build a \$139 million reclamation and reuse plant. The plant will help address the growing need for *water* in Denver by supplying approximately 17% of the projected need over the next 45 years. Construction is set to begin in the fall.

Residential Construction

According to Perry and Butler Realty, the number of existing home sales in metro Denver is down 0.6% through July of 2000, compared with the same period

Figure 6 - Single Family Home Sales (1993 - 2000 YTD)



in 1999. The median price of an existing single-family home during the first seven months of 2000 was \$199,900, representing a 13.4% increase over the same period in 1999. Though recent price increases and new construction have helped the market loosen slightly from a year ago, Denver is still experiencing one of its tightest single-family home markets on record. Meanwhile, condominium prices have risen 16.8% to \$121,900, driven at least in part by those priced out of the single-family market.

A recent study completed by First American Real Estate Solutions ranked Denver second among 35 national major metropolitan areas in home price appreciation between 1989 and 1999. The average price of a single-family home over that period more than doubled, as compared with the overall national increase of 23.6%. However, according to the National Association of Home Builders, Denver remains in the top half of the nation's large cities (population over 250,000) for housing affordability through the first quarter of 2000.

“...multi-family permits increased by an astounding 80.4%...indicative of the conditions in the market where increased demand in the condominium and apartment markets is being created by those priced out of the ever increasing single-family market.”

According to the Department of Housing and Urban Development, permits for residential construction projects increased 21.6% through the first quarter of 2000, relative to the first three months of 1999. Though this might suggest widespread growth, single-family permits were down 3.9%, while multi-family permits increased by an astounding 80.4%. This notable expansion is again indicative of the conditions in the market where increased demand in the condominium and apartment markets is being created by those priced out of the ever increasing single-family market.

According to The Genesis Group, Douglas and Arapahoe counties accounted for nearly two-thirds of all new housing development through the first quarter of 2000, although Douglas County did experience

a 24% decline in new home sales as compared with the first quarter of 1999. Arapahoe County was the only county in metro Denver to increase its new home sales, which was bolstered by an increase in the supply of homes priced under \$200,000.

Douglas County continues to lead the metro area's new *single-family* home market. County commissioners approved plans for a 5,576 acre project north-west of Castle Rock. The community, called The Canyons, will be comprised of 2,406 single-family homes, 95 affordable housing units, two golf courses, two regional parks, and four local parks. Also in Douglas County is the Reata project near Parker. The North, South, and East developments will total 1,560 homes and include a golf course, private country club, and lodge.

The Lowry area has also been a hotbed for development. Construction will begin next month on its third residential neighborhood. The project, to be phased in over the next three years, will have approximately 950 single-family homes, duplexes, townhomes, and apartments, with home prices in the first phase expected to start near \$300,000.

Denver's *apartment* market remained healthy through the second quarter of 2000. A new survey completed by the University of Denver shows the vacancy rate for apartments in the metro area at 4.9% for the second quarter. That's up from 4.5% for the same quarter last year and down from 5.1% in the first quarter of 2000. As expected in a stable market, the slight decrease in vacancy led to a small increase in rents over the quarter.

Several significant *multi-family* projects are underway or planned in metro Denver. Loft development continues to drive the market in and around downtown. Three developments totaling 185 units in the Highland neighborhood were recently announced, with the largest of these being the Residences at Highland Crossing. The project includes 100 units with prices ranging from \$161,000 to \$424,000. All three projects are expected to break ground by the middle of fall. Also, a six-story warehouse in lower downtown Denver is being converted into 45 lofts, which have been largely pre-sold for between

\$345,000 and \$681,000. Other major projects include Red Rock Ranch, a \$34 million, 348-unit apartment complex to be completed in the summer of 2002, and the continuing redevelopment of much of the Central Platte Valley near Elitch Gardens and the Pepsi Center, which could see as many as 800 new loft and apartment units completed in the next three years.

Congress Park will get its first new housing project along East Colfax in 80 years with the completion of Chamberlin Heights, a \$15 million, 56-unit condominium and townhouse project on the corner of Colfax and Steele Street. The 70,000-square-foot building will house 56 units, ranging in size from 1,000 to 1,600 square feet.

