

Regaining Momentum | 2004 Economic Forecast



The US Outlook: 2004

When the 2003 forecast was prepared a year ago, we hoped the recession was over and that the economy would strengthen in the second half of the year. By the time we updated the outlook in February 2003, we were convinced that a new round of economic problems lay ahead. Unfortunately, the second forecast was the more accurate. Growth slowed to 1.4% in the final quarter of 2002 and the first quarter of 2003, then strengthened to 2.4% in the second quarter. Spending on national defense surged 44.1%.

We finally have the official date for the end of the recession that began in March 2001 (it's determined by the Business Cycle Dating Committee of the National Bureau of Economic Research), who tell us it lasted eight months, ending in November 2001. We don't know whether the 20 months since then have included a second recession or merely the weakest recovery on record. But as our clients tell us, "If this is a recovery, who needs it?"

Is a Jobless Recovery an Oxymoron?

The most troubling aspect of the six consecutive quarters of output growth (inflation adjusted gross domestic product or real GDP) that began in the first quarter of 2002 is the continuing job loss. Seasonally adjusted employment peaked in February 2001 and has declined steadily except for the final four months of 2002. When compared to the same month a year earlier, the number of Americans at work has fallen in every month since July 2001.

During the first 12 months of economic recovery, the US economy normally creates a million new jobs. The one exception followed the 1990-91 recession, a period often referred to as the jobless recovery. In hindsight we know that this ushered in the longest economic expansion in US history. Yet, in February of 1992 (almost a year into the expansion), we wrote:

With three quarters of economic growth behind us, why is employment continuing to decline?

The current mood suggests that the aggregated macroeconomic data such as GDP are not telling the full story.

We could use that same paragraph in this year's forecast. In mid-2003, there were 9.4 million Americans looking for jobs. More than 20% had been looking for work for 27 weeks or longer and the average period of unemployment, 19.8 weeks, was the longest since January of 1984. Another 478,000 people reported they'd given up looking for a job and 4.4 million said they could only find part-time work. The proportion of workers who exhausted their unemployment benefits before they found work was the highest in the 30 years that records have been kept.

RECESSIONS AND JOBS

<i>Recession</i>	<i>Length (months)</i>	<i>Job Loss (millions)</i>	<i>Months of Losses</i>	<i>18-month Job Gain (millions)</i>
12/69-11/70	11	1.044	8	3.058
11/73-3/75	16	2.171	9	3.243
1/80-7/80	6	1.159	4	0.725
7/81-11/82	16	2.838	17	5.312
7/90-3/91	8	1.617	11	0.685
3/01-11/01	8	2.598	16	-0.908

Source: NBER, Department of Commerce.

There are reasons companies aren't hiring. The high cost of labor brought on by the labor shortage of the late 1990s forced business to invest in productivity-enhancing technology. This means that today more output is being produced by fewer employees. In addition, the cost of benefits is soaring, up 6.2% in the first quarter of 2003. This is highest benefit inflation rate since 1992. Finally, private demand remains weak and there is substantial excess capacity (the factory utilization rate of 72.9% is the lowest in 20 years), so there is little reason for companies to make capital expenditures or hire additional workers.



Whatever Happened to the “New Economy?”

How did this happen? Only a few years ago there was talk of a new economy, in which technology assured boundless opportunity and the demise of the business cycle. Of course, that was nonsense.

We’ve had lots of booms in technology that have fueled economic growth. The steam engine, electricity, the railroad and the telephone all changed the way we do business, just as the microchip did in the 1990s. But, technology doesn’t rewrite the basic laws of economics or preclude the tendency to overinvest and create speculative bubbles. It happened during the last boom and we’ve been working off the excesses and paying the piper for the last three years.

What Will It Take to Turn the Economy Around?

There are three sources of economic growth: consumers must spend, businesses must invest or our overseas trading partners must take up the slack in domestic demand.

International: The European Union is the largest market for the goods and services that Americans sell. In 2002, its GDP grew only 0.8% and today it is nearly at a standstill. The outlook for 2004 is for weak growth averaging less than 1%. The Japanese economy is in a hopeless muddle despite 0% nominal interest rates and negative real (inflation adjusted) rates.

Still, there is some good news on the international scene. US exports, which fell 5.4% in 2001 and 1.5% in 2002, are benefiting from a weaker dollar (down about 25% from its peak in early 2002). Currency moves tend to last a long time (the 50% rise in the dollar that began in 1995 occurred over almost seven years) and some international specialists think that the dollar may fall until a Euro costs \$1.40. This will give the US a larger share of the world market in 2004 and enhance growth in the US economy.

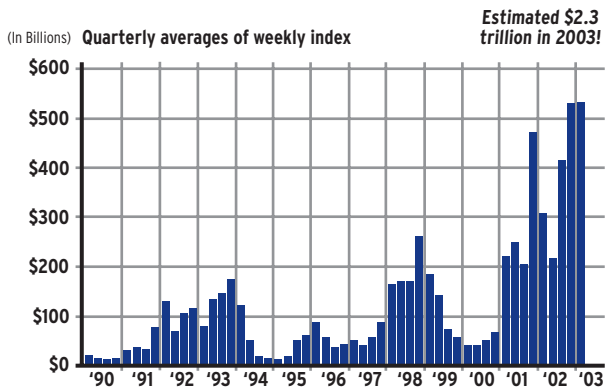
A Federal Reserve study suggests that a 10% drop in the dollar after inflation adds 0.4 percentage points to growth in the first year of its decline and another 1.2 percentage points in the second year.

