

2021

ANNUAL ECONOMIC INDICATOR REPORT



Centennial 2021 Annual Report

Employment increased throughout the region from 2020 to 2021 as businesses recovered from the closures and stay-at-home orders in 2020 that affected payrolls across most industries. The unemployment rate in Centennial peaked at 10 percent in May 2020 before steadily decreasing and settling back to an annual average rate of 5.8 percent in 2020 and 4.2 percent in 2021. Consumer confidence increased between 2020 and 2021 but remained below pre-pandemic averages as concerns about coronavirus variants and inflation dampened optimism in the second half of 2021. Net taxable sales increased 23 percent in Centennial from 2020 to 2021 and significantly outperformed pre-pandemic annual averages. Amid strong builder confidence and a robust housing market, existing home sales from 2020 to 2021 increased 12.2 percent in Centennial and increased 13.8 percent in Arapahoe County. Demand for housing outpaced supply in 2021, leading to a sharp increase in home prices in the market areas. The apartment market in Centennial reported low vacancy rates and record high rental rates during the period. Commercial building activity fell significantly in 2021, while vacancy rates rose across all commercial property types during the period.

Economic Forecast

- Employment in Metro Denver increased 3.4 percent in 2021, recovering 56,700 of the 87,400 jobs lost in 2020 due to the pandemic. Employment increased in nine of the 11 industry supersectors, with leisure and hospitality posting the largest increase (+11.8 percent) as widespread vaccine distribution allowed business reopenings and capacity increases. The unemployment rate in Metro Denver fell from 7 percent in 2020 to 5.4 percent in 2021 but remained well-above the historically low rate of 2.5 percent reported in 2019.
- Consumer confidence increased 10.2 percent in the Mountain region between 2020 and 2021 and retail sales increased 17.4 percent during the period. The population in Metro Denver grew at a rate of 0.8 percent in both 2020 and 2021, representing the slowest rate of growth for the region in over 30 years. Population growth slowed over the past two years due to an increase in the number of deaths, a decrease in the number of births, and slower net migration activity. Home sales rebounded rapidly in Metro Denver in 2021, increasing 15.4 percent from 2020 to 2021. Commercial vacancy rates fell for the industrial/flex and retail markets but increased for the office market.
- Metro Denver will continue adding jobs throughout 2022 and is expected to return to pre-pandemic employment levels in most supersectors within the first half of the year. Employment in leisure and hospitality will take longer to recover as businesses continue to struggle to fill vacant positions, especially those in lower-wage occupations. The mining and logging sector will continue to lag 2019 employment level as well. With the number of workers in the labor force reaching record levels in 2021, labor market conditions will continue to improve and the unemployment rate will retreat further, falling below 4 percent in 2022.
- Significant risks to the economic outlook include the ongoing pandemic, the war in Ukraine, mounting
 inflationary pressure, and tightening monetary policy. Consumer activity is expected to slow as consumers
 adjust to waning federal stimulus, higher interest rates, rising prices, and continued supply chain disruptions.
 Home sales will continue at a brisk pace due to the concentration of the millennial population in the typical
 first-time home buyer ages in Metro Denver, although activity is likely to be hampered by rising mortgage
 rates and continued supply shortages. Conditions in the commercial real estate markets will be mixed, with
 industrial construction and leasing continuing solid performance, while the office and retail markets will
 remain somewhat challenged.

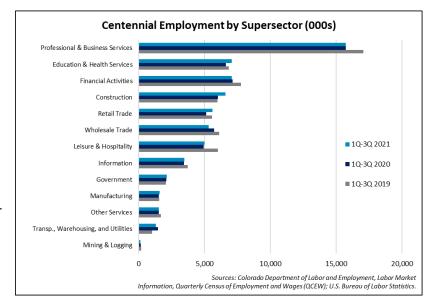
Employment Activity

Total Employment

As annual 2021 data at the county level or smaller is not yet available, this report examines the employment data for the first three quarters of 2019, 2020, and 2021 so that like periods of time may be analyzed. For simplicity, these data periods may be referred to as 2019, 2020, and 2021, respectively.

- Centennial had an average employment base of 62,542 workers in 2021, representing nearly 4 percent of total Metro Denver employment.
- Employment in Centennial rose 1.6 percent between 2020 and 2021 or an additional 989 workers over the period. Due to the impacts of COVID-19, employment declined 6.2 percent between 2019 and 2020.
- Metro Denver employment averaged nearly 1.7 million in 2021, an increase of 3.1 percent from 2020 employment.
 Employment in Metro Denver degrated 4.6 percent between

decreased 4.6 percent between 2019 and 2020.



- In Centennial, seven of the 13 supersectors posted increases from 2020 to 2021. From 2019 to 2020, 10 supersectors reported decreases.
- The three largest supersectors in Centennial throughout the three-year period were Professional and Business Services, Financial Activities, and Education and Health Services. These supersectors represented nearly 48 percent of total employment in Centennial. Professional and Business Services represented 25.2 percent of Centennial's total employment in 2021, compared with 19.6 percent in Metro Denver over the same period. The Professional and Business Services supersector was also the largest supersector in Metro Denver.
- Professional and Business Services remained consistent from 2020 to 2021, compared to falling 7.9 percent in 2020 from 2019, or by 1,348 employees. The second largest supersector, Education and Health Services, declined 3.1 percent in 2020 but rose 6.7 percent in 2021, resulting in a net increase of 236 employees from 2019 to 2021. Financial Activities decreased by 8.2 percent in 2020 and an additional 0.8 percent in 2021, resulting in 700 fewer employees over the two years.
- Transportation, Warehousing, and Utilities added the most jobs between 2019 and 2020, adding 448 jobs, while Construction added the most jobs between 2020 and 2021, increasing by 570 positions. Mining and Logging in Centennial recorded the largest over-the-year percentage decline of 13.5 percent between 2020 and 2021, followed by Transportation, Warehousing, and Utilities (-11.3 percent), and Wholesale Trade (-7.2 percent).

