

RETHINK REFRESH
RESILIENT REMAKE
RESKILL REBUILD
REFORM REMOTE



2022 ECONOMIC FORECAST FOR METRO DENVER

RESET
REPAIR

REWRITE RESTART
REPOSITION REWORK
REFLEX REIMAGINE
RETRAIN REBOOT



ABOUT THE METRO DENVER EDC

Often called a "center of influence," the Metro Denver EDC is the nation's first regional economic development organization.

From Castle Rock to Fort Collins and Golden to Greeley, we represent the nine counties and 66 communities that contribute to our resilient economy and incredible culture.

Thanks to the leadership and generosity of 250 of Colorado's most influential companies, we work to monitor and respond to the needs of the Colorado economy through corporate attraction and retention, workforce development, domestic and global marketing, investments in infrastructure, and public policy that fosters a pro-business climate.

The data we produce is foundational to the work we do. Publications like our annual Economic Forecast offer our clients, investors and community partners timely and relevant information on our regional and state economies.

The information included in this Economic Forecast reflects data and insights that were collected and evaluated as of February 1st, 2022, which was prior to the geopolitical and economic unrest due to Russia's invasion of Ukraine. For consistency's sake, as well as the longitudinal integrity of our data, we are distributing this research, recognizing that it may not be reflective of the immediate economic environment.

Looking ahead, the Metro Denver EDC will monitor the short-term and long-term economic impacts of this situation as our team works to drive competition, foster a culture of impact and innovation, support the business community, and ensure that life and work in Metro Denver are thriving.

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EXECUTIVE SUMMARY

When a machine, appliance, or electronics item is not working properly, the first potential solution is usually to reset, restart, reboot. The hope is that 2022 will be a reset year for the economy as many of its components were not working properly in 2021 as the pandemic has caused numerous changes in our economic system.

Unpredictable labor conditions dominated business performance, causing supply chain challenges coupled with strong consumer and business demand. The supply/demand imbalance resulted in rapidly rising prices, which has led to workers renegotiating their employment positions. Virus variants have caused businesses to keep reinventing how they use their physical space. Resilient consumers replaced household items and repaired and remodeled existing homes. Home sales and home prices reached new heights and housing affordability issues continued to be a key concern as community leaders pondered how best to build and rebuild their housing stock.

NATIONAL ECONOMY

Preliminary 2021 data suggests that real GDP in the U.S. expanded 5.7% in 2021, the fastest growth rate since 1984. All four components of GDP increased:

- Personal consumption expenditures, which comprise about 70% of GDP, expanded by 7.9% in 2021. Household spending on goods increased 12.1% compared with 2020 and surpassed pre-pandemic levels. Spending on services increased 5.9 over-the-year but remained below 2019.
- A contraction in business spending on structures was offset by increases in equipment and intellectual property spending, with nonresidential business investment increasing 7.3% in 2021. Residential fixed investment activity increased 9% as residential building permits reached the highest level since 2006.
- After an 8.1% increase in nondefense federal government expenditures from 2019 to 2020 as pandemic aid was distributed, spending levels retreated in the latter half of 2021 to a 2.8% increase from 2020 to 2021. The federal budget deficit is expected to decrease 61.6% to \$1.2 trillion in 2022.
- Net exports, or the value of exports minus the value of imports, generally represent a negative contribution to GDP as U.S. exports tend to be smaller than imports. The negative contribution increased to 4% in 2021 as a result of an increase in exports coupled with a larger increase in imports.

Real GDP is forecast to increase by 4.1% in 2021 as the nation moves back toward historic growth patterns and the Federal Reserve takes restrictive monetary actions to temper demand and curb inflation.

LABOR FORCE & EMPLOYMENT

Employment recovery was underway across the country throughout 2021. Colorado's recovery pace tended to be slower than the nation in the first half of 2021, with employment growth accelerating later in the year.

- The U.S. lost 22.4 million jobs from February to April 2020 but recovered 84% of the jobs lost by December 2021. The pace of employment growth will slow in 2022 but remain above historic averages.
- As of December 2021, Colorado had recovered 89.2% of the jobs lost during the COVID recession, the 13th strongest recovery of the 50 states. About 91.4% of Metro Denver jobs had returned.
- All supersectors except government and information added workers from 2020 to 2021 in Metro Denver.
- The annual average unemployment rate of 5.6% in Metro Denver and Colorado surpassed the U.S. average of 5.3%. Although Colorado's unemployment rate was 15th highest in the country in 2021, the state's high labor force participation rate bodes well for future employment growth as some of the workers currently "sitting on the sideline" will re-enter the labor force as new employment opportunities entice them back into the work environment.

While job growth will continue at a slower pace in 2022, expect that all Colorado jobs will be added back by 4Q 2022. In Metro Denver, the expected 2.9% employment gain means that about 49,200 jobs will be added, with eight of the 11 supersectors posting more jobs in 2022 than the pre-pandemic benchmark year of 2019.

COMMERCIAL REAL ESTATE

The commercial real estate market fared relatively well in 2021 as vacancy rates declined across three of the four property types, average lease rates ticked upwards, and 8.26 million square feet of space was added.

- Metro Denver's office vacancy rate rose to 14.1% in 2021 as companies continued to reevaluate their space requirements. A higher level of office completions in 2021 than in 2020 contributed to negative net absorption for the year. Expect the vacancy rate to retreat slightly in 2022 as only about 1.35 million square feet of new office space is added to the market.
- The vacancy rate for both flex and industrial space declined in 2021, bolstered by e-commerce and the increased need for onshore warehouse space. The industrial market continued to add significant amounts of new space with 5 million square feet or more added each year for the past five years. Completions in 2022 will reach a new record of 10.9 million square feet, provided that construction schedules remain on target.
- The retail market remained stable in 2021 with vacancy declining to 4.8% as minimal new space was added. Suburban retail centers outperformed urban locations due to delays in return to office plans.

CONSUMER ACTIVITY

Metro Denver's population increased 0.8% in 2020 and 2021, the lowest rate since 1990, due to more deaths, fewer births, and low net migration. 3.3 million of the state's 5.9 million residents live in Metro Denver.

- A rapid increase in personal income in 2021 due to the infusion of pandemic relief funds fueled high levels of consumer spending during a period of product supply challenges, causing the strongest increase in inflation since 1982. While personal income in Colorado is expected to increase faster than the nation in 2022, persistent inflation may erode some of the gains, especially for lower-income households.
- Retail trade spending increased 15.2% in 2021 in Metro Denver as all seven counties recorded growth and all retail categories met or exceeded 2019 levels. Retail activity in Metro Denver is expected to slow to a 4.3% growth rate in 2022 as spending levels return to historic norms.

RESIDENTIAL REAL ESTATE

- Residential building permits in Metro Denver increased 46.6% in 2021 compared with 2020. Permit growth was largest in multifamily and single-family attached units, with more modest growth for single-family detached. The number of residential building permits is expected to decline in 2022, influenced by materials shortages, rising prices, labor constraints, and ongoing production bottlenecks.
- Home sales increased 0.3% in 2021, nearly unchanged from the year prior. Home sales were boosted by ultra-low mortgage rates, with the 30-year fixed rate mortgage averaging just 2.96% throughout 2021, but were constrained by lack of inventory and rapidly rising prices.
- After increasing 6.6% in 2020, the median home price in Metro Denver grew at a record rate of 18.5% in 2021 to reach \$583,600. Home price increases are expected to moderate in 2022 as mortgage rates increase, causing a decrease in the demand for home purchases, and continued new home construction adds to the housing supply.

INTRODUCTION

When a machine, appliance, or electronics item is not working properly, the first potential solution is usually to reset, restart, reboot. The hope is that 2022 will be a reset year for the economy as many of its components were not working properly in 2021 as the COVID-19 pandemic caused numerous changes in our economic system over the past two years.

Unpredictable labor conditions have dominated business performance across the globe. Factories were not able to maintain planned production levels as virus surges caused increased absenteeism or facility shutdowns. Backlogs at our nation's ports and the lack of truck drivers to move goods across the country caused supply shocks to ripple across industries. Still, consumer and business demand remained elevated as pandemic relief payments supported strong spending on goods. The supply/demand imbalance caused rapidly

rising prices, with the consumer price index posting its fastest over-the-year increases since 1982.

In the face of these market challenges, workers are renegotiating their employment positions. The tight labor force is causing challenges for employers as a record high 4.5 million U.S. workers resigned in November 2021 as they pursued new employment opportunities offering the wage level, amenities, and flexibility needed to accommodate their skill level and personal situations. High levels of retirements are also occurring as the labor force ages.

Companies that had anticipated a return to the office around Labor Day 2021 pushed return dates into 2022 as highly contagious COVID variants caused businesses to keep reinventing how they use their physical space. While the office market has suffered through these changes in plans, retail has remained surprisingly stable

although suburban retail centers have tended to perform better than urban centers due to fewer workers and visitors in central business districts. The industrial market has thrived as resilient consumers purchased goods both online and in-person, leaving companies scrambling to find warehouse and logistics space closer to their customer base.

Consumers replaced household items and repaired and remodeled their existing homes. Home sales reached new heights despite the slowest pace of population growth from 2020 to 2021 since the founding of the nation. Strong housing demand due to the concentration of the millennial population who are solidly within the first-time home buyer age groups, low mortgage rates, and a lack of inventory caused home prices to soar. Housing affordability issues will continue to be a key concern as community leaders ponder how best to build and rebuild their housing stock.

REPORT ORGANIZATION

This report presents a comprehensive analysis of economic trends and conditions in 2021 and provides a look forward as to what to expect in 2022 for the national, Colorado, and Metro Denver economies. The seven-county Metro Denver area, or the region comprised of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson Counties, is home to 56% of

Colorado's population and 62% of the state's jobs.

The report includes six main sections. The first and second sections describe international and national economic conditions. Specifically, the national economy is discussed in terms of the components of Gross Domestic Product and interest rate trends. The remaining

sections present data and trends for the U.S., Colorado, and Metro Denver economies, as relevant, grouped into four main topics: labor force and employment, commercial real estate, consumer activity, and residential real estate.

INTERNATIONAL ECONOMY

The global economy continues to recover from the COVID-19 pandemic, although setbacks due to the highly transmissible Delta and Omicron variants slowed momentum in the second half of 2021. The global COVID-19 death toll has surpassed 5.6 million and continued caution surrounding health risks remains an obstacle to a full return to normalcy. Strong consumer demand amid supply chain disruptions and logistical challenges led to price increases across the globe. In many countries, rising inflation reflects pandemic-related supply-demand mismatches and higher commodity prices compared with their low base from a year ago. A global shortage of semiconductors was a major concern in 2021, causing production disruptions of various goods from electronics to motor vehicles. Logistics challenges at ports coincided with widespread truck driver shortages leading to longer delivery times and further exacerbating shortages and inflation. In its January 2022 *World Economic Outlook Update*, the International Monetary Fund (IMF) estimated that 2021 global output increased 5.9% in 2021 despite the challenges, a significant improvement from the 3.1% decline in 2020.

IMF analysts predict that global

economic growth will moderate to a 4.4% increase in 2022. This growth will be driven by an ongoing recovery from the COVID-19 pandemic, pent-up demand, and strong corporate earnings. Global growth is projected to slow to about 3.8% in 2023.

Downside risks to the forecast are significant, with elevated inflation, ongoing supply chain disruptions, and high energy prices expected to continue in 2022. As advanced economies embark on more restrictive monetary and fiscal policy positions to control inflation, risks to financial stability in emerging market and developing economies' capital flows may emerge. Further, geopolitical tensions remain high, and ongoing climate change means that the probability of major natural disasters remains elevated.

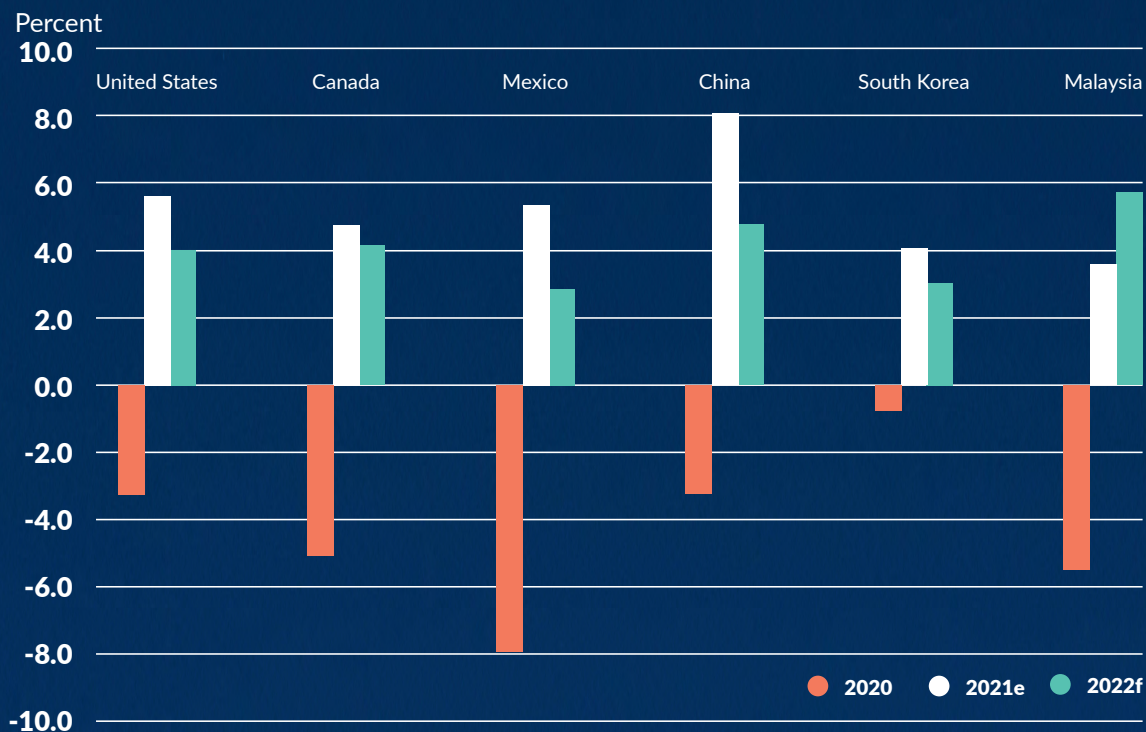
The pandemic impacted Colorado's major trading partners. Colorado's two largest trade partners, Canada and Mexico, comprise about 33% of Colorado's export activity. In Canada, economic activity remained slightly behind the U.S. with growth of 4.7% in 2021 but will surpass the U.S. slightly in 2022 at 4.1% growth. Mexico's economy was about on par with the U.S. in 2021, posting a 5.3% increase, but will lag behind with a

2.8% growth rate in 2022 as monetary policy actions aimed against inflation weaken domestic demand.

After five consecutive years of a decline in exports from Colorado to China, activity nearly doubled in 2021. China once again ranks as Colorado's third largest export market, representing 10% of the state's trade. As the world's second largest economy, the pace of recovery and continued growth in China plays a significant role in the success of global supply chains. GDP growth in South Korea (7% of Colorado's exports) is expected to moderate from 4% in 2021 to 3% in 2022. Malaysia, the recipient of 6% of the state's exports, is expected to experience a 2.2 percentage point increase in its GDP growth rate in 2022, one of only 12 of the 30 largest global economies expected to post stronger growth this year.

The value of Colorado's exports increased 12.1% from January to November 2020 to the same period in 2021. In 2022, Colorado's export value should continue to grow as the outlook for its main products (meat, electrical equipment, precision instruments, and industrial machinery) remains solid.

REAL GDP GROWTH FOR COLORADO'S FIVE-LARGEST TRADE PARTNERS



Source: International Monetary Fund, World Economic Outlook Update, January 2022. Note: Colorado's top five trading partners based on Nov 2021 YTD export volume.

PANDEMIC IMPACTING COLORADO'S MAJOR TRADING PARTNERS

OEDIT EXPORT GRANT

In order to support Colorado exporters, the Colorado Office of Economic Development (OEDIT) offers the Advanced Industries Export Grant helps Colorado-based advanced industries technology businesses who want to export or are currently exporting. This grant is for small- and medium-sized businesses. It reimburses for international business development and marketing costs. Businesses can apply for up to \$15,000 and up to 50% of the approved expenses.

The Global Consultant Network is also funded through this program. Colorado-based businesses can receive consulting support to help them expand into other countries. Consulting services typically last between three and eight months. Consultants offer market entry services, in-country partner meetings, and other services.

[See more here.](#)

WORLD TRADE CENTER DENVER

The World Trade Center Denver (WTCD) aims to help local companies succeed internationally. Through the WTCD, companies can participate in peer-to-peer training, consult with trade experts and make international business connections both locally and around the world.

[See more here.](#)

NATIONAL ECONOMY

GROSS DOMESTIC PRODUCT

Gross domestic product, or GDP—the total value of goods and services produced in the U.S.—is a key gauge of the nation's economic health. Follow-

ing a severe contraction during the first half of 2020, which caused real GDP to decline by an average of 3.4 % in 2020, preliminary 2021 data suggests that real GDP in the U.S. expanded 5.7%, the fastest growth rate since 1984.

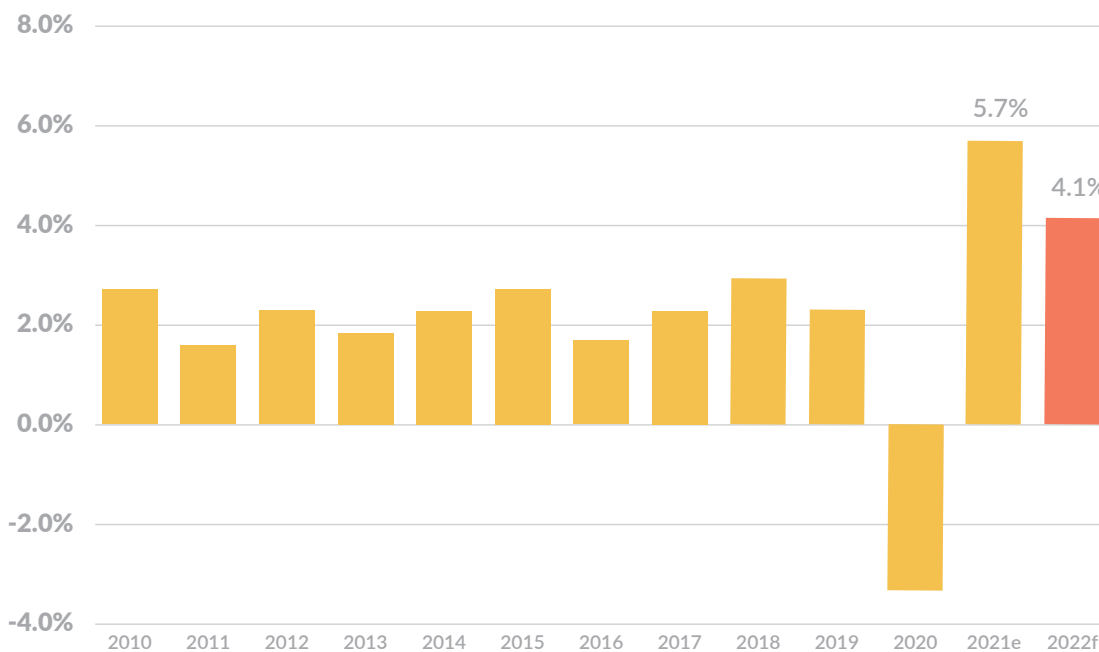
In 2022, real GDP growth is expected to slow to 4.1%, remaining above the 20-year historical average of 2.1%. The following sections detail the trends influencing each major component of GDP.

UNITED STATES

2021e
5.7%

2022f
4.1%

ANNUAL PERCENTAGE CHANGE IN REAL GDP



Source: U.S. Bureau of Economic Analysis. 2021e=DRP Estimate; 2022f=DRP Forecast.

CONSUMER SPENDING

Consumer spending recovered unevenly among goods and services.