More moderate multi-family development is occurring in Englewood and other outlying areas, as the trend toward mixed-use projects containing apartments takes hold. On the former site of Cinderella City, construction is beginning on a 450-unit complex that will also include a civic center and retail

development anchored by a Wal-Mart store. The redevelopment is a mixed-use, transit-oriented project built to accompany the addition of the southwest light rail line in Englewood.

Summary

Metropolitan Denver continues to be the economic leader in Colorado. Accounting for over half of the state's employment, Denver continues to lead the state with expansions in advanced technologies and construction. Mergers and acquisitions of large companies are the main cause of negative economic news in the region. Though the area still has high levels of residential and nonresidential construction, rising costs of living and increasing inflation are concerns for the short and long-term future. Ultimately, Denver remains one of the fastest growing metropolitan areas in the country. Although the region's economic climate continues to attract businesses, the extended labor shortage will persist in driving up costs to both businesses and individuals.

Table 2 - Metro-Denver Economic Indicators at a Glance

	Metro Denver	Colorado
<i>Population Growth</i>		
1990-99 Compound Average Annual Growth Rate(CAAGR)	2.5	2.6
1998-99 Growth Rate	2.6	2.5
<i>Nonfarm Employment Growth</i>		
1990-99 CAAGR	3.7	3.8
1998-99 Growth Rate	3.7	3.7
<i>Unemployment Rate (seasonally adjusted)</i>		
1990-99 Average	3.9	4.3
June 2000	2.2	2.3
<i>Retail Trade Sales Growth</i>		
1990-99 CAAGR	7.5	7.3
1998-99 Growth Rate	9.6	8.5
<i>Year-to-date Nonresidential Construction (Permit Values)*</i>	(30.3)	(29.1)
<i>Year-to-date Residential Construction (Units Permitted)*</i>	(6.3)	(6.6)

Special Report: Gasoline Prices and the Colorado Economy

Gasoline Prices and the Colorado Economy

Between February 1999 and July 2000, the price of a gallon of mid-grade conventional gasoline increased 68.8% in the United States. Heavily reported on by the media, the strong increase caused political turmoil in Washington D.C. and many states. This special report in the *Colorado Economic Chronicle* will investigate the causes of the gasoline price increase and its effect on the Colorado economy.

