

Will the Recovery Ever End?

Louisville Economic Development Forum



Richard Wobbekind

Senior Economist and Associate Dean for Business and
Government Relations

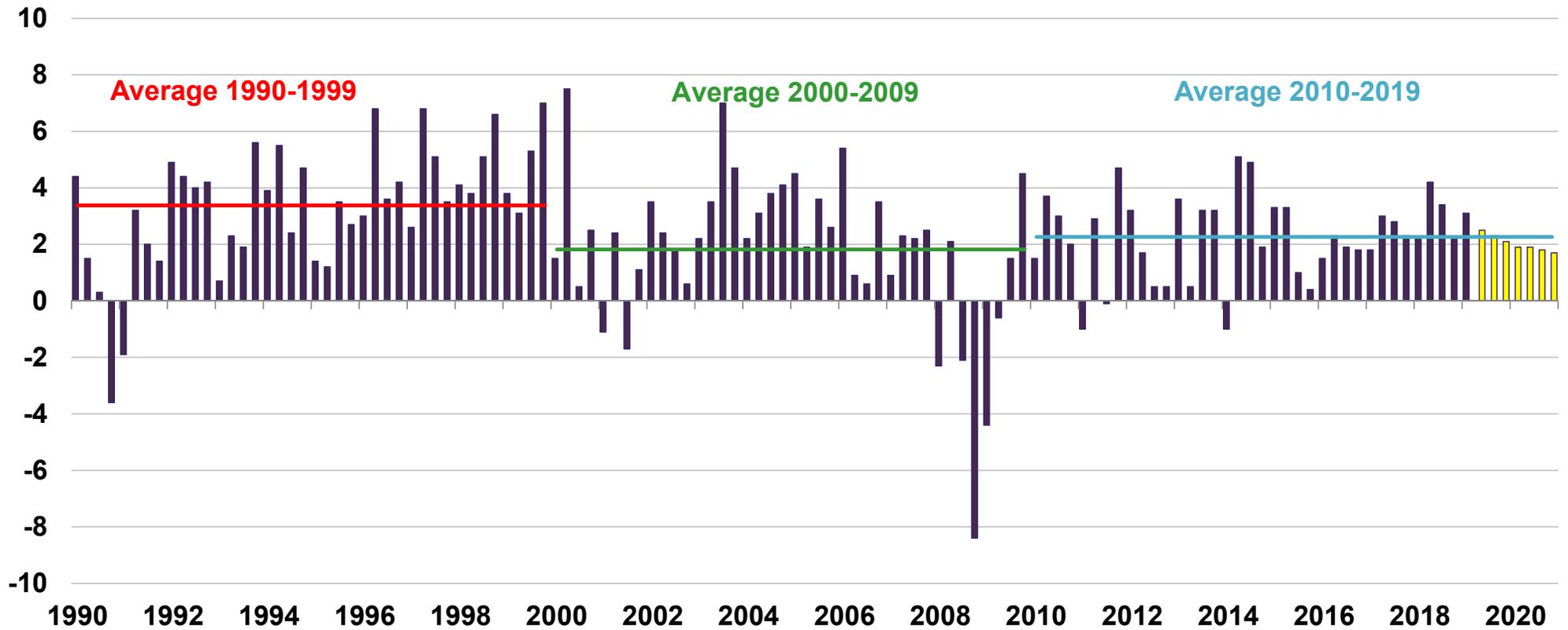