Personal consumption expenditures, which comprise about 70% of GDP, expanded by 7.9% in 2021. That growth was driven by consumer spending on goods, while consumer spending on services increased at a slower pace. Based on preliminary annual data for 2021, household spending on goods in 2021 increased 12.1% compared with 2020, and outpaced pre-pandemic levels by 17.3%. Consumption of services, many of which rely on physical proximity among people, increased 5.9 over-the-year but remain 2.1% below pre-pandemic levels due, in part, to a resurgence in COVID-19 cases in the latter part of 2021.

Boosted by increases in personal income, spending on durable goods increased 18% in 2021, while spending on nondurable goods increased 9%. For durable goods, the largest

increases in spending were in other durable goods (+32.6%), recreational goods and vehicles (+19.1%), and motor vehicles and parts (+14.8%). **For nondurable goods, clothing and footwear had the largest increase of 26.7%, while all other nondurable goods categories reported increases less than 10% over the period.** On the services side, food services and accommodations increased 22.9%, followed by recreation services (+16.9%) and transportation services (+13.2%).

crocs™

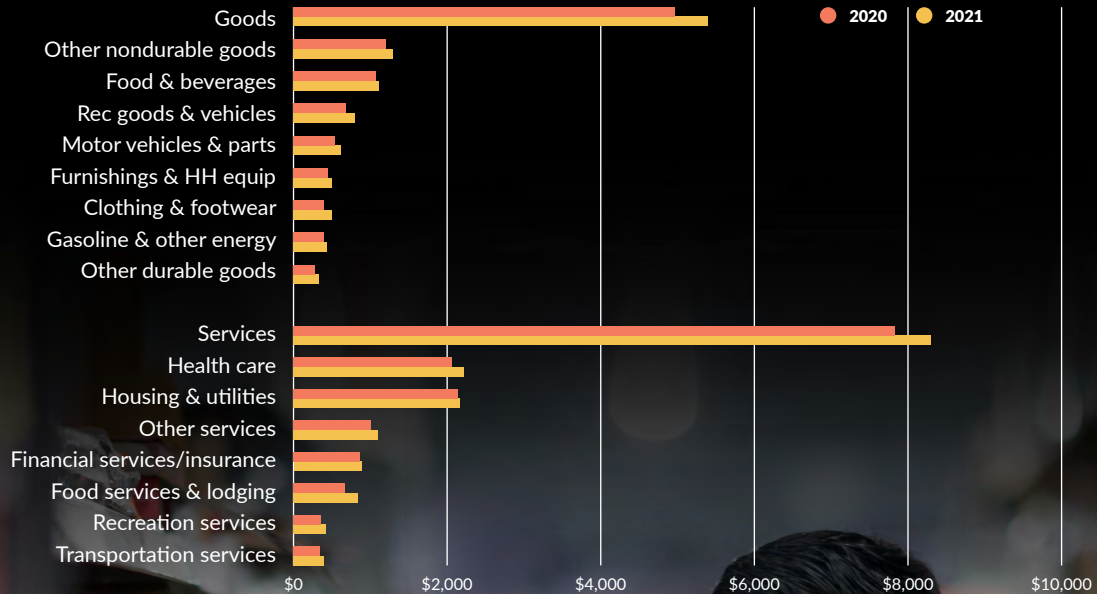


NITE IZE®



Note: Throughout this publication, (e) is used to represent data that is estimated in the absence of data for all 12 months of 2020; (f) indicates a forecast figure.

U.S. REAL PERSONAL CONSUMPTION EXPENDITURES BY CATEGORY (\$ IN BILLIONS)

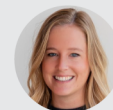


Source: U.S. Bureau of Economic Analysis.



CONSUMER SPENDING

Based in Los Angeles with an office in Boulder, Honey is a browser extension used by consumers that automatically applies coupons at e-commerce sites. The company was acquired by PayPal in 2019, making it PayPal's largest-ever acquisition and giving access to valuable data on consumer buying habits. In 2020, as stores closed and people sheltered in place, eCommerce became the default shopping medium, leading to soaring consumer adoption. In early in the pandemic, 92% of consumers said they had changed the way they shop, according to Honey. That led to total U.S. eCommerce sales of \$791.7 billion in 2020, representing an increase of 32.4% over 2019. Honey expects this trend to continue as with 88% of consumers noted they intend to continue purchasing online even after a COVID-19 vaccine was widely available.



Our goal was to be a partner for these brands as their models fluctuated to help them gain market share – even in new ways they hadn't explored – as they supported existing customers and earned new ones.

STEPHANIE CRIM

HEAD OF INTERNATIONAL PARTNERSHIPS • HONEY



VIBE
SALON INC

VIBE
SALON INC

BALAYA

STYLE

Retail trade surpasses pre-pandemic levels. Consumer spending behavior shifted dramatically in 2020 due to the pandemic, with sales declining for many categories that rely on in-store purchasing. Those declines were partially offset by increases in e-commerce activity. As in-person consumer spending rebounded in 2021, e-commerce growth continued to climb. Indeed, retail trade data indicate that non-store retailers – which includes e-commerce activity – reported the largest increase of 39.2% in 2021 compared with 2019.

All subsectors of retail trade reported increased retail sales over-the-year

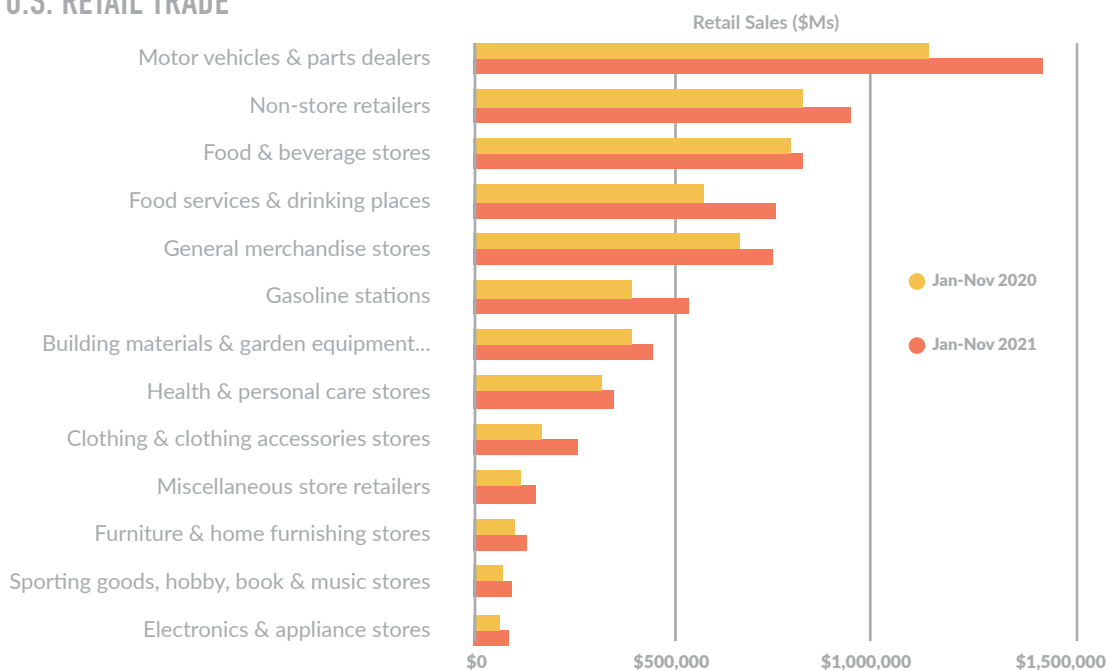
in 2021 and surpassed sales levels in 2019. Between 2020 and 2021, clothing and clothing accessories stores reported the strongest growth of 52%, followed by gasoline stations (+36.2%) and food services and drinking places (+31.1%). Food and beverage stores reported the most modest increase of 3.7%.

Household debt fell with the passage of the American Rescue Plan Act of 2021. This relief package provided significant benefits to U.S. households. The relief funds included additional economic impact payments for households, extended unemployment benefits through September 6, 2021, provided

assistance with housing costs, and increased the child tax credit and other child assistance programs. As a result, the household debt service ratio fell to a multi-decade low of 8.4% in 1Q 2021.

At the same time, the personal saving rate reached 26.6% in March 2021 as households pocketed the economic impact payments. The saving rate dropped to 6.9% at the end of November 2021 as most households have now spent the money received. The current saving rate is lower than the 7.6% average rate in 2019, so expect consumer spending to be more modest in 2022.

U.S. RETAIL TRADE



Source: U.S. Census Bureau.

The chart displays the Total Debt-Service Ratio as a percentage over time. The y-axis is labeled 'Percent' and ranges from 8 to 14. The x-axis shows quarters from 1Q 2000 to 1Q 2021. The ratio begins at approximately 11.5% in 2000, rises to a peak of about 13.1% in 2008, and then shows a steady decline, reaching approximately 9.8% by 2021. A legend indicates the line represents the 'Total Debt-Service Ratio'.

Quarter	Total Debt-Service Ratio (%)
1Q 2000	11.5
1Q 2001	12.0
1Q 2002	12.5
1Q 2003	12.3
1Q 2004	12.1
1Q 2005	12.2
1Q 2006	12.5
1Q 2007	12.8
1Q 2008	13.1
1Q 2009	12.8
1Q 2010	12.2
1Q 2011	11.2
1Q 2012	10.5
1Q 2013	9.8
1Q 2014	10.0
1Q 2015	9.8
1Q 2016	9.8
1Q 2017	9.8
1Q 2018	9.8
1Q 2019	9.8
1Q 2020	9.8
1Q 2021	9.8

Source: Federal Reserve Bank of St. Louis, FRED Database.

The chart displays the percentage of the U.S. population vaccinated against COVID-19 over time. The y-axis represents the percentage, ranging from 0 to 35. The x-axis shows dates from 1/1/2000 to 1/1/2021. The vaccination rate remains low (below 10%) until early 2021, when it spikes sharply to approximately 33%.

Date	Percent Vaccinated
1/1/2000	~4.5
1/1/2001	~4.5
1/1/2002	~4.5
1/1/2003	~5.0
1/1/2004	~5.0
1/1/2005	~4.5
1/1/2006	~3.5
1/1/2007	~3.5
1/1/2008	~3.5
1/1/2009	~5.0
1/1/2010	~5.0
1/1/2011	~6.0
1/1/2012	~6.0
1/1/2013	~11.0
1/1/2014	~6.0
1/1/2015	~7.0
1/1/2016	~7.0
1/1/2017	~7.0
1/1/2018	~7.0
1/1/2019	~7.0
1/1/2020	~7.0
1/1/2021	~33.0

Source: Federal Reserve Bank of St. Louis, FRED Database.

BUSINESS SPENDING & RESIDENTIAL FIXED INVESTMENT

Business investment uneven but investment in IP at record highs.

Business investment increased in 2021 after a sharp decline in 2020.

Nonresidential business investment increased 7.3% in 2021 compared with 2020. Investment in equipment and intellectual property grew 12.9% and 10.2% year-over-year, respectively. Equipment investments have recovered to pre-pandemic levels, while investments in intellectual property, which were only minimally affected by the pandemic recession, have increased to a record high. Investment in structures declined 8.2% from 2020 to 2021, representing a shift towards more employees working from home and less need for investment in office space. Investment in structures declined sharply in 2Q 2020 and remained depressed through the

remainder of 2020 and 2021.

Closely correlated with business spending, corporate profits were up 42.2% in the first three quarters of 2021, due in part to the low base levels from a significant pull-back of corporate spending in the first and second quarters of 2020. After a strong rebound in 3Q 2020, corporate profits have increased to a record high each consecutive quarter, leading to an expected record year for corporate profits in 2021.

Residential investment grows despite challenges. Despite contracting 8.8% from the first quarter to the second quarter of 2020, residential fixed investment activity in 2020 increased 6.8% compared with 2019. In 2021, residential fixed investment continued to climb and hit a record high in the first quarter before contracting slightly. Residential

fixed investment activity increased 9% in 2021 compared with 2020. Further, new residential building permits recorded in 2021 were at their highest level since 2006. Strong consumer demand and limited existing inventory helped push builder confidence higher at the end of 2021 despite inflation concerns and ongoing production bottlenecks. Additional challenges for builders include finding workers, predicting prices, and material delays.

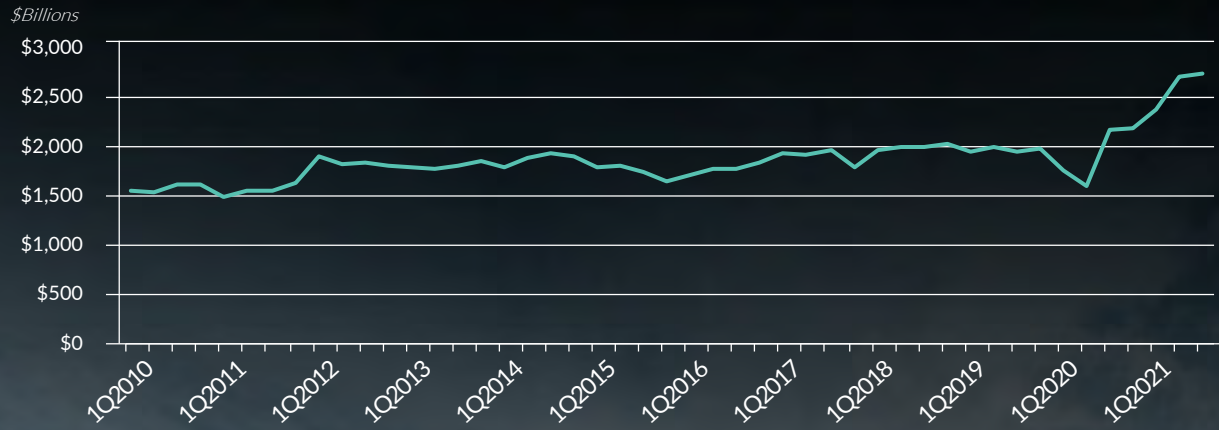
Business spending and residential investment to support real GDP growth in 2022. Business spending and residential fixed investment activity will positively contribute to GDP growth in 2022, albeit at a slower pace as rising interest rates, supply chain disruptions, and worker shortages contribute to higher business costs.

U.S. BUSINESS SPENDING BY CATEGORY (BILLIONS OF CHAINED 2012 DOLLARS)



Source: U.S. Bureau of Economic Analysis.

U.S. QUARTERLY CORPORATE PROFITS (SEASONALLY ADJUSTED ANNUAL RATE)



Source: Federal Reserve Bank of St. Louis, FRED Database. Note: corporate profits after tax without IVA and CCAAdj.





BUSINESS SPENDING & RESIDENTIAL FIXED INVESTMENT

Founded in 2016 in Denver, Velocity Global is a provider of employment advisory and management services offering a range of services including international payroll management, immigration advisory, employee relocation and international expansion advisory services. After the company's acquisition of iWorkGlobal in 2021, Velocity Global became the largest U.S. domestic and global Employer of Record (EoR) and launched a proprietary technology platform that streamlines the client and talent experience to deliver real-time insights to manage distributed teams. This follows a trend of Denver Metro-based companies investing heavily in state-of-the-art software with global impacts.



It was great to see Colorado's business start to bounce back in 2021. For knowledge workers, the mindset shifted for both employers and talent, moving from caution and uncertainty to opportunity. At Velocity Global, we jumped on the opportunity to further our global connectivity by investing heavily in our Global Work Platform, making it simple to work with anyone, anywhere. Our cloud software IP empowers us to deliver a seamless experience from start to finish, built by our internal team in Denver and time zones across the globe.

BEN WRIGHT
FOUNDER & CEO • VELOCITY GLOBAL

NEW U.S. PRIVATE HOUSING UNITS AUTHORIZED BY BUILDING PERMITS (SEASONALLY ADJUSTED ANNUAL RATE)

Thousands



Source: Federal Reserve Bank of St. Louis, FRED Database.

GOVERNMENT SPENDING

Government spending increased during pandemic recovery.

Government spending at all levels – federal, state, and local – represented an average of 17.4% of U.S. GDP from 2017 through 2019. The government spending contribution increased to 19.8% in 2Q 2020 as pandemic relief programs began. Government spending's contribution to GDP is currently decreasing and reached 17.2% in 4Q 2021. The smaller share should continue in 2022 with government spending representing between 17 and 17.5% of GDP.

Federal spending positively contributed to real GDP.

Nondefense federal spending increased 8.1% from 2019 to 2020 due to the implementation of the Coronavirus Aid, Relief, and Economic Security (CARES) Act passed in March 2020 and the Coronavirus Response and Consolidated Appropriations Act passed in December 2020. Federal spending remained elevated into the first quarter of 2021 with the passage of the American Rescue Plan Act (ARPA) in March 2021. Spending levels retreated in the latter half of 2021, with a 2.8% increase posted for 2021 compared with 2020.

To combat the pandemic and its impact on the economy,

policymakers approved trillions of dollars of relief funds through various fiscal and monetary measures. As of January 2022, \$13.7 trillion in relief funds had been approved with about \$9.8 trillion disbursed or committed. These funds represent direct payments, grants, loans, and tax relief provided through administrative actions, legislative rulemaking, and Federal Reserve operations.

The federal budget deficit remained high in 2021, after more than tripling in 2020.

As a result of the federal pandemic relief funds, the federal budget deficit reached \$3.1 trillion in 2020 and \$3 trillion in 2021. The Congressional Budget Office projects the deficit will continue to narrow in 2022, nearly returning to the 2019 level as emergency pandemic support ends. A significant portion of the spending decrease will come from the U.S. Department of Labor as a result of the ending of emergency pandemic unemployment insurance payments. The deficit is expected to decrease 61.6% to \$1.2 trillion in 2022.

Stronger than expected retail sales activity supported state and local governments. Retail sales tax revenue was more resilient than expected during the pandemic as consumer spending increased at a brisk pace. State and local

government spending increased 0.3% in 2021 compared with 2020.

State and local governments also were supported by about \$240 billion in ARPA funds distributed in 2021. ARPA funds may be used to cover eligible costs incurred during the period from March 3, 2021 through December 31, 2024, as long as the funds are obligated by December 31, 2024 and are expended by December 31, 2026. The funds are intended to meet immediate pandemic response needs and to make long-term investments in the recovery, equity, and prosperity of local communities.

Colorado state government received \$3.8 billion in ARPA funds that will be used to fortify the state budget in priority areas such as K-12 education, housing, and employee compensation; fund the public health response to COVID-19; expand affordable housing and home ownership; make behavioral health investments; provide small business support; expand broadband access across the state; provide workforce development and education programs; and invest in transportation and infrastructure improvement projects. In addition, cities and counties across the state received about \$1.9 billion in ARPA funds.

TRACKING THE COVID RESPONSE (IN \$TRILLIONS)



U.S. FEDERAL DEFICIT (\$BILLIONS)



NET EXPORTS

Trade volumes increased in 2021 after sharp decline in 2020. Net exports, or the value of exports minus the value of imports, generally represent a negative contribution to GDP of about 3% as U.S. exports tend to be smaller than imports. The overall negative contribution increased to 4% in 2021 as a result of an increase in exports coupled with a larger increase in imports. Based on U.S. Census Bureau data, export activity increased 18.2% year-to-date through November 2021 but is expected to remain below pre-pandemic levels for the year. Imports increased 20.7% over the same period and surpassed the 2019 level.

Exports to nation's large trade partners rebound in 2021. In 2020, U.S. exports fell 13.3%, with the nation's two largest trading partners

– Canada and Mexico – comprising nearly 38% of that decline. Among the nation's key trading partners, China was the only country where U.S. exports increased in 2020. In 2021, preliminary data for November year-to-date show that U.S. exports increased 23.4% over-the-year and export values to all of the nation's key trading partners increased. Combined, exports to the nation's North American trade partners comprised about one-third of all U.S. exports in 2021 and contributed nearly 36% of the growth between 2020 and 2021. Exports to China – the nation's third largest trading partner – increased further in 2021, posting a 25% gain over-the-year.