Gasoline prices have risen dramatically since February 1999

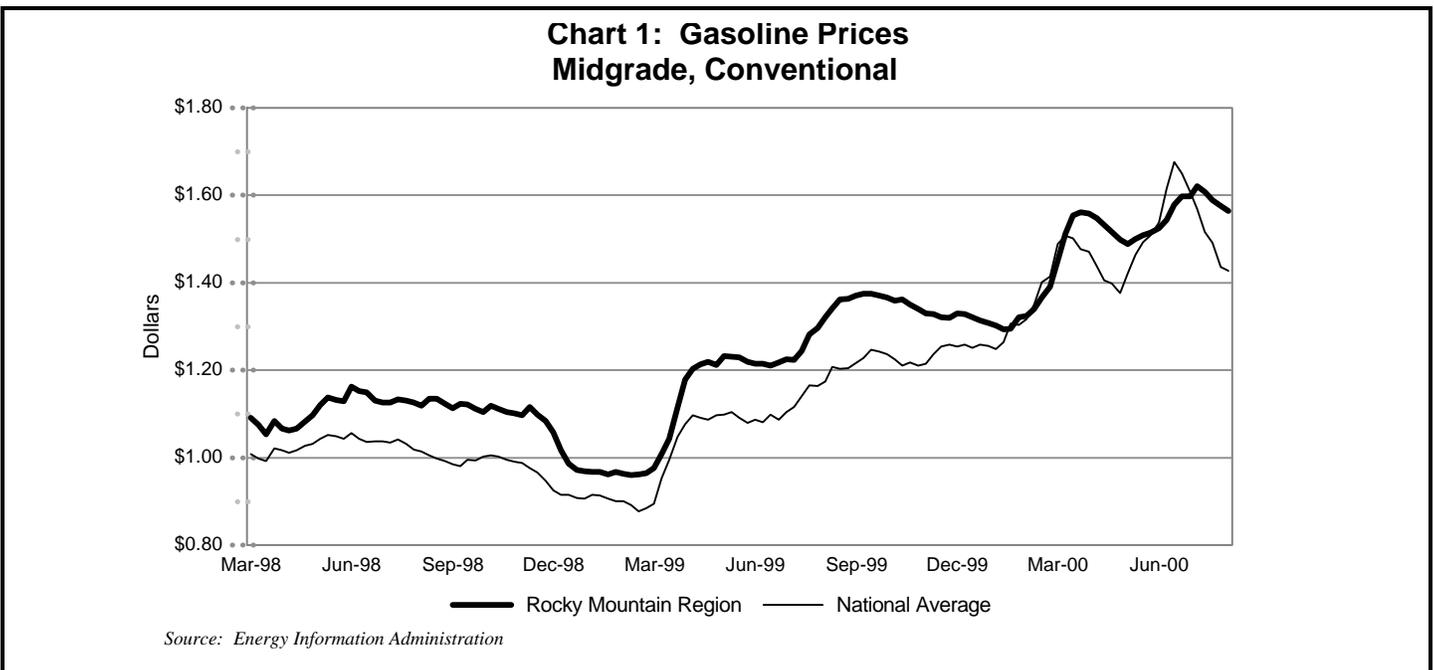
Chart 1 shows the average price of a gallon of gasoline¹ over the last 18 months for the United States and for the Rocky Mountain region, which includes Colorado, Wyoming, Montana, Idaho, and Utah. After hitting a low of 96 cents per gallon in mid-February 1999, average gasoline prices in the Rocky Mountain region began rising, peaking at \$1.62 per gallon in mid-July 2000. This increase was characterized by two periods of very strong price rises dur-

ing 1999 and 2000; gasoline prices rose 27 cents, or 28.4%, between mid-February and mid-May 1999, and another 26 cents, or 20.1%, between mid-January and mid-March 2000.

Colorado gasoline prices are higher than the national average, but less volatile

Chart 1 also shows that the price of gasoline in the Rocky Mountain region is consistently between ten and twenty cents higher than the average price of gasoline in the U.S., except for brief periods of strong price increases. Prices in the Rocky Mountain region are generally higher than the U.S. average because they are relatively further away from the Gulf Coast, the major source of gasoline produced in the nation. Indeed, absent temporary disruptions, the highest prices in the nation can be found in California and the upper northwest.

During periods of strong price increases, the gap between the average U.S. price and the price in the Rocky Mountain region shrinks and at times be-



1. Unless otherwise indicated, all gasoline prices in this report will refer to midgrade conventional.

comes negative. This indicates that the average U.S. gasoline price is more volatile than gasoline prices in the Rocky Mountain region. In general, gasoline prices in any region are more stable than the national average, because every region's volatility is reflected in the national average. Gasoline price volatility in Colorado and other states in the Rocky Mountain region results primarily from seasonal changes in demand and volatility in the price of crude oil. Other regions of the U.S. also experience volatility due to more stringent environmental regulations, and recently, more supply disruptions. For example, prices surged in the Midwest as a result of supply disruptions and complications from new anti-smog regulations in June,² causing the U.S. average price of gasoline to skyrocket relative to that of the Rocky Mountain region. Suppliers subsequently rushed gasoline to the Midwest, resulting in a 17.3 cent decline in the U.S. average price of gasoline during the month of July, while prices in the Rocky Mountain region declined by only 2.2 cents.