June 13, 2019

#COBizOutlook



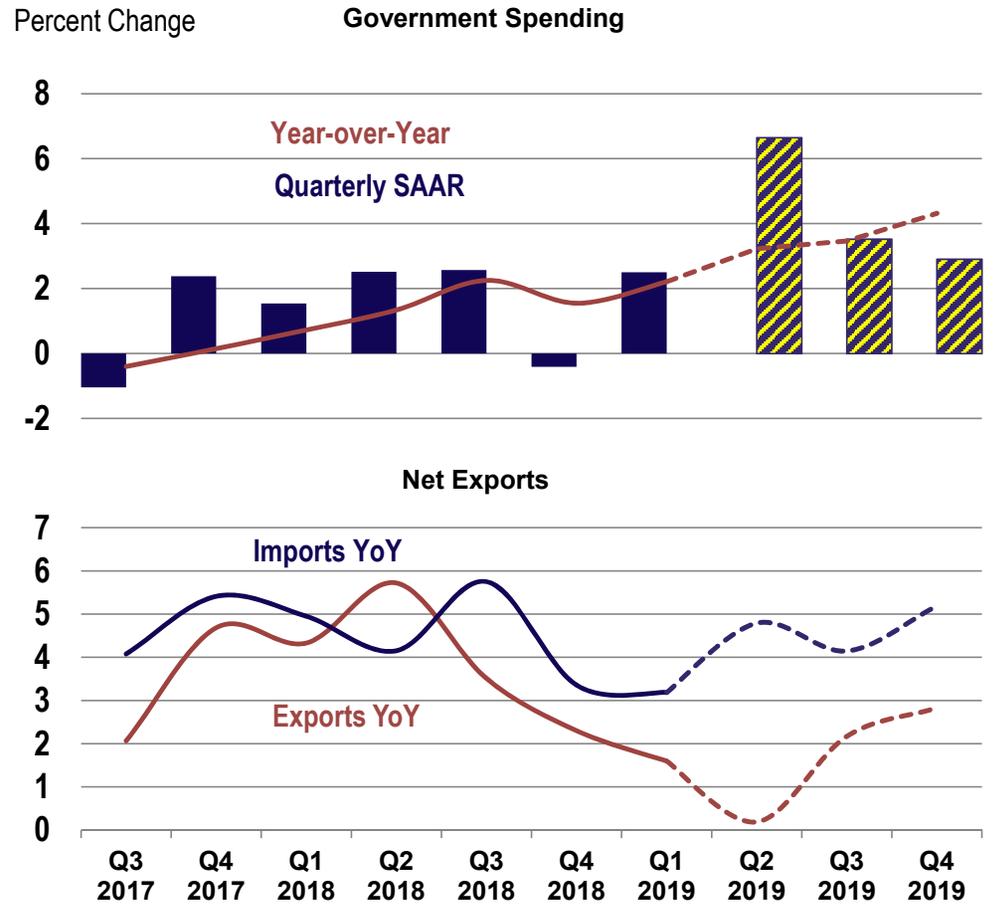
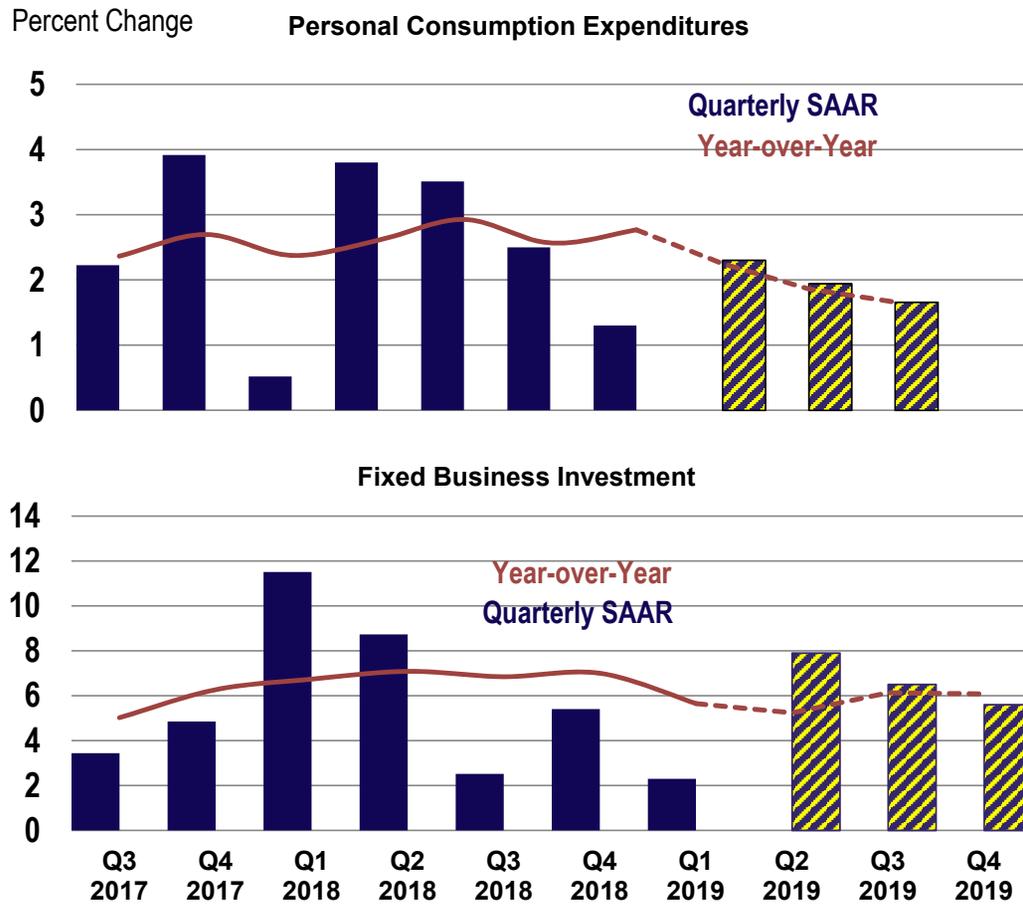
Real GDP Growth

Percent Change, SAAR



Sources: Bureau of Economic Analysis and Consensus Forecasts.

