2017 Economic Update for Metro Denver
By Development Research Partners, August 2017

As the current economic expansion continues, people start to question where we are in the business cycle. The "official" declaration of U.S. expansions and contractions comes from the National Bureau of Economic Research (NBER). The NBER declares the peaks (the end of an expansion and beginning of a recession) and troughs (the end of a recession and beginning of an expansion) in the economy. There were 11 business cycles from 1945 to 2009, with the average expansion (trough to peak) lasting 58.4 months and the average contraction (peak to trough) lasting 11.1 months.

As of August 2017, the current economic expansion has been underway for 98 months, which currently ranks as the third-longest expansion since tracking began in 1854. The longest expansion was from March 1991 to March 2001, a period of 120 months. The second-longest expansion was from February 1961 to December 1969, totaling 106 months.

Where we are in the business cycle is an important consideration for most companies, as they plan and budget for changing sales and staffing expectations. While the business cycle is often discussed as a singular measure, in reality, different facets of the economy are typically at different points of expansion and contraction at any given time, as indicated by the following various business cycle measures.

World Output

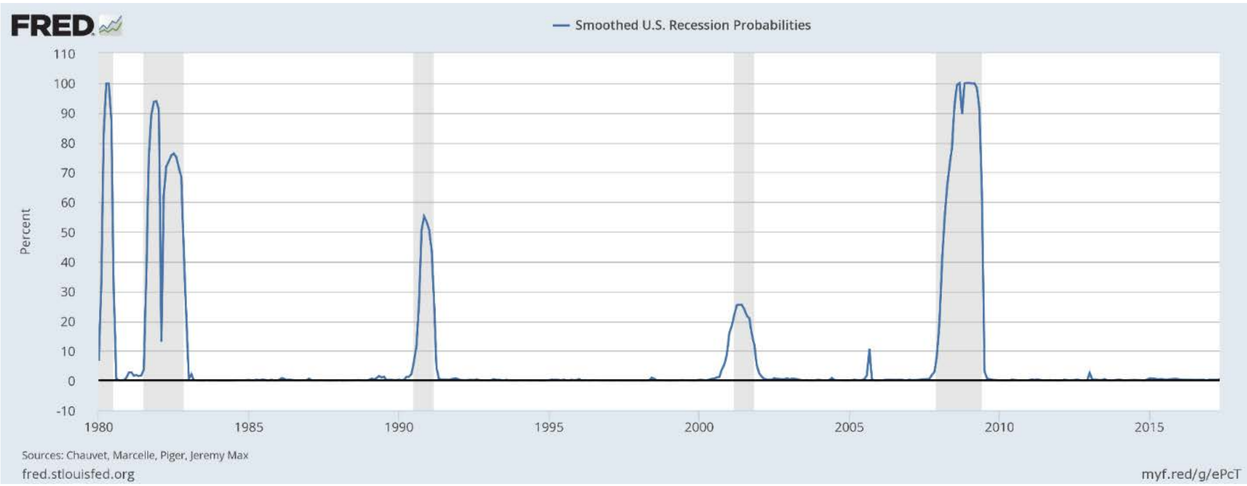
World output gained speed in the second half of 2016 and the momentum is expected to continue through 2017 and 2018. The International Monetary Fund (IMF) releases a detailed world economic outlook each October and brief updates quarterly. The IMF increased the expected growth rate from their January 2017 update to their July 2017 update for most global economies. As a result, rather than the 3.4 percent increase in world output that the IMF forecasted in January 2017, the expected growth rate in 2017 was increased to 3.5 percent. Looking ahead to 2018, the IMF notes rising trends for world output with projected global growth to be 3.6 percent.

A closer look at some of Colorado's key trading partners reveals mixed economic performance. Canada is expected to grow at a rate of 2.5 percent in 2017 and 1.9 percent in 2018, significantly faster than the two prior years due to strong domestic demand. However, the Mexican economy is forecasted to slow in 2017 and 2018, growing at a rate of 1.9 percent and 2 percent, respectively. Projected activity in the Euro Area is basically on par with the prior two years as political risk has diminished, with anticipated growth rates of 1.9 percent in 2017 and 1.7 percent in 2018. Nonetheless, slower growth expectations in the United Kingdom remain, with increases of 1.7 percent in 2017 and 1.5 percent in 2018. The Chinese growth rate is expected to remain at 6.7 percent in 2017 and decline only modestly in 2018 to 6.4 percent. Private consumption, investment, and export activity is boosting the Japanese economy to an expected increase of 1.3 percent in 2017, followed by a relatively flat 0.6 percent growth rate in 2018.