Inflation-adjusted gasoline prices are still relatively low

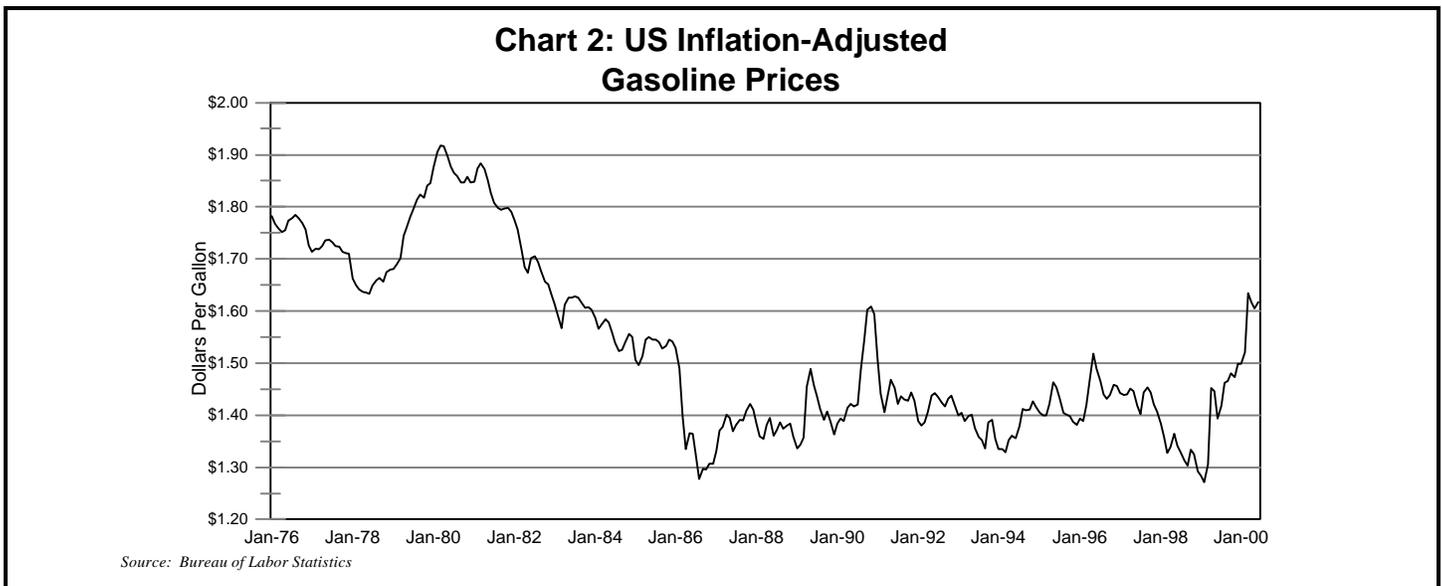
Chart 2 shows the U. S. average gasoline price, adjusted for inflation in the energy industry (in 2000 dollars), since 1976. Despite strong price increases

during the last 18 months, inflation-adjusted gasoline prices remain at relatively low levels. Indeed, inflation-adjusted gasoline prices are still lower than they were in 1982. However, consumers and businesses tend to react more to large changes in the price level than to the price level itself.³

The increase in the price of gasoline was driven by low supplies of crude oil

Table 1 shows the price of a gallon of regular conventional gasoline in June 1999 and in June 2000. There are four components in the price of gasoline: 1) federal and state taxes, 2) the price of the crude oil used to produce the gasoline, 3) the costs and profits of gasoline refiners, and, 4) the distribution costs, marketing costs, and other costs and profits of retail gasoline stations. The most stable component in the price of gasoline is federal and state taxes, which are equal to 40.5 cents per gallon in Colorado, slightly lower than the U.S. average.

Table 1 shows that the largest increase occurred in the price of crude oil. However, the amount of money retained by refiners for their costs and profits nearly tripled, and the amount retained by retail stations also increased. Absent the added volatility caused by the supply problems and regulatory issues



2. However, the Federal Trade Commission recently found that new anti-smog regulations contributed to the supply disruptions, but otherwise were not the primary reason for the disproportionately huge price increases in the Midwest during June and July.
 3. Energy Information Administration, Petroleum Division. Update: A Year of Volatility; Oil Markets and Gasoline. June 20, 2000.

Table 1: Components of the Price of a Gallon of Gasoline
United States Average; Regular Conventional

	June 1999 \$1.11 per gallon		June 2000 \$1.63 per gallon	
	Cents	Percent	Cents	Percent
Federal and State Taxes	41 cents	37%	42 cents	26%
Crude Oil	43 cents	38%	75 cents	46%
Refiners Costs and Profits	6 cents	5%	20 cents	12%
Distribution and Marketing; Retail Station Costs and Profits	21 cents	19%	26 cents	16%

Totals may not sum due to rounding.