Economic Growth

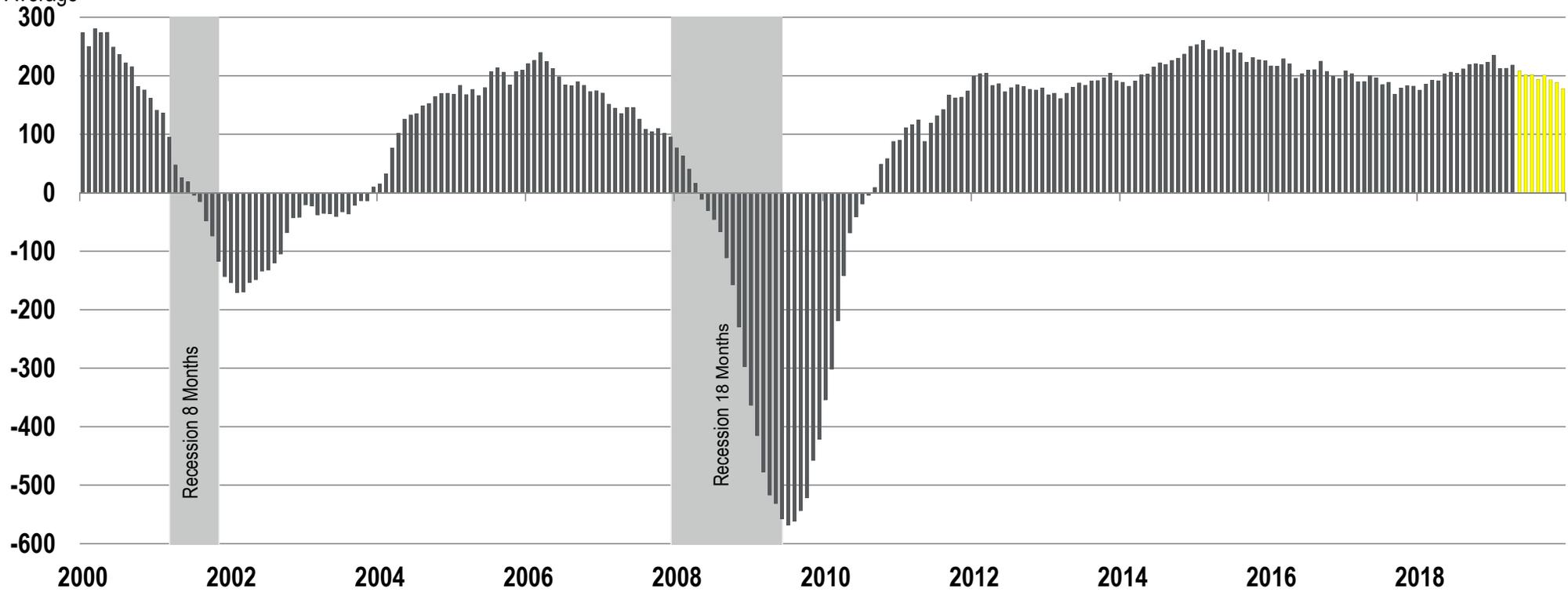


Sources: Bureau of Economic Analysis, the National Bureau of Economic Research, Moody's Analytics, and the Business Research Division.

National Employment

Month-over-Month Change, 12-Month Average

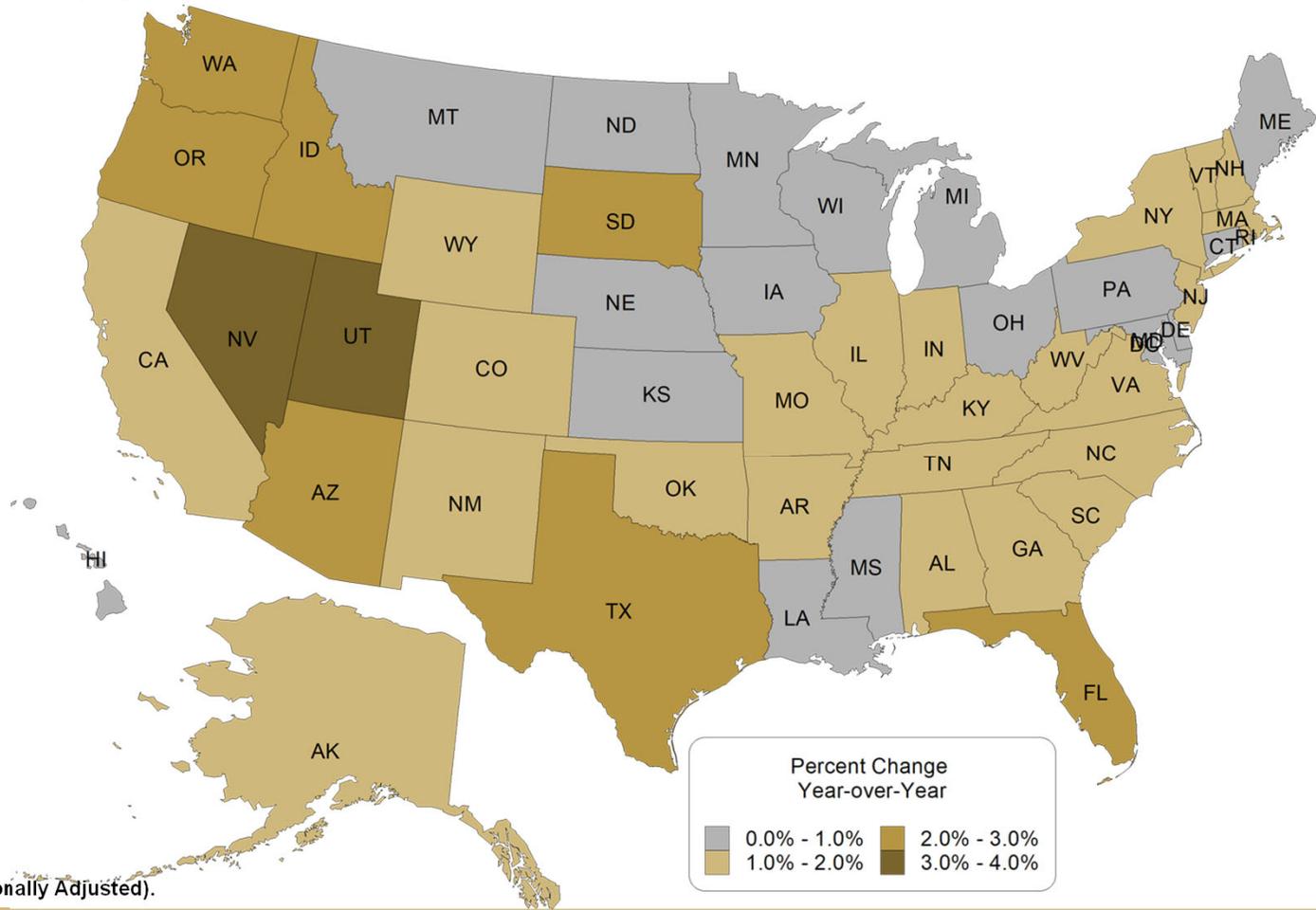
Thousands, Month-over-Month, 12-Mo Average



Sources: Bureau of Labor Statistics (Seasonally Adjusted), Moody's Analytics, and NBER.