Business: Although private demand is weak and the world is awash in excess capacity, there is still hope for increased capital spending by businesses in 2004. Profits improved last year and the net worth of non-financial businesses increased. Technology purchased during the boom of the 1990s is out of date. Capital spending fell 5.2% in 2001 and 5.7% in 2002, the worst two-year decline since World War II. While capital spending won’t grow at pre-recession rates, it’s unlikely to decline another 5% and we are cautiously optimistic that it will increase modestly in 2004.

Consumers: American consumers, who account for 70% of economic activity, are the key to growth in 2004. Consumer spending has grown in each of the nine quarters since the recession began in 2001, averaging 2.7%. In the nine quarters following the onset of the 1990-91 recession, spending growth averaged only 1.2% and actually declined in three of those quarters.

Two things account for this anomalous behavior in the recent business cycle. First, because of the hype that accompanied the long 1990s expansion, consumers believed the economic problems were temporary and they’d quickly be back at work. After all, the business cycle was dead. Second, as mortgage rates moved lower and lower while housing prices continued to rise, consumers refinanced their mortgages and took equity out of their homes to pay off their credit cards and maintain their spending. The weekly tally of mortgage refinancing applications reached a new high in mid-2003. Almost 28 million homeowners have refinanced, lowering mortgage payments by \$20 billion and converting \$270 billion of home equity into cash.

MORTGAGE REFINANCE ORIGINATIONS



Source: HUD, Mortgage Bankers Association

The downside of this frenzy of borrowing is that household debt has reached a new high relative to income. It is growing at an annual rate of 10.3%, twice the growth rate of after-tax income. Obviously, this can't continue indefinitely.

However, there are some positive signs. The improvement in the stock market in recent months has restored \$2.21 trillion of the \$7.41 trillion of wealth erased between March 2000 and October 2002. Extremely low interest rates are keeping the debt service burden at the high end of the normal range (12-14%), despite the high level of debt. Interest rates remain low and there is little prospect of a significant increase. A recovery in 2004 is premised on consumers returning to work and improving their debt ratios through rising income levels rather than by cutting back on spending to pay down debt, the usual response during tough economic times.

Can Government Do Anything to Help?

When private demand (domestic and foreign consumer and business spending) is weak, economic theory tells us that government should take up the slack. It can do this in one of two ways – by making credit readily available and cheap (monetary policy) or by cutting taxes and increasing spending (fiscal policy).

The Federal Reserve has used monetary policy aggressively in an attempt to stimulate growth and avoid deflation. It has lowered short-term interest rates 13 times since January 2001 and there is no shortage of money for financial institutions to lend.

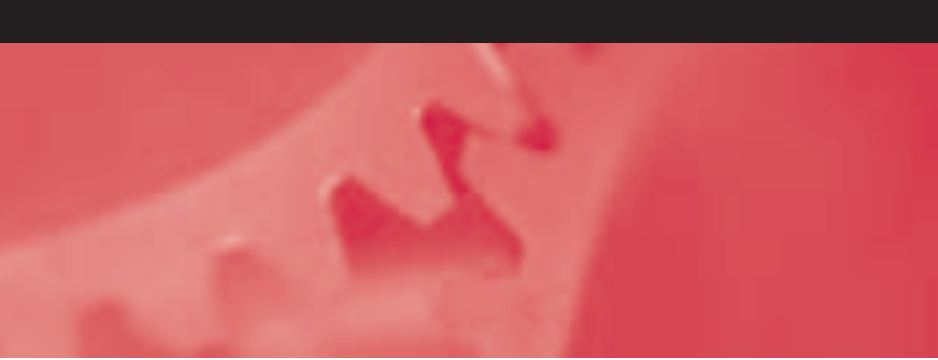
Fiscal policy is also very stimulative. The deficit is projected to reach \$455 billion this year and move \$475 billion next year. The previous record was \$290 billion in 1992. The war in Iraq and the Homeland Defense initiative following the 2001 terrorist attacks boosted Federal government spending \$92 billion in 2003 and an estimated \$89 billion in 2004. In May, Congress passed a \$350 billion package of tax cuts designed to increase spending in the short run and improve the business and investment climate in the longer run. Economists estimate it will add \$125 billion of stimulus over the next four quarters, bigger than any tax change since the Reagan tax cuts in 1982. If the provisions are allowed to expire at the end of three years, as provided in the bill, it will amount to one of the largest tax increases in history.

This combination of monetary and fiscal policy helped the economy to grow in 2003 and will continue to have a positive impact in 2004. The question is whether and when it will translate to more spending by consumers and businesses.

What About All the Negative Economic News?

Personal bankruptcies, which account for more than 95% of all filings, are at record levels, up 7.4% in the 12 months ending March 31, 2003 to an all-time high of 1.57 million. Foreclosures are climbing. The unemployment rate marches steadily upward, hitting a cyclical peak of 6.4% in June. How can we be in the early stages of an expansion, when there is so much bad news out there?