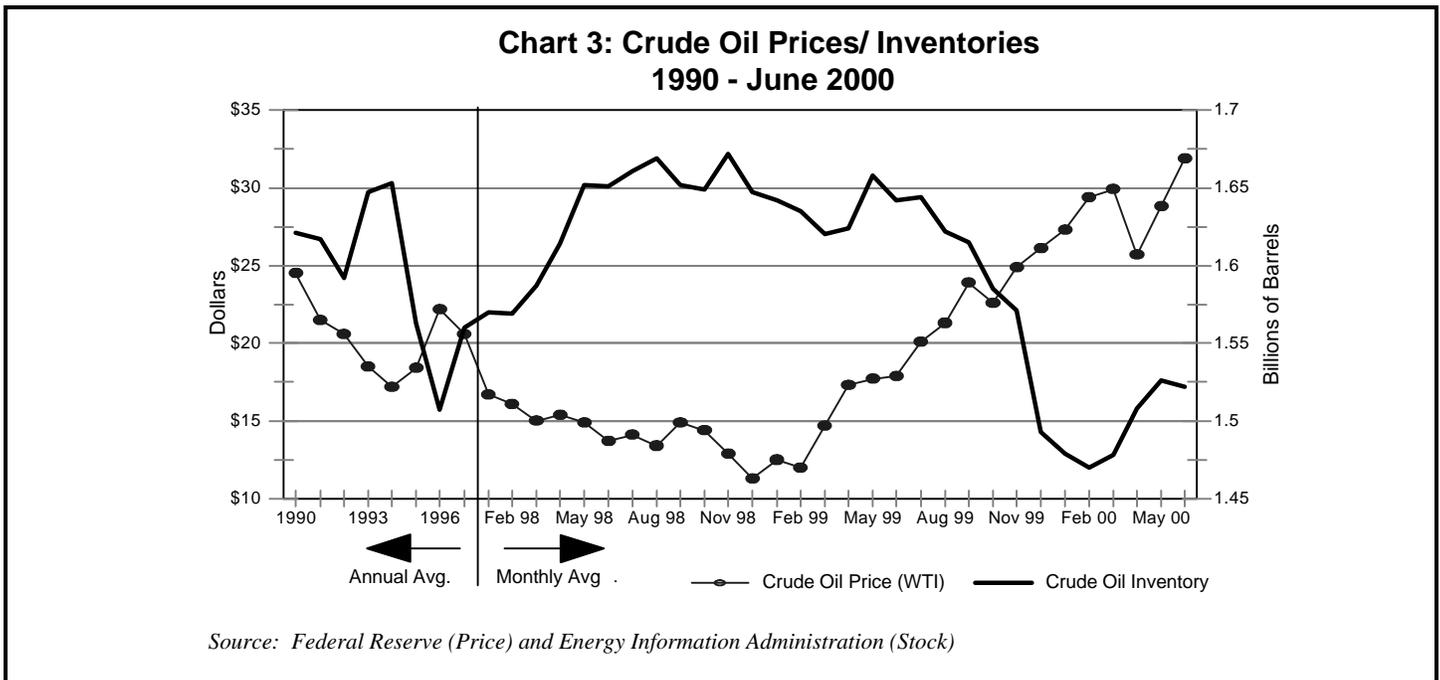
Source: Energy Information Administration Petroleum Division; July 13, 2000 EIA testimony before the U.S. Senate Committee on Energy and Natural Resources about rising crude oil and gasoline prices.

experienced in the Midwest, the price increases in the nation and Colorado were driven by a global imbalance between the supply and demand for crude oil.

A glut of crude oil in 1997 and 1998 set the stage for price volatility in 1999 and 2000. Chart 3 shows the crude oil and petroleum product inventories and the price of West Texas Intermediate crude oil from 1990 through May 2000. In 1997 and 1998, large buildups in petroleum inventories were caused by ex-

cessive production by Iraq, growth in production by other members of the Organization of Petroleum Exporting Countries (OPEC) during 1997, increased production by non-OPEC suppliers during 1997, and two successive mild winters, which reduced demand for oil used in heating. Also, global demand faltered as a result of the Asian economic crisis. As shown in Chart 3, these conditions caused a glut in inventories and a decline in the price of crude oil. Accordingly, the nationwide average price of gasoline fell to less than 90 cents per gallon by February 1999, as shown in Chart 1.