State Employment Growth

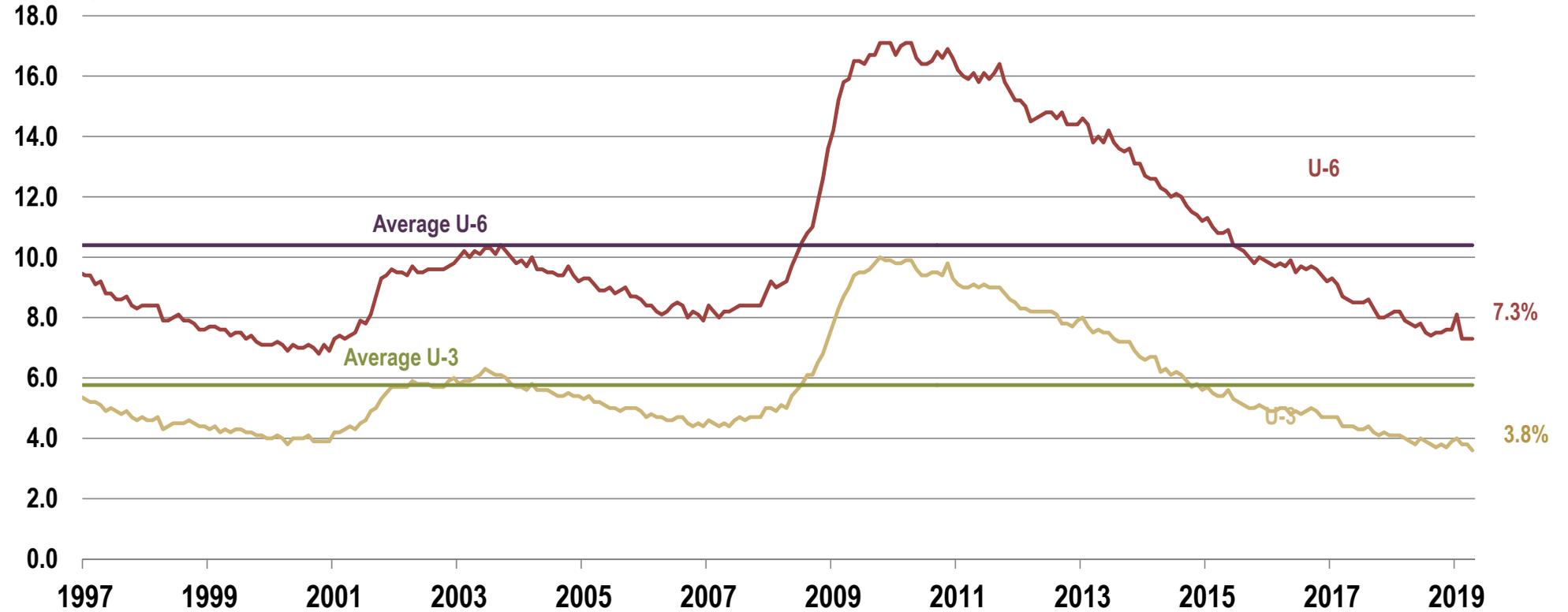
Year-over-Year April 2019



Source: Bureau of Labor Statistics (Seasonally Adjusted).

Labor Underutilization

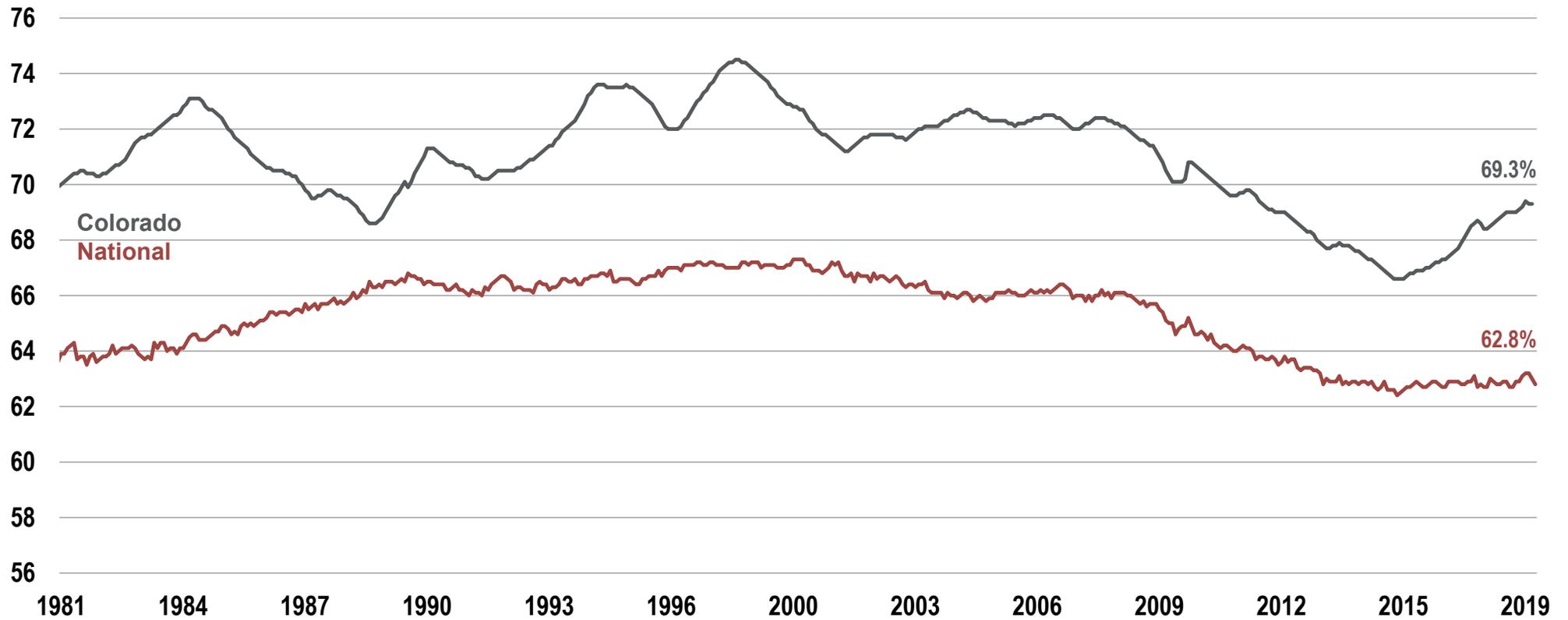
Percentage of Labor Force



Source: Bureau of Labor Statistics (Seasonally Adjusted).

