

Regional Economic Review - Boulder County

After a decade of strong growth, Boulder County's economy remained healthy through the first half of 2001 despite some volatility produced by the slow-down in the advanced technology sector. Boulder County's economy is presently a mix of stability and volatility; the University of Colorado and other large government employers provide a stable employment base, while the large presence of firms in the advanced technology sector renders the county's economy vulnerable to the business cycle. Despite numerous layoff announcements, primarily in the advanced technology sector, employment continues to grow and unemployment remains extremely low. Nonresidential and residential construction are falling in 2001, but remain at fairly high levels. The office and manufacturing real estate sectors, however, are suffering as a result of the nationwide technology slowdown. Meanwhile, retail sales remain strong despite the slowing economy in the rest of the state, primarily as a result of the new Flatiron Crossing mall in Broomfield.

Much of the growth that occurred during the past decade in the Boulder County economy occurred along the U.S. 36 corridor in Broomfield, Louisville, and Superior. Broomfield's Interlocken office park is

the location for many of the largest advanced technology employers that contributed substantially to the heady growth of the late 1990s and that are currently suffering from the nationwide technology slowdown. Broomfield is also home to the new Flatiron Crossing mall, which has allowed retail sales to continue to grow at very healthy levels through the first half of 2001, while retail sales elsewhere in the state have nearly ground to a halt. In November, however, Broomfield, will become its own city and county. As a result, Boulder County will lose any revenues generated from Interlocken and Flatiron Crossing mall.

Population

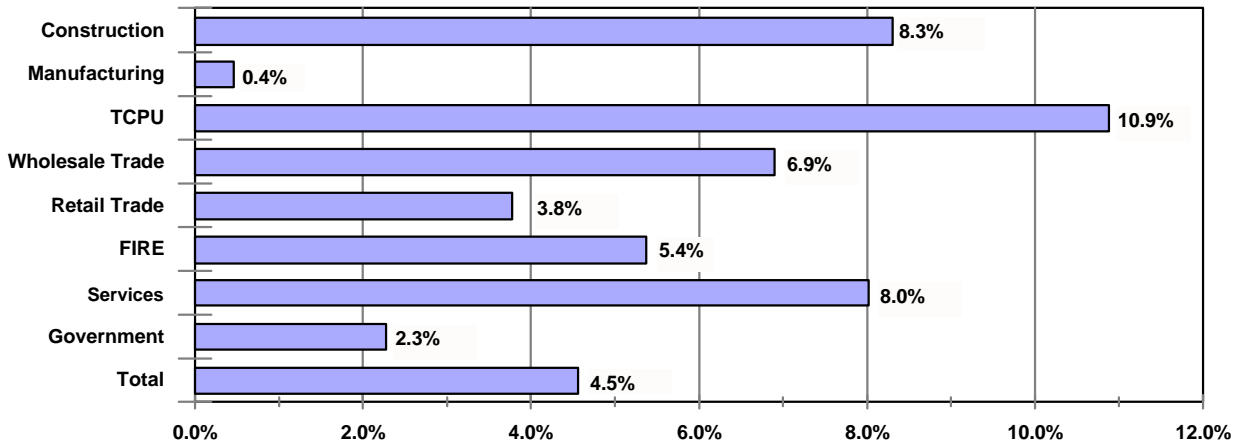
According to figures from the 2000 Census, Boulder County is the sixth-largest county in Colorado with 291,288 people. Boulder County's population increased at an average annual rate of 2.7% between 1990 and 2000, adding nearly 66,000 people. Boulder, with 94,673 people, is the largest city in the county and grew at an average annual rate of only 1.1% during the same time period. Meanwhile, the city of Erie grew from a population of only 1,258 in