The oil and gas industry was severely hurt as a result of the plunge in oil and gas prices. The U.S. Energy Information Administration (EIA) reported that net income to energy companies monitored by the EIA fell 61% in 1998.⁴ In Colorado, three oil and gas companies announced cutbacks in December 1998. Amoco Corp. and Coastal Corp. both closed their Denver headquarters. Amoco relocated or laid off 380 employees, while Coastal Corp. relocated 50 employees to Utah and Texas. In addition, Texaco laid off 126 people in Colorado and 1,000 people nationwide during the first few months of 1999. Each company blamed the increased competition and depressed prices resulting from the Asian economic slump for the cutbacks.



4. Energy Information Administration, Energy Finance Division. Performance Profiles of Major Energy Producers; 1998. January 2000.

The members of OPEC, as well as some non-OPEC suppliers, responded to declining prices by consistently lowering production of crude oil during late 1998 through March 1999. During this time period, OPEC cut back production by an amount equal to approximately 6% of world supply. Meanwhile, the economic recovery in Asia stimulated worldwide demand. These events together caused inventories of crude oil to fall substantially between May 1999 and February 2000, as shown in Chart 3. Meanwhile, low crude oil inventories translated into higher crude oil prices, and, as shown in Chart 1, higher gasoline prices.

Retail gasoline inventories were also substantially reduced. Crude oil prices initially rose faster than gasoline prices at the pump, squeezing refinery profits and discouraging the production of gasoline at refineries. Indeed, Table 1 shows that refinery revenues in June 1999 were only six cents per gallon, much lower than the usual revenues of between 10 and 12 cents per gallon received by refineries in the summer months. Refineries allowed their inventories to decline, expecting crude oil prices to fall after the Federal Reserve Board's interest rate hikes cooled consumer demand. At that point, refineries expected to restock their inventories at a lower cost. Consumer demand, however, continued to grow despite

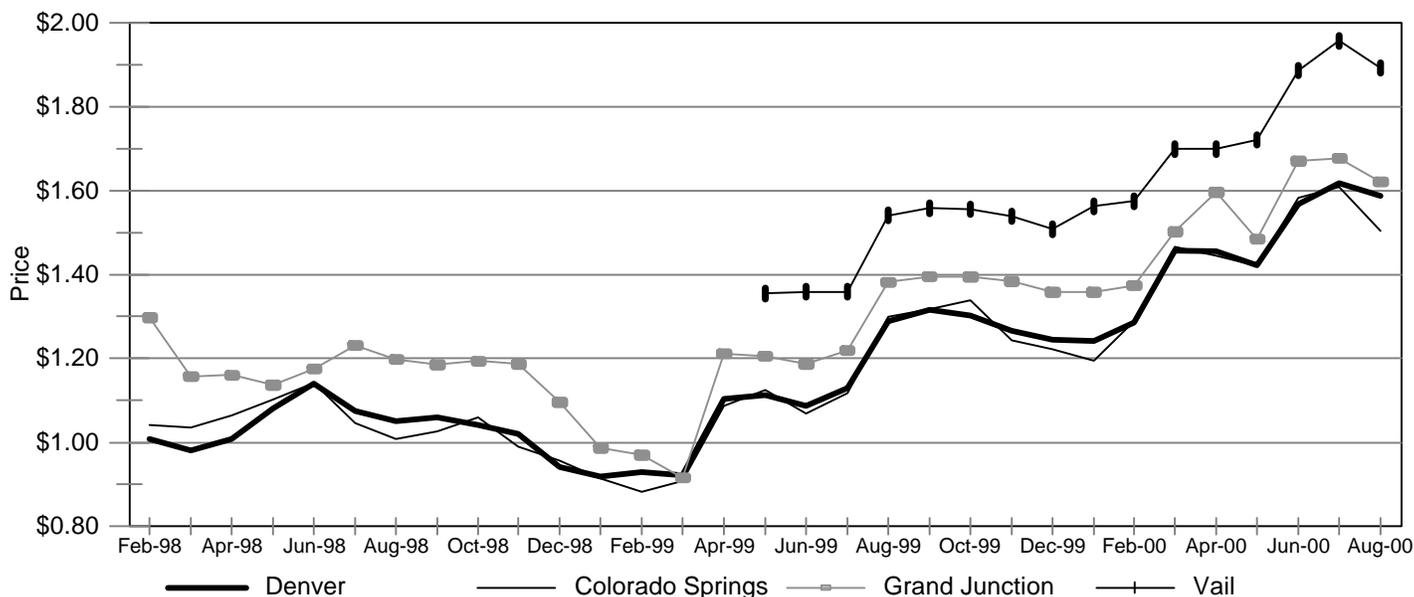
the interest rate hikes, and the Asian economy began recovering sooner than had been expected. By spring 2000, the price of crude oil remained high. Thus, refineries, finding their inventories dangerously low, helped bid the price up further in their effort to restock.