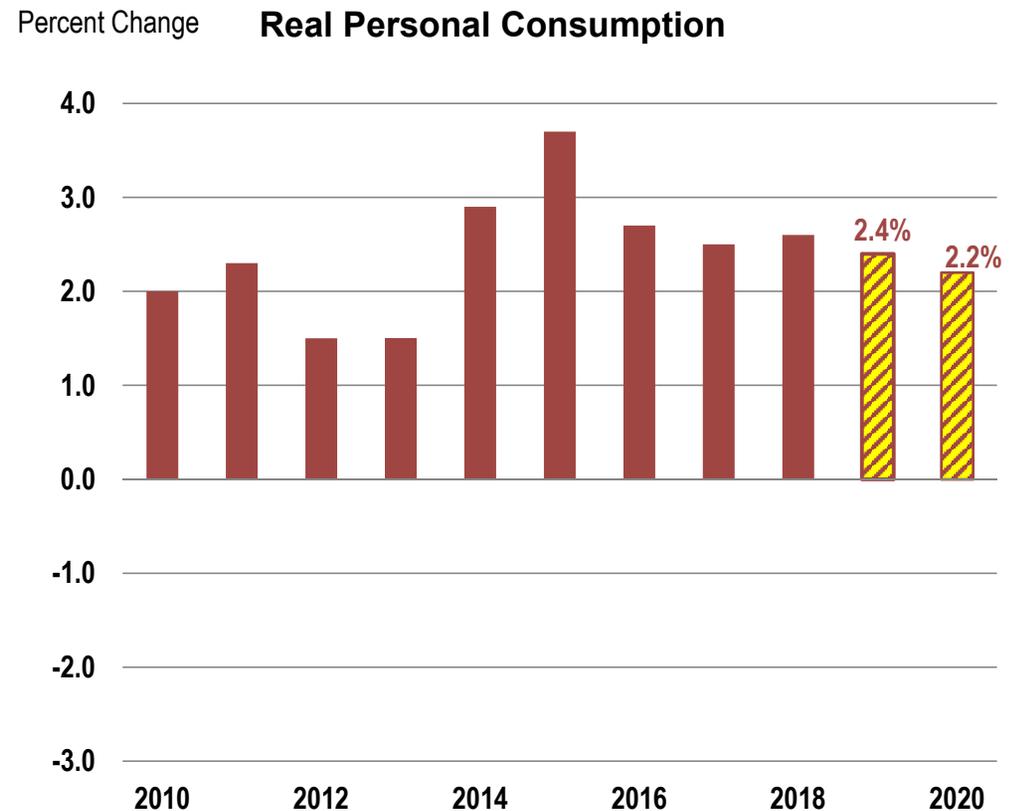
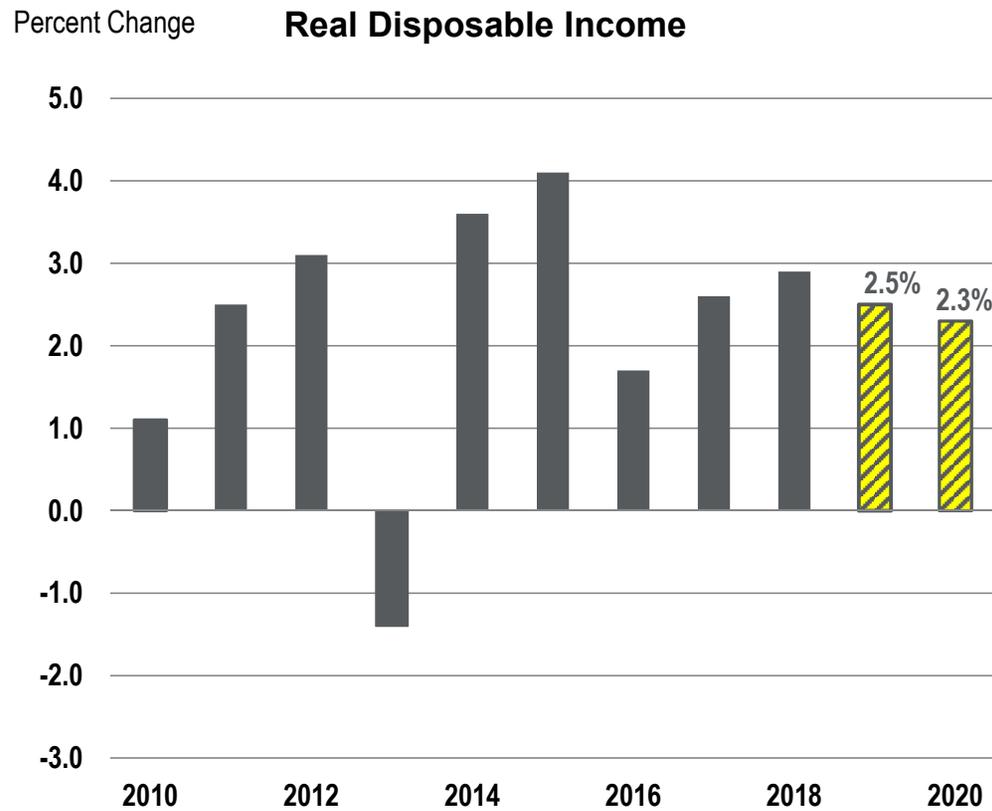
Labor Force Participation Rate

Percent of Population 16 and Over



Source: Bureau of Labor Statistics (Seasonally Adjusted).