Table 1. Boulder County Economic Indicators at a Glance

	Boulder	Colorado
Population Growth		
1990-2000 Compound Average Annual Growth Rate (CAAGR)	2.6	2.7
1999-2000 Growth Rate	2.6	2.0
Nonfarm Employment Growth		
1990-2000 CAAGR	4.5	3.9
1999-2000 Growth	6.7	3.9
Unemployment Rate (Regional data not seasonally adjusted)		
1990-2000 Average	3.7	4.2
2001 Year-to-date (through June)	2.5	2.8
Retail Trade Sales Growth		
1990-2000 CAAGR	8.8	7.7
2001 Year-to-date (through June)	8.9	1.0
2001 Year-to-date Nonresidential Construction Growth* (through July)	-48.2	-5.5
2001 Year-to-date Residential Construction Growth* (through July)	-25.2	6.2

* F.W. Dodge Data

Chart 1. Average Annual Employment Growth 1990-2000



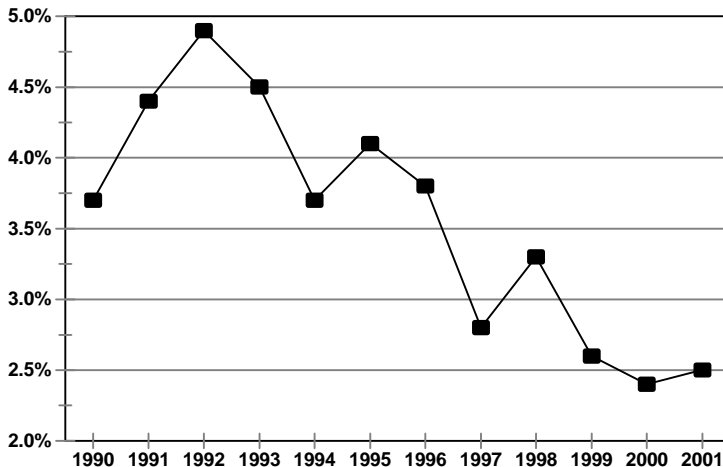
1990 to 6,291 people in 2000. The city of Superior showed even stronger growth, increasing from 255 people in 1990 to 9,011 people in 2000.

Employment

Employment in Boulder County grew at an average annual rate of 4.5% between 1990 and 2000, as shown in Chart 1. Boulder County employment growth outperformed the rest of the state; statewide employment grew at an average annual rate of 3.8% during the same time period. Employment in the county continued to grow at a healthy rate through the first half of 2001 despite numerous layoff announcements, growing 4.2% through June compared with the first half of 2000. Meanwhile, state employment grew 3.2% through June.

The unemployment rate in Boulder County averaged 3.7% between 1990 and 2000. As Chart 2 shows, unemployment rose substantially during the economic slowdown in the early 1990s. However, it began falling steadily during the mid- and late-1990s to a historic low of 2.4% in 2000, while severe labor shortages plagued employers. Meanwhile, the unemployment rate remains low through the first six months of 2001, averaging 2.5%.

Chart 2. Unemployment Rate 1990-First Six Months of 2001



Advanced technology is an integral portion of the Boulder County economy. Advanced technology firms in the county are major employers in the services, manufacturing, and communications sectors. Including some of the largest employers in Boulder County, they have been the most volatile portion of the local economy within the last decade, contributing to the boom during the late 1990s and to the current climate of increased layoffs in the sector. Employment trends in the software, advanced technology manufacturing, dot-com, Internet service providers and satellite, telecommunications, and advanced technology services sectors are described below.

Software industry. According to the Software and Information Industry Association, the Boulder-Longmont area had more software-related jobs per capita than any other metropolitan area in the nation in 1999 for the second year in a row. With 13,740 people, approximately 5% of the Boulder-Longmont work force was employed in software-related jobs, more than five times the national average. Software-related jobs include computer programmers, software

engineers, systems analysts, database administrators, network administrators, and analysts and support specialists.

Circadence Corp. laid off 92 workers, including 44 in Boulder, in August. The Boulder-based company manufactures software used to speed up Web-site performance. Prior to the layoffs, the company employed 170 people, including 120 people in Boulder.