By early 2000, the low supply of gasoline, coupled with increasing demand due to the recovering Asian economies and booming economies elsewhere, caused retail gasoline prices to soar relative to the price of crude oil. As shown in Table 1, refinery revenues expanded to 20 cents per gallon by June 2000, 14 cents higher than a year earlier. Meanwhile, crude oil inventories remained low, causing a 33 cent increase in the price of a gallon of gasoline between June 1999 and June 2000. In addition, retail gasoline station revenues increased six cents per gallon during this time period as a result of these conditions. Thus, an imbalance in the supply and demand for crude oil caused the rapid increase in the price of gasoline.

Gasoline prices vary within Colorado

Chart 4 shows the average price of regular unleaded gasoline reported by AAA Colorado for the front

Chart 4: Regular Unleaded Gasoline Prices Across Colorado



Source: AAA Colorado; Data for Vail was unavailable prior to May 1999.

range, the mountain areas, and the western slope. Gasoline prices along the front range, represented by Denver and Colorado Springs on Chart 4, tend to be the lowest in the state. Although not shown, prices reported in Fort Collins and Pueblo closely follow the trend experienced in Denver and Colorado Springs. Nevertheless, prices in Pueblo tend to be the lowest in the state. Prices in the mountain areas, represented by Vail, are the highest in the state, while prices on the western slope, represented by Grand Junction, generally lie between front range and mountain area prices. Prices for the eastern plains are unavailable.

What effect do increasing gasoline prices have on the Colorado economy?

Coloradans consider gasoline to be a necessary good. While the price of a gallon of gasoline grew 28.0% between May 1999 and May 2000, demand for gasoline was actually 5.3% higher in May 2000 than it was in May 1999.⁵ Regardless of rapidly rising gasoline prices, consumers, farmers, and businesses in Colorado continued to demand additional gasoline; population growth and rising incomes more than offset the negative impacts of higher prices. While it is clear that the state as a whole is able to absorb a price increase, the ability of consumers, farmers, and businesses to absorb a price increase may vary. While the average consumer seems to have been unaffected by the rising price of gasoline, businesses may have been affected, and farmers were caught between low crop prices and rising fuel costs.

The current economic expansion has been driven by the **consumer** both nationwide and in Colorado. There is little evidence that higher gasoline prices have hurt the average consumer in Colorado. Despite spending more on gasoline, Coloradans' spending spree continued in 1999 and early 2000. Retail sales are not decelerating, but instead are accelerating, growing 8.5% in 1999, and 12.6% through May 2000 compared with the first five months in 1999. In addition, there is no evidence that vehicles with

low mileage capacities are being replaced with vehicles with high mileage capacities. According to the Associated Press, SUV sales were up 11% in the first half of 2000 nationwide, compared with only a 7% increase in the entire car and light truck market. The booming economy is responsible for the seemingly unaffected Colorado consumer. Personal income in Colorado increased 9.0% in 1998 and 7.9% in 1999, and is expected to rise another 8.3% in 2000. Wealth is also increasing in Colorado. The evidence suggests that the economy in Colorado is so strong that most Coloradans can afford an increase in gasoline prices, particularly when inflation has been mild otherwise.