After a modest start to 2017 with U.S. Gross Domestic Product (GDP) increasing 1.2 percent in the first quarter, the economy regained momentum in the second quarter as GDP increased 3 percent. GDP is expected to maintain a similar growth pattern in the last half of the year. As a result, GDP is expected to increase 2.2 percent in 2017 and 2.3 percent in 2018. Of the four components of GDP, consumer spending has been the key to growth. After a slight downturn in gross private domestic investment in 2016, a proxy for business spending, investment has rebounded so far in 2017. Imports remain greater than exports, resulting in a negative contribution to GDP, and government spending is relatively stable.

Employment

The Federal Reserve Bank of St. Louis produces a Smoothed U.S. Recession Probability model on a monthly basis that uses four variables to forecast the chance of an upcoming national recession. The variables are non-farm payroll employment, the index of industrial production, real personal income, and real manufacturing and trade sales. Healthy employment growth generally results in a low probability of recession. Indeed, the U.S. has currently posted 51 consecutive months of a recession probability under 1 percent.



While national business cycles are tracked using measures such as GDP, personal income, industrial production, and employment, these measures may not be available at the state level or are released with such a lag as to not be useful. Therefore, employment statistics, which are released on a monthly basis, are closely watched at the state and local level as the key indicator of an area's economic health. After ranking fifth for employment growth in 2015 and 13th in 2016, Colorado ranked 11th for employment growth as of mid-2017. Nevada and Utah currently hold the top spots in the country with a 3.3 percent increase in employment. Colorado employment growth is expected to average 2.1 percent in 2017 and slow slightly to 2 percent growth in 2018 as worker availability remains constrained.

Six of the seven metropolitan statistical areas (MSAs) in Colorado posted increased employment from the first half of 2016 to the first half of 2017. The lone exception was the Grand Junction MSA, where employment declined 0.4 percent. The Fort Collins MSA has been the fastest growing metro area in Colorado since 2015, and posted a 4.3 percent increase in employment in the first half of 2017. The biggest shift in position has been in the Greeley MSA. Employment in the Greeley MSA decreased by 1.3 percent in 2016 due to a decline in the oil and gas industry. Employment then expanded by 2.6 percent in the first half of 2017, ranking the Greeley MSA as the third-fastest growing MSA in Colorado.

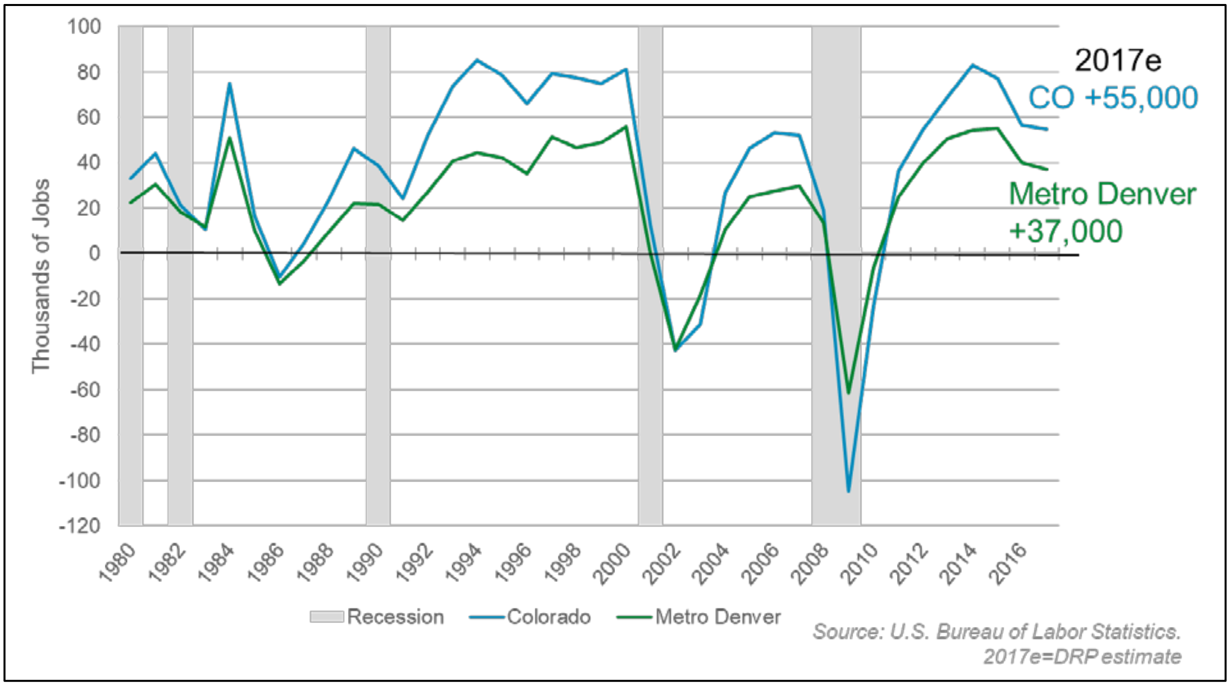
Annual Employment Growth Rates

	2015	2016	2017 est.
Metro Denver	3.6%	2.5%	2.3%
Colorado	3.1%	2.2%	2.1%
U.S.	2.1%	1.7%	1.5%