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¹ A detailed list of the types of companies found within each North American Industry Classification System (NAICS) sector may be found at https://www.census.gov/naics/.

• Eleven of the 13 supersectors in Metro Denver reported decreases in employment between 2019 and 2020, but employment increased in 11 of the supersectors from 2020 to 2021, with six returning to 2019 levels. Leisure and Hospitality recorded the largest percentage increase of 6.8 percent in 2021, followed by Retail Trade (+5 percent).

Employment Indicators by Supersector

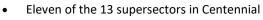
		Ce	ntennial			Metro	Denver			
	En	nployment								
	1Q-3Q	1Q-3Q	1Q-3Q	% Change	% Change	% Change	% Change			
	2019	2020	2021	2019-20	2020-21	2019-20	2020-21			
Total All Industries	65,629	61,553	62,542	-6.2%	1.6%	-4.6%	3.1%			
Private Sector										
Mining & Logging	191	151	131	-20.9%	-13.5%	-11.0%	-1.7%			
Construction	5,994	6,027	6,596	0.5%	9.5%	-1.1%	0.2%			
Manufacturing	1,541	1,522	1,586	-1.3%	4.3%	-1.7%	1.9%			
Wholesale Trade	6,105	5,731	5,317	-6.1%	-7.2%	-1.5%	0.9%			
Retail Trade	5,572	5,124	5,597	-8.0%	9.2%	-6.0%	5.0%			
Transp., Warehousing & Utilities	1,014	1,462	1,296	44.2%	-11.3%	5.9%	3.8%			
Information	3,734	3,449	3,458	-7.6%	0.3%	0.9%	2.5%			
Financial Activities	7,775	7,135	7,075	-8.2%	-0.8%	-1.3%	3.1%			
Professional & Business Services	17,081	15,734	15,733	-7.9%	0.0%	-2.1%	4.9%			
Education & Health Services	6,843	6,633	7,078	-3.1%	6.7%	-4.4%	3.7%			
Leisure & Hospitality	6,016	4,948	5,005	-17.7%	1.2%	-22.1%	6.8%			
Other Services	1,692	1,535	1,532	-9.3%	-0.2%	-9.7%	4.3%			
Government	2,055	2,093	2,137	1.8%	2.1%	-1.4%	-1.0%			

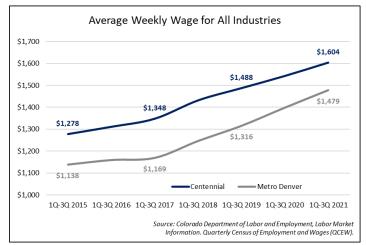
Note: Industry data may not add to all-industry total due to rounding, suppressed data, and employment that cannot be assigned to an industry.

Source: Colorado Department of Labor and Employment, Labor Market Information. Quarterly Census of Employment and Wages.

Average Wage

- Centennial's average weekly wage for all industries was \$1,604 in 2021, an increase of 3.9 percent compared with the 2020 average wage of \$1,543. The 2021 average weekly wage was 8.5 percent higher than the average weekly wage of Metro Denver, representing an additional \$125 per week.
- The highest average weekly wage in Centennial since 2019 has been in the Information supersector (\$2,441 per week in 2021) while the lowest has been in the Leisure and Hospitality supersector (\$484 per week in 2021).





recorded increases in the average weekly wage between 2020 and 2021. Wholesale Trade recorded the largest increase, rising 16.1 percent during the period, followed by Mining and Logging (+10.7 percent) and Transportation, Warehousing, and Utilities (+8.6 percent). The Education and Health Services supersector reported the largest over-the-year decrease of 4 percent, followed by Government (-0.1 percent).

Centennial Business Counts and Average Wage by Supersector

		Bus	iness Cou	nt		Average Annual Wage				
	1Q-3Q	1Q-3Q	1Q-3Q	% Change	% Change	1Q-3Q	1Q-3Q	1Q-3Q	Change	Change
	2019	2020	2021	2019-20	2020-21	2019	2020	2021	2019-20	2020-21
Total All Industries	5,115	5,224	5,386	2.1%	3.1%	\$1,488	\$1,543	\$1,604	3.7%	3.9%
Private Sector										
Mining & Logging	26	24	20	-7.7%	-15.3%	\$2,231	\$1,982	\$2,193	-11.2%	10.7%
Construction	437	440	447	0.6%	1.7%	\$1,502	\$1,493	\$1,528	-0.6%	2.3%
Manufacturing	93	92	89	-1.1%	-3.2%	\$1,548	\$1,606	\$1,612	3.8%	0.4%
Wholesale Trade	454	448	440	-1.3%	-1.7%	\$2,159	\$2,072	\$2,406	-4.0%	16.1%
Retail Trade	268	262	277	-2.5%	5.7%	\$847	\$923	\$995	8.9%	7.9%
Transp., Warehousing & Utilities	65	71	79	9.2%	11.3%	\$893	\$759	\$825	-15.0%	8.6%
Information	138	145	154	5.1%	6.2%	\$2,248	\$2,277	\$2,441	1.3%	7.2%
Financial Activities	788	815	826	3.4%	1.4%	\$1,917	\$1,927	\$1,951	0.5%	1.3%
Professional & Business Services	1,624	1,677	1,744	3.3%	4.0%	\$1,706	\$1,863	\$1,949	9.2%	4.6%
Education & Health Services	568	592	618	4.2%	4.5%	\$1,057	\$1,123	\$1,078	6.2%	-4.0%
Leisure & Hospitality	289	282	295	-2.3%	4.4%	\$446	\$463	\$484	3.9%	4.5%
Other Services	348	362	380	3.9%	5.2%	\$921	\$975	\$1,009	5.9%	3.4%
Government	15	15	15	-2.2%	0.0%	\$1,490	\$1,610	\$1,608	8.1%	-0.1%

Note: Industry data may not add to all-industry total due to rounding, suppressed data, and employment that cannot be assigned to an industry.

Source: Colorado Department of Labor and Employment, Labor Market Information. Quarterly Census of Employment and Wages (QCEW).