Despite the overall health of the Colorado economy, some consumers in the state are feeling the impacts of higher gasoline prices. According to a report by the Census Bureau, 8.7% of Colorado households had incomes below the federal poverty level of \$16,660 for a family of four in 1998.⁶ Poor families who must commute for long distances are likely to be hurt relatively more by a price increase, particularly those who live in the mountain areas of the state or on the western slope where gasoline prices are higher and/or public transportation less available.

Economists have differed on what effect rapidly rising gasoline prices may have on the general economy, in particular the **inflation** rate. Some, including Fed chairman Alan Greenspan, have theorized that rising prices could cool the consumer-driven economy, easing overall inflationary pressures. Others have theorized that rising gasoline prices could fuel expectations of further price increases, causing workers to demand higher wages, and thus causing an upward spiral of inflation. However, the evidence in Colorado does not support either theory. As mentioned above, retail sales are accelerating, and the Denver-Boulder-Greeley inflation rate, at 3.4% for FY 1999-00, is showing inflationary pressure but remains low by historical standards. Regardless, gasoline prices would need to continue rising on a more permanent basis for either theory to play out in the economy.

5. Colorado Department of Revenue. Gasoline tax liabilities were \$35.4 million for May 1999 and \$37.3 million for May 2000.

6. Dalaker, Joseph, U.S. Census Bureau, Current Population Reports, Series P60-207, Poverty in the United States: 1998, U.S. Government Printing Office, Washington, D.C., September 1999.

Part of the decline in Colorado gasoline consumption since gasoline prices began rising invariably came from a decline in **tourism**. Indeed, a recent survey by the Colorado Tourism Board found that the number of tourists in Colorado declined 4% in 1999 over 1998. Our analyses suggest that retail sales at hotels in Colorado decline when the national average price of gasoline increases. This is consistent with a decline in tourism activity during 1999. However, the survey indicated that while the number of tourists declined, the amount of money spent by tourists did not. Indeed, five out of the top ten tourist attractions in the metro-Denver area were shopping centers. The survey also indicated that the proportion of tourists coming from outside of Colorado declined relative to those traveling within the state, indicating that more Coloradans are choosing to vacation in Colorado. Thus, because of high gasoline costs, many Coloradans are electing to spend their vacation and entertainment budgets within the state rather than traveling outside of their state. At the same time, however, fewer tourists are coming from outside of Colorado. This hurts business along interstate highway corridors where tourists drive through on their way to tourist destinations, particularly on the eastern plains.

High fuel prices have put additional pressure on the already struggling **agricultural** sector in Colorado. While many agricultural prices have recovered somewhat from the record lows that threw the Colorado agricultural community into a crisis a year and a half ago, most prices remain at levels very low by historical standards. This combined with rising fuel prices, a major input into their production process, has helped maintain the status of farmers as onlookers to Colorado's economic boom.

The extent to which **businesses** in Colorado were affected by the rapid rise in gasoline prices remains unclear. Profits were certainly squeezed in businesses that rely heavily upon fuels to provide their product, since there is little evidence that businesses were able to pass on increased costs to consumers in the form of higher prices. While, according to the Front Range Purchasing Managers' Index, Colorado's **manufacturing** industry expanded steadily during the first six months of 2000, rising gasoline prices contributed to inflationary pressures that

caused the individual index for the price of raw materials to remain at very high levels during that time period. Because manufacturers were able to respond by improving productivity rather than raising wholesale prices, this had relatively little effect on businesses in Colorado.

In conclusion, rapidly rising gasoline prices did not substantially affect the booming Colorado economy. Inflation remains low despite high input prices for business and the Colorado consumer, who is the driving force behind the current economic expansion, remained unchecked. While corporate profits, the agricultural sector, and the tourism industry were pinched by higher fuel prices, Colorado's diverse economy allowed the state to maintain strong growth with relatively little impact from the rapid increase in gasoline prices.