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These are all lagging indicators of economic activity. In other words, they don't worsen until several months after a contraction is underway and they don't improve until several months into an upturn. This makes sense. You don't lose your job the first day your company's orders weaken. You don't lose your home or file for personal bankruptcy the first week there's no paycheck. Nor is the opposite true the day an expansion begins. Companies wait until they are sure growth is here to stay before they begin rehiring and it takes months to repair your credit problems. The unemployment rate last peaked at 7.2% in June of 1992, more than a year into the recovery. In the previous downturn, it reached a high of 10.8% in November and December of 1982, at the end of the recession.

"The stock market is up, which means an expansion is imminent." Be careful with this one, even though it is often touted as a dependable leading indicator. As some wag pointed out, "The market has correctly forecast 15 of the last six business cycles."

The stock market is extremely volatile and swings of 20% are common. The S&P 500 Index fell 60% twice during the long 1980s expansion. There were seven swings of 25% or more during the 1990s expansion, before it finally got it right. Yes, the stock market is a leading indicator of growth... but we only know after the fact which of its many swings we should have watched.

How Likely is Deflation?

Deflation (a sustained decline in the average price level) has been the topic de jour for much of the last 12 months. Even Federal Reserve Chairman Alan Greenspan worries about it in public discussions. Japan has had falling prices since 1995 and the threat of deflation in Germany is very real.

The problem with falling prices is that there is no incentive to buy or invest when one knows it will cost less a few months hence. As demand implodes and orders fall, layoffs ensue. This means consumers and businesses are now unable, as well as unwilling, to spend. The downward cycle is inescapable.

The concern today is that the Fed has "run out of ammunition," as the media describes it. Traditionally, monetary policy is conducted by buying (which pushes the price up and interest rates down) or selling (which pushes the price down and rates up) very short-term Treasury securities. The Fed could buy long-term Treasuries, where rates are higher, as it did from 1942-51 to hold down the borrowing costs associated with World War II. It could make massive loans directly to banks, as it did on September 12, 2001, when it loaned a record \$46 billion in a single day to keep the financial system functioning. Most importantly, it can continue to inspire confidence by pointing out the mistakes made by the Bank of Japan and assuring the public that the central bank is acting preemptively.

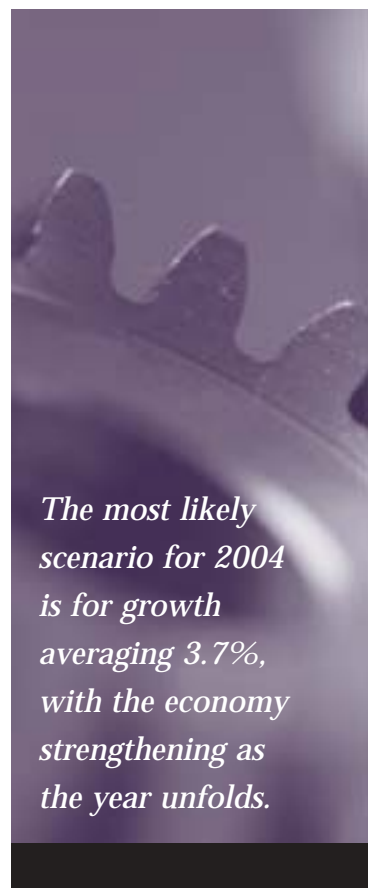
While not a foolish concern for the US economy, the probability of deflation remains remote. Through June, consumer prices rose 2.5% and as the economy recovers, workers will demand and receive wage and salary increases.

The Outlook and the Risks

The good news is that, although economic activity softened in the first two quarters of 2003, today the economy is fundamentally sound and some of the precursors to growth are evident. Most of the bad news making headlines are lagging, not coincident or leading indicators. If everything goes right, modest growth accompanied by job creation and business capital spending will occur in 2004.

That being said, the recovery is very fragile and all of the risks are on the downside. A major terrorist attack within the continental US, an escalation of hostilities in the Middle East, rising interest rates or falling housing prices – the list of what could go wrong is long. Any of these events could push the economy back into recession.

The most likely scenario for 2004 is for growth averaging 3.7%, with the economy strengthening as the year unfolds. Inflation will remain low, at 2.5%, and the unemployment rate will average 5.8%. Housing starts will decline and auto sales will be flat. Interest rates will move up to 2002 levels, but remain low by historic standards. We attach a 60% probability to this scenario. This leaves a significant, 40%, chance of continued stagnation or outright recession. ■



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WEB LINK TO THE MOST UP-TO-DATE INFORMATION

NATIONAL ECONOMIC INDICATORS

	2002	2003e	2004f	01/02	02/03e	03/04f
Gross Domestic Product (billions)	\$10,446.2	\$10,843.2	\$11,417.8	4.2%	3.8%	5.3%
Real GDP (billions of 1996 dollars)	\$ 9,439.9	\$ 9,638.1	\$ 9,994.7	2.4%	2.1%	3.7%
Unemployment Rate	5.8%	6.0%	5.8%	n/a	n/a	n/a
Private Housing Starts (million units)	1.71	1.68	1.62	6.7%	-1.8%	-3.6%
Auto/Truck Sales (million units)	17.1	16.3	16.4	-2.3%	-4.9%	0.6%
Consumer Price Index (1982-84=100)	179.9	184.2	188.8	1.6%	2.4%	2.5%
90-Day Treasury Bill Rate	1.6%	1.0%	1.8%	n/a	n/a	n/a
10-Year Treasury Note	4.6%	3.6%	4.6%	n/a	n/a	n/a
30-Year Conventional Mortgage Rate	6.5%	5.5%	6.2%	n/a	n/a	n/a

n/a = not applicable e = estimate f = forecast

The Colorado Outlook: 2004

The Year in Review

Colorado experienced an extremely severe recession in 2001-2003, with only the real estate and construction sectors contracting less than in the 1980s. The most dramatic impact was on jobs. Employment fell 1.9% in 2002 and another 0.5% through June 2003. This was on top of job growth of only 0.6% in 2001. The unemployment rate averaged 5.7% in 2002 and remained at that level at mid-year.