Business Counts

- Centennial added 162 businesses between 2020 and 2021, increasing to 5,386 businesses, a 3.1 percent increase. The number of businesses increased 2.1 percent from 2019 to 2020 as the city added 109 businesses.
- Nine of the 13 supersectors recorded an increase in the number of businesses between 2020 and 2021, with the Transportation, Warehousing, and Utilities supersector recording the largest percentage increase of 11.3 percent (8 businesses). Seven of the 13 supersectors reported an increase in the number of businesses in 2020, led by a 53-business increase in Professional and Business Services.
- Mining and Logging, Manufacturing, and Wholesale Trade were the only 3 of the 13 supersectors to report a
 decline in businesses in 2021, losing a combined total of 15 businesses. Professional and Business Services
 added the most new businesses during 2021 period (68 businesses), followed by Education and Health
 Services (26 businesses) and Other Services (18 businesses).

Largest Employers in Centennial

The largest employers in Centennial represent a diverse mix of industries. Isolating the largest employers to just the city's primary employers (that is, excluding retail operations), these industries range from financial services to construction and engineering to high technology industries such as telecommunications, bioscience, and computer systems.

Centennial Largest Employers List - Private Non-Retail

Rank	Company	Product/Service	Employment
1	Comcast	Telecommunications	4,400
2	UnitedHealthcare	Insurance	3,620
3	Arrow Electronics	Electronic component wholesaler	1,690
4	Centura Health	Healthcare	1,670
5	United Launch Alliance (ULA)	Space launch systems	1,290
6	The Travelers Indemnity Company	Insurance	870
7	Sierra Nevada Corporation	Aerospace systems	840
8	RingCentral	Telecommunications	710
9	MasTec Advanced Technologies	Technology infrastructure	710
10	Nordstrom	Credit card & corporate services	590
11	Standard & Poor's (McGraw-Hill Companies)	Business support services	580
12	Zillow Group	Real estate database services	550
13	SEAKR Engineering, a Raytheon Company	Engineering services	520
14	AlloSource	Tissue allograft provider	440
15	US Foods	Foodservice distribution	420
16	Amerita	Specialty infusion services	400
17	Stolle Machinery	Fabricated metal machinery	370
18	Travelport	Travel commerce	300
19	Haselden Construction	Construction services	300
20	Amazon	Warehousing & distribution services	290

Source: Development Research Partners, March 2022.

Centennial High Location Quotient Employment Activity

The location quotient (LQ) is a ratio that compares the region's employment share of a particular industry with the employment share nationwide. An LQ equal to 1.0 indicates that the region's employment concentration is equal to that of the nation. Where an industry's local employment concentration is greater than the national economy (an LQ greater than 1.0), it is presumed that the production of goods and services is more than sufficient to meet local demand. Therefore, the industry's production is exported, either physically or financially, a key component of a "primary job." These industries drive wealth creation within a region.

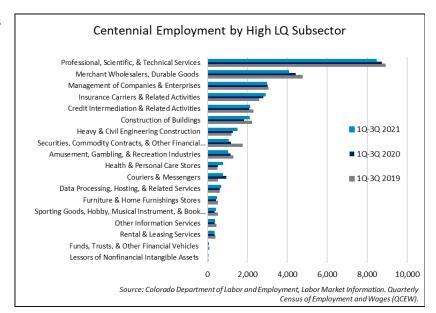
LQ's were computed for each three-digit North American Industry Classification System (NAICS) subsector level code. Centennial is most concerned with tracking economic activity in those subsectors that have an LQ of 1.5 or more, which are highlighted below.

Total Employment – High LQ's

- There are 19 subsectors in Centennial that have an LQ of 1.5 or more. However, data for one of these
 subsectors was not disclosed in 2019 due to confidentiality issues. That is, the U.S. Bureau of Labor Statistics
 requires withholding all employment and wage data for any industry level when necessary to protect the
 identity of individual employers. The subsector for which data cannot be disclosed is Broadcasting (except
 Internet).
- All subsector data was reported in 2021 and revealed that almost 50 percent of Centennial's total employment was found in the high LQ subsectors.
- Based on the 18 subsectors for which data was available for all three years, total employment in the high LQ subsectors decreased 1 percent from 30,130 in 2020 to 29,835 in 2021. Employment decreased 3.9 percent from 2019 to 2020.

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- Eleven of the high LQ subsectors in Centennial posted employment increases in 2021. The Health and Personal Care Stores subsector reported the fastest growth over-the-year, rising 46.7 percent, followed by Heavy and Civil Engineering Construction (+16.2 percent) and Sporting Goods, Hobby, Musical Instruments, and Book Stores (+15.3 percent).
- The largest employment decreases from 2020 to 2021 were reported in Couriers and Messengers (-20.8 percent); Amusement, Gambling, and Recreation Industries (-13.2



percent); and Securities, Commodity Contracts, and Other Financial Investments and Related Activities (-12.1 percent).

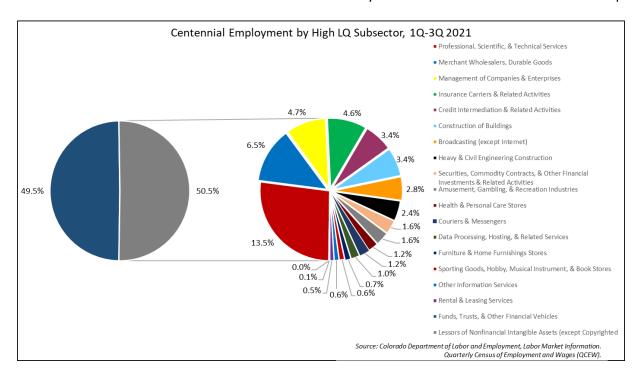
• The Construction of Buildings subsector added the most jobs (+271) between 2020 and 2021.