Source: U.S. Bureau of Labor Statistics.

Nearly 1.7 million jobs are located in Metro Denver. Dividing the employment base into 11 supersectors reveals that nine of the 11 categories in Metro Denver increased through the first half of the year. The information and manufacturing supersectors posted the only declines. The education and health services supersector reported the largest percentage increase in employment and added the most new jobs, averaging a 4.1 percent increase in employment in the first six months of the year, or the addition of 8,500 jobs. The professional and business services supersector is the largest of the 11 supersectors and created 7,200 jobs over the period. The natural resources supersector recorded the smallest increase in employment over-the-year, rising 0.5 percent with the addition of 500 jobs. Employment in Metro Denver is forecasted to increase by 2.3 percent in 2017, representing the addition of about 37,200 jobs. Similar to the state, Metro Denver employment growth in 2018 is likely to fall slightly to 2.2 percent as companies struggle to find more workers as the region continues to post an average annual unemployment rate in the 2.5 to 3 percent range.

Employment Gains/Losses by Year



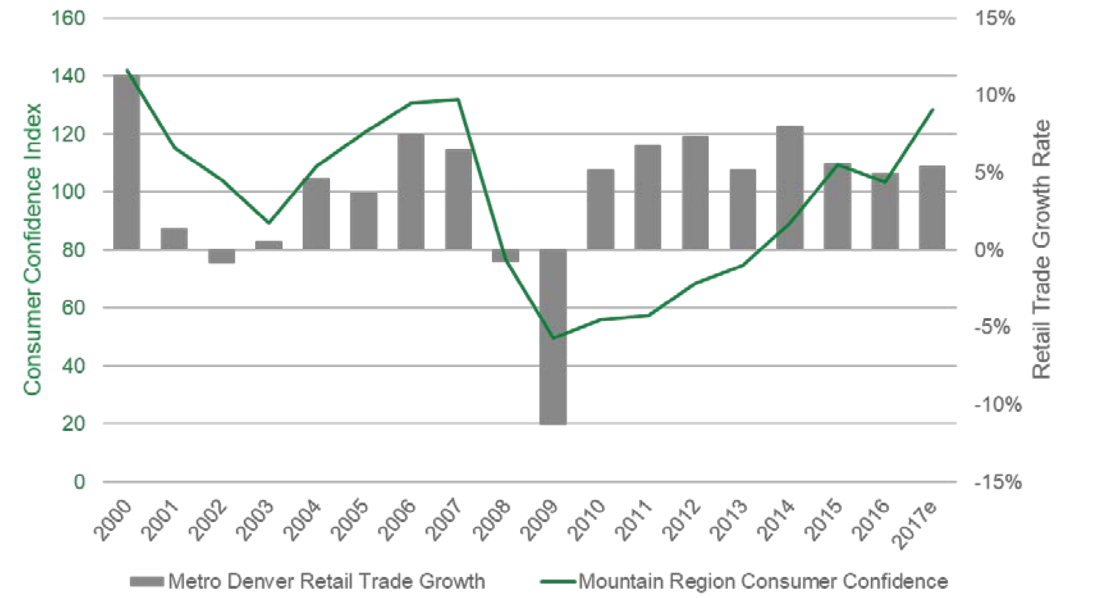
Consumer Activity

Consumption, or consumer activity, is the largest component of U.S. GDP, representing approximately 69 percent of the total. The Consumer Confidence Index tends to be a reasonable indicator of future consumer activity. The January–June average Consumer Confidence Index for the U.S. was 20.4 percent higher in 2017 compared with the same time last year. The average Mountain Region Index, which includes Colorado, was 30.4 percent higher. The high index levels reflect confident consumers who are spending at a steady pace.