Population growth slowed to an estimated 1.2% between July 2002 and July 2003. Net migration (the number of people moving to the state less the number moving away) was less than 15,000.

Per capita personal income declined in 2002 for the first time in almost 50 years, down 0.5% to \$33,276. After adjustment for inflation, it fell for the second consecutive year. There has been no growth in total retail sales for two years and retail trade sales (a narrower measure comparable to consumer spending) declined 0.7% last year. Inflation in the Denver/Boulder metropolitan area averaged only 2% in 2002 and 1.7% in the first six months of 2003.

The construction and real estate industries remained in better condition throughout the recent recession and anemic recovery than they have in previous recessions. However, declines were evident in all sectors. Housing permits fell 12.9% in 2002 and another 22.3% through the first half of 2003. Most of the contraction was in the multifamily market. Single-family permits were off 2.5% last year, but total permits remained at a high level of 47,911. Through June, single-family permits declined another 11.7%.

Apartment vacancy rates soared to a 16-year high of 13.1% in metro Denver and 12.7% in Colorado Springs. Statewide, they reached 11.6% in February 2003. Sales of existing homes in metro Denver rose 0.3% in 2002 and then declined 11.1% in the first six months of 2003. The inventory of homes for sale reached

an all-time high, and the average and median price continued to rise. In Colorado Springs, home sales dropped 1.7% through June.

The value of nonresidential construction fell 20.9% in 2002, to \$2.8 billion, as commercial vacancy rates increased. Contracts were down another 28.3% through June 2003. At mid-year, the office vacancy rate in metro Denver was 23.3%, while the industrial vacancy rate averaged 8.6% and the retail vacancy rate reached 9.2%.

After declining 7.1% in 2001 and 9.9% in 2002, Colorado exports increased 2.6% through April 2003. Exports to Canada, our largest trading partner, fell 8.9% after two years of growth. Exports to Japan continued to decline, while sales to Korea and Mexico were up 56.2% and 21.1%, respectively, bringing them close to Japan in terms of importance. Electronic integrated circuits, our largest export, soared 64.4%. ADP machines and parts for office machines declined year-to-date, on top of double-digit drops in 2002. Together, these three segments account for 38% of Colorado's exports.

In 2002, Colorado ranked 11th in the amount of land in farms and ninth in farm size, with an average of 1,043 acres per farm. We ranked among the top ten states in cattle and calves, sheep and lambs, breeding hogs and pigs, wool production, cherries, peaches, pears, barley, dry beans, silage corn, potatoes, millet, sorghum, sugar beets, sunflowers, wheat, and numerous vegetables. Of our 30,000 farms, only 2,400 had sales of more than \$250,000 and 14,800 had sales of less than \$10,000.

In 2001, the value of the state's agricultural output was \$5.44 billion with 25.3% derived from crops and 60.5% from livestock. Government payments of \$209.8 million accounted for 3.9% and forestry and services for 10.2%. After deducting production expenses, net farm income was \$989.7 million, up 46.9% from 2000. Government payments accounted for 34% of

net farm income in Colorado from 1999-2001 and were also high in 2002 and 2003. Farm income will fall in 2004 as direct government payments decline.

Is the Economy More Diversified?

There has been less change in the composition of jobs in Colorado over recent decades than many people think. The popular conception that the energy industry was the basis of the economy in the 1980s and responsible for the severe, but localized, recession is a myth. Mining employment peaked in 1981 at 3.4% of the employment base. The oil and gas industry, a subset of mining, provided 2% of the state's jobs. Oil and gas employment peaked in 1982 at 28,500 jobs, 2.2% of the total, and has declined steadily since then.

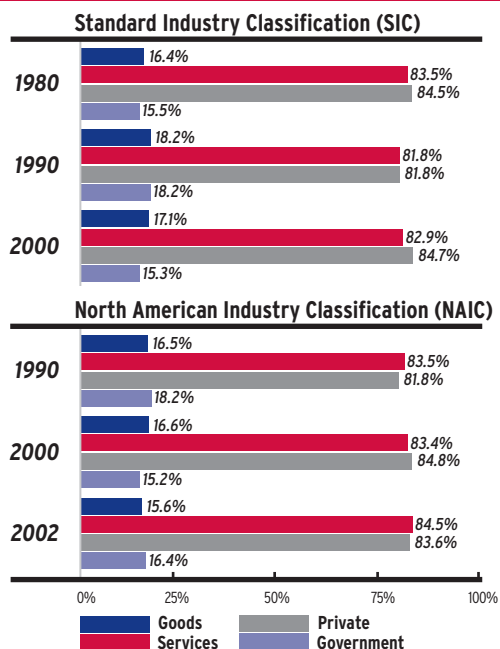
Another way to look at the data is to compare employment in the goods-producing industries with employment in the service-producing industries. The goods-producing industries such as manufacturing and mining are generally considered to be more cyclical than services, and private sector jobs to be more cyclical than public sector

jobs. In 1980, 16.4% of the state's job base produced goods; that rose to 18.2% in 1990, then declined to 17.1% by 2000 (changes in the way the data are compiled make it difficult to compare the most current data with anything prior to 1990. By the new method, goods-producing jobs were unchanged between 1990 and 2000, then declined a full percentage point to 15.6% in 2002 as the recession wiped out thousands of jobs in manufacturing).