The nation's largest export categories are chemicals, computers and electronics, and transportation equipment. The top three categories

all posted an increase from 2020 to 2021, although the value of transportation equipment exports is still lower than the level posted in 2019.

Global trade volumes are expected to moderate in 2022. The IMF forecasts that global trade volumes will grow by 6% in 2022, down from the 9.3% increase posted in 2021. The nation's largest trade partners will continue to recover, with Canada's GDP expected to grow 4.1% in 2022 and Mexico's increase expected to be 2.8%. According to the IMF, assuming that the pandemic eases over 2022, supply chain problems should abate later in 2022 and the moderation in global goods demand should reduce imbalances. Cross-border services trade, especially tourism, is expected to remain subdued.

VALUE OF U.S. IMPORTS & EXPORTS (\$BILLIONS)



Source: U.S. Census Bureau, Foreign Trade Division.

INTEREST RATES

Monetary policy remained accommodative in 2021. The bank prime loan rate, or the interest charged on short-term business loans, decreased to 3.25% in April 2020 and remained at that rate through the end of 2020 and all of 2021. The prime rate is highly correlated with the federal funds rate (the rate targeted by the Federal Open Market Committee (FOMC) for overnight loans between banks) and has averaged about 3.1 percentage points above the federal funds rate for several years. The FOMC maintained an accommodative stance on

monetary policy as economic conditions strengthened and employment rebounded. The federal funds rate averaged 0.08% in 2021, peaking at 0.1% in July, but otherwise remaining below 0.1%.

Inflationary pressures and persistent supply-chain disruption will lead to tightening of monetary policy in 2022. As inflationary pressures mount, the FOMC will take action to tighten credit conditions in 2022. The FOMC is expected to gradually raise interest rates in 2022, with three rate increases expected during the year. Short- and longer-term interest rates will rise, which

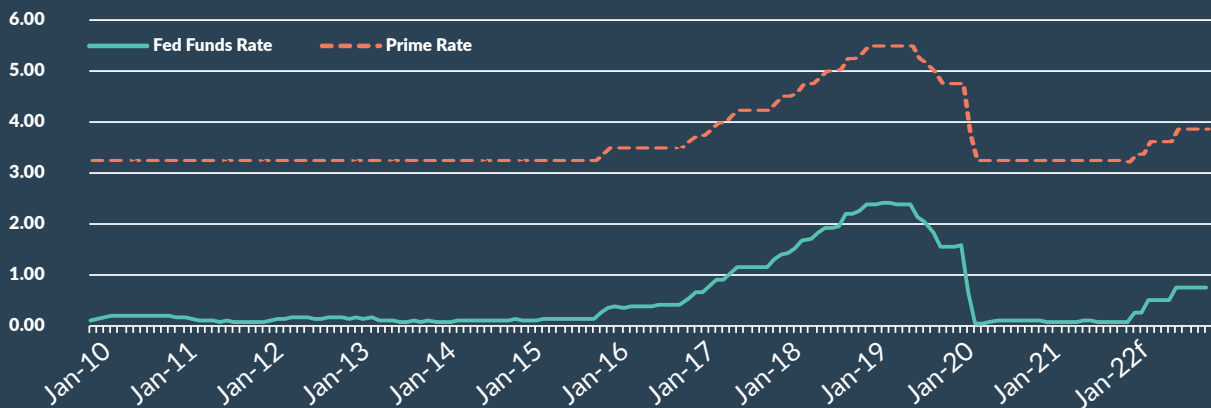
will in turn raise the cost of borrowing, temper demand, and decrease inflationary pressure. While this will help prevent some price pressures, supply chain disruptions will continue to challenge many industries. The Federal Funds rate will average 0.53% in 2022 and the prime rate will average 3.65% for the year.

PRIME RATE

2021e
3.3%

2022f
3.7%

U.S. KEY INTEREST RATES



Source: Board of Governors of the Federal Reserve System. 2022f=DRP Forecast.



LABOR FORCE & EMPLOYMENT

EMPLOYMENT

Colorado recovery position stronger than the nation. Colorado lost 376,300 jobs in just three months (January 2020 – April 2020) as a result of the COVID-19 pandemic. This steep and sudden decline in the employment position was far worse than the state's experience during the Great Recession when 154,000 jobs were lost over a 20-month period (May 2008 – Jan 2010). As of December 2021, the state had recovered 89.2% of the jobs lost, ranking as the 13th strongest recovery of the 50 states. In contrast, the U.S. had recovered 84% of the jobs lost by the end of 2021.

UNITED STATES

2021e	2022f
2.8%	2.3%

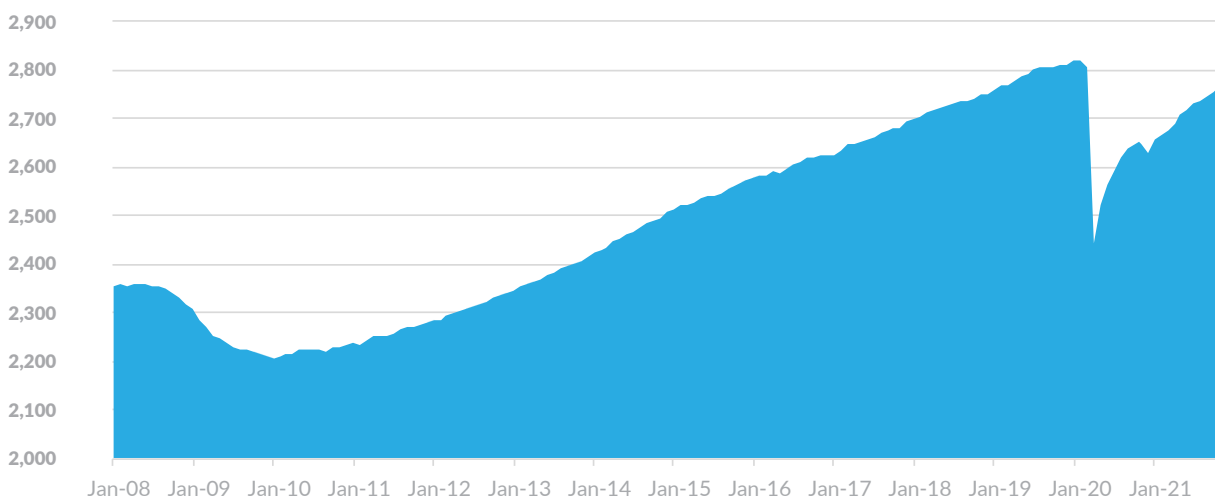
COLORADO

2021e	2022f
3.0%	2.9%

METRO DENVER

2021e	2022f
3.2%	2.9%

COLORADO TOTAL NONFARM EMPLOYMENT BY MONTH (000S)



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics, Seasonally Adjusted.

It took 38 months for Colorado to recover all of the jobs lost during the Great Recession. The recovery from the COVID Recession is expected to be faster but will still take considerable time due to the severity of the employment losses and the resulting challenges such as supply chain issues, rising producer and consumer prices, and labor market constraints. Colorado is estimated to recover all jobs lost by the fourth quarter of 2022, representing about a 30-month recovery period.

Metro Denver employment situation also fared better than the nation.

Seasonally adjusted employment data for Metro Denver, defined to be the Denver metropolitan statistical area (MSA) plus the Boulder MSA, re-

vealed that 91.4% of the region's jobs lost due to the COVID Recession had been recovered by December 2021. Based on preliminary (not seasonally adjusted) data, Metro Denver lost 5.3% of its employment base in 2020.

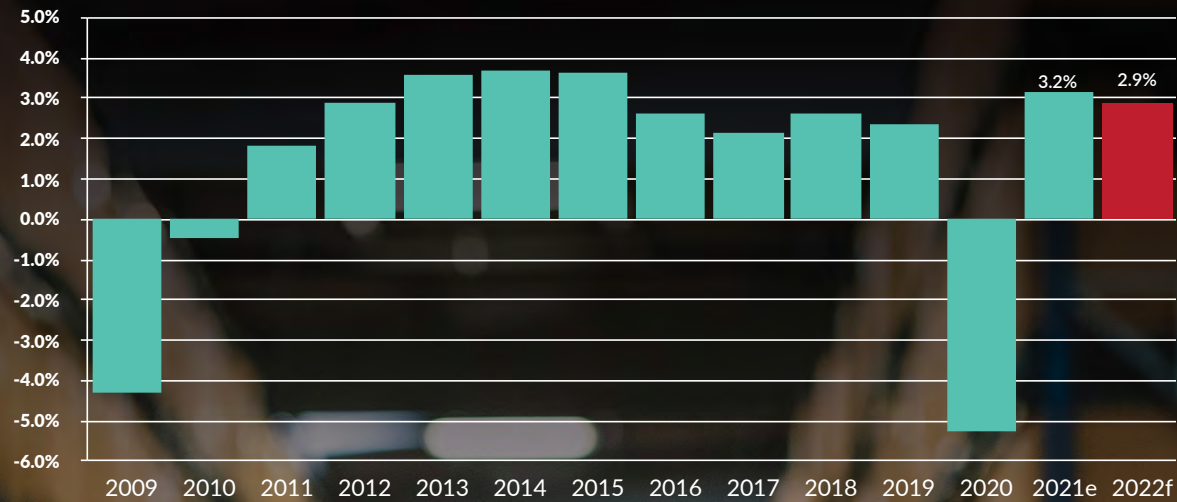
The employment recovery was relatively consistent throughout 2021, with employment growth averaging about 3.2%. As the region naturally moves back to its historic growth pattern, employment is expected to increase at a slightly slower pace of 2.9% in 2022, representing the addition of 49,200 jobs.

Metro Denver employment growth stronger than Colorado, with mixed recovery positions across the state.

There are seven metropolitan statistical areas in the state, covering 17 of the state's 64 counties. The Colorado Springs MSA (+3.9%) and the Denver MSA (+3.3%) posted the strongest employment increases in 2021. Both areas have diversified economic bases with high concentrations of professional and business services. Further, both areas experienced strong increases in the transportation, warehousing, and utilities supersector due to expansion in e-commerce and logistics operations. The Colorado Springs MSA is the only metro area in the state whose 2021 employment level was greater than its 2019 employment level.

Note: Annual benchmark revisions to the employment and unemployment data series can significantly alter historic trends. As 2020 and 2021 data will be revised in March 2022, the exact revisions are not yet known. The following forecast is based on preliminary 2020 and 2021 data.

ANNUAL PERCENTAGE CHANGE IN METRO DENVER NONFARM EMPLOYMENT



Source: U.S. Bureau of Labor Statistics. 2021e=DRP Estimate; 2022f=DRP Forecast.



The Fort Collins (+2.1%) and Boulder (+2%) MSAs experienced slower employment increases due to the importance of Colorado State University and the University of Colorado Boulder, respectively, to their economies. When students were attending classes remotely and not spending their dollars within the community, employment growth lagged. Employment growth returned to more historic patterns in both areas in the latter half of the year. The Grand Junction MSA (+1.6%) has expanded due to outdoor recreation and an inflow of retirees. The Greeley MSA (+1.1%) continues to be challenged by lagging natural resources and renewable energy employment. Slower growth in the Pueblo MSA (+0.6%) is due to lagging employment in the government, manufacturing, and education and health services supersectors.

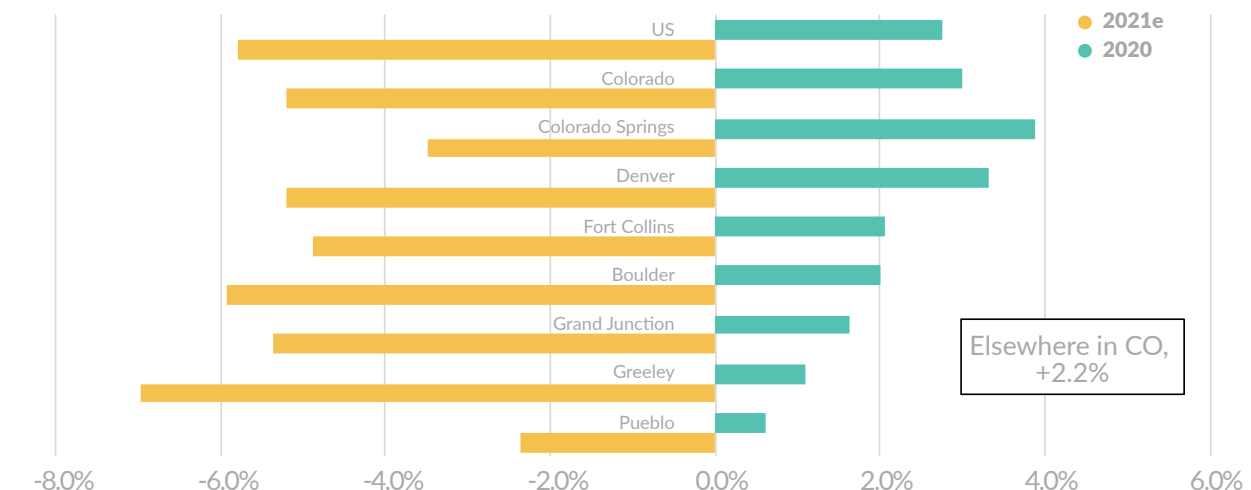
Employment in the state's 47 nonmetro counties increased 2.2% in 2021, a significant improvement from 2020 when the number of jobs decreased by 6.5%. In particular, employment in the mountain resort regions of the state increased as tourism activity improved.

High concentration of professional and business services employment formed solid base for Metro Denver.

Ten of the 11 supersectors in Metro Denver lost employment in 2020 due to the pandemic. Businesses in the most severely affected supersectors were either those that relied on physical proximity, where work could not be conducted remotely, or were those deemed nonessential during periods of business restrictions. Companies within leisure and hospitality, other (personal) services, and various retail trade operations were some of the most negatively impacted. Of all the supersectors,

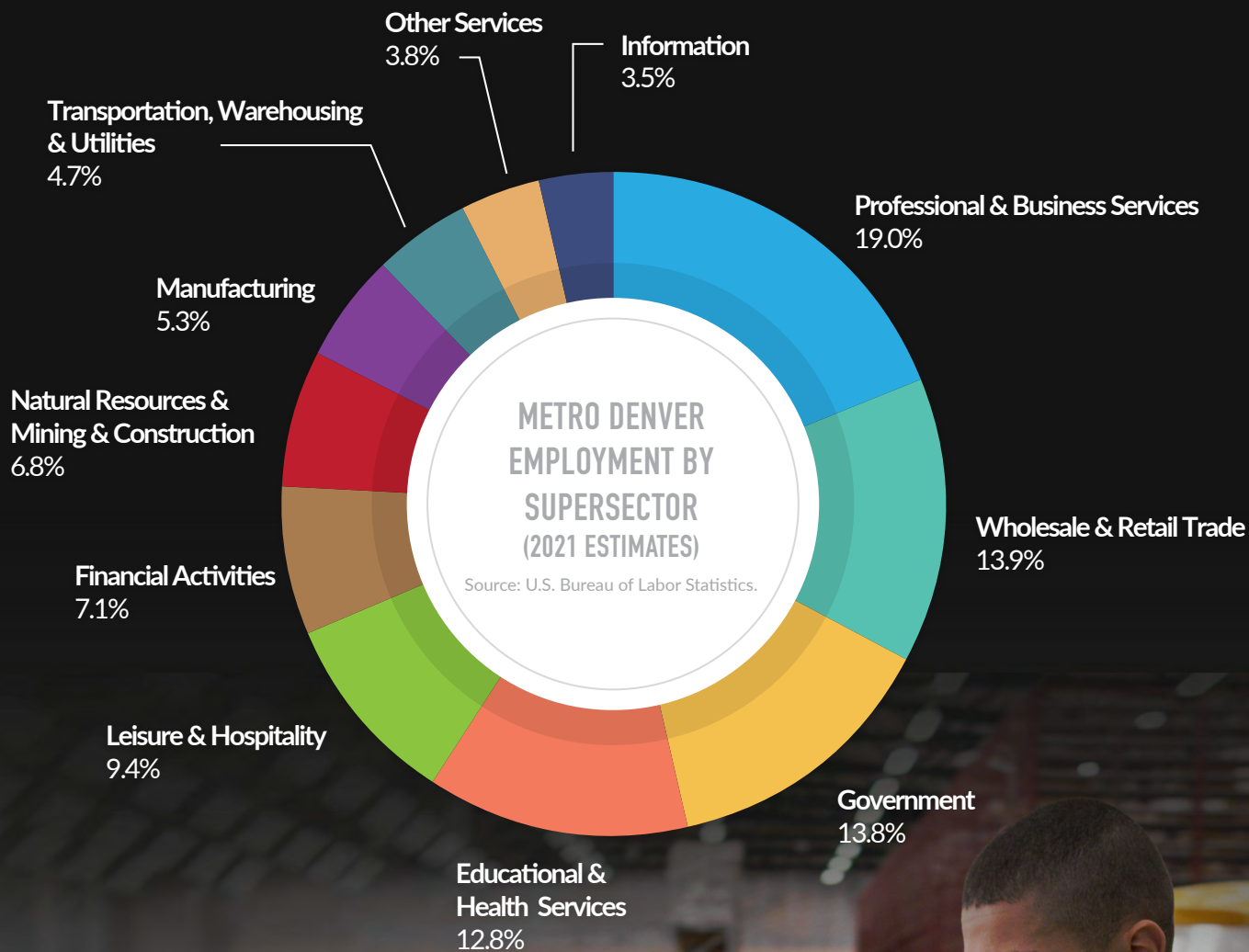
professional and business services companies, which represents a broad range of business operations ranging from accounting and legal services to computer systems design, were in the best position to shift quickly to remote work. While the supersector lost jobs in 2020, employment growth resumed in 2021 and served as a solid foundation for recovery. This supersector tends to be export-oriented, knowledge-intensive, and supportive of business sectors thus enhancing their ability to successfully compete in the global economy. Metro Denver competes for talent at an international level in this sector. The only supersector that posted an increase in employment from 2019 to 2020 was the transportation, warehousing, and utilities supersector, bolstered by the strength in e-commerce and logistics operations.

COLORADO NONFARM JOB GROWTH RATES BY METRO AREA



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics.

Industry employment data are grouped according to the North American Industry Classification System (NAICS) codes. This coding structure includes 20 detailed industry sectors that are combined to form 11 "supersectors."



The employment situation improved significantly in 2021 with all supersectors except government and information adding workers. The fastest rate of growth once again occurred in the transportation, warehousing, and utilities supersector (+10.2%, +7,400 jobs) as warehousing and logistics operations continued to expand. Leisure and hospitality (+8.7%, +12,700 jobs) and other services (+8.4%, +5,000 jobs), two supersectors that were hit particularly hard at the start of the pandemic, posted strong increases in 2021 as businesses reopened or increased capacity as consumer demand picked up. Leisure and hospitality added the most jobs compared with 2020, followed by professional and business services (+3.7%, +11,600 jobs) and wholesale and retail trade (+3.7%, +8,300 jobs). Despite the broad-based increase in employment in 2021, only three of the supersectors

reached employment levels higher than those achieved in 2019: transportation, warehousing, and utilities; professional and business services; and financial activities. Manufacturing employment matched its 2019 level.

2022 employment in 8 of the 11 supersectors expected to surpass the pre-pandemic employment base of 2019. Employment growth is expected to continue in 2022 at a slightly slower 2.9% pace as activity starts to settle back to historic levels. The forecasted addition of 49,200 jobs in Metro Denver will occur across all supersectors with the exception of information. Employment in the information supersector, which is dominated by print media and broadcasting, is expected to remain flat from 2021 to 2022.