Employment for High Location Quotient Subsectors

	LQ		En	nploymer	t	
		1Q-3Q	1Q-3Q	1Q-3Q	%	%
	3Q 2021	2019	2020	2021	2019-20	2020-21
Construction of Buildings	2.8	2,203	1,826	2,098	-17.1%	14.9%
Heavy & Civil Engineering Construction	3.5	1,173	1,276	1,483	8.8%	16.2%
Merchant Wholesalers, Durable Goods	2.8	4,735	4,418	4,060	-6.7%	-8.1%
Furniture & Home Furnishings Stores	2.2	496	429	441	-13.3%	2.8%
Health & Personal Care Stores	1.7	470	512	752	9.1%	46.7%
Sporting Goods, Hobby, Musical Instrument, & Book Stores	1.7	487	348	401	-28.6%	15.3%
Couriers & Messengers	1.5	506	944	747	86.5%	-20.8%
Broadcasting (except Internet)	16.7	**	1,668	1,728	**	3.6%
Data Processing, Hosting, & Related Services	3.9	601	624	654	3.8%	4.8%
Other Information Services	2.1	425	350	368	-17.6%	5.0%
Credit Intermediation & Related Activities	1.7	2,292	2,100	2,110	-8.4%	0.5%
Securities, Commodity Contracts, & Other Financial Investments & Related Activities	2.4	1,736	1,170	1,028	-32.6%	-12.1%
Insurance Carriers & Related Activities	2.8	2,559	2,802	2,893	9.5%	3.3%
Funds, Trusts, & Other Financial Vehicles	4.2	63	36	39	-43.0%	9.6%
Rental & Leasing Services	1.4	382	353	327	-7.7%	-7.3%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1.4	20	15	14	-24.3%	-6.7%
Professional, Scientific, & Technical Services	2.0	8,907	8,749	8,462	-1.8%	-3.3%
Management of Companies & Enterprises	2.8	3,022	3,018	2,951	-0.1%	-2.2%
Amusement, Gambling, & Recreation Industries	1.7	1,280	1,160	1,007	-9.3%	-13.2%

Source: Colorado Department of Labor and Employment, Labor Market Information. Quarterly Census of Employment and Wages (QCEW).

Note: Some employment data cannot be reported due to confidentiality issues.



Average Wage - High LQ's

- Fourteen of the 19 subsectors in Centennial recorded growth in the average weekly wage between 2020 and 2021. The Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) subsector recorded the largest increase over-the-year of 19.8 percent, followed by Merchant Wholesalers and Durable Goods (+16.9 percent) and Broadcasting (except Internet) (+15 percent).
- The Funds, Trusts, and Other Financial Vehicles subsector reported the largest over-the-year decrease in the average weekly wage, falling 41.7 percent to \$2,458 per week, followed by Insurance Carriers and Related Activities (-1.5 percent).

Business Counts - High LQ's

- The Professional, Scientific, and Technical Services subsector has the highest business count in Centennial of 1,275, followed by Merchant Wholesalers and Durable Goods (271), and Insurance Carriers and Related Activities (197).
- The Other Information Services subsector recorded the largest percentage increase in business count overthe-year, rising 26.2 percent or by four businesses. The Heavy and Civil Engineering Construction subsector recorded the largest contraction in business count, decreasing 16.2 percent, representing the loss of five businesses.

Business Count and Average Wage for High Location Quotient Subsectors

LQ Business Count Average Wage for Fight Education Quotient Subsectors LQ Business Count Average Weekly Wage											
	LQ			iness Cou	nt						
		1Q-3Q	1Q-3Q	1Q-3Q	%	%	1Q-3Q	1Q-3Q	1Q-3Q	%	%
	3Q 2021	2019	2020	2021	2019-20	2020-21	2019	2020	2021	2019-20	2020-21
Construction of Buildings	2.8	142	146	147	2.8%	0.9%	\$1,812	\$1,786	\$1,795	-1.4%	0.5%
Heavy & Civil Engineering Construction	3.5	32	33	28	2.1%	-16.2%	\$1,478	\$1,570	\$1,570	6.2%	0.0%
Merchant Wholesalers, Durable Goods	2.8	266	267	271	0.1%	1.5%	\$2,280	\$2,187	\$2,556	-4.1%	16.9%
Furniture & Home Furnishings Stores	2.2	9	10	11	3.6%	17.2%	\$661	\$768	\$799	16.3%	3.9%
Health & Personal Care Stores	1.7	22	21	26	-7.5%	25.8%	\$1,090	\$1,152	\$1,180	5.7%	2.5%
Sporting Goods, Hobby, Musical	1.7	25	24	29	-2.7%	19.2%	\$464	\$529	\$572	14.2%	8.1%
Couriers & Messengers	1.5	14	17	20	23.8%	13.5%	\$740	\$613	\$605	-17.2%	-1.4%
Broadcasting (except Internet)	16.7	**	9	9	**	0.0%	**	\$1,448	\$1,665	**	15.0%
Data Processing, Hosting, & Related	3.9	47	49	52	3.5%	6.2%	\$4,556	\$5,021	\$4,984	10.2%	-0.7%
Other Information Services	2.1	15	14	18	-8.7%	26.2%	\$2,512	\$2,437	\$2,438	-3.0%	0.0%
Credit Intermediation & Related Activities	1.7	122	126	129	2.7%	2.7%	\$1,471	\$1,537	\$1,752	4.5%	14.0%
Securities, Commodity Contracts, & Other											
Financial Investments & Related Activities	2.4	113	124	124	9.7%	-0.3%	\$2,470	\$2,656	\$2,620	7.5%	-1.4%
Insurance Carriers & Related Activities	2.8	212	200	197	-5.5%	-1.3%	\$2,006	\$2,079	\$2,048	3.6%	-1.5%
Funds, Trusts, & Other Financial Vehicles	4.2	4	4	5	-7.7%	25.0%	\$7,412	\$4,214	\$2,458	-43.1%	-41.7%
Rental & Leasing Services	1.4	28	27	27	-3.5%	0.0%	\$1,289	\$1,419	\$1,491	10.1%	5.1%
Lessors of Nonfinancial Intangible Assets											
(except Copyrighted Works)	1.4	4	4	4	0.0%	0.0%	\$1,478	\$1,456	\$1,745	-1.5%	19.8%
Professional, Scientific, & Technical	2.0	1,182	1,208	1,275	2.2%	5.5%	\$1,974	\$2,007	\$2,146	1.7%	6.9%
Management of Companies & Enterprises	2.8	115	130	127	12.7%	-2.1%	\$2,388	\$2,437	\$2,598	2.1%	6.6%
Amusement, Gambling, & Recreation	1.7	36	35	38	-2.8%	10.6%	\$447	\$451	\$469	0.9%	3.9%

Source: Colorado Department of Labor and Employment, Labor Market Information. Quarterly Census of Employment and Wages (QCEW).