There were also only small changes in the breakdown between private employment and government employment over the last two decades. In 1980, 15.5% of the state's jobs were in the government sector. This rose to 18.2% in 1990, then dropped back to 15.3% in 2000 (the new data show 18.2% of jobs in the public sector in 1990, 15.2% in 2000 and 16.4% in 2002. This ratio is likely to decline in

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EMPLOYMENT DISTRIBUTION



Source: Colorado Department of Labor.

COLORADO'S LARGEST PUBLIC EMPLOYERS

	2002
Wal-Mart Stores	18,715
Kroger	17,451
Qwest Communications*	16,000
Centura Health	12,000
Vail Resorts	12,000
Safeway Inc.	11,274
HealthONE	9,000
Lockheed Martin	8,900
UAL Corporation	8,273
AT&T	8,168
WorldCom*	7,745
Albertsons	6,000
IBM Corporation	6,000
Agilent Technologies	5,100
ConAgra Foods	5,000
Kmart	5,000
United Parcel Service	4,931
Target Corp	4,815
EchoStar*	4,500

*would not disclose Denver employment
Source: The Denver Post, February 24, 2002

DENVER'S LARGEST PUBLIC EMPLOYERS

	1988	2001
Martin Marietta Astronautics	12,316	12,559 King Soopers
US West	9,787	9,285 HealthONE
Coors Brewing	9,400	7,599 United Airlines
AT&T	8,400	7,117 Centura Health
Continental Airlines	7,600	6,000 Safeway
United Airlines	7,000	5,420 Exempla Healthcare
Public Service of Colorado	6,200	4,110 Kaiser Permanente
Rockwell International	5,200	3,400 Coors Brewing
Storage Technology	4,479	3,400 Wells Fargo Bank
United Banks of Colorado	3,481	2,649 Xcel Energy

Source: Denver Business Journal Book of Lists.

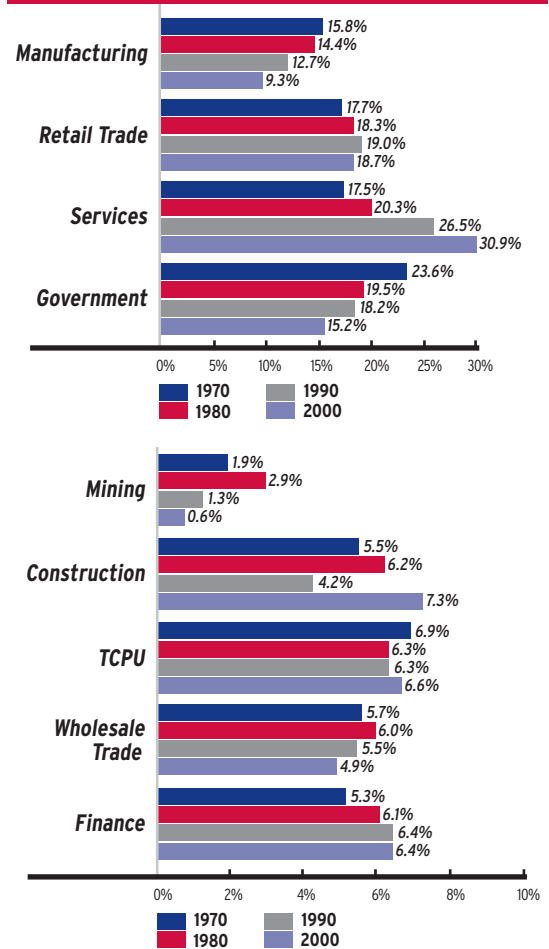
2003 and 2004, as state and local governments are forced to implement massive layoffs to deal with their budget crises).

While the changes by industrial sector have been modest, the changes in the companies with the largest employment have been dramatic. In 1988 (the earliest data we had available), Denver's largest employers included four manufacturers – Martin Marietta Astronautics, Coors Brewing, Rockwell International and Storage Technology; three utilities – US West, AT&T and Public Service of Colorado; two airlines – Continental and United – and one bank – United Banks of Colorado. By 2001, only four of these remained in the top ten – United Airlines, Coors Brewing, Wells Fargo Bank (formerly United Banks of Colorado) and Xcel Energy (formerly Public Service of Colorado). Newcomers included four healthcare providers – HealthONE, Centura Health, Exempla Health and Kaiser Permanente – and two grocery stores – King Soopers and Safeway (three telecommunications companies – Qwest, WorldCom and EchoStar, which ranked #2, #8 and #10 in statewide employment in 2001, declined to give metro Denver data. Qwest, formerly US West, would certainly rank among the top ten, displacing Xcel Energy).