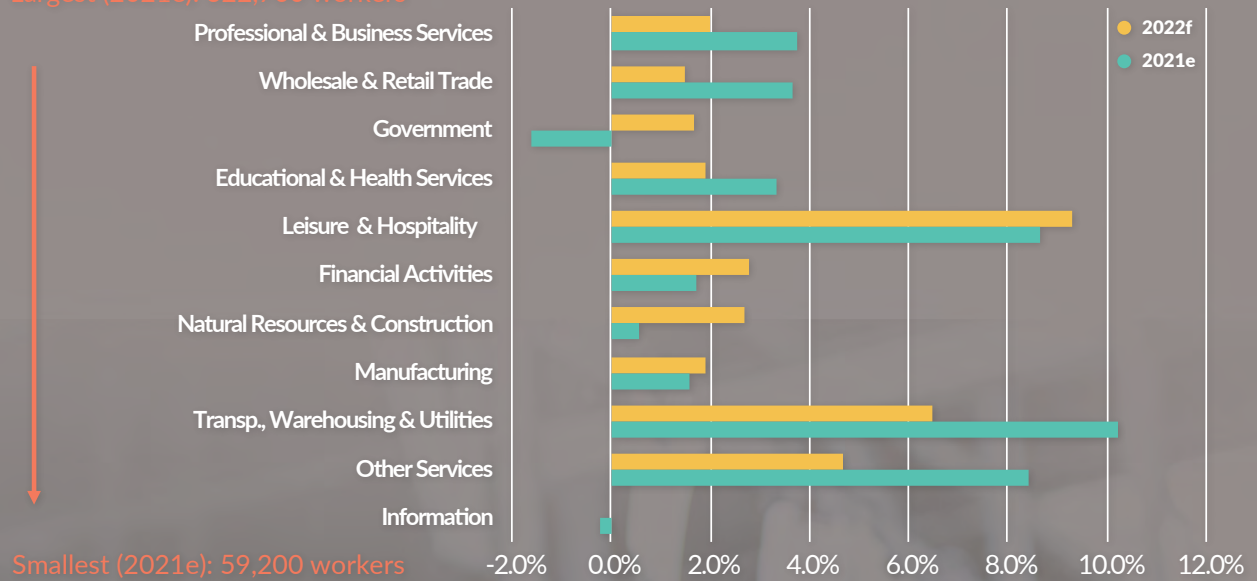
The pace of job gains in 2022 will be enough to lift eight of the 11

supersectors to employment levels that will surpass the pre-pandemic 2019 employment benchmark. Transportation, warehousing, and utilities and professional and business services will surpass the prior high mark by the largest amounts. Natural resources and construction will barely surpass the 2019 employment level as drilling activity slowly resumes and construction continues at a brisk pace.

On the downside, leisure and hospitality employment will still be lower in 2022 than in 2019 as businesses struggle to fill vacant positions, especially those in lower-wage occupations. Government employment will also be lower in 2022 than 2019 as the state and local positions that were trimmed in 2020 in anticipation of lower tax revenue will be added back slowly. Information sector employment will continue to lag its 2019 level as well.

METRO DENVER NONFARM EMPLOYMENT GROWTH BY SUPERSECTOR

Largest (2021e): 322,700 workers



UNEMPLOYMENT

Tight labor market impacts businesses across the country.

Businesses nationally and across all industries have expressed concerns with finding available workers. At the national level, the monthly Job Openings and Labor Turnover Survey (JOLTS) reveals that there are more job openings than unemployed workers. As of the end of November 2021, businesses were trying to fill 10.6 million positions across the country although only 6.8 million people were unemployed. This represents 0.7 workers per open position, the lowest unemployed-to-open-positions ratio posted in statistics dating back to January 2008. Indeed, this ratio averaged 0.77 for the six-month period from June to November 2021. As a comparison, during the period of historically low unemployment rates in 2019, the ratio averaged 0.8 workers per open position.

Exacerbating this situation is the high level of "quits." In addition to tracking open positions, the JOLTS data tracks the number of worker separations.

Separations are classified as layoffs and discharges (involuntary separations), quits (voluntary separations), or other separations (retirement, death, disability, and transfers). After the rapid increase in layoffs and discharges in 2020, which averaged 3.4 million per month for the year, involuntary separations settled to just 1.5 million per month in 2021. After reaching a recent low average of 333,600 other separations per month in 2019, other separations increased to an average of 356,800 per month in 2021. Most challenging has been the increase in the number of workers voluntarily quitting their job. The number of quits averaged 3.5 million per month in 2019 and increased to 3.9 million per month in 2021. Further, the number of quits reached 4.5 million in November 2021, a series high.

The quits rate in November, or the number of quits for the month as a % of total employment, was 3%. The quits rate was the highest in the leisure and hospitality (6.4%), retail trade (4.4%), and professional and business services (3.7%)

supersectors. While the average annual wage tends to be low in the leisure and hospitality and retail trade sectors, professional and business services tends to offer some of the highest average annual wages. Therefore, quits are happening in all industries and at all wage levels.

UNITED STATES

2021e	2022f
5.3%	4.1%

COLORADO

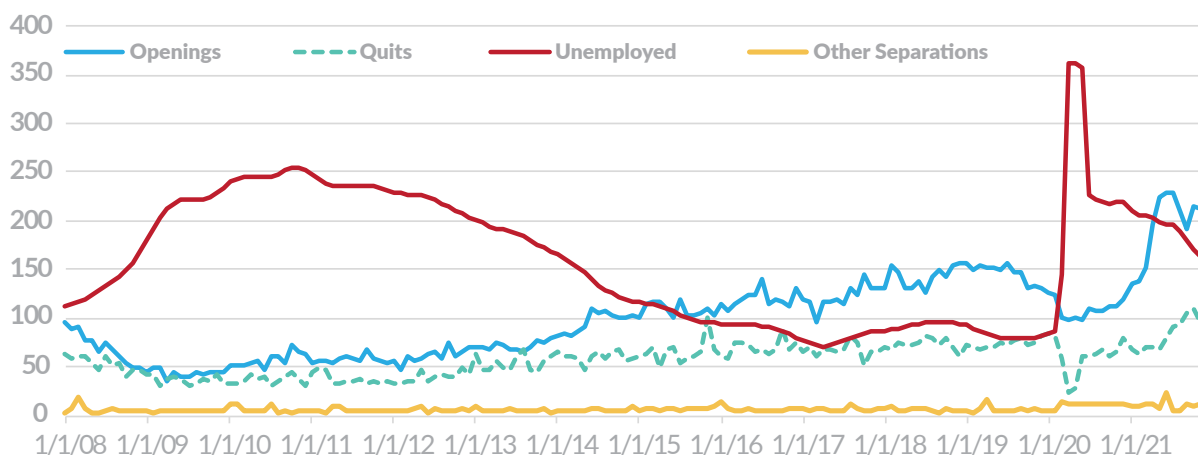
2021e	2022f
5.6%	4.1%

METRO DENVER

2021e	2022f
5.6%	4.0%

The Colorado job openings and quits experience is similar to that of the U.S. In Colorado, there were 0.77 unemployed workers per open position in the month of November, as there were 163,800 unemployed persons compared with 212,000 open positions. A key difference in Colorado is that the quits rate is slightly higher than the U.S. as the rate reached 3.5% in November and has averaged 3.1% for the year compared with the 2.7% average at the national level.

COLORADO JOB OPENINGS & LABOR TURNOVER (000S)



Source: U.S. Bureau of Labor Statistics, Job Openings & Labor Turnover Survey, seasonally adjusted.

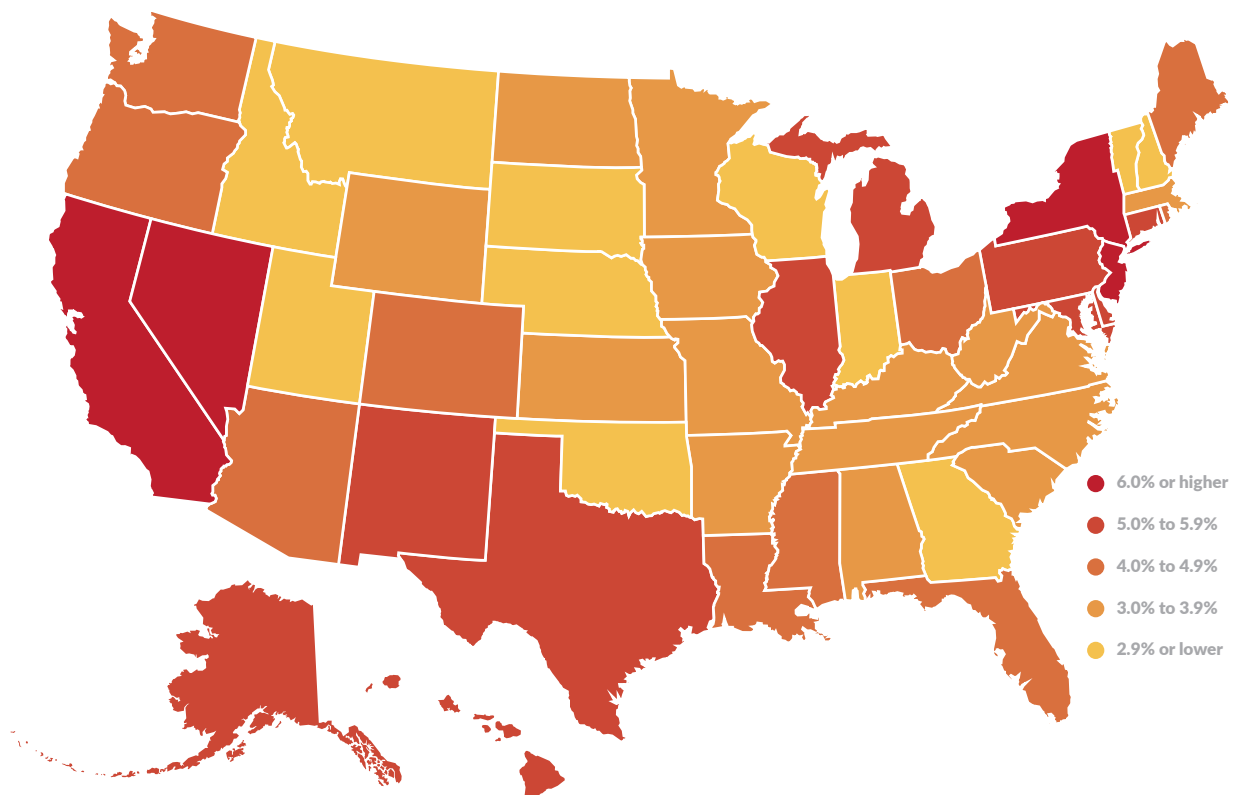
The last time that the number of quits reached levels similar to the current situation was in late 2015/early 2016. This was a period of rapid job growth and declining unemployment, so it was similar to the current position of workers having the advantage in employment negotiations. During such periods of time, the savvy worker compares their current position with other openings in the marketplace to make sure that wage levels, employee benefits packages, job amenities, and job satisfaction are in line with their needs and desires. While this competitive market is challenging for employers, it is reasonable that employees re-evaluate their career path at this time.

Workers pursue employment opportunities offering wage level, amenities, and flexibility needed to accommodate their skill level and personal situations. Despite having more jobs open than the number unemployed in the state, Colorado's unemployment rate remains higher than the national average, as has been the situation since October 2020. While Colorado's unemployment has historically been one of the lowest in the nation, the state ranked as having the 15th highest unemployment rate in the country in December 2021, with a seasonally adjusted unemployment rate of 4.8%. Colorado has a strong concentration of leisure and hospitality jobs due to the strength of the state's

tourism market and high resident income levels. As this industry is one that remains challenged due to the COVID pandemic, the number of unemployed remains high as these workers pursue employment opportunities offering the wage level, amenities, and flexibility needed to accommodate their skill level and personal situations.

In 2021, the unemployment rate averaged 5.6% in Colorado compared with the 5.3% average rate across the country. The unemployment rate is expected to fall to an average of 4.1% in 2022, the same level as the U.S., as job growth continues and unemployed workers reach the point when they must choose the best employment opportunity for their needs.

UNEMPLOYMENT RATES BY STATE, SEASONALLY ADJUSTED, DECEMBER 2021 (U.S. RATE = 3.9 PERCENT)



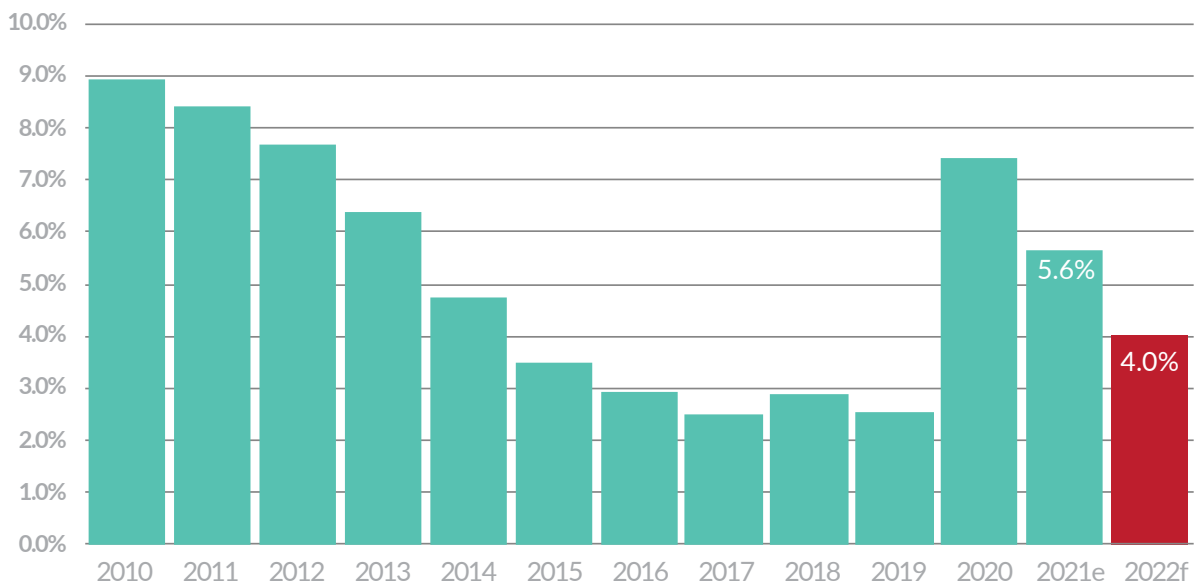
Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Unemployment in Metro Denver similar to that of the state. An average of 105,000 people were unemployed in Metro Denver each month of 2021, down from the 2020 average of 135,000 people. While the

decline in the number unemployed is good news, there are still significantly more people that say they are seeking new employment opportunities than the pre-pandemic average of about 46,000

unemployed persons per month. Similar to the situation at the state level, the unemployment rate is expected to continue declining in 2022, falling to a level just below the projected national average of 4.1%.

METRO DENVER AVERAGE ANNUAL UNEMPLOYMENT RATES



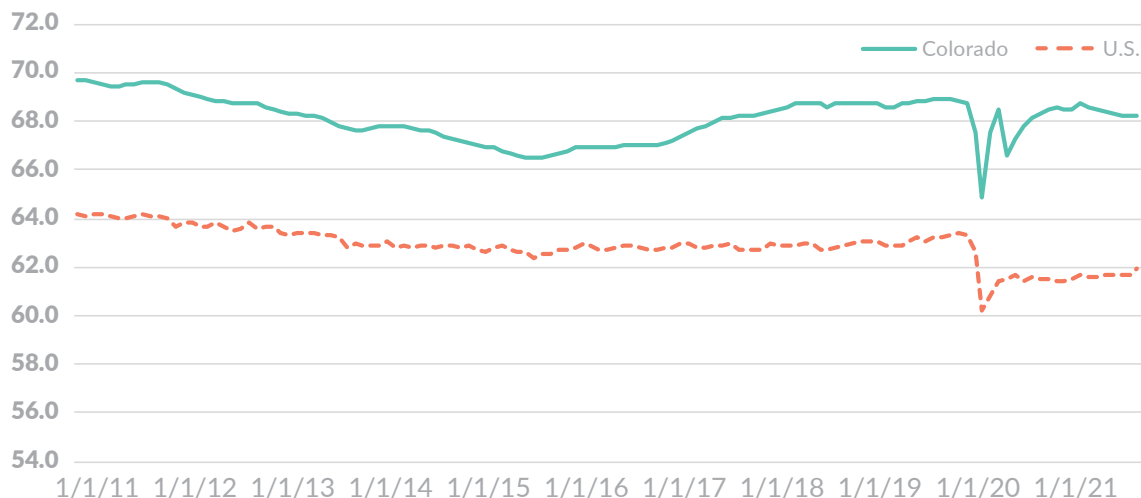
Source: Colorado Department of Labor and Employment, Local Area Unemployment Statistics. 2021e=DRP Estimate; 2022f=DRP Forecast.

Labor force participation fell dramatically at the start of the pandemic and is improving slowly. Both nationally and regionally, labor force participation contracted significantly in April 2020 as workers dropped out of the labor force to care for children that had shifted to

remote learning and other family members requiring assistance due to COVID. Others chose to re-evaluate their work life, with some choosing to retire earlier than planned, pursue new skills through education or training, or drop out of the labor force due to fear for their health.

In the United States, the labor force participation rate fell from 63.4% in January 2020 to 60.2% in April 2020. The national rate has been increasing slowly, reaching 61.9% in November 2021.

LABOR FORCE PARTICIPATION RATES (%)



Source: U.S. Bureau of Labor Statistics, seasonally adjusted.

COLORADO HIGHER LABOR FORCE PARTICIPATION RATE DUE TO THE STATE'S LOWER MEDIAN AGE & PRODUCTIVE WORKER BASE.

The improvement in Colorado's labor force participation rate has been more rapid than the U.S. At 68.2%, Colorado ranked as having the fourth highest labor force participation rate in the country in November 2021. Labor force participation in Colorado tends to surpass the national average by a wide margin, reflecting the state's lower median age and productive worker base.

The high level of participation in the state bodes well for future employment growth as some of the workers currently “sitting on the sidelines” will re-enter the labor force as new employment opportunities entice them back in.



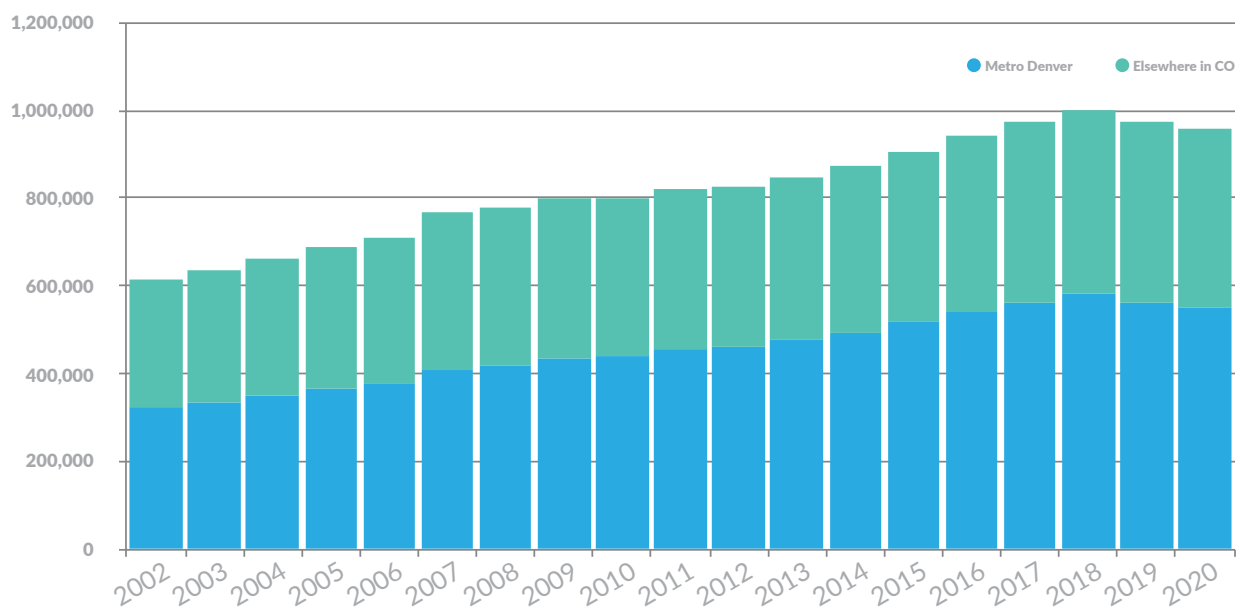
Colorado experiencing rising gig employment. Another trend during the pandemic recovery has been the shift to self-employment or gig work. Labor force statistics include individuals 16 years old or over that are either working in a wage and salary position, working in a gig position, or are actively pursuing a job. As the labor force has reached record high levels in the state and in Metro Denver, it is possible that many individuals have started their own business.