Note: Some employment data cannot be reported due to confidentiality issues.

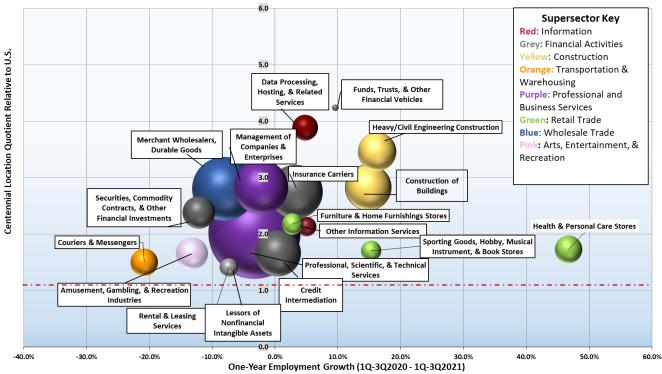
Analysis – High LQ's

Bubble charts are popular tools used to illustrate industry clusters. These charts allow multiple variables to be plotted within the same graph, making it easy to assess relative economic performance. Bubble charts are often used for pinpointing priority industries since they allow visual comparisons of economic measures.

This chart illustrates industry cluster relationships for the 19 high LQ subsectors for which employment could be compared from 2020 to 2021. The following four variables are plotted:

- One-year direct employment growth, 1Q-3Q 2020 to 1Q-3Q 2021; on the x-axis (horizontal);
- The industry's location quotient, 3Q 2021; on the *y-axis (vertical)*;
- Employment size of the industry, average for the first three quarters of 2021; indicated by the size of the bubble; and
- Subsectors that are included in the same supersector are the same color.

The dotted red line on the graph represents the location quotient equal to 1.5 to easily identify the bubbles that are above this demarcation.

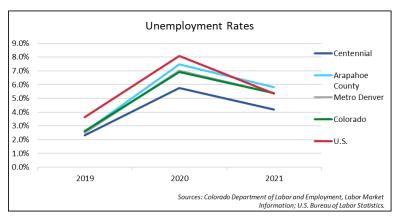


Note: Broadcasting has a high LQ and is therefore excluded from the chart due to scale issues.

Source: Development Research Partners analysis of Colorado Department of Labor, Labor Market Information,
Quarterly Census of Employment and Wages (QCEW).

Labor Force and Unemployment Rate

• The labor force in Centennial rose 2.2 percent from 2020 to 2021, representing 1,333 additional people either working or looking for a job during the period compared with a 2.9 percent decline in the labor force from 2019 to 2020. The labor force increased 2 percent in Arapahoe County and rose 2.1 percent in Metro Denver from 2020 to 2021. Colorado reported an increase in the labor force of 2.2 percent in 2021, and an increase of 0.3 percent occurred across the U.S. over-the-year.



- All five market areas reported over-the-year decreases in the unemployment rate from 2020 to 2021 after
 increasing significantly from 2019 to 2020 due to the pandemic. Centennial's unemployment rate fell 1.6
 percentage points from 5.8 percent in 2020 to 4.2 percent in 2021, the lowest unemployment rate of the five
 market areas.
- Centennial residents represented 17.1 percent of the total labor force in Arapahoe County in 2021.

			Labor Force	Unem	ployment Rat	:e		
	2019	2020	2021	% Change 2019-20	% Change 2020-21	2019	2020	2021
Centennial	63,264	61,424	62,757	-2.9%	2.2%	2.3%	5.8%	4.2%
Arapahoe County	361,797	359,977	367,171	-0.5%	2.0%	2.6%	7.5%	5.8%
Metro Denver	1,810,522	1,804,969	1,842,469	-0.3%	2.1%	2.5%	7.0%	5.4%
Colorado	3,100,598	3,087,271	3,156,110	-0.4%	2.2%	2.6%	6.9%	5.4%
U.S. (000s)	163,539	160,742	161,204	-1.7%	0.3%	3.7%	8.1%	5.4%

Sources: Colorado Department of Labor and Employment, Labor Market Information; U.S. Bureau of Labor Statistics.

Consumer Activity

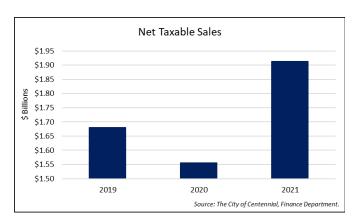
Consumer Confidence Index

- The Consumer Confidence Index for the U.S. increased 11.5 percent from 2020 to 2021, compared to a 21.2 percent decrease from 2019 to 2020. Analysts noted that confidence improved in the second quarter of 2021 as vaccination rates increased and the economy reopened. In the second half of the year, optimism was dampened by concerns about the emergence of new coronavirus variants and inflation.
- Colorado is included in the Mountain Region Index and the area reported an average index of 115.1 in 2021, an increase of 10.2 percent from 2020. In the Mountain Region, consumer

confidence remained above national confidence throughout most of the year, averaging 2.2 percent higher than the national average throughout 2021.