After laying off 25 people, or 75% of its staff, in April, Boulder-based Ereo Inc. closed its doors in May. The fifteen-month-old company had designed a search engine for images on the internet, but was unable to retain clients for the technology due to the slowdown in the internet industry.

Boulder-based PlanetCAD laid off seven people, or 15% of its workforce. The firm designs software for the manufacturing industry.

Broomfield-based Global Commerce Systems laid off 56 people, or 19% of its staff, in late 2000. The company develops business-to-business software.

Despite the numerous layoffs, some companies are expanding. Turquoise Technology Corp. moved its 15 employees and its headquarters from Lafayette to Boulder this spring. The firm, which develops software to manage large volumes of data, expects its work force to grow to 200 people worldwide by 2003.

Lucent Technologies spinoff InPhase Technologies opened shop in Longmont in February with 12 employees. The company, which is developing a technology to increase the storage capacity of DVDs and compact discs, expects to hire approximately 88 more people within the next two years.

Advanced technology manufacturing. Programmable chip manufacturer Xilinx required its workers to take two weeks of vacation as a cost-cutting measure rather than resort to layoffs. In addition, the company has reduced salaries among all but its lowest-paid employees. Xilinx recently completed construction on a 125,000-square-foot facility in southwest Longmont, to which it plans to move its employees currently housed in Boulder. Xilinx currently em-

ploys between 250 and 300 people in Boulder County.

Computer disc-drive manufacturer Seagate Technology Inc. opened a new 443,000-square-foot facility in Longmont in January. The company moved approximately 1,000 employees from nine different buildings around Longmont to the \$70 million, 4-acre facility.

In July, fiber-optic production equipment manufacturer ILX Lightwave laid off 34 people in Boulder. The company cited the downturn in the telecommunications industry as the reasons for the layoffs.

Tape-drive manufacturer Benchmark Storage Innovations hired at least 15 people in the past few months, expanding its work force to over 100 people. While the technology slowdown has affected other tape-drive manufacturers in Boulder County, such as Ecix Corp., it may have aided Benchmark Storage Innovations because their products are concentrated in the low- to mid-end tape drive market. Ecix Corp. laid off 24 people, or 21% of its staff, in May. Ecix now employs 89 people in Boulder.

Adaptec laid off approximately 35 people, or nearly half of its 78-person Longmont work force, in late June. The manufacturer of advanced technology connectors laid off 325 people, or 15% of its work force, worldwide as a result of the slowdown in the technology sector.

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Dot-Com Industry. Boulder County’s dot-com sector has experienced several casualties of the widespread technology slowdown nationwide. With initial public offerings on the stock market and venture capital drying up, several of Boulder County’s Internet companies closed their doors or cut employees in late 2000 and the first half of 2001. Fastideas, an incubator for Internet firms, is representative of this economic climate. The company laid off most of its 30 employees in February, and another two employees in May, currently retaining three employees.

Funded by venture capital firm iBelay, four of the original six startups nurtured by Fastideas have closed their doors. They include Ereo Inc., Grant-Seeker.com, Productbuzz.com, and RTOnline. All but RTOnline were headquartered locally.

Boulder-based NetLibrary laid off 32 people in the first quarter. The company pulled their initial public offering in December as a result of poor market conditions. NetLibrary, with 400 employees, manufactures and distributes electronic books on the Internet.

EarthWeb Inc. closed its Boulder, Boston, and San Francisco offices in early 2001, laying off 100 people, including 28 in Boulder. EarthWeb provides career-development resources over the Internet. New York City-based EarthWeb employed 350 people worldwide prior to the layoffs.

Superior-based MessageMedia Inc. laid off 100 people in December and another 46 people in April. Most layoffs occurred at the company's Superior location. The permission-based e-mail marketing company employs 340 people, including 214 in Superior. MessageMedia cited the slump in the Internet industry, combined with lower demand for marketing services, as the reasons for the layoffs.