The number of proprietors in the state may be used as a proxy for the number of gig positions held by Colorado residents, with these numbers reflecting the number of proprietor positions, not the number of proprietors, as some individuals may hold more than one gig position. The number of proprietors peaked in 2018 but declined slightly in 2019 as wage and salary job opportunities were plentiful. The situation in 2020 likely was distorted by the pandemic, so it will be interesting to track activity in 2021. In 2020,

25.6% of Colorado's total employed positions were proprietors, the fifth highest concentration in the country. This represented 956,000 proprietor positions, of which nearly 58% were located in Metro Denver.

Analysts have suggested that a wave of individuals pursued their own business during the pandemic in order to achieve more flexible working conditions while meeting household responsibilities.

NUMBER OF COLORADO PROPRIETORS



Source: U.S. Bureau of Economic Analysis.

MOVING FORWARD, THE CHALLENGE IS TO HELP THESE ENTREPRENEURS SUCCESSFULLY MAINTAIN & GROW THEIR BUSINESSES.

If 2021 was a reasonable indication of the availability of assistance, the outlook for the future is bright. Metro Denver's venture capital funding in 2021 shattered records with \$6.1 billion invested in 399 deals, according to PitchBook's

Venture Monitor report. Between 2020 and 2021, the number of deals rose 121.3% and the amount invested grew 241.3% over-the-year. Metro Denver was among the top six metropolitan areas for venture capital deal activity in 2021.

The region's record-breaking investment pace in 2021 can be partly attributed to increased interest from out-of-state investors and the availability of seed and institutional capital.

STARTUP COMMUNITY

Metro Denver provides a culture of connectedness through abundant networking opportunities with business leaders that celebrate the professional success of community members. We are home to a large number of tech and startup-related networking events such as 1 Million Cups, Boulder Denver New Tech, Women Who Startup, and Rockies Venture Club Investor Forum, keeping talent engaged, excited, and connected. Denver Startup Week, the largest free entrepreneurial event in North America with over 20,000 attendees, hosts seminars and panels over five days. Throughout the week, job seekers meet with CEOs and founders to learn more about their companies and the hiring process. These events bring talent and employers together and foster a sense of community, collaboration, and an exchange of ideas - integral to startup and business ecosystems. Our community is also fortunate to have many business leaders who champion an openness to new ideas and embrace both success and failures of businesses, entrepreneurs, and employees.



COMMERCIAL REAL ESTATE

METRO DENVER COMMERCIAL REAL ESTATE FUNDAMENTALS

Office	4Q 2021	4Q 2020
Vacancy Rate (with sublet)	14.1%	12.3%
Average Lease Rate	\$29.47	\$28.88
New Construction (YTD, MSF)	2.14	1.64
Industrial		
Vacancy Rate (with sublet)	5.3%	5.7%
Average Lease Rate	\$9.31	\$8.69
New Construction (YTD, MSF)	5.49	5.25
Flex		
Vacancy Rate (with sublet)	7.3%	8.3%
Average Lease Rate	\$14.56	\$13.33
New Construction (YTD, MSF)	0.17	0.40
Retail		
Vacancy Rate (with sublet)	4.8%	5.2%
Average Lease Rate	\$19.27	\$18.82
New Construction (YTD, MSF)	0.46	0.82

Notes: Vacancy includes direct and sublet space. All lease rates are per square foot for direct space only. Office lease rate is full service and all other lease rates are triple-net. MSF=Million Square Feet. Source: CoStar Realty Information, Inc.

Commercial real estate fundamentals were mixed in Metro Denver. Vacancy rates declined across three of the four property types in 2021, with the office market reporting the only increase in vacancy. The office market reported negative net absorption in 2021, while industrial, flex, and retail all reported positive net absorption for the year. The average lease rate increased in all four property types in 2021 as a growing economy fueled demand for space and increased real estate investment across all property types. This trend is expected to continue into 2022 with a generally positive outlook for the commercial real estate market in 2022, despite uncertainty due to the impact from COVID-19 variants. Average lease rates will remain high, while the vacancy rate stays fairly constant for the four property types. The vacancy rate may increase slightly for

industrial, flex, and retail spaces, while the office market is expected to see a slight decline in the vacancy rate as more companies return to the office.

Construction activity slows for retail and flex space but increases modestly for industrial and office.

Commercial completions in Metro Denver increased in 2021 after two consecutive years of decline. Completions increased 1.8% to 8.26 million square feet of commercial space completed in 2021. The office market reported the largest over-the-year increase in completions, while flex and retail reported decreases. This was the fifth consecutive year of 5 million square feet or more of industrial space added. Commercial real estate completions in Metro Denver are expected to have a record year in 2022, surpassing the 2018 peak of 11.87 million square feet completed and increasing

64.8% over-the-year to more than 13 million square feet completed in 2022. Completions are expected to increase in three of the four property types, with only the office market expected to have fewer completions in 2022 compared with 2021.

METRO DENVER OFFICE

Amid high direct vacancy, sublease space recedes and negative net absorption diminishes.

In the fourth quarter of 2021, Metro Denver's office vacancy rose by 1.8 percentage points over-the-year to 14.1%, reflecting a 12.5% vacancy rate for direct space and a 1.6% rate for sublet space. This represented over 28 million square feet of vacant office space at the end of 2021. While total vacancy steadily increased each quarter, the sublet vacancy rate generally declined.

Fewer completions are expected in 2022 than in 2021.

More office space came onto the market than was absorbed in 2021, contributing to negative net absorption of more than 1.6 million square feet. There were 22 office buildings completed in

2021, delivering more than 2.1 million square feet to Metro Denver. Several large projects were delivered in 2021 including the 606,000-square-foot Block 162 building in Downtown Denver and the 260,000-square-foot Kiewit Regional Headquarters building in Lone Tree. At the end of 2021, there was 1.78 million square feet of office space across 16 buildings under construction in Metro Denver. Trends that began at the end of 2021 are expected to continue into 2022, although the 2022 office market will be highly dependent on the trajectory of the COVID-19 virus. Sublease space will recede further in 2022, while direct vacancy will continue to rise as new construction is completed. Total vacancy in Metro Denver is expected to decrease slightly but will remain higher than long-term averages. In 2022, 1.35 million square feet of office space

is expected to be completed. Office employees will spend less time working in the office as companies continue to adopt hybrid work approaches. The shifting role of the office will likely accelerate a flight to quality, with Class A office buildings that offer desirable technology, amenities, and flexible space capturing a growing share of demand. Class B and C office buildings may be considered for conversions into residential and industrial space.

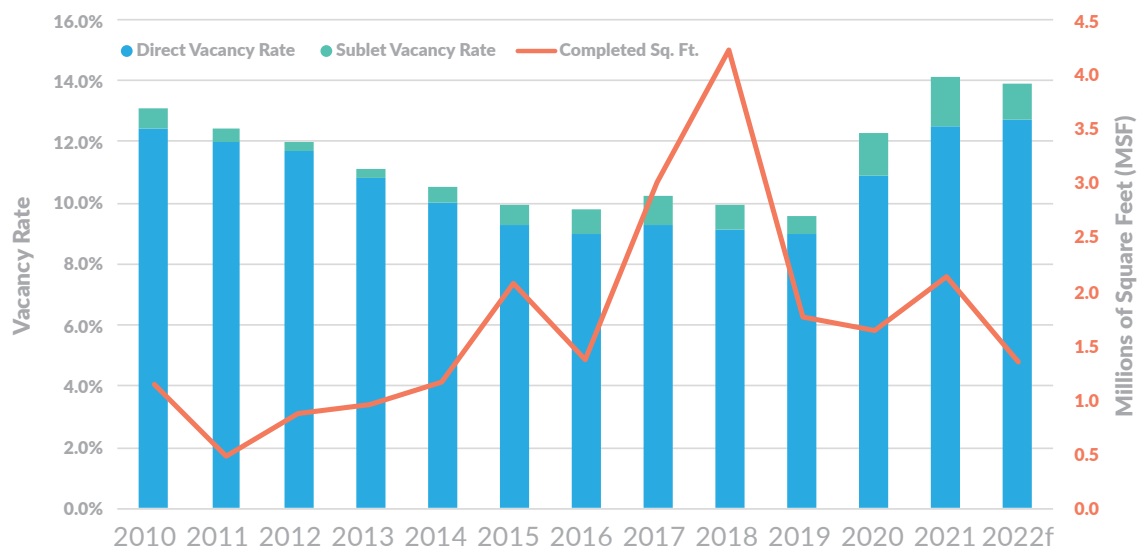
VACANCY RATE (WITH SUBLET)

4Q 2021	4Q 2022f
14.1%	13.9%

COMPLETIONS (MSF)

4Q 2021	4Q 2022f
2.14	1.35

METRO DENVER OFFICE VACANCY RATES & COMPLETIONS



Source: CoStar Group 2022f=DRP Forecast.

METRO DENVER INDUSTRIAL

Both supply and demand in the industrial real estate market remain strong.

The vacancy rate in the industrial market decreased to 5.3% in 2021 with the direct vacancy rate down 0.2 percentage points to 5% and vacancy for sublet space down 0.2 percentage points to 0.3%. In

2021, net absorption in the industrial market remained positive each quarter but accelerated markedly in the latter half of the year. Net absorption was 0.9 million square feet in the first and second quarters, increasing to a net absorption of nearly 5.3 million square feet in the third and fourth quarters. The average lease rate increased

throughout the year, with the average lease rate up 8.2% over-the-year in the fourth quarter of 2021.

VACANCY RATE (WITH SUBLET)

4Q 2021	4Q 2022f
5.3%	6.8%

COMPLETIONS (MSF)

4Q 2021	4Q 2022f
5.49	10.94

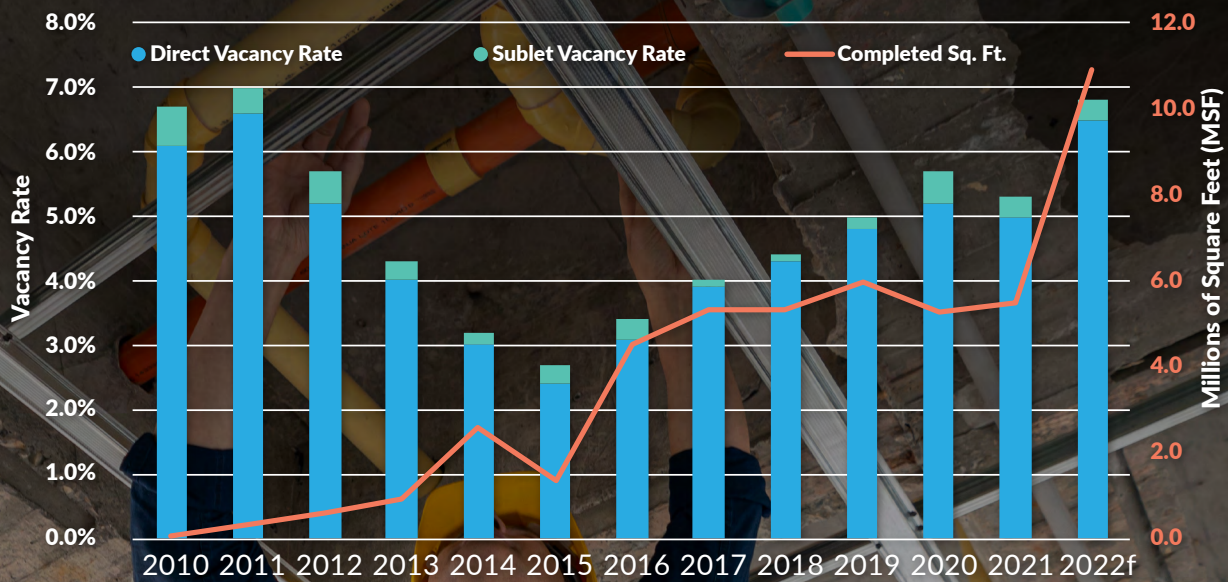
Industrial demand primarily driven by e-commerce and the need for onshore warehouse space to avoid further supply chain disruptions. In 2021, 5.5 million square feet of industrial space was completed, which was nearly unchanged compared with each of the four previous years. In 2022, new construction completions are expected to increase sharply to nearly 11 million square feet due to the amount of space that is currently under construction and slated for delivery in 2022. This will put upward pressure on the vacancy rate, with the direct vacancy expected to increase 1.5 percentage points to 6.5%. Vacancy in sublet space will remain stable at 0.3%.

Nearly three-quarters of the new industrial space completed in 2021 was located in Adams County.

In 2021, Metro Denver posted 5.5 million square feet of new industrial space across 36 buildings, a decrease in the number of buildings completed compared with each of two years prior. Still, this was the fifth consecutive year that 5 million square feet or more of industrial space was completed. More than 72% of the completed space was in Adams County, primarily along I-70 and I-76. The largest industrial building

completed in Metro Denver was the 594,138-square-foot Stafford Logistics Center building in Aurora. The next largest buildings were the 526,400-square-foot 76 Commerce Center Building 3 in Brighton and the 450,000-square-foot Ferguson Enterprises building in Aurora. As of the fourth quarter 2021, there was 11.4 million square feet of space under construction, indicating strong expectations for 2022. Of the buildings under construction, 51 are slated for 2022 delivery with three slated for delivery in 2023.

METRO DENVER INDUSTRIAL VACANCY RATES & COMPLETIONS



Source: CoStar Group 2022f=DRP Forecast.

METRO DENVER FLEX

Metro Denver's flex market encompasses buildings designed to meet a variety of uses including office, R&D, wholesale, light industrial, and warehousing. In 2021, the vacancy rate for flex reached 7.3%, down from 8.3% reported in 2020, which was the highest rate since 2013. The direct vacancy rate for flex space fell 0.8 percentage points to 6.8% in 2021 and the sublet vacancy rate fell 0.2 percentage points to 0.5%. The direct vacancy rate is expected to rise in 2022, reaching 7.6%, while sublease

vacancy is expected to decrease further to 0.3%. The increase in the vacancy rate will primarily be caused by the large amount of industrial space that is expected to be added to the market. As companies choose between multiple space options, it is likely that more of the flex space will be vacated.

Construction activity in the flex market decreased further in 2021 after completions fell sharply in 2020. There was 170,000 square feet of flex space completed across seven buildings in 2021, down 42.5% from the 400,000 square feet completed in 2020. Based on current projects

slated for delivery in 2022, about 570,000 square feet of space is expected to be completed over the next year as construction in the flex market regains momentum. Of the flex space currently under construction, over 66% is in Boulder and Broomfield Counties.

VACANCY RATE (WITH SUBLET)

4Q 2021	4Q 2022f
7.3%	7.9%

COMPLETIONS (MSF)

4Q 2021	4Q 2022f
0.17	0.57

METRO DENVER RETAIL

Metro Denver's retail market fared surprisingly well in 2021, but ongoing challenges from the pandemic will impact 2022 performance. The vacancy rate in the retail market decreased 0.4 percentage point to 4.8% in 2021, reflecting direct vacancy of 4.6% and sublet vacancy of 0.2%. After four consecutive quarters of negative net absorption between Q2 2020 and Q1 2021, net absorption remained positive and increasing for the remainder of 2021, ending the year with positive net absorption of nearly 1.3 million square feet. Suburban retail centers outperformed urban retail centers in 2021, due to delays in returns to the office. The average lease rate hit a record high of \$19.21 in the fourth quarter of 2021, up 2% over-the-year.

Retail construction pipeline will remain modest in 2022. In 2021, retail completions fell to 460,000 square feet, the lowest level seen since 2010. The largest retail space completed in 2021 was the 75,500-square-foot McGregor Square in Downtown Denver. Over half of the retail space built in 2021 is located in Denver and Jefferson Counties. In 2022, current data indicate completions will increase to about 760,000 square feet, the first over-the-year increase since 2018, but still below the long-term average. Three retail properties larger than 100,000 square feet are slated for delivery in 2022, including Victory Crossing in Commerce City, Amber Creek in Thornton, and a Kroger grocery store in Aurora. CBRE analysts predict that the retail

construction pipeline will remain modest heading into 2022 as developers focus on industrial and multi-family projects instead. With retail development expected to remain constrained, retailers will continue to use space more efficiently. Grocery-based e-commerce is expected to grow more than 20% in 2022 and grocery-anchored retail assets will remain the gold standard of retail investment.

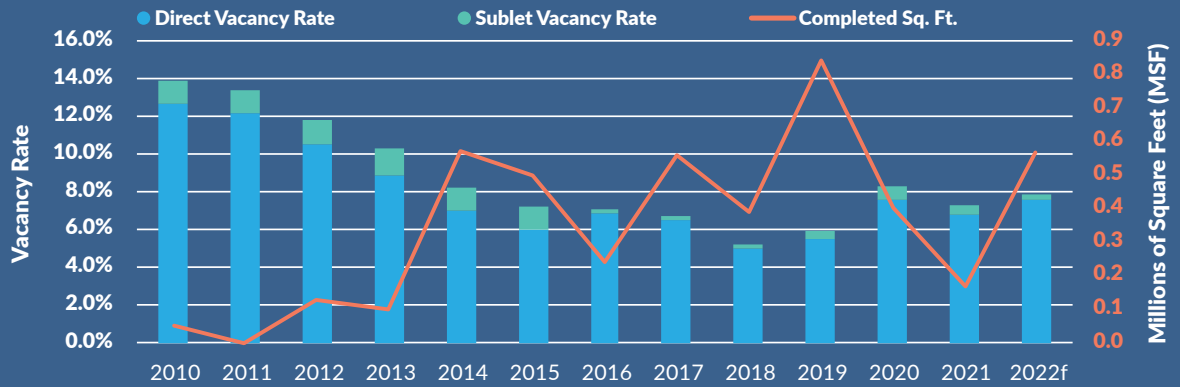
VACANCY RATE (WITH SUBLET)

4Q 2021	4Q 2022f
4.8%	5.1%

COMPLETIONS (MSF)

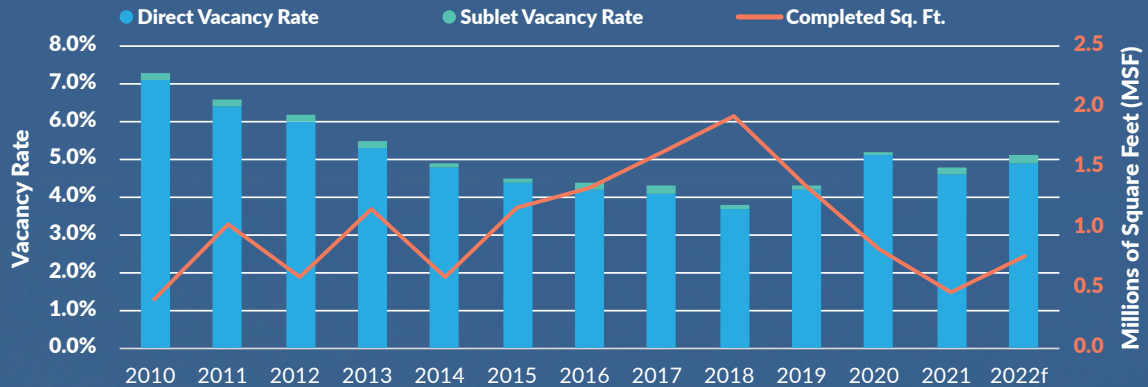
4Q 2021	4Q 2022f
0.46	0.76

METRO DENVER FLEX VACANCY RATES & COMPLETIONS



Source: CoStar Group 2022f=DRP Forecast.