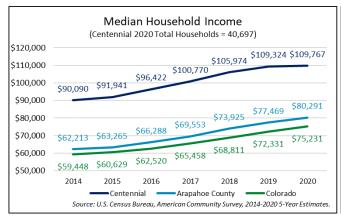
Local Net Taxable Sales

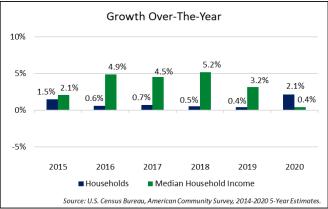
 Net taxable sales totaled about \$1.91 billion in Centennial in 2021. Net taxable sales increased 23 percent from 2020 to 2021, rising by about \$358 million during the period. From 2019 to 2020, sales decreased 7.4 percent, while sales increased 4.8 percent between 2018 to 2019.



Median Household Income

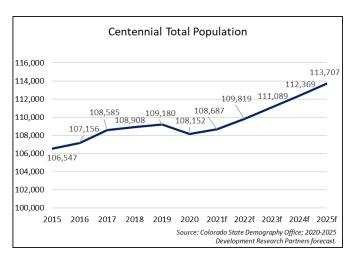
- Median household income for Centennial reached \$109,767 in 2020, an increase of 0.4 percent over-the-year, representing an additional \$443 a year. The number of households in Centennial increased by 846 in 2020, a rise of 2.1 percent to 40,697 total households.
- The median household income in Centennial is 36.7 percent higher than Arapahoe County and 45.9 percent higher than Colorado.
- Median household income in Centennial rose 21.8 percent from 2014 to 2020, while the number of households increased by 5.9 percent during the same period.
- The consumer price index increased 14.8 percent from 2014 to 2020, so the inflation-adjusted increase in median household income in Centennial was 7.1 percent during the period.





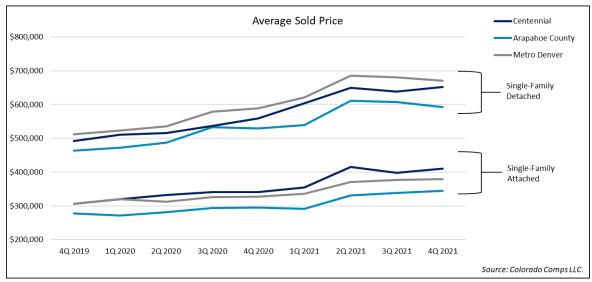
Population

- The population of Centennial reached 108,152
 as of July 1, 2020, a 0.9 percent decrease from
 2019 and the first over-the-year decline in
 population since 2006, according to the
 Colorado State Demography Office. Prior to the
 decline in 2020, the population in Centennial
 had been growing at an average of 0.9 percent
 per year from 2010 to 2019.
- Assuming that Centennial's share of the total population in Arapahoe County holds steady at about 16.5 percent, Centennial's population is likely to reach 113,707 in 2025, based on the Colorado State Demography Office forecasted population increase in Arapahoe County of between 0.5 percent and 1.2 percent per year.



Residential Real Estate

Existing Home Sales



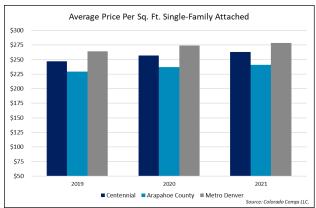
- Between 2020 and 2021, all three market areas reported increases in detached home sales and increases in home prices. Detached home sales rose 12.7 percent in Centennial, 11.7 percent in Arapahoe County, and 13.9 percent in Metro Denver. Between 2019 and 2020 detached sales rose 2.5 percent in Metro Denver but fell 1.9 percent and 0.9 percent in Centennial and Arapahoe County, respectively.
- All three market areas recorded increases in the single-family detached average sold price during the same periods. Prices rose at a slower rate from 2019 to 2020, increasing 5.1 percent in Centennial, 8.7 percent in Arapahoe County, and 8.6 percent in Metro Denver. From 2020 to 2021, prices rose 19.8 percent in Centennial, 16 percent in Arapahoe County, and 19 percent in Metro Denver.
- The price per square foot of a detached home in Centennial in 2021 was 18.7 percent higher than the previous year, rising at a faster rate than Arapahoe County (+17.7 percent) but at a slower rate than Metro Denver (+18.8 percent).

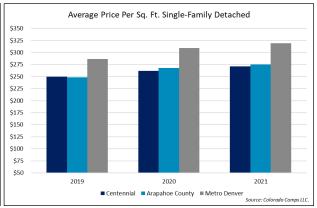
	Single	-Family Att	ached	% Change	% Change	Single-	Family De	tached	% Change	% Change
Home Sales	2019	2020	2021	2019-20	2020-21	2019	2020	2021	2019-20	2020-21
Centennial	464	434	478	-6.5%	10.1%	1,649	1,617	1,823	-1.9%	12.7%
Arapahoe County	4,343	4,183	4,935	-3.7%	18.0%	8,633	8,551	9,554	-0.9%	11.7%
Metro Denver	14,199	14,126	16,974	-0.5%	20.2%	43,049	44,116	50,231	2.5%	13.9%
Average Sold Price										
Centennial	\$321,682	\$335,035	\$398,122	4.2%	18.8%	\$507,848	\$533,505	\$639,126	5.1%	19.8%
Arapahoe County	\$278,837	\$287,193	\$328,939	3.0%	14.5%	\$470,558	\$511,282	\$592,854	8.7%	16.0%
Metro Denver	\$310,036	\$322,667	\$367,338	4.1%	13.8%	\$517,861	\$562,203	\$669,137	8.6%	19.0%
Average Price per. Sq. Ft.										
Centennial	\$247	\$257	\$296	4.2%	15.0%	\$250	\$262	\$311	4.7%	18.7%
Arapahoe County	\$229	\$237	\$274	3.4%	15.5%	\$249	\$268	\$315	7.8%	17.7%
Metro Denver	\$264	\$274	\$316	3.6%	15.6%	\$287	\$309	\$367	7.9%	18.8%

Source: Colorado Comps LLC.

 All three housing market areas recorded decreases in attached home sales from 2019 to 2020 before rising from 2020 to 2021. From 2019 to 2020, sales fell 6.5 percent in Centennial, 3.7 percent in Arapahoe County, and 0.5 percent in Metro Denver. From 2020 to 2021, sales rose 10.1 percent in Centennial, 18 percent Arapahoe County, and 20.2 percent in Metro Denver.