Chicago-based MVP.com closed its Boulder subsidiary, PlanetOutdoors.com, laying off 39 people in late 2000.

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Internet service providers and satellite companies. Internet service provider Evoke Communications laid off 112 people in January, including 43 in Louisville. After the layoffs, the Louisville-based firm employs 208 people, including 142 people in Louisville. The company indicated that the layoffs would help contain costs, allowing the company to become profitable by 2002 without seeking further funding.

Telecommunications. Broomfield is home to two firms attempting to corner the fiber-optic network market. Both Level 3 Communications, with its North American fiber-optic network already constructed, and 360networks, still in the process of con-

structing its network, are experiencing difficulties as a result of the economic slowdown and an oversupply of fiber-optic cable. After relocating its headquarters to a new 95,000-square-foot building in Broomfield during January, 360networks laid off 325 people locally and 800 people worldwide in June. 360networks employs 225 people in Broomfield and 1,000 people worldwide after the layoffs. Not long after laying off 325 people worldwide in April, Level 3 laid off 1,400 people, or 24% of its worldwide staff, in June. The layoffs included 500 in Colorado, primarily in Broomfield. In addition, Level 3 announced tentative plans to consolidate its Colorado offices in Broomfield.

Advanced technology services. Boulder-based advanced technology public relations firm Metzger Associates laid off seven people, or 15% of its work force, in April. The company retained approximately 35 employees. Meanwhile, California-based eConvergent, an Internet customer-services provider, laid off 25 out of 120 people at its Longmont office in January.

“However, residential and nonresidential construction building and employment are slowing along with the economy in 2001.”

The 1990s brought several years of double-digit growth for ***construction*** employment, with the construction of several large-scale developments, including Interlocken Office Park and the Flatiron Crossing mall. However, residential and nonresidential construction building and employment are slowing along with the economy in 2001. Employment growth in the construction industry increased 3.8% during the first half of 2001 compared with the first half of 2000, after increasing at an average annual rate of 8.3% between 1990 and 2000.

The ***manufacturing*** sector remains a major contributor to the local economy. Manufacturing employment declined 0.3% during the first half of 2001 compared with the first half of 2000, and grew at an average annual rate of only 0.4% between 1990 and 2000. In 1991, Boulder County's manufacturing sector employed 21.7% of the work force and represented 28.6% of wages earned in the county. In 2000, the sector employed 17.3% of the work force

and represented 23.5% of wages. Because much of the sector is concentrated in advanced technology, the county's manufacturing industry provides some of the highest-paid jobs in the state. The average wage for Boulder County's manufacturing sector was \$60,776 in 2000.

Medical device manufacturer Colorado MEDtech Inc. laid off 54 people in April, including 27 contract employees. MEDtech employs about 350 people in Boulder County.

Employment in the *transportation, communications, and public utilities* (TCPU) sector increased at an annual average rate of 10.9% between 1990 and 2000, faster than any other sector. The majority of this growth occurred in the latter half of the 1990s as a result of Level 3 Communications, which opened for business in Broomfield in 1998. The TCPU sector employed 3.8% of Boulder County's work force in 2000, up from 2.1% in 1990.

Employment in the *retail trade* sector increased at an average annual rate of 3.8% between 1990 and 2000, falling from 18.5% of the work force in 1990 to 17.2% of the work force in 2000. While employment in this sector increased only 2.8% through the first half of 2001 compared with the first half of 2000, it grew 6.1% in 2000 with the opening of Broomfield's Flatiron Crossing mall in August 2000. The 1.5 million-square-foot shopping mall generated \$360 million in sales during its first year of operation, or \$431 a square foot. Flatiron Crossing was expected to employ 3,000 people when it opened a year ago.

Employment in Boulder County's *finance, insurance, and real estate* (FIRE) sector grew 3.9% through the first half of 2001, after growing at an average annual rate of 5.4% between 1990 and 2000.