Nationally, total retail trade activity has been increasing at a 4.5 percent pace in 2017, higher than the 2.6 percent growth rate in 2015 and the 3 percent increase in 2016. However, the slower pace in 2015 and 2016 was mainly attributed to the low and falling price of gasoline. “Core” retail activity, which excludes gasoline, motor vehicles, and building materials, has decelerated over the past three years, increasing 4.3 percent in 2015, 3.6 percent in 2016, and 3.4 percent as of mid-2017.

Retail trade sales data for Metro Denver is currently not available from the Colorado Department of Revenue, so it is difficult to project the spending patterns of the region’s 3.2 million people. Retail trade sales increased 5.5 percent in 2015, the last full year for which data is available at a county level. As consumers in the Mountain Region have displayed higher levels of confidence than found nationally, it is expected that consumer activity has been increasing at a faster pace in Metro Denver than the nation.

Consumer Activity



Sources: Colorado Department of Revenue; The Conference Board. 2017e=DRP estimate

Residential Real Estate

One of the largest purchases ever made by a consumer is a home. However, the rapid increase in the median home price in Metro Denver is making it challenging for some households to move into a home ownership position. As of the second quarter of 2017, the Boulder MSA had the sixth-highest median home price of the 178 MSAs tracked by the National Association of Realtors. The Denver MSA ranked as the 13th most expensive market. While home price increases are moderating, the median home price in the Denver MSA is expected to average $409,000 in 2017, a 6.4 percent increase over last year. In comparison, the national median home price is expected to average $250,000, a 6 percent increase over 2016.

Home prices in the Denver and Boulder MSAs are rising at a rapid pace due to both strong demand and limited supply. The population in the Metro Denver region has increased by over 1,000 net new residents each week from 2011 through 2017. However, the number of existing homes on the market has fallen from 18,026 in June 2011 to 7,059 in June 2017. Limited inventory and rapidly rising prices forced some potential buyers out of the market, resulting in a slight decline of 0.8 percent in home sales in 2016. The Metro Denver region is on target to post about 56,700 home sales in 2017, a 2 percent increase from 2016.

Many Metro Denver households are choosing to rent versus own not only due to rising single-family home prices and limited availability, but also due to changing demographics. Metro Denver has significant concentrations of both millennials and baby boomers, with the former delaying home ownership and the latter attracted by lower maintenance housing options. Strong apartment demand resulted in the permitting of 12,300 new multi-family units in 2016, and permitting activity was nearly 46 percent higher in the first half of 2017 than the first half of 2016. The apartment vacancy rate has been rising slowly as a result of the new units, but still is expected to average about 6 percent in 2017. The new apartment supply is also bringing welcome relief to average rent increases. After double-digit increases in the average apartment rent in 2014 and 2015, apartment rental rates increased by 4.3 percent in 2016 and are expected to increase at a similar pace in 2017. The average rental rate for all units as of mid-2017 ranged from $1,338 per month in Adams County to $1,605 in the Boulder/Broomfield market area, with an average of $1,420 per month throughout Metro Denver.

Residential Real Estate Indicators

	2015	2016	2017 est.
Home Sales (closed)	56,062	55,634	56,747
Median Home Price			
Metro Denver	$353,600	$384,300	$409,000
National	$223,900	$235,500	$250,000
Apartment Vacancy Rate	5.3%	5.7%	6.0%
Residential Building Permits*	19,269	23,496	25,643
Single-Family Detached (1 unit)	9,786	10,663	11,516
Single-Family Attached (2-4 units)	422	532	596
Multi-Family (5+ units)	9,061	12,301	13,531

**The U.S. Census Bureau tracks building permits according to the number of housing units in the structure.*

Sources: Denver Metro Association of Realtors; National Association of Realtors; Denver Metro Apartment Vacancy & Rent Survey; U.S. Census Bureau.

Residential developers have responded to the strong market conditions for both for-sale and rental housing. Construction activity averaged about 19,900 units per year from 2014 through 2016. New building permits have increased by 26 percent from the first half of 2016 to the first half of 2017, with activity expected to reach over 25,600 units in 2017, the highest level since 2001. Multi-family construction currently represents 55 percent of all new units developed, driven by the region's changing demographics and increasing preferences for higher density development around the FasTracks rail stations and in downtown Denver.