- All three market areas recorded an increase in the single-family attached average sold price over each of the
 last two years. Centennial reported a 4.2 percent increase from 2019 to 2020 and an 18.8 percent increase
 from 2020 to 2021. Arapahoe County reported a 3 percent increase from 2019 to 2020 and a 14.5 percent
 increase from 2020 to 2021. Metro Denver reported a 4.1 percent increase from 2019 to 2020 before
 increasing 13.8 percent from 2020 to 2021.
- The attached home price in Centennial in 2021 of \$296 per square foot is higher than Arapahoe County (\$274) but lower than Metro Denver (\$316).





Apartment Market

• Apartment vacancy rates decreased in all three market areas² from the fourth quarter of 2020 to the fourth quarter of 2021. The Metro Denver market reported the largest over-the-year decrease in vacancy, falling 1.5 percentage points to 4.3 percent. The vacancy rate in the Arapahoe County-Southeast submarket declined 0.5 percentage points and the rate in Arapahoe County-South fell 0.1 percentage points. Between 2019 and 2020, vacancy fell 1.4 percentage points in Arapahoe County-South and 0.1 percentage points in Arapahoe County-Southeast, while vacancy in Metro Denver rose 0.5 percentage points.

Average Apartment Rents and Vacancy

	V	acancy Rate		Avg Ren	tal Rate - Al	l Types
	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021
Arapahoe County-South	6.5%	5.1%	5.0%	\$1,658	\$1,585	\$1,827
Arapahoe County-Southeast	4.6%	4.5%	4.0%	\$1,606	\$1,710	\$1,849
Metro Denver	5.3%	5.8%	4.3%	\$1,503	\$1,510	\$1,709

 ${\it Source: Denver\ Metro\ Apartment\ Vacancy\ and\ Rent\ Survey}.$

• The average rental rate for all property types in all three markets increased in 2021. The Arapahoe County-South market reported the largest over-the-year increase in 2021 of 15.3 percent, rising to \$1,827 per month. The Metro Denver market apartment rental rate increased 13.1 percent to \$1,709 per month, while the Arapahoe County-Southeast market rate rose 8.2 percent to \$1,849 per month.

² Arapahoe County-South Boundary: North: City of Englewood and City and County of Denver; East: I-25; South: Douglas County; West: City of Englewood and City of Littleton.

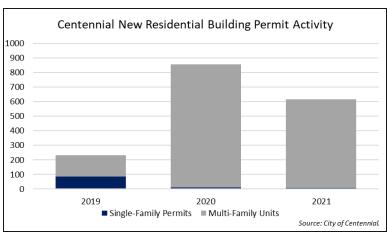
Arapahoe County-Southeast Boundary: North: Arapahoe County Line; East: Havana/Parker Road; South: Douglas County; West: I-25.





New Residential Building Permits

- The number of single-family building permits increased year-over-year from 2015 to 2018 but fell from 2018 to 2021. Building permits totaled 7 in 2021, falling by 3 permits from the previous year, a 30 percent decrease. Single-family permits fell 68 percent from 2018 to 2019 and fell 88 percent from 2019 to 2020.
- The average valuation for new single-family homes permitted decreased from 2015 to 2018 and rose significantly from 2018 to 2021, increasing 106.3 percent from 2019 to 2020 and rising 56.3 percent from 2020 to 2021. This resulted in an additional \$402,453 per home from 2020 to 2021 to an average valuation of \$1,117,857.



• Centennial issued 2 multi-family building permits for 610 units in 2021, down from 848 units permitted in 2020 but up from 149 units permitted in 2019. The valuation per multi-family unit averaged \$78,389 in 2021, down from \$136,467 in 2020 and \$112,008 in 2019.

Commercial Real Estate

Commercial Building Permits

• Centennial issued 288 commercial permits during 2021, of which 281 were commercial alteration permits and 7 were new commercial permits. This represented a 0.7 percent decrease compared with 2020, which had 2

- new commercial permits and 288 commercial alteration permits. From 2019 to 2020, total commercial permits fell 20.5 percent from 365 to 290 permits.
- Project valuation fell to about \$60.5 million in 2021, a decrease of 50 percent from 2020. Total valuation fell 33.5 percent from 2019 to 2020.
- Centennial permitted 337,101 square feet of new commercial space. The additional commercial square footage permitted in 2020 was not reported. In 2019, 199,447 square feet of space was permitted.

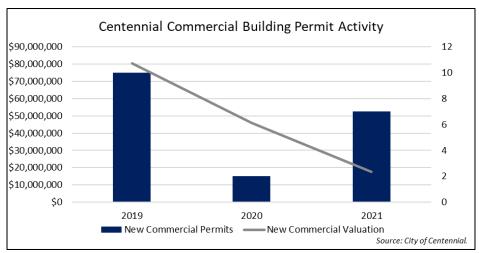
Centennial Commercial Bu	ilding Permits
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				% Change	% Change
New Commercial	2019	2020	2021	2019-20	2020-21
New Commercial				2013-20	2020-21
No. of Permits	10	2	7	-80.0%	250.0%
Total Valuation	\$80,516,380	\$45,840,773	\$17,531,294	-43.1%	-61.8%
Square Footage	199,447	NA	337,101	NA	NA
Commercial Alteration					
No. of Permits	355	288	281	-18.9%	-2.4%
Total Valuation	\$101,269,479	\$75,075,656	\$42,918,700	-25.9%	-42.8%
Total Commercial					
No. of Permits	365	290	288	-20.5%	-0.7%
Valuation	\$181,785,859	\$120,916,429	\$60,449,994	-33.5%	-50.0%

Source: City of Centennial.