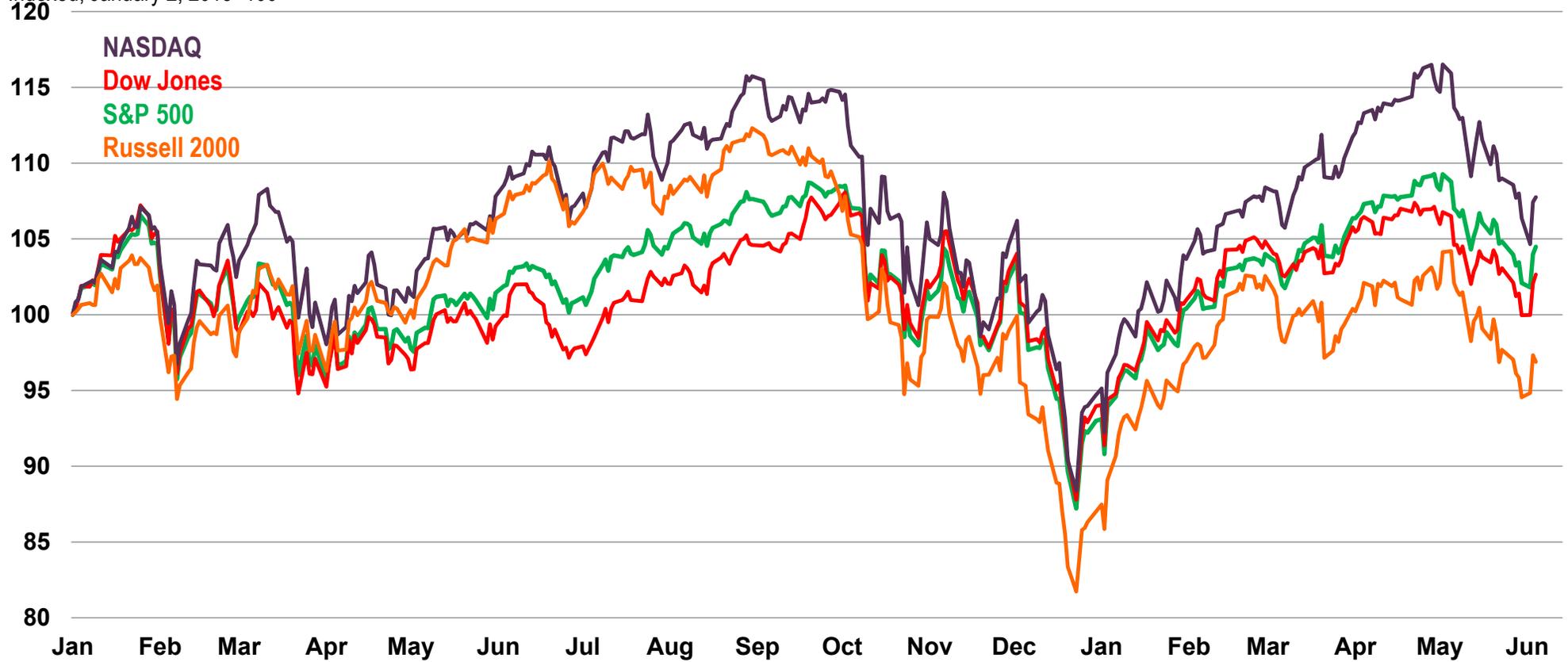
U.S. Income and Consumption



Sources: Consensus Forecasts.