METRO DENVER RETAIL VACANCY RATES & COMPLETIONS



Source: CoStar Group 2022f=DRP Forecast.



CONSUMER ACTIVITY

POPULATION

Metro Denver population growth remains at lowest rate since 1990.

Population in Colorado increased by 48,247 people from 2020 to 2021 to reach 5.8 million. According to data from the U.S. Census Bureau, Colorado ranked 17th for its population growth rate of 0.8% from 2020 to 2021. In contrast, the U.S. population increased just 0.1% during that same time, the slowest pace of growth since the founding of the nation. Metro Denver is home to 3.27 million people, representing 56% of the state's population. The 0.8% increase in Metro Denver's population from 2020 to 2021 was the same rate as the year prior and the slowest rate of growth for the region since 1990. The population is expected to increase by 1% in 2022, with the region reaching 3.3 million people.

Over the past 10 years, net migration represents about 60% of total Metro Denver population growth. Population growth is comprised of both natural increase and net migration. Natural increase is the difference between

births and deaths, and typically changes only gradually as the population ages – although 2021 had an atypical dip due in part to a sharp uptick in deaths due to the virus. Net migration is the number of people moving into the state minus the number leaving, and it tends to be more volatile as economic cycles, housing costs, and other less-predictable factors tend to influence population mobility. Over the last ten years, net migration represented about 60% of total Denver metropolitan area population growth and natural increase represented 40%. In 2021, net migration accounted for 59% of Metro Denver's population increase, and this figure is expected to fall to 57% in 2022. Net migration peaked in 2015 with 43,300 more people moving into Metro Denver than moving out. By contrast, net migration is expected to total 16,000 in 2021 and 18,600 in 2022. Natural increase in 2021 reached its lowest level since 1974 with an increase in deaths – due in large part to COVID-19 deaths – and a decrease in births.

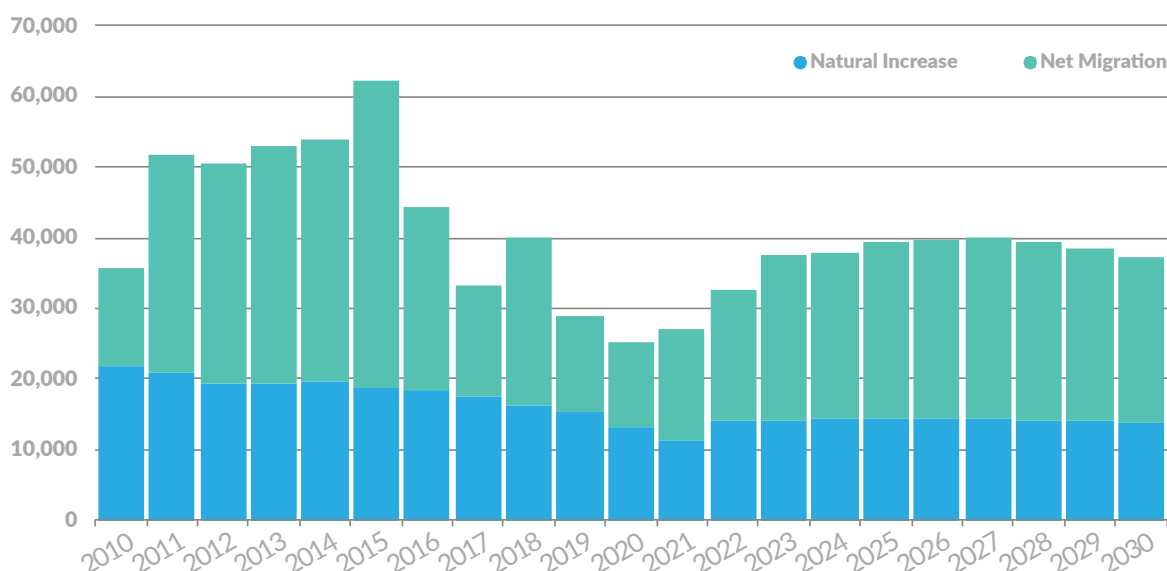
In 2022, fewer deaths and more

	2021e	2022f
Colorado	5,831,162	5,892,723
Pop Growth Rate	0.8%	1.1%
Metro Denver	3,268,068	3,300,771
Pop Growth Rate	0.8%	1.0%

births will lead to a rise in natural increase.

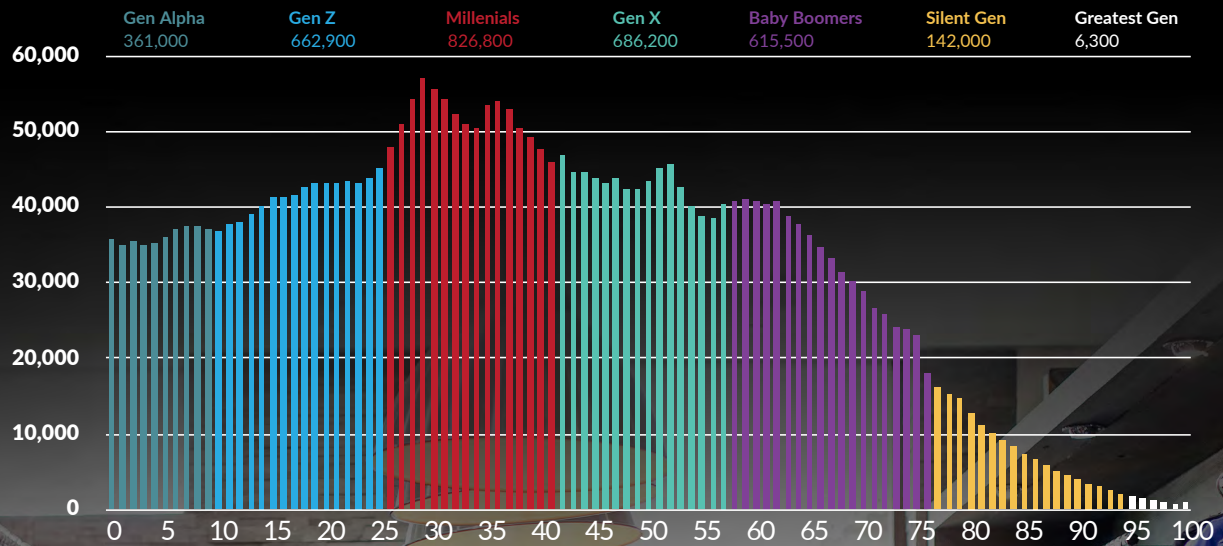
Population by generation influences spending patterns, housing market. Millennials are the largest generational group in Metro Denver, totaling nearly 827,000 in 2022 and accounting for 25% of the area's population. Millennials are the key home buying segment of the population in Metro Denver, so the strong concentration of individuals in the 30 to 36 years categories bodes well for continued strength in the housing market as the average age of a first-time home buyer is 34 years, according to Zillow. On the other hand, the majority of household wealth tends to be held by the baby boomers, who now total about 616,000 and are the fourth largest generational group in Metro Denver. A strong concentration of baby boomer residents tends to bode well for future spending on entertainment and other services in the region in coming years.

COMPONENTS OF CHANGE IN METRO DENVER POPULATION



Source: Colorado State Demography Office.

METRO DENVER 2022 POPULATION = 3.3 MILLION



Source: Colorado Division of Local government, State Demography Office. Generational groups defined by Pew Research Center, January 2019.



PROFESSIONAL & BUSINESS SERVICE SECTOR

Denver's knowledge-based economy attracts leaders, innovators and talent from large, coastal and global cities that have seen it all. Colorado continues to benefit from intangible benefits such as diversity of thought and the ability to adapt to the market quickly, shifting the country's cultural center of gravity.



Denver has so many things going for it – as existing top-level talent pool, a burgeoning tech scene, and an overall environment conducive to helping us grow both our business, and the business of our customers. It very quickly became the obvious choice once we started looking at locations for a customer-centric centers of excellence strategy.

AMY ZUPON
CEO • VERTAFORE



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PERSONAL INCOME

U.S. personal income growth in 2021 on par with economic expansion due to government benefits and a rise in wages and salaries.

In 2021, personal income expanded 7.4% at the national level as federal policy responses to the pandemic resulted in a record-breaking boost to personal income. The boost from direct economic assistance payments and enhanced unemployment insurance benefits more than offset pandemic-related declines. After government benefits subsided, wages and salaries – the largest component of personal income – continued to rise steadily. Growth in 2021 was the fastest on record and outpaced the previous record of 6.6% in 2020.

Colorado's personal income growth in 2021 higher than nation.

Year-to-date data indicate that Colorado's personal income in 2021

grew faster than the nation. Through the third quarter, personal income in the U.S. grew 6.2% compared with the same months in 2020. In Colorado, personal income over the same period increased by 7.6%. Data indicate that proprietors' income in Colorado fared better than nationally. In Colorado, proprietors' income comprises a higher percentage of personal income than the nation. Wages and salaries also comprised a higher percentage of personal income in Colorado compared with the nation. The average annual wage in Colorado increased to \$66,600 in 2020, a 7.7% increase over 2019. The average annual wage is expected to increase by 4.2% in 2021, and continued strong growth is expected in 2022 given the tight labor market.

Positive personal income growth in 2022 due to higher wages and lower unemployment rates.

In 2022, personal income in the U.S.

will increase by an estimated 2.2% and 3.7% in Colorado, a slowdown from 2021 as fiscal relief packages and pandemic-related government assistance end. High employment and increases in wages will continue to push personal income upward. However, inflation in 2022 may erode gains in personal income, primarily for those with lower incomes who spend proportionally more on goods like food and fuel. In 2022, Colorado is expected to have faster personal income growth than the nation due to faster wage and salary growth and faster growth in proprietors' income.

United States	
2021e	2022f
7.4%	2.2%

Colorado	
2021e	2022f
8.7%	3.7%

INFLATION (CONSUMER PRICE INDEX)

National inflation outpaces Metro Denver.

The Consumer Price Index in the Denver-Aurora-Lakewood area consistently outpaced national price changes since the Great Recession, but 2021 figures showed a change to that trend. In 2021, prices grew 3.5% in the Denver-Aurora-Lakewood area, 1.2 percentage points slower than recorded nationally. Throughout the economic expansion, inflation in Metro Denver was fueled by rapidly rising prices for housing and medical care. From 2010 to 2020, the housing component of the CPI in Metro Denver rose at an annual rate of 3.6% compared with 2.3% nationally. The medical care index rose by 3.5% each year compared with 2.9% nationally. In 2021, the main components for price changes shifted significantly both nationally and in Metro Denver. The transportation index reported the most significant price increase nationally, slightly higher than in

Metro Denver, while apparel prices increased the most in Metro Denver, with a much smaller increase nationally. National prices increased at a faster rate than in Metro Denver in six of the eight categories in 2021.

Much concern has been raised about the steep over-the-year consumer price increases that were posted at the national level in 2021. The CPI increased by 5% or more nationally for eight consecutive months beginning in May 2021, peaking at a 7% increase in December. This was the fastest over-the-year increase posted since June 1982.

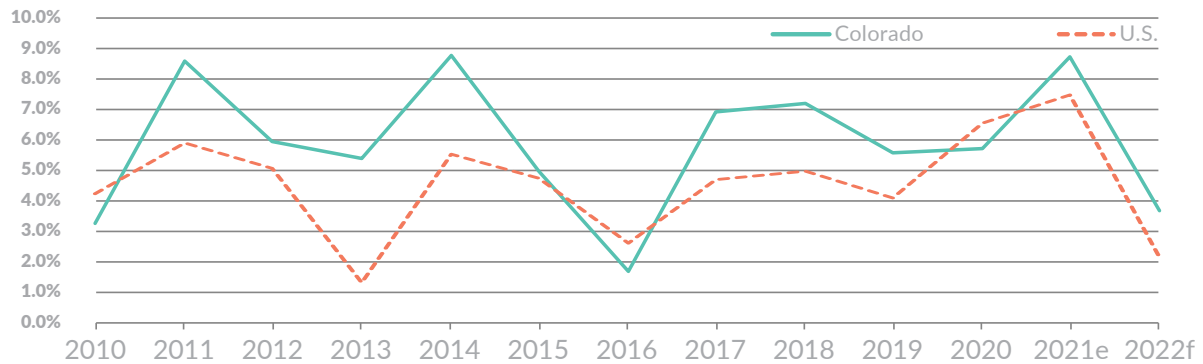
However, the increase by category reveals why high inflation is expected to be a short-term issue. In 2021, transportation prices increased significantly as supply chain issues, semiconductor shortages, and a partial return to typical commuting patterns caused a steep increase in new and used car prices. In addition, the price of gasoline and various

	2021	2022f
United States	4.7%	4.3%
Metro Denver*	3.5%	3.6%
*Denver-Aurora-Lakewood CPI		

energy components increased rapidly, with the energy CPI up 21% in the U.S. and 24.4% in the Metro Denver area in 2021. Energy prices are expected to moderate by the end of 2022, which will dampen the inflation rate. Looking at core inflation, which excludes the influence of volatile energy and food prices, price growth averaged 3.6% nationally and 2.5% in Metro Denver in 2021.

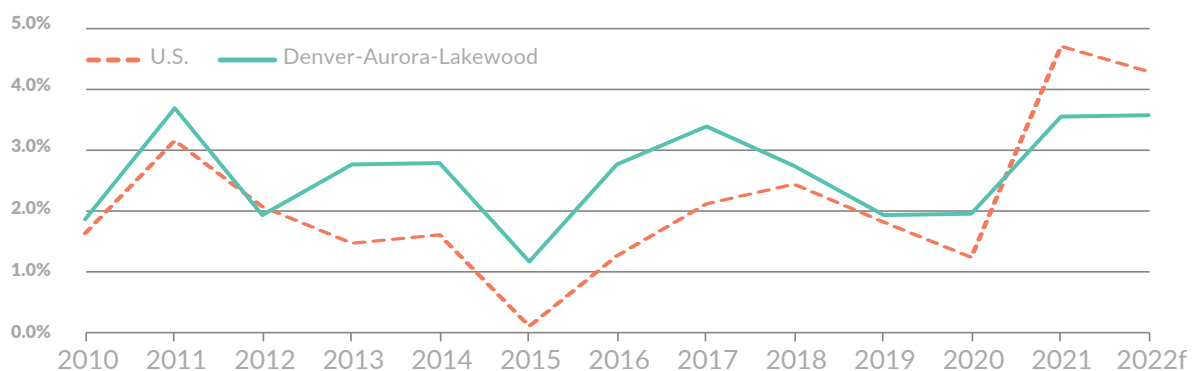
In Metro Denver, apparel posted the fastest increase of the eight categories. This was the first increase in apparel prices following price decreases during six of the past seven years. Given the increase in apparel purchases in 2021 following the steep decline in 2020, this price change is expected to be temporary.

ANNUAL PERCENTAGE CHANGE IN PERSONAL INCOME



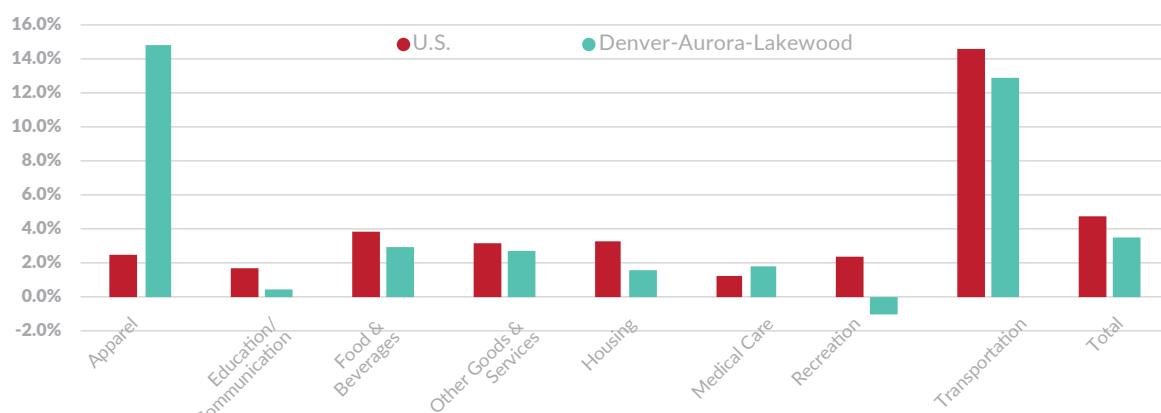
Source: U.S. Bureau of Economic Analysis. 2021e=DRP Estimate; 2022f=DRP Forecast.

ANNUAL PERCENTAGE CHANGE IN THE CONSUMER PRICE INDEX (CPI-U)



Source: U.S. Bureau of Labor Statistics. 2022f=DRP Forecast.

2020 - 2021 CHANGE IN CPI BY CATEGORY



Source: U.S. Bureau of Labor Statistics.

RETAIL TRADE

Metro Denver retail trade sales had record growth in 2021.

Consumer confidence increased but remained below pre-pandemic levels. Consumer confidence in the mountain region, a multi-state area that includes Colorado, increased 10% in 2021, after falling 22.6% in 2020. The national consumer confidence index recorded a slightly larger increase in 2021 of 11.6% after falling 20.8% in 2020.

In 2021, consumer confidence steadily increased for the first half of the year as economic growth strengthened, nearly reaching pre-pandemic levels. The trend changed in July when concerns

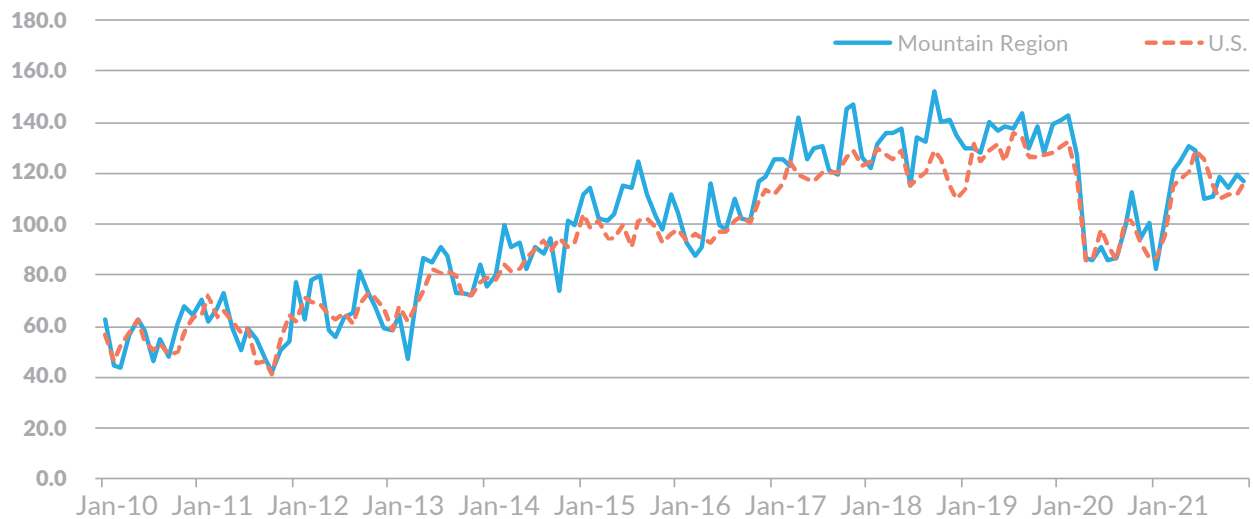
about the emergence of new COVID-19 variants as well as inflation concerns brought down consumer confidence, which remained above pandemic lows but below pre-pandemic levels for the remainder of the year. In Metro Denver, retail trade sales (that include food and drinking services) are expected to grow a staggering 15.2% in 2021. Retail sales growth was welcome news for many local governments across the Metro Denver area that are dependent on retail sales tax revenues.