Construction is one of the most volatile sectors in Colorado's job base. In 1980, when the state was growing rapidly, it provided 6.2% of the

jobs. In 1990, at the end of a long recession and five years of out-migration, it had fallen to 4.2% of the total. In 2000, after the strong growth of the 1990s, it was up to 7.3% of the jobs.

CHANGING EMPLOYMENT BASE



Source: Colorado Department of Labor.

Manufacturing has been declining steadily as a percentage of total employment as surging productivity has enabled companies to produce more with fewer employees. In 1970, it provided 15.8% of Colorado's jobs; by 2000, this was down to 9.3%.

The most dramatic shifts have been in the government and narrowly defined services sectors.

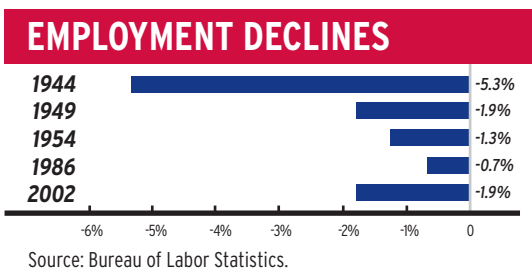
In 1970, government accounted for 23.6% of all local jobs. In 2000, it was only 15.2%. Service sector jobs have risen from 17.5% in 1970 to 30.9% in 2000. Business services have soared from 3.1% in 1970 to 9.4% in 2000.

This is the result of companies outsourcing jobs to independent contractors and temporary help agencies. Over the last two decades, the unlikely term “permanent temp” entered the business vocabulary.

How Bad Was the Local Recession?

Coloradans were surprised to learn in June that the recession had ended 19 months earlier. The business cycle is dated on a national, but not a regional basis. What local businesses and consumers experienced in 2002 and the first half of 2003 did not feel like an economic recovery.

Jobs: Employment contracted in Colorado in 2002 for only the fifth time since the 1930s, down 1.9%. Through June of 2003, another 0.5% of jobs disappeared. Even during the severe recession of the 1980s there was only one year of job losses, down 0.7% in 1986. Prior to that, there had not been a calendar year decline in employment since 1954.



The jobs losses in 2002 and 2003 are particularly troubling because this was a period of economic recovery. The US economy, not to mention the Colorado economy, normally experiences strong job growth following a recession. In the 18 months following the five recessions occurring between 1970 and 2000, job growth nationally ranged between 685,000 (in the early stages of the jobless recovery of the 1990s) to 5.3 million following the long recession in 1981-82. In the

most recent cycle, there was a loss of 908,000 jobs in the 18 months following the recession’s end in November 2001 and another 30,000 jobs disappeared in the 19th month of “recovery.”

RECESSIONS AND JOBS – COLORADO

Recession	Length (months)	Job Loss	Months of Losses	18-month Job Gain
7/81-11/82	16	20,200	12	89,000
1980s	n/a	31,100	23	40,500
7/90-3/91	8	0	0	74,300
3/01-11/01	8	82,400	27	-44,800

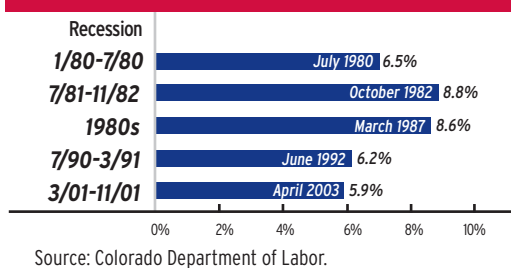
Source: NBER, Colorado Department of Labor.

In the 18 months following the most recent recession, Colorado lost 44,800 jobs. In contrast, the state gained 89,000 jobs following the 1981-82 recession and 74,300 following the 1990-91 recession (and suffered essentially no job loss during that recession).

It is difficult to do a comparable analysis for the regional recession in the second half of the 1980s, since it has no official beginning or end. If we measure the job loss from its peak of 1,427,800 in December of 1984 to its low point of 1,396,700 in November of 1986, 31,100 jobs disappeared. Employment fluctuated over the next several months, finally stabilizing at 1,403,600 in March 1987. Over the 18 months ending September 1988, 40,500 jobs were created.

In terms of job losses, the most recent recession was clearly the most severe in decades. Although the unemployment rate remained lower, peaking

UNEMPLOYMENT RATE PEAK



What local businesses and consumers experienced in 2002 and the first half of 2003 did not feel like an economic recovery.

at 5.9% in April 2003, that was a function of the age mix of the labor force and the number of discouraged workers who stopped looking for work rather than an indication of fewer problems.

Income: In 2002, per capita personal income in Colorado declined 0.5% to \$33,276. One must go back 50 years to find another period when this occurred. In 1953 and 1954, during a ten-month recession, it dropped 3.6% and 2.2%, respectively. The only other decline since the Great Depression of the 1930s was a 1.7% contraction during the 11-month recession of 1948-49.

RECESSIONS AND INCOME

Recession	Length (months)	Per Capita Income	Change	Real Income	Change
1/80-7/80 1981	6	\$10,809	1.1%	\$13,787	0.6%
		\$12,141	12.3%	\$13,923	1.0%
7/81-11/82 1983	16	\$12,945	6.6%	\$13,612	-2.2%
		\$13,570	4.8%	\$13,502	-0.8%
7/90-3/91 1991	8	\$19,680	6.1%	\$16,264	1.5%
		\$20,369	3.5%	\$16,217	-0.3%
3/01-11/01 2002	8	\$33,455	1.2%	\$18,453	-3.3%
		\$33,276	-0.5%	\$17,997	-2.5%

Source: NBER, US Department of Commerce.