Boulder County's *services* sector employed 34.2% of the work force in 2000, up from 28.6% in 1991. After increasing at an average annual rate of 8.0% between 1990 and 2000, employment in the services sector increased 7.0% through the first half of 2001 compared with the same time period in 2000. In August, Texas-based Electronic Data Systems Corp. laid off 160 people. The company, which employs 8,000 people nationwide and 1,600 people in Louis-

ville and Longmont, declined to say how many of the layoffs occurred locally. The company, which provides systems and technology services and business management services, blamed the layoffs on the weakening economic climate.

Boulder-based bicycle manufacturer Schwinn/GT Corp. laid off 300 people, including 80 people from their administrative offices in Boulder, in anticipation of the company's sale to another firm. Prior to the layoffs, Schwinn employed 530 people nationwide and 135 people in Boulder.

Federal, state, and local *government* employs 15.3% of Boulder County's work force. The University of Colorado, which employs approximately 7,500 full- and part-time workers, is the largest employer in the county. Other large government employers include the Boulder Valley School District, Boulder County, the National Oceanic and Atmospheric Administration, the City of Boulder, the National Center for Atmospheric Research, and the National Institute for Standards and Technology.

Full-time-equivalent (FTE) student enrollment at CU-Boulder increased 1.4% from 22,882 students in FY 1999-00 to 23,213 students in FY 2000-01. Most of the growth occurred among nonresidents; nonresident enrollment increased 4.3%, while resident enrollment increased only 0.2% in FY 2000-01. According to CU, the university has a substantial impact on the Colorado economy, with \$400 million spent by CU students and \$80 million spent by out-of-state visitors to CU students during fiscal year 1999.

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CU-Boulder faculty received research awards totaling \$214.2 million in 2000, a 4.8% increase from 1999. The amount awarded to CU-Boulder faculty in 2000 represented 46.5% of all research awards granted to the University of Colorado system. According to the National Science Foundation, the University of Colorado continues to be ranked among the top universities in terms of research spending. In FY 1998-99, the CU system ranked 14th in overall

research expenditures and 6th in federal expenditures among public universities in the United States.

Residential Construction

According to F.W. Dodge, the number of new permits issued for residential construction in the county decreased 48.2% through July 2001, compared with the same time period a year ago. Residential construction permits increased at an average annual rate of 11.1% between 1990 and 2000. Much of the growth during the last decade occurred in the construction of apartment units, which grew at an average annual rate of 16.9% between 1990 and 2000. While apartment construction through the first seven months of 2001 decreased 89.0% compared with the first seven months of 2000, this does not necessarily imply a slower trend in apartment construction, since the last decade's growth occurred in a very volatile pattern. Meanwhile, after increasing at an average annual rate of 8.3% between 1990 and 2000, permits issued for single-family homes decreased 9.1% through July 2001 compared with the same time period in 2000. Declining growth in single-family permits, however, does indicate a downward trend, since the number of permits issued for single-family homes has been declining since 1999.

Construction began this summer on One Boulder Plaza, a mixed-use development located on two blocks between Broadway, Walnut Street, 14th Street, and Canyon Boulevard in **Boulder**. Once complete, the \$95 million development will include 30 luxury condominiums, 100,000 square feet of retail space, 210,000 square feet of office space, and an outdoor ice skating rink. Three of the condominiums will be reserved for those earning less than 60% of the median income in Boulder. The development is expected to be complete by summer 2005.

Plans were announced for the Holiday Drive-In project, a large mixed-use development located at the former site of the Holiday Drive-In movie theater in north Boulder, which will include several smaller developments with a total of 267 new single- and multi-family homes. According to developers of the project, between 35 and 40 percent of the new homes will be affordable. Naropa University is participating in the development of 62 units that will be priced

between \$145,000 and \$250,000. The units will be used to help house professors and students. Northern Lights, a 14-unit development, will be available to buyers making between 50% and 80% of the median income for the Boulder/Longmont area. Main Street North will include 14 loft-style units, including five affordable units, and 28,000-square-feet of office and retail space. A separate 56 single- and dual-family development in the area will include 21 affordable units. Finally, a 121-unit development, 35% of which will be affordable, will also include 10,000 square feet of office and retail space. The entire development is expected to be complete in 2003.