Metro Denver retail trade growth slower than state. All of Metro Denver's counties recorded growth in retail trade in 2021. As of October,

	2021e	2022f
United States	19.3%	4.1%
Colorado	16.1%	4.8%
Metro Denver	15.2%	4.3%

Douglas County reported the largest year-to-date increase of 23.7%, followed by the City and County of Denver (+17.4%) and Adams County (+16.9%). Jefferson and Boulder Counties both reported the most modest increase of 13.4% in 2021. Retail trade in Colorado grew an estimated 16.1% in 2021, 0.9 percentage points higher than in Metro Denver as receipts at food and drinking places continued to strengthen across the state.

CONSUMER CONFIDENCE INDEX



Source: The Conference Board.



Metro Denver's non-store retail sales continued to grow in 2021 after more than doubling in 2020.

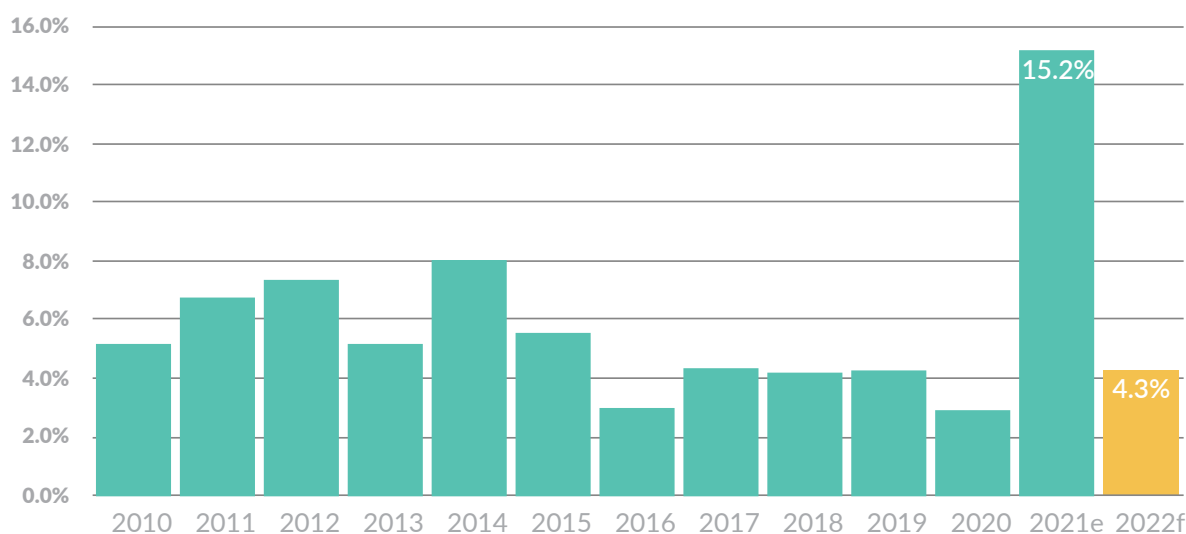
Data from the Colorado Department of Revenue indicate that non-store retail, a category largely driven by e-commerce, increased 12.7% in 2021 after more than doubling in 2020 as many consumers substituted online shopping for in-store purchases. Nationally, non-store retail sales were up 14.3% year-to-date through October. While non-store retail has steadily comprised a higher percentage of retail trade over

the past decade, the pandemic accelerated this broad shift in consumer behavior. Many analysts expect e-commerce to continue to significantly shape growth in retail trade in the coming years.

Categories that struggled in 2020 had the largest growth in 2021. Retail trade in Metro Denver increased across all categories, with the largest increase in clothing and clothing accessories stores

(+46.9%) followed by food services and drinking places (+30.7%), gasoline stations (+23.4%), and motor vehicles and parts dealers (+20%). Categories with the largest declines in 2020 were the same categories that experienced some of the largest increases in 2021, as those industries returned to – and then surpassed – pre-pandemic levels. Food and beverage stores reported the most modest growth of 4.8%, having weathered the previous year relatively unscathed.

ANNUAL PERCENTAGE CHANGE IN METRO DENVER RETAIL TRADE SALES



Source: Colorado Department of Revenue. Note: Retail trade sales include sales in the food services sector. 2021e=DRP Estimate; 2022f=DRP Forecast.

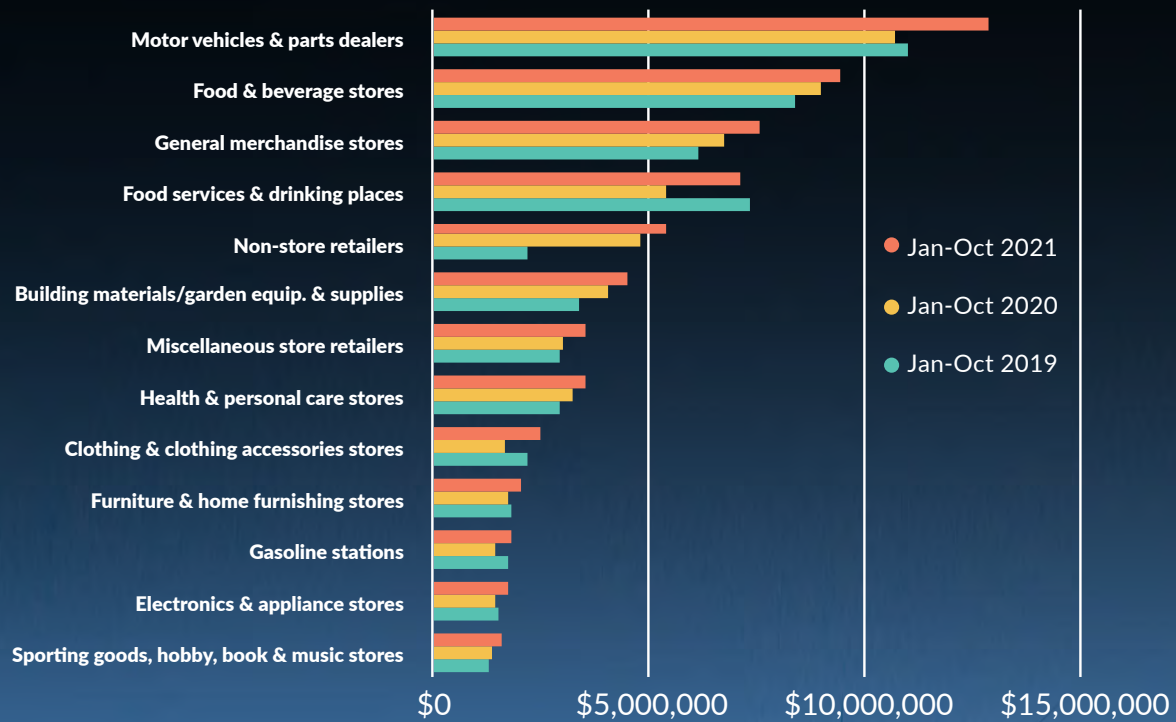
Growth in retail trade in Colorado and Metro Denver will be ahead of the U.S. as activity in leisure and hospitality continues to rise.

In 2022, national retail trade and food and drinking services sales are forecast to increase 4.1%. In

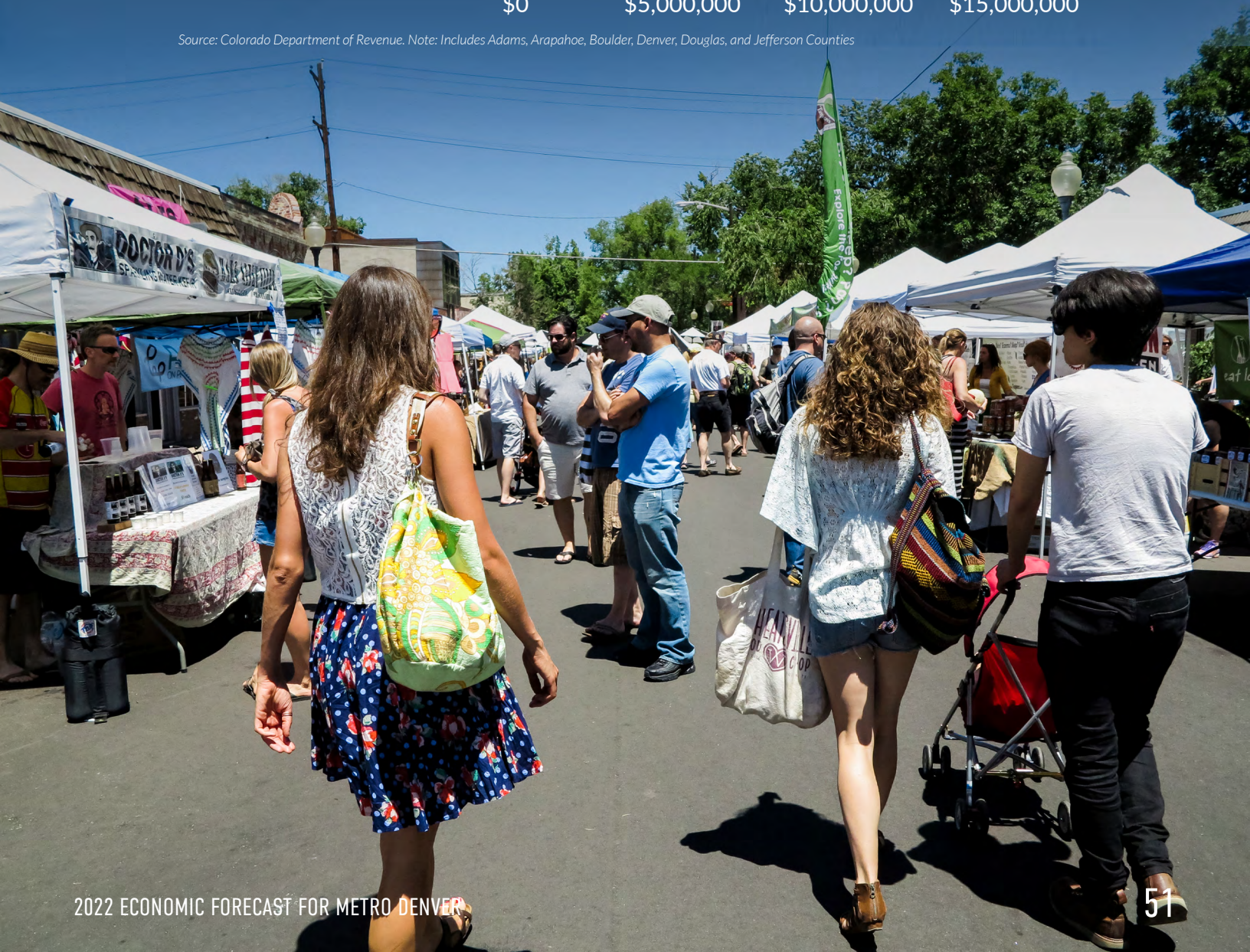
2022, Colorado retail trade sales are forecast to increase by 4.8%. Retail trade across the state is expected to improve faster than in Metro Denver as tourism activity continues to rise through 2022, especially in Colorado's resort communities. In

Metro Denver, retail trade in 2021 grew at a slower pace than Colorado. In 2022, Metro Denver retail trade is forecast to still grow slower than the state, at a rate of 4.3%, as spending levels return to historic norms.

METRO DENVER RETAIL TRADE SALES (IN \$000S)



Source: Colorado Department of Revenue. Note: Includes Adams, Arapahoe, Boulder, Denver, Douglas, and Jefferson Counties



RESIDENTIAL REAL ESTATE

BUILDING PERMITS

Surge in multifamily permits drives residential building activity in Colorado to highest levels recorded since 1972. In 2021, building permit activity for residential units in Colorado increased 48.6%, growing to an estimated 60,123 units by year end. Preliminary 2021 data indicate that permits for multi-family units increased 89.2% over-the-year to 24,044 units permitted – the highest level since 1972. Single-family attached permits increased 63.1% over-the-year, marking the highest annual level since 1999. Permits for single-family detached units were up 28.6% for the year and reached 34,244 units permitted,

their highest level since 2005. Material shortages and ongoing production bottlenecks as well as inflation and worker shortages were major concerns for builders in 2021. These concerns likely will continue to affect building activity into 2022.

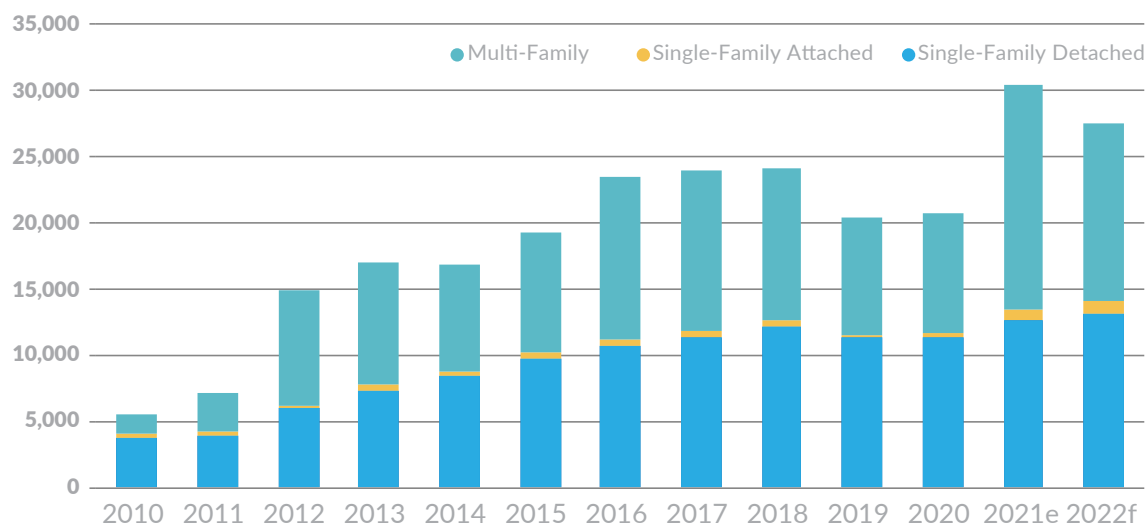
Residential permit activity records significant increase in Metro Denver, with largest increases in Denver and Jefferson Counties.

Building permit activity for residential units in Metro Denver was up 46.6% in 2021 compared with 2020. Similar to statewide permits, Metro Denver permit growth was largest in multifamily and single-family attached units, with more modest growth for single-family detached.

	2021e	2022f
Colorado	48.6%	-1.0%
Metro Denver	46.6%	-9.5%

Further, 50.7% of residential permitting activity in the state was in Metro Denver. Single-family attached units permitted increased 102.2% to their highest level since 2003 and multifamily units permitted increased 87.5% to the highest level achieved based on records going back to 1980. Single-family detached units were up 11.6%. Preliminary 2021 data indicates that permitted units for the year were up in six of the seven Metro Denver counties, led by Denver and Douglas Counties. Boulder County reported the only decline in units permitted in 2021 compared with 2020.

METRO DENVER NEW RESIDENTIAL UNITS



Source: U.S. Census Bureau 2021e=Census Bureau preliminary; 2022f=DRP Forecast.

The number of residential building permits expected to decline in Colorado and Metro Denver in 2022.

Residential construction in Metro Denver and Colorado will continue to be influenced by inflation and ongoing production bottlenecks in 2022. Multifamily construction will remain elevated but will decline from the record high levels in 2021. Single family detached construction activity will increase slightly. In Colorado,

residential building permits will decrease by 1% across all three permit types.

In Metro Denver, multifamily permit activity is expected to decrease 20% in 2022, while single-family attached permits will decrease 4%. Despite a decline over-the-year, units permitted will remain high by historic standards as housing supply catches up with demand. Most multifamily building activity in 2022

will continue to be in Denver County. Single-family detached units will see a modest increase of 4%, with most building activity concentrated in Douglas, Adams, and Arapahoe Counties. An increase in residential construction activity compared with 2021 is expected in Boulder County as rebuilding begins of the over 1,100 homes destroyed or damaged in the Marshall fire at the end of December 2021.



HOME SALES & PRICES

Home sales remain constant in Metro Denver. Home sales in the first quarter of 2021 were well below 2020 levels, but by April, home sales began to balloon and outpace 2020 levels. Growth remained strong through the second and third quarters of the year. By the fourth quarter, home sales remained up, but only barely ahead of 2020. By year end, 2021 home sales increased 0.3%, nearly unchanged from the year prior and up 8.1% compared with 2019.

Home sales were boosted by ultra-low mortgage rates, with the 30-year fixed rate mortgage averaging just 2.96% throughout 2021. While the pandemic resulted in economic hardship for many, other households experienced more

stable financial situations thanks to economic relief funds and housing assistance programs, supporting demand for home ownership. Home purchasers desired more or different space, often a shift from urban to suburban neighborhoods, as well as space to accommodate remote or hybrid school and work. Further, the millennial generation, the largest generational group residing in Metro Denver, is solidly in the key home buying age range. Denver was ranked the top city where millennials are moving, according to a report by SmartAsset. The report also found that among MSAs, Denver has the fifth highest share of millennial population.

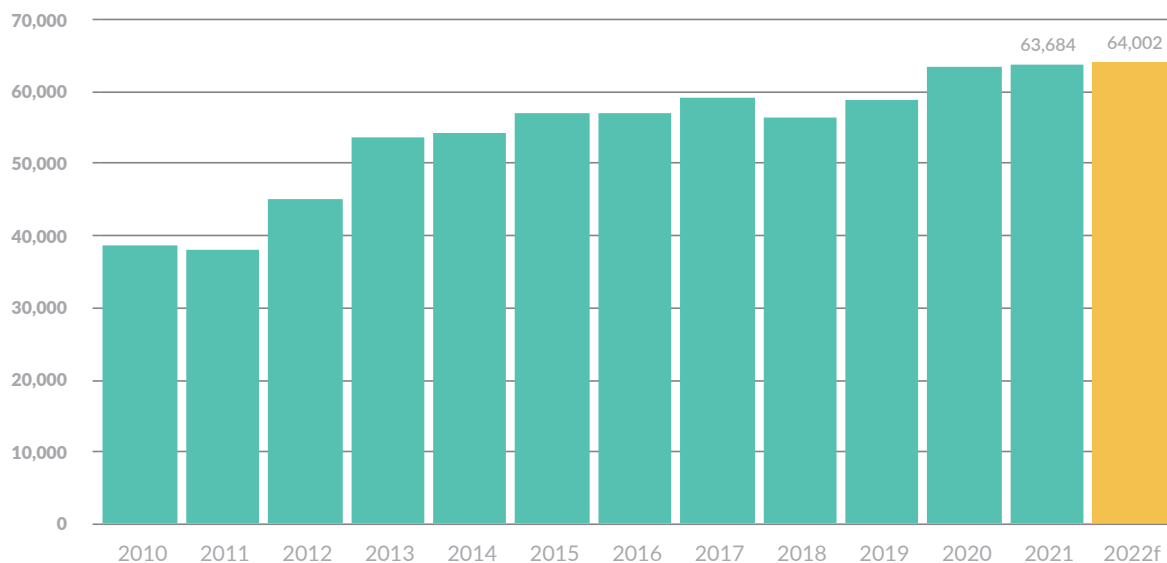
A challenge to the home sales market throughout 2021 was the lack

	2021e	2022f
Metro Denver:		
Home Sales	0.3%	0.5%
Median Home Price	19.0%	8.0%
Foreclosures	-48.0%	374.7%

of inventory. At the end of December 2021, there were only 1,477 homes listed for sale in the multiple listing service for the Metro Denver region, which was 42% lower than the same time in 2020. Housing inventory was constrained similarly throughout all of 2021.

The outlook for 2022 is another year with little change in sales volume as mortgage rates start to increase and the inventory of homes available for sale remains limited. Home sales are expected to increase 0.5%, to about 64,000, nearly unchanged from 2021.