Inflation adjusted or real per capita income, a rough measure of the standard of living, often declines during recessions. This is not surprising since recessions are frequently accompanied by job losses and/or few wage and salary increases. Real per capita income has fallen for two consecutive years in Colorado, down 3.3% during the recession in 2001 and another 2.5% in the post-recession year of 2003. It declined by a smaller amount during the 1981/82 recession and was off another 0.8% during the first year of recovery. It rose during the 1980 recession and the first year of recovery and rose during the 1990 recession, but declined fractionally in the post-recession year of 1991.

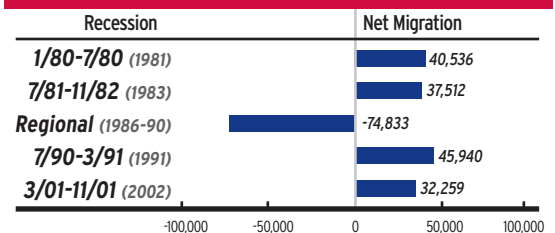
The almost unprecedented decline in nominal income and two-year decline in real income

indicate that the recent recession was one of the most severe in Colorado's history. During the massive economic problems in the second half of the 1980s, in contrast, per capita income continued to rise on both a nominal and inflation adjusted basis.

Growth: For most of the 1990s, growth and its accompanying congestion were among the biggest concerns for Coloradans. Commute times increased, vacant apartments were scarce and home prices soared. We quickly forgot the problems generated by lack of growth.

Although population growth slowed sharply during the recent recession, net migration remained positive. This is in sharp contrast to the regional recession in the 1980s, when migration was negative for five consecutive years (1986-90) and the state had a total outflow of 74,883 people. The most recent estimates from the State Demographer indicated that Colorado had a net gain from migration of 67,245 in the recession year of 2001. In response to the slow job growth in 2001 and jobs losses in 2002, net migration slowed to 32,259 last year and 14,550 in the 12 months ending July 2003. Migration peaked in 1993, at 84,742.

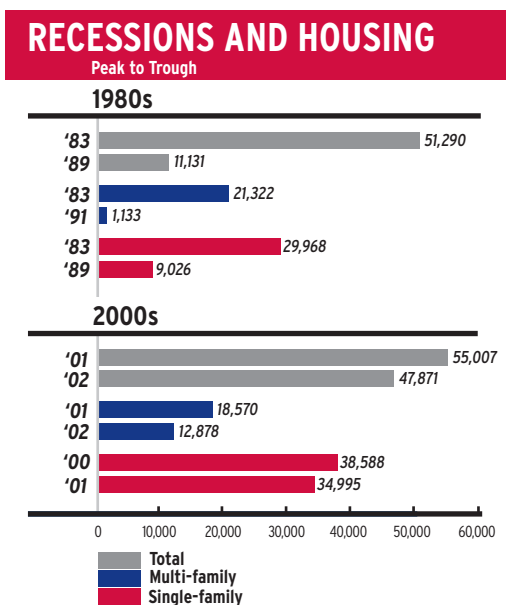
RECESSIONS AND MIGRATION



Source: NBER, Colorado Division of Local Government.

By this measure, the recent recession was less severe than the regional recession of the late 1980s. During that period, people left the state in large numbers to take jobs available in other parts of the country. In the recent downturn, unemployment was high across the nation so there was less incentive to move.

Housing: Colorado's housing cycles are extremely violent. During the 1980s, when there were two national recessions and one lengthy regional recession, housing permits fell by 78.3% between the peak in 1983 and the low point in 1989. Multifamily permits declined a precipitous 94.7%, from 21,322 units in 1983 to only 1,133 units in 1989. Single-family permits were down 70% over the same period.



Source: NBER, US Department of Commerce C40.

The housing decline accompanying the recent recession has been much more muted, although it is not yet over. Permits peaked in 2001 at a record 55,007 units, then declined 12.9% in 2002 and 22.3% through the first six months of 2003. If we are correct in our forecast of 38,725 units for 2004 followed by growth in 2005, permits will decline 29.6% from peak to trough. More prudent lending and development, which precluded most speculative construction, along with the lack of out-migration from the state, muted the most recent housing cycle.

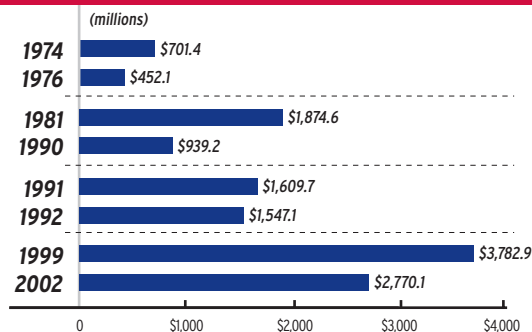
Nonresidential Construction: The value of contracts for offices, factories and warehouses, shopping centers, schools, hospitals, churches and public buildings is also affected by the

business cycle. Contracts declined for two years during the 1973-75 recession. They peaked at \$1.9 billion in 1981, then fell fairly steadily through 1990 for a peak to trough decline of 49.9%. They reached a new peak of \$3.8 billion in 1999 and are down 26.8% through 2002 and another 28.3% over the first six months of 2003. Commercial vacancy rates are well below the peaks reached in the last cycle. As is true with residential construction, more prudent lending and development made the nonresidential construction recession less severe than that experienced in the 1980s.