“Three large residential developments have been proposed for Broomfield.”

Three large residential developments have been proposed for Broomfield. First, Broomfield's city council approved plans for Preble Creek, a 2,500-acre mixed-use development that would require 25 years to complete. Once complete, the development could bring up to 4,000 single-family homes, 2,900 apartment units, between 13,000 and 17,000 new residents, and 50,000 new jobs to Broomfield. The plans call for more than 850 acres of open space, including a 188-acre golf course and 18 miles of trails. A regional bus station, two schools, and either a library or a police substation are included in the plans. Second, plans have been announced, but not approved, to build a 560-home development at Sheridan Boulevard and 144th Avenue. The 440-acre development would include 277 single-family homes, 284 town homes, and 65 acres of open space. Third, a mixed-use development with 550 apartment units is planned near Flatiron Crossing mall. The development would also include 125,000 square feet of retail space and 225,000 square feet of office space.

Nonresidential Construction

According to F.W. Dodge, the value of nonresidential construction in Boulder County decreased 25.2% through the first seven months of 2001 over the same time period in 2000, after increasing at an average annual rate of 16.7% between 1990 and 2000. A significant decline in manufacturing, retail, and government building construction is responsible for the

overall decline in construction activity this year. Activity increased steadily to extremely high levels for six consecutive years from 1994 to 1999. Nonresidential construction began to decline in 2000, and with a glut of office and manufacturing space resulting from the technology slowdown and the completion of the Flatirons Crossing shopping mall in 2000, this downward trend is expected to continue for at least the rest of 2001 and very likely into the next few years.

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Construction in Boulder County's *office* sector increased 26.9% through July 2001 compared with the first seven months of 2000. Despite this, a significant glut of vacant office space exists on the U.S. 36 corridor. According to a report by Fuller and Co., the office vacancy rate in the corridor between Denver and Louisville was 32% for the first six months of 2001, up from 3.8% at the end of 2000. A separate report by Trammell Crow Co., which included the city of Boulder, showed a 22% vacancy rate along the corridor in July 2001.

Office construction through July has increased over levels seen in 2000 despite the high vacancy rates because very few expected the technology slowdown to have as large an impact as it did on firms located along the corridor during the first quarter. As late as February, several firms announced plans to build new campuses along the corridor, and several others were continuing construction on ongoing projects. McData Corp. began construction in February on the Great Western Park, a new office park in Broomfield. Plans for the park include nine buildings with a total of 1.4 million square feet. Plans were announced in January to build the Summit Corporate Center near Broomfield's Interlocken Business Park, with 300,000 square feet of office space and five four-story multifamily residential buildings. Plans were also announced in January to build "Outerlocken", a five-building, 430,000-square-foot, speculative office park near Interlocken. Also in January, Sun Microsystems announced plans to build

two 180,000-square-foot office buildings connected by a covered walkway and parking garages in Broomfield. Currently, Sun Microsystems has 250,000 square feet of vacant office space in Broomfield. In addition, Avaya has 1.2 million square feet of vacant office space in Broomfield, StorageTek has 142,000 square feet of vacant space, and Level 3 Communications recently completed construction on two buildings totaling 350,000 square feet at Interlocken that will likely remain vacant.

Construction in the *manufacturing* sector decreased 92.8% through the first seven months of 2001, compared with the same time period in 2000. However, two new manufacturing facilities are planned for the Colorado Technology Center in Louisville. Plans were announced to build a \$12 million, 105,000-square-foot manufacturing facility at the Colorado Technology Center for Thermo BioStar, a manufacturer of quick diagnostic tests for illnesses. Thermo BioStar employs 125 people in Boulder and 200 people worldwide. Internet hardware manufacturer Kiosk Information Systems will move its headquarters from Broomfield to a new 70,000 to 90,000-square-foot building in the Colorado Technology Center. Kiosk Information Systems employs between 65 and 70 people.