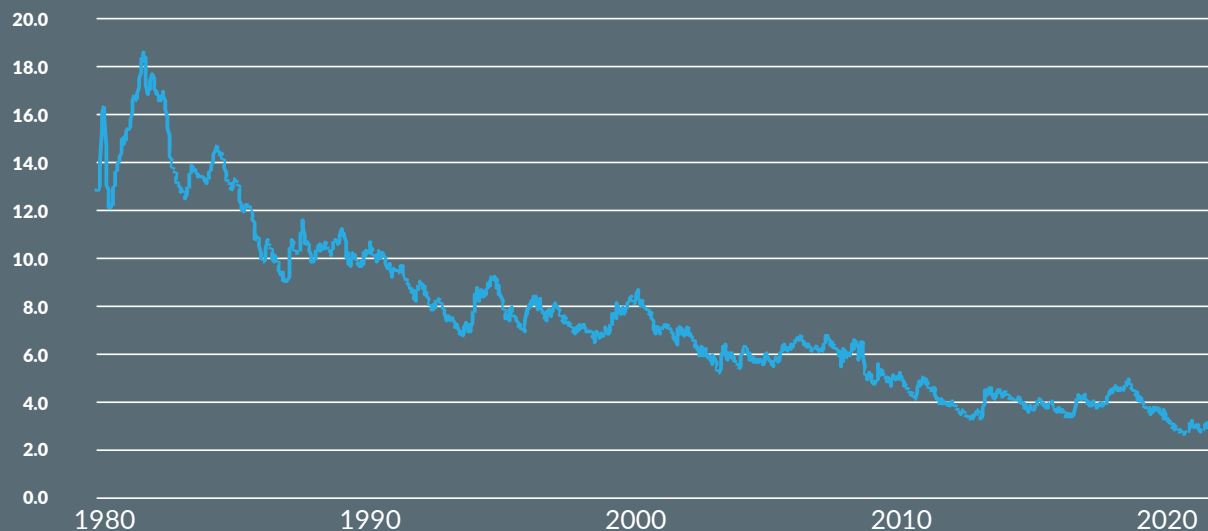
METRO DENVER EXISTING HOME SALES



Source: Metrolist (2008-2010); Denver Metro Association of REALTORS (2011 - 2021). 2022f=DRP Forecast.

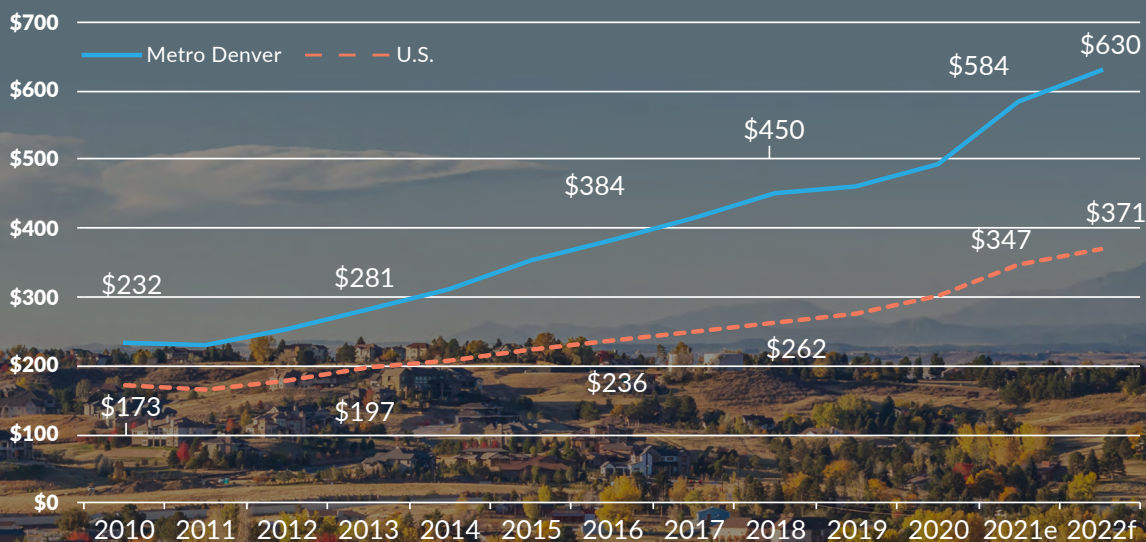
U.S. AVERAGE 30-YEAR FIXED RATE MORTGAGE

Percent



Source: Federal Reserve Bank of St. Louis, FRED Database.

MEDIAN ANNUAL HOME PRICE (\$000s)



Source: National Association of REALTORS (NAR). 2021e=DRP Estimate; 2022f=DRP Forecast.

Metro Denver has record home price growth in 2021, ahead of national growth. After increasing 6.6% in 2020, the median home price in Metro Denver grew at a

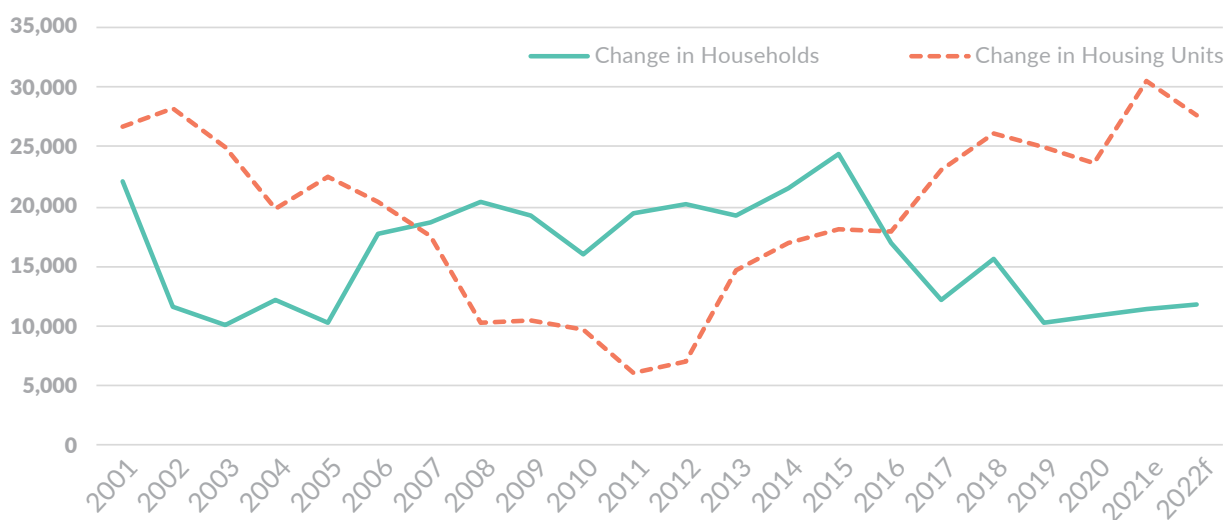
record rate of 18.5% in 2021 to reach \$583,600, surpassing the previous record of 14% growth in 2015. Price growth also accelerated across the nation, with the median price

rising an estimated 15.5% in 2021 to \$346,600, up from a 9.3% increase in 2020.

Interestingly, a typical indicator of supply/demand imbalances in the housing market did not signal the likelihood of such a rapid rise in housing prices. Since 2016, Metro Denver's supply of homes has outpaced new households to the point that the undersupply of housing units that occurred from 2007 to 2015 should have been reversed in 2021. Further, in each year from 2019 to 2021, the region's population growth has remained below 1%, significantly lower than the peak 2.1% rate of growth posted in 2015. Despite an increase in housing units and a low rate of population growth, the supply of housing apparently fell well below demand in 2021 and the lack of inventory led to the year's explosive growth in home prices. Potential reasons for this indicator not providing a solid predictive result include:

- Smaller household size preferences such that current household demand for housing is less than the historic standard of 2.5 persons per household.
- Changing housing unit preferences such that the size, design, and/or location of existing residential units does not appropriately meet the needs of the region's households.
- The number of second homes and visitor rental properties are skewing the results as these units are counted as housing units but are not available to meet the housing needs of the region's households.

METRO DENVER HOUSEHOLD FORMATION & CHANGE IN HOUSING UNITS



Source: Colorado State Demography Office. 2021e=DRP Estimate; 2022f=DRP Forecast.

Home prices are expected to moderate in 2022 as mortgage rates increase, causing a decrease in the demand for home purchases, and continued new home construction adds to the housing supply. According to the National Association of REALTORS, there are several demographic trends that will continue to affect the housing market into 2022 and beyond. Baby boomers will want to age in place and will continue to hold onto their homes, contributing to the ongoing inventory shortage. Millennials, who are the largest generation of potential buyers, will face significant headwinds including low inventory, high prices, and student loan debt. Additionally, a drop in the birth rate could contribute to slower sales activity as the birth of a child is often a motivation to buy and a child moving out is often a reason to downsize and sell. Nonetheless, housing affordability challenges will persist. In 2022, median home price growth is expected to slow to 8% in Metro Denver and 7% across the U.S.

Foreclosures in Metro Denver shrank further in 2021, forecast to approach pre-pandemic levels in 2022. Foreclosure moratoriums, plunging interest rates, strong residential demand, and support from the pandemic relief packages pushed foreclosure filings in Metro Denver to a record low. In 2021, foreclosure filings dropped by 48% to 512 filings by year end. The government's foreclosure moratorium and mortgage forbearance programs kept foreclosures low for most of 2021. When the foreclosure moratorium ended August 31, 2021, the Consumer Financial Protection Bureau enacted guidelines that allowed foreclosures to resume under limited circumstances. In the last four months of the year, foreclosures increased slightly, but remained well below pre-pandemic levels. Low interest rates also enabled many homeowners to reduce monthly payments and consolidate debt. Further, home appreciation in 2021 gave many borrowers the option to sell their house at a profit rather than lose their house to foreclosure. In the beginning of 2022, foreclosures will remain low but will gain momentum throughout the year. While improving

economic conditions should prevent a sudden increase in foreclosures, there will be a gradual increase in foreclosure activity as programs expire and servicers exhaust all loan modification options for delinquent borrowers. Foreclosure activity in Metro Denver is expected to return to pre-pandemic levels by the end of 2022.

The apartment vacancy rate throughout Metro Denver fell 1.5 percentage points over-the-year to 4.3% vacancy in the fourth quarter of 2021. Vacancy rates ranged from 3.1% in the Boulder/Broomfield submarket to 4.9% in Douglas County. The tight apartment market resulted in a 13.1% increase in the average rental rate, which was the highest increase in records dating back to 1981. Douglas County reported the highest rental rate in 4Q 2021 of \$1,881 per month, while Adams County reported the lowest rental rate of \$1,624 per month. Across Metro Denver, rents averaged \$1,708 per month.

As new supply opens in 2022, the vacancy rate should drift upwards to the 5% range and rental rate increases should moderate to slightly above historic patterns, increasing about 5% to \$1,800 per month.

METRO DENVER NEW FORECLOSURE FILINGS



Sources: Colorado Division of Housing and county public trustees. Note: Not all new filings result in a foreclosure sale; foreclosure cases can be cured or withdrawn. 2022f=DRP Forecast.

METRO DENVER ECONOMIC FORECAST SUMMARY

While 2021 will be remembered as a year of severe supply/demand imbalances, it was also a year of resilience and recovery. Employment growth averaged 3.2% in Metro Denver from 2020 to 2021, with all supersectors except government and information adding workers. The fastest rates of growth occurred in the transportation, warehousing, and utilities supersector as warehousing and logistics operations continued to expand. Leisure and hospitality and other services, two supersectors that were hit particularly hard at the start of the pandemic, posted strong increases as businesses reopened or increased capacity as consumer demand picked up. Despite the broad-based increase in employment in 2021, only three of the supersectors reached employment levels higher than those achieved in 2019: transportation,

warehousing, and utilities; professional and business services; and financial activities. Manufacturing employment matched its 2019 level.

As the region naturally moves back to its historic growth pattern, employment is expected to increase at a slightly slower pace of 2.9% in 2022, representing the addition of 49,200 jobs. The region will add jobs across all supersectors except for information, and employment in 8 of the 11 supersectors is expected to surpass the pre-pandemic employment base of 2019. Leisure and hospitality employment will still be lower in 2022 than in 2019 as businesses struggle to fill vacant positions, especially those in lower-wage occupations. Government employment will also be lower in 2022 than 2019 as the state and local positions that were

trimmed in 2020 in anticipation of lower tax revenue will be added back slowly.

A key challenge to achieving faster recovery is the tight labor market, with more job openings than unemployed persons. In Colorado, there were 0.8 unemployed persons per open position in the month of November. Further, the state experienced a high “quits” rate as workers voluntarily left their jobs in pursuit of new positions offering better wages, benefits, amenities, and job satisfaction. While this competitive market is challenging for employers, it is reasonable that employees re-evaluate their career path at this time. The Metro Denver unemployment rate is expected to decline from 5.6% in 2021 to 4% in 2022, reflecting even tighter labor market conditions in the year ahead.



Many companies that had anticipated a return to the office in 2021 pushed return dates into 2022 as COVID variants caused businesses to keep reinventing how they use their physical space. The office market suffered with these changes in plans, but retail has remained surprisingly stable as consumer spending increased at record-high growth rates. The industrial market has thrived as consumers purchased goods both online and in-person, leaving companies scrambling to find warehouse and logistics space closer to their customer base.

Metro Denver is home to 3.27 million people, representing 56% of the state's population. The population is expected to increase by 1% in 2022,

with the region reaching 3.3 million people. Millennials are the largest generational group in Metro Denver, accounting for 25% of the population. Millennials are the key home buying segment of the population, as the average age for a first-time home buyer is currently about 34 years, so the strong concentration bodes well for continued home buying activity.

After increasing 6.6% in 2020, the median home price in Metro Denver grew at a record rate of 18.5% in 2021 to reach \$583,600. Home prices are expected to moderate in 2022 as mortgage rates increase and continued new home construction adds to the housing supply. Building permit activity for residential units in Metro Denver was up 46.6% in 2021,

with permit growth for multifamily and single-family attached units surpassing growth for single-family detached units. Material shortages and ongoing production bottlenecks as well as inflation and worker shortages were major concerns for builders in 2021 and these concerns will likely continue into 2022.

2022 is hoped to be a reset year, with many of the supply/demand imbalances of 2021 beginning to be resolved. While tight labor markets will persist, inflation will remain elevated, COVID's path will remain uncertain, and housing affordability issues will continue, economic conditions should stabilize as growth patterns trend toward historic norms.

CURRENT & HISTORIC ECONOMIC INDICATORS

NATIONAL INDICATORS

	2012	2013	2014	2015
Population (Thousands)	313,878	316,060	318,386	320,739
Real GDP (Billions)	\$16,254.0	\$16,553.3	\$16,932.1	\$17,390.3
Real GDP Growth Rate	2.3%	1.8%	2.3%	2.7%
Employment Growth Rate	1.7%	1.6%	1.9%	2.1%
Unemployment Rate	8.1%	7.4%	6.2%	5.3%
Inflation Rate	2.1%	1.5%	1.6%	0.1%
Personal Income Growth Rate	5.0%	1.3%	5.5%	4.8%
Prime Rate	3.3%	3.3%	3.3%	3.3%

COLORADO INDICATORS

Population (Thousands)	5,194.7	5,270.9	5,347.7	5,446.6
Net Migration	39,143	45,109	45,062	68,844
Employment Growth Rate	2.4%	3.0%	3.5%	3.1%
Unemployment Rate	7.9%	6.9%	5.0%	3.9%
Denver-Aurora-Lakewood Inflation Rate	1.9%	2.8%	2.8%	1.2%
Personal Income Growth Rate	5.9%	5.4%	8.8%	4.9%
Retail Trade Sales Growth Rate	5.9%	5.0%	7.4%	4.9%
Housing Permits Growth Rate	72.6%	18.1%	4.3%	11.1%

METRO DENVER INDICATORS

Population (Thousands)	2,900.1	2,953.2	3,007.2	3,069.3
Net Migration	31,158	33,675	34,280	43,316
Employment Growth Rate	2.9%	3.6%	3.7%	3.6%
Non-Agricultural Employment (Thousands)				
TOTAL	1,417.6	1,468.2	1,522.7	1,578.1
Natural Resources & Construction	77.5	85.0	95.3	100.1
Manufacturing	79.8	81.1	82.9	85.6
Wholesale & Retail Trade	209.3	214.7	220.9	227.4
Transp., Warehousing & Utilities	48.8	51.3	53.1	54.5
Information	52.0	52.8	53.5	54.0
Financial Activities	99.8	103.4	105.3	109.6
Professional & Business Services	254.1	265.1	275.6	285.4
Educational & Health Services	174.7	182.0	190.7	200.8
Leisure & Hospitality	154.3	160.4	167.4	175.2
Other Services	55.1	56.3	58.4	59.9
Government	212.2	216.1	219.6	225.7
Unemployment Rate	7.7%	6.4%	4.7%	3.5%
Retail Trade Sales Growth Rate	7.3%	5.2%	8.0%	5.5%
New Residential Units	14,925	16,940	16,910	19,269

Sources: Board of Governors of the Federal Reserve System; Colorado Department of Labor & Employment, Labor Market Information; Colorado Department of Revenue; Colorado Division of Local Government; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; U.S. Census Bureau.

2016	2017	2018	2019	2020	2021e	2022f
323,072	325,122	326,838	328,330	331,501	331,894	334,216
\$17,680.3	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$19,427.2	\$20,225.2
1.7%	2.3%	2.9%	2.3%	-3.4%	5.7%	4.1%
1.8%	1.6%	1.6%	1.3%	-5.8%	2.8%	2.3%
4.9%	4.4%	3.9%	3.7%	8.1%	5.3%	4.1%
1.3%	2.1%	2.4%	1.8%	1.2%	4.7%	4.3%
2.6%	4.7%	5.0%	4.1%	6.6%	7.4%	2.2%
3.5%	4.1%	4.9%	5.3%	3.5%	3.3%	3.7%
5,529.6	5,599.6	5,676.9	5,734.9	5,782.9	5,831.2	5,892.7
53,294	42,394	51,761	34,162	27,340	32,782	39,525
2.4%	2.2%	2.5%	2.3%	-5.2%	3.0%	2.9%
3.3%	2.8%	3.2%	2.8%	7.0%	5.6%	4.1%
2.8%	3.4%	2.7%	1.9%	2.0%	3.5%	3.6%
1.7%	6.9%	7.2%	5.6%	5.7%	8.7%	3.7%
3.8%	5.6%	4.8%	4.7%	4.9%	16.1%	4.8%
22.3%	4.4%	4.8%	-9.4%	4.8%	48.6%	-1.0%
3,113.7	3,146.7	3,186.7	3,215.7	3,240.9	3,268.1	3,300.8
25,942	15,646	23,921	13,797	11,921	16,040	18,594
2.6%	2.1%	2.6%	2.3%	-5.3%	3.2%	2.9%
1,619.2	1,653.9	1,697.5	1,737.4	1,645.7	1,698.0	1,747.3
102.7	107.7	114.2	117.8	114.2	114.9	118.0
86.6	87.5	88.9	90.6	89.2	90.6	92.3
231.6	234.2	236.9	237.4	227.4	235.7	239.3
55.8	58.5	62.5	67.9	72.1	79.4	84.6
54.7	55.4	58.5	60.1	59.3	59.2	59.2
113.2	116.0	118.5	120.4	118.8	120.8	124.2
291.8	297.9	307.1	318.4	311.1	322.7	329.2
207.1	210.7	214.8	218.6	209.5	216.6	220.7
182.1	187.2	190.8	194.3	146.9	159.6	174.5
62.0	62.8	64.0	65.6	59.7	64.8	67.8
231.6	235.9	241.3	246.3	237.6	233.8	237.7
2.9%	2.5%	2.9%	2.5%	7.4%	5.6%	4.0%
3.0%	4.3%	4.2%	4.3%	2.9%	15.2%	4.3%
23,496	24,021	24,209	20,489	20,794	30,474	27,592

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