2018-2019 Securities Trends

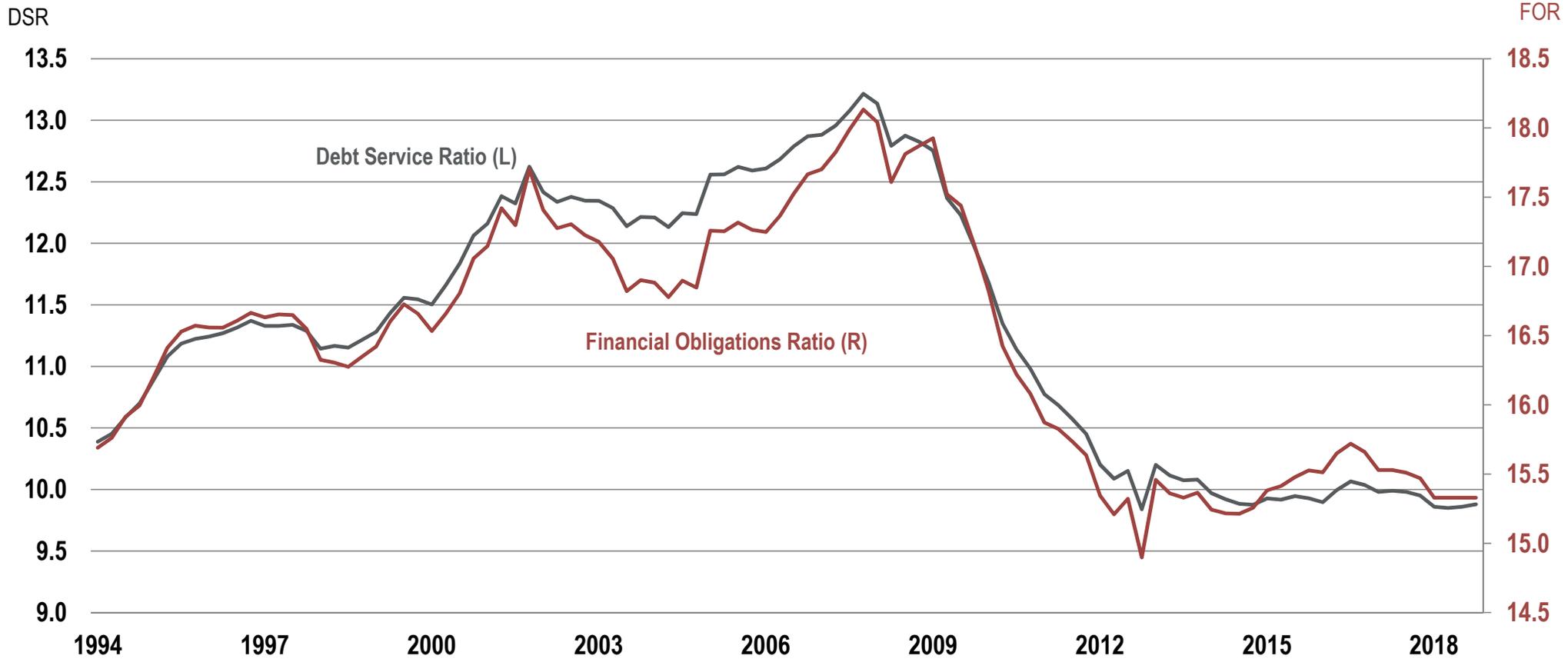
Indexed, January 2, 2018=100



Source: Yahoo! Finance.

Household Debt Burden

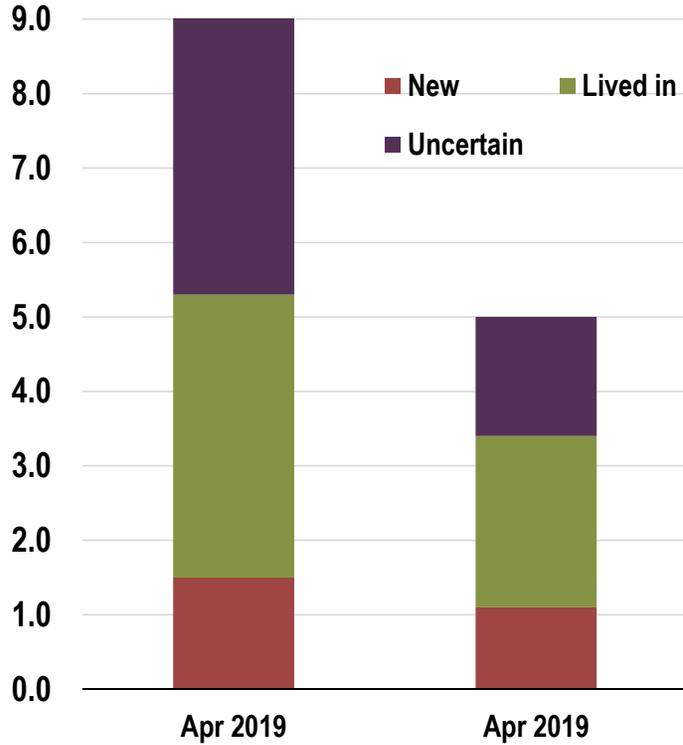
Percent of Disposable Income



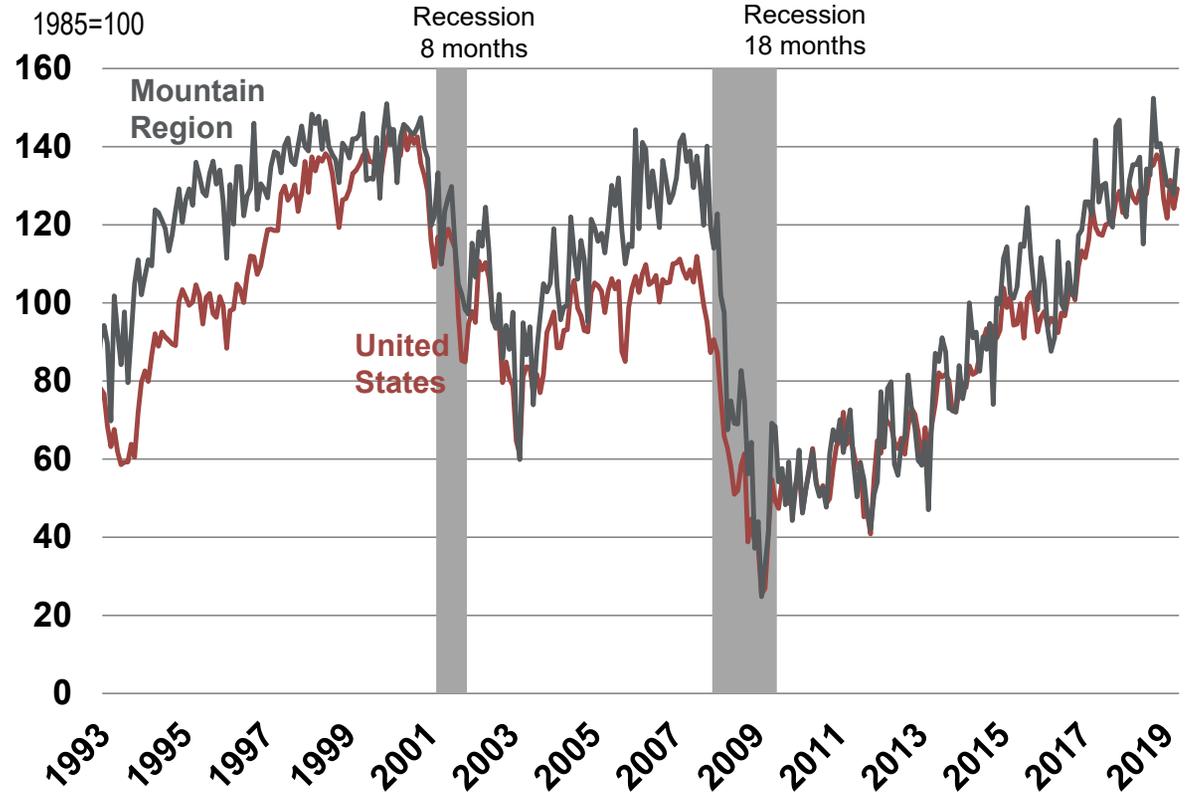
Source: Federal Reserve, Household Debt Service and Obligations Ratios.

Index of Consumer Confidence

Plans to buy a home in the next 6 months



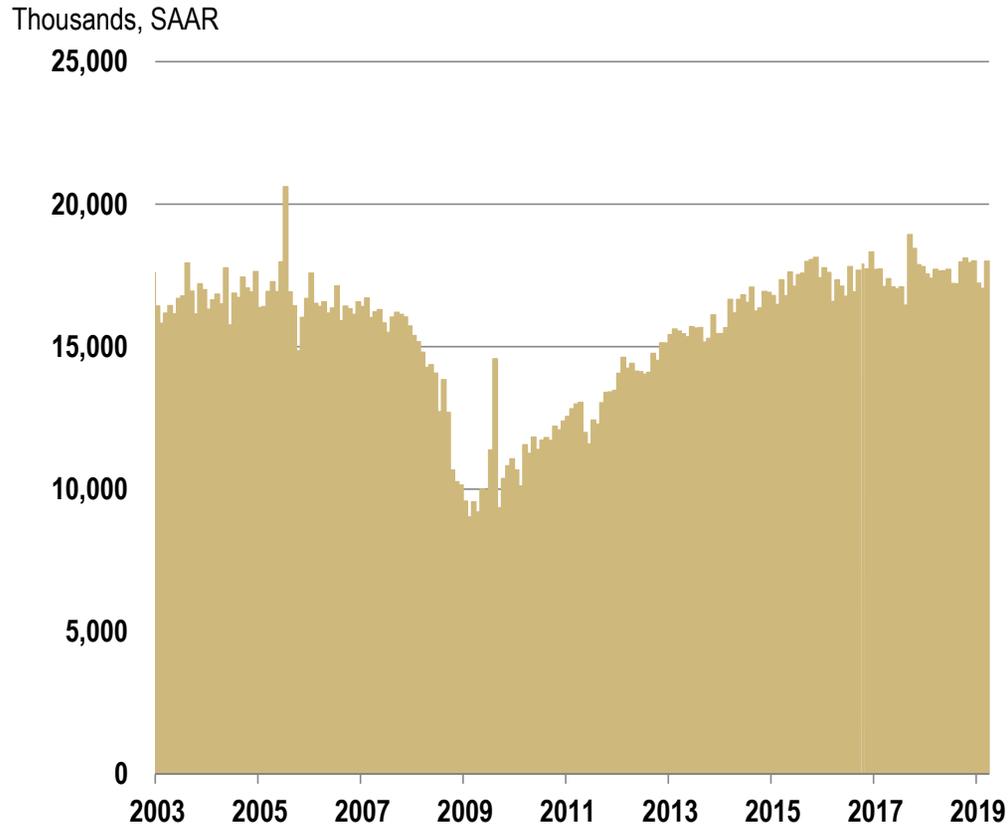
Index of Consumer Confidence



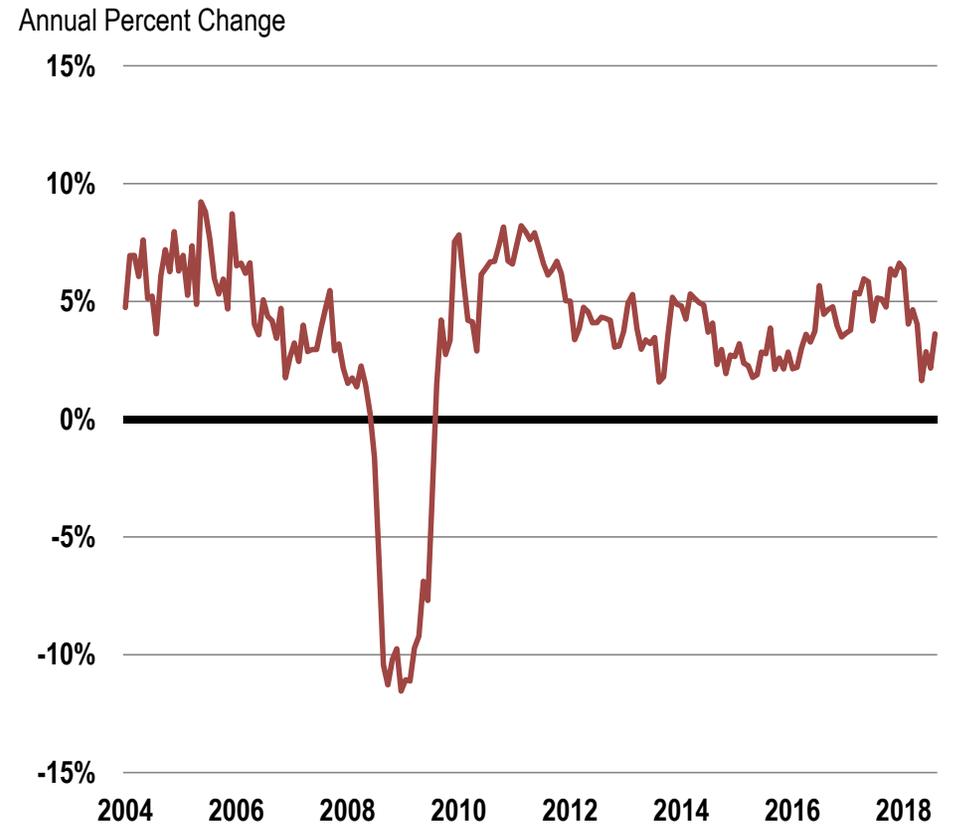
Sources: The Conference Board and National Bureau of Economic Research.

Vehicle Sales and Retail Sales

Vehicle Sales