“Construction in the manufacturing sector decreased 92.8% through the first seven months of 2001...”

Biotechnology manufacturer Amgen began construction on a 200,000-square-foot expansion of its Boulder facility in June. The company currently has a 150,000-square-foot manufacturing plant and research laboratory in Boulder, where it employs 300 people. The expansions, which will house administrative employees, are expected to be completed in May 2002. Amgen also employs 300 people at its Longmont facility.

The value of construction in the *retail* sector declined 82.7% during the first seven months of 2001, compared with the same time period in 2000. However, this decline comes after three years of extremely heady growth and the August 2000 completion of the Flatiron Crossing mall in Broomfield. Two separate retail developments nearing comple-

tion are located near the Flatiron Crossing shopping mall. The Flatiron Marketplace will contain one million square feet of retail and hotel space at build-out, and the MainStreet at Flatiron, a 160,000-square-foot development, will house 26 retailers when complete.

The *hospital and health treatment* sector is one of the few sectors experiencing increased construction activity in 2001, with the value of construction in the sector increasing 174% through July 2001, compared with the first seven months of 2000. Construction began in May on a \$32 million expansion of Centura Avista Adventist Hospital in Louisville. The expansion will add between 70,000 and 100,000 square feet, including an expansion of the emergency room and the intensive care unit, a pediatric emergency room, 19 private patient rooms, and 28 delivery suites for new parents. It is expected to be complete by 2002. In Longmont, the Longmont Clinic completed construction of a three-story, 40,000-square-foot building in April. The \$11 million building almost doubles the clinic's operating space.

According to F.W. Dodge, there was no construction in the *hotel* sector in 2000, while through July 2001 there was \$17.2 million in hotel construction. In Boulder, construction began on the St. Julien hotel, a \$40 million, 200-room hotel at Canyon Boulevard and Ninth Street. The hotel is expected to be complete by spring 2003. Construction began in February on the Black Diamond hotel, Lafayette's first hotel. The \$4.2 million, 68-room, hotel will include a 2,000-square-foot conference facility. Five new hotels, with a total of 441 rooms, are planned for Longmont. They include two Marriot hotels, one with 84 rooms and another with 78 rooms, a 93-room Hilton GardenInn, a 86-room Holiday Inn Express and a 100-room Holiday Inn Staybridge. The new hotels will nearly double Longmont's hotel room inventory; Longmont currently has 569 rooms in eight hotels and motels.

Construction activity in Boulder County's *religious* sector increased 27.5% through July 2001, compared with the first seven months of 2000. LifeBridge Christian Church announced plans to build a 318-acre religious campus in Longmont, including a 500-unit senior housing complex, a 300-room hotel, a movie theater, a recreation center, a medical office

building, a performing arts complex, and a new church building. The hotel will include a 1,000-person conference center and retail space.

Summary

“Despite some volatility caused by the nationwide slowdown in the technology sector, the Boulder County economy remained resilient through the first half of 2001.”

Despite some volatility caused by the nationwide slowdown in the technology sector, the Boulder County economy remained resilient through the first half of 2001. Those laid off seem to be finding work elsewhere; employment growth continues to be strong and unemployment is still at a very low level historically. As a result of the new Flatiron Crossing mall, retail sales continued to grow at a heady pace compared with the rest of the state. Furthermore, while nonresidential and residential construction are both declining, they are declining from extremely high levels and remain healthy. The most significant impact caused by the national slowdown in the technology sector occurred in the commercial real estate market, with skyrocketing office vacancy rates in the U.S. 36 corridor. This could portend significant declines in construction activity in upcoming years. Otherwise, the Boulder County economy is thus far surviving the national economic slowdown.