Office Market

- Centennial had 159 office buildings offering nearly 5.8 million square feet of space in the fourth quarter of 2021. This represented 11.5 percent of office space in the Southeast market and 2.9 percent of space in Metro Denver.
- Centennial had the highest office vacancy rate of the three market areas. The office vacancy rate increased 2.6
 percentage points to 17.2 percent between the fourth quarters of 2020 and 2021 in Centennial. The vacancy
 rate increased 0.4 percentage points to 15.1 percent in the Southeast market and 1.6 percentage points in
 Metro Denver to 12.5 percent.
- The office lease rate in Centennial decreased less than 0.1 percent over-the-year between the fourth quarters of 2020 and 2021 to \$24.67 per square foot. In the Southeast market, the lease rate rose 0.6 percent to \$27.32 per square foot, while the lease rate in Metro Denver rose 2 percent to \$29.48 per square foot between 4Q 2020 and 4Q 2021.



• There was negative net absorption in Centennial totaling 149,975 square feet of office space from the fourth quarter of 2020 to the fourth quarter of 2021. In comparison, net absorption in the Southeast market was a negative 101,866 square feet and negative 1.26 million square feet in Metro Denver during the period.

Commercial Vacancy and Lease Rates Office Market

Office Market	Total Ex	Va	acancy Rat	e	Avg Lease Rate (per sq. ft.)				
	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021
Centennial	5,786,251	5,786,251	5,786,251	10.8%	14.6%	17.2%	\$23.49	\$24.68	\$24.67
Southeast	49,538,581	50,009,793	50,113,793	10.9%	14.7%	15.1%	\$26.34	\$27.15	\$27.32
Metro Denver	196,203,269	197,977,545	199,983,145	9.0%	10.9%	12.5%	\$28.04	\$28.90	\$29.48

Note: Vacancy rate and average lease rate are for direct space only (excludes sublet space). Office rates are full-service.

Source: CoStar Realty Information, Inc.

Industrial/Flex Market

- Centennial had 151 industrial and flex buildings offering nearly 5.1 million square feet of space. This represented 27.4 percent of the industrial/flex space in the Southeast market and 1.8 percent of space in Metro Denver.
- The vacancy rate increased 1.7 percentage points to 9.1 percent in Centennial from the fourth quarter of 2020 to the fourth quarter of 2021. The vacancy rate increased 1.1 percentage points to 9.8 percent in the Southeast market but decreased 0.3 percentage points to 5.1 percent throughout Metro Denver.
- The industrial/flex space average lease rate rose 3.3 percent over-the-year to \$10.15 per square foot in Centennial. The Southeast market reported an increase in the lease rate of 3.5 percent to \$11.16 per square foot. The lease rate rose 7.3 percent over-the-year to \$10.69 per square foot in Metro Denver.
- There was 89,489 square feet of industrial/flex space absorbed in Centennial between the fourth quarter of 2020 and the fourth quarter of 2021. Net occupied space in Metro Denver increased by more than 8 million square feet.

Commercial Vacancy and Lease Rates Industrial/Flex Market

			•						
Industrial/Flex Market	Total Ex	Va	acancy Rat	:e	Avg Lease Rate (per sq. ft.)				
IVIAIREC	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021
Centennial	4,886,902	4,886,902	5,075,202	7.9%	7.4%	9.1%	\$10.12	\$9.83	\$10.15
Southeast	16,934,985	17,818,048	18,518,661	6.2%	8.7%	9.8%	\$10.68	\$10.78	\$11.16
Metro Denver	276,335,668	281,846,130	289,559,598	4.6%	5.4%	5.1%	\$9.35	\$9.96	\$10.69

Note: Vacancy rate and average lease rate are for direct space only (excludes sublet space). Industrial/flex rates

are NNN.

Source: CoStar Realty Information, Inc.

Retail Market

- Centennial had 202 retail buildings offering nearly 4.5 million square feet of space. This represented 20.6 percent of the retail space in the Southeast market and 2.6 percent of space in Metro Denver.
- Centennial had the highest retail vacancy rate of the three market areas. The retail vacancy rate increased 0.2 percentage points to 9.2 percent in Centennial from the fourth quarter of 2020 to the fourth quarter of 2021. The vacancy rate fell 0.8 percentage points to 4 percent vacancy in the Southeast market and fell 0.5 percentage points to 4.6 percent vacancy throughout Metro Denver during the period.
- Centennial had the lowest average lease for retail space of the three market areas. The average lease rate for retail space in Centennial was \$18.10 per square foot, down 18 percent from the same time last year. The

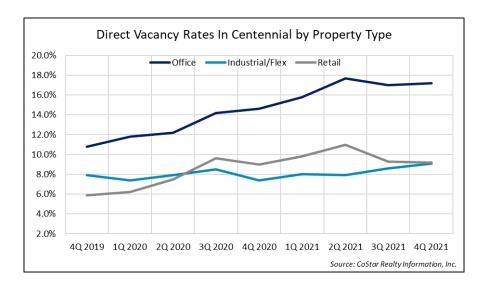
- lease rate in the Southeast market increased 11.2 percent over-the-year to \$19.80 per square foot. Throughout Metro Denver, the retail lease rate rose 2.3 percent, or by \$0.43, to \$19.31 per square foot.
- There was negative net absorption of retail space in Centennial totaling 4,570 square feet from the fourth quarter of 2020 to the fourth quarter of 2021. In contrast, positive net absorption totaled nearly 1.4 million square feet in Metro Denver.

Commercial Vacancy and Lease Rates Retail Market

	Retail Market	Total Existing Square Footage			Vacancy Rate			Avg Lease Rate (per sq. ft.)			
		4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021	4Q 2019	4Q 2020	4Q 2021	
	Centennial	4,458,225	4,472,552	4,478,575	5.9%	9.0%	9.2%	\$16.60	\$22.06	\$18.10	
	Southeast	21,534,517	21,657,065	21,706,355	3.3%	4.8%	4.0%	\$20.25	\$17.81	\$19.80	
	Metro Denver	172,025,137	172,884,620	173,434,058	4.1%	5.1%	4.6%	\$18.43	\$18.88	\$19.31	

Note: Vacancy rate and average lease rate are for direct space only (excludes sublet space).

Source: CoStar Realty Information, Inc.



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