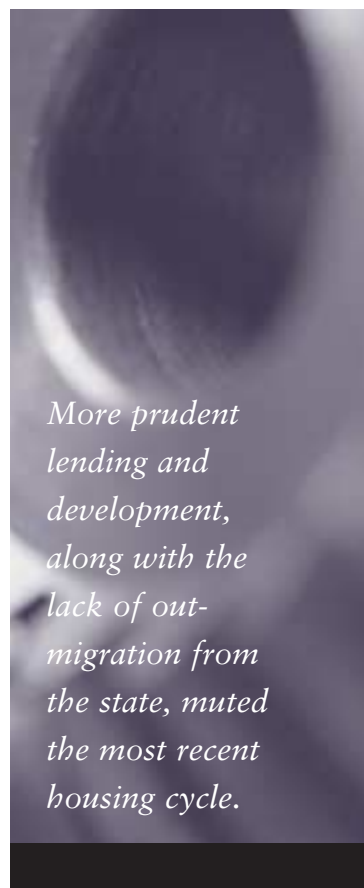
Denver's office market appeared to stabilize in 2003, with the vacancy rate climbing fractionally to 23.3%. Only 185,000 square feet of new space came into the market, according to Frederick Ross. The northwest sector, hard hit by the dot.com collapse, showed improvement as the vacancy rate declined five percentage points to 29.5%. Rental rates continued to decline and concessions were the norm.

The industrial market is improving, with the vacancy rate down slightly to 8.6% at midyear. Rental rates edged down, with the biggest declines in high-end product. The retail vacancy rate rose to 9.2% with positive absorption and stable rental rates.

RECESSIONS AND COMMERCIAL CONSTRUCTION



Source: F.W. Dodge Construction Potentials.



More prudent lending and development, along with the lack of out-migration from the state, muted the most recent housing cycle.

The Road Ahead

Colorado, because of its reliance on advanced technology and tourism, was hit hard by the national recession. Its recovery in 2004 is predicated on an expanding US economy.

Population growth will continue to be slow, at 1.3%, with net migration of about 22,000. If job creation nationally resumes before it does locally, out-migration such as we experienced in the 1980s is possible.

Although we will have a second year of job losses in 2003, we expect job growth to be underway by the end of the year. Employment gains in 2004 of 1.7% or about 37,000 jobs will be modest by Colorado standards, but will enable a small decline in the unemployment rate to 5.7%.

Personal income growth will exceed the local inflation rate in both 2003 and 2004 and per capita income will increase 2.5% to \$34,710 next year. However, inflation adjusted per capita income will continue to decline and not until 2005 will Coloradans enjoy an improvement

in their standard of living. Because of this, retail sales growth will remain low, averaging 4.6% next year. The Denver-Boulder inflation rate will inch up in tandem with the national rate as the economy recovers at 2.2% in 2003 and 2.5% in 2004.

The construction industry lags the business cycle and housing permits will continue to shrink in both 2003 and 2004, ending the year at 38,725, down 2.5% after a 17.1% decline in 2003. Multifamily construction will continue to bear the brunt of the decline. Nonresidential construction will stabilize in 2004, after falling another 23.1% in 2003.

If the national economy slips back into recession, Colorado will follow. There is nothing occurring in the state today to make it behave differently from the nation in this business cycle. Longer term, when an expansion is solidly underway, Colorado and the Mountain West will once again be the high growth region of the country. ■

WEB LINKS TO THE MOST UP-TO-DATE INFORMATION

COLORADO ECONOMIC INDICATORS

	2002	2003e	2004f	01/02	02/03e	03/04f
Population	4,512,400	4,566,000	4,627,400	1.6%	1.2%	1.3%
Net Migration	32,259	14,550	22,000	n/a	n/a	n/a
Nonagricultural Wage and Salary Employment	2,183,700	2,177,100	2,214,300	-1.9	-0.3	1.7
Unemployment Rate	5.7%	5.9%	5.7%	n/a	n/a	n/a
Personal Income (billions)	\$149.96	\$154.6	\$160.6	1.2%	3.1%	3.9%
Per Capita Personal Income	\$33,276	\$33,860	\$34,710	-0.5%	1.8%	2.5%
Retail Sales (billions)	\$103.8	\$105.7	\$110.6	0.1%	1.8%	4.6%
Housing Permits (number of units)	47,911	39,718	38,725	-12.9%	-17.1%	-2.5%
Nonresidential Building Contracts (millions)	\$2,770.1	\$2,130.2	\$2,130.0	-20.9%	-23.1%	—
Denver-Boulder Consumer Price Index CPI-U (1982-84=100)	184.9	189.0	193.7	2.0%	2.2%	2.5%

n/a = not applicable e = estimate f = forecast



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Permission is granted to reprint from this *Forecast* with credit to U.S. Bank's Rocky Mountain Chief Economist Dr. Tucker Hart Adams.

Information

For more information on the economy, contact Dr. Tucker Hart Adams at (303) 329-9218. For more data on the Colorado economy as well as updated forecasts, visit Dr. Adams' web site at www.coloradoeconomy.com.

August 15, 2003