Commercial Real Estate

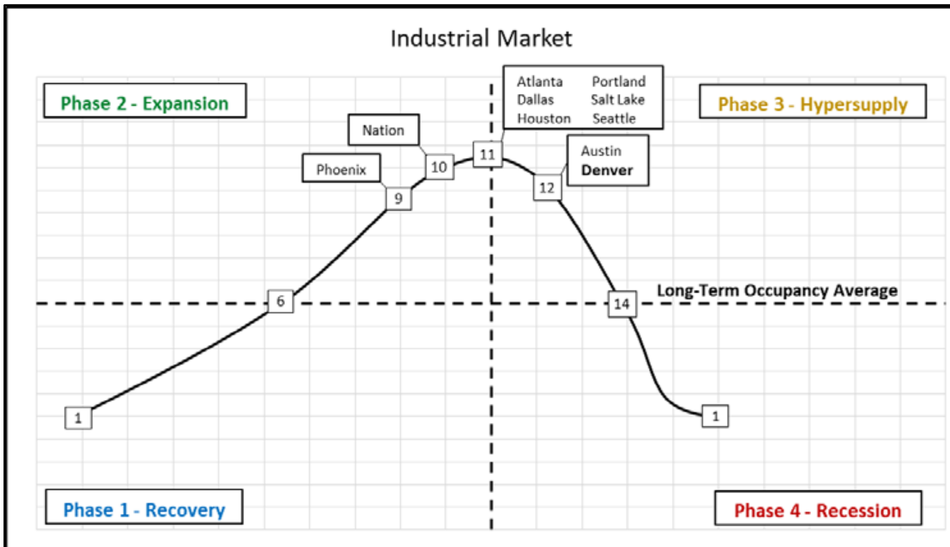
Cycles in the office, industrial, and retail real estate markets may occur in different manners than employment growth patterns. To provide insight as to the position of the commercial real estate market, Glenn Mueller of Dividend Capital Research releases the quarterly *Cycle Monitor* report that analyzes 55 MSAs in the U.S. Mueller's model analyzes occupancy movements, rental growth rates, and new construction data to place a specific market in one of four phases, consisting of recovery, expansion, hypersupply, and recession. According to the first quarter 2017 *Cycle Monitor* report, Denver's commercial real estate markets are either in an expansion phase or the beginning stages of hypersupply.

Office

Mueller places Denver's office market at the beginning of the expansionary phase, indicating that the market has shown declining vacancy, rapidly rising rents, and increasing construction levels. However, current data suggest that the office market may be in a more mature expansionary phase. The second quarter 2017 direct vacancy rate of 9.9 percent is higher than the same periods in 2015 and 2016. The average lease rate rose 2.1 percent over-the-year to $25.88 per square foot during the second quarter of 2017, which was slower than the 5.3 percent increase in 2016 and the 5.9 percent increase in 2015. Nearly 2 million square feet of office space has been completed as of mid-2017 with another 4.7 million square feet under construction. About 57 percent of the office space under construction is located in the City and County of Denver.

Industrial

According to Mueller, Denver's industrial market is currently at the beginning of the hypersupply phase, indicating increasing vacancy, rent growth but at a slower pace, and continued new construction. While the second quarter direct vacancy rate of 3.9 percent was 0.5 percentage points higher than the prior year, it is still a tight market. The direct vacancy rate has been below 4 percent since the fourth quarter of 2013. The average lease rate increased 1.1 percent over-the-year to $7.56 per square foot (NNN) during the second quarter of 2017, a slower pace than the 13.5 percent increase recorded at this time last year. The vacancy rate has increased and lease rate growth has slowed as 1.9 million square feet of new industrial space was brought online during the first half of 2017, and another 3.3 million square feet of space remains under construction. Most of the industrial activity is occurring along the I-70 corridor, with 89 percent of the industrial space under construction located in Adams County.



Q2 2017
Vacancy Rate: 3.9%
Full Service Rent: $7.56
Completed: 1.9 MSF
Under Construction: 3.3 MSF

Source: CoStar Group

Source: Dividend Capital Research, Cycle Monitor, First Quarter 2017 Analysis, May 2017.

Retail

Mueller places Denver's retail market just below the peak of the expansionary phase, indicating declining vacancy, high rent growth due to a tight market, and continued construction. The direct vacancy rate decreased 0.1 percentage points between the second quarters of 2016 and 2017 to 4.5 percent. The second quarter direct vacancy rate was the lowest second quarter level since 2003. The average lease rate in the second quarter increased 5.7 percent over-the-year, to $17.42 per square foot (NNN), which was a stronger pace than the prior two years. There were 45 projects totaling nearly 860,000 square feet of space completed during the first half of the year, with Douglas County and the City and County of Denver recording the largest amounts of completed space. Over 1.4 million square feet of space in 73 buildings was under construction as of the end of the second quarter of 2017.

Direct Vacancy Rates

	2Q 2015	2Q 2016	2Q 2017
Office	9.6%	9.2%	9.9%
Industrial	2.8%	3.4%	3.9%
Retail	5.0%	4.6%	4.5%

Source: CoStar Realty Information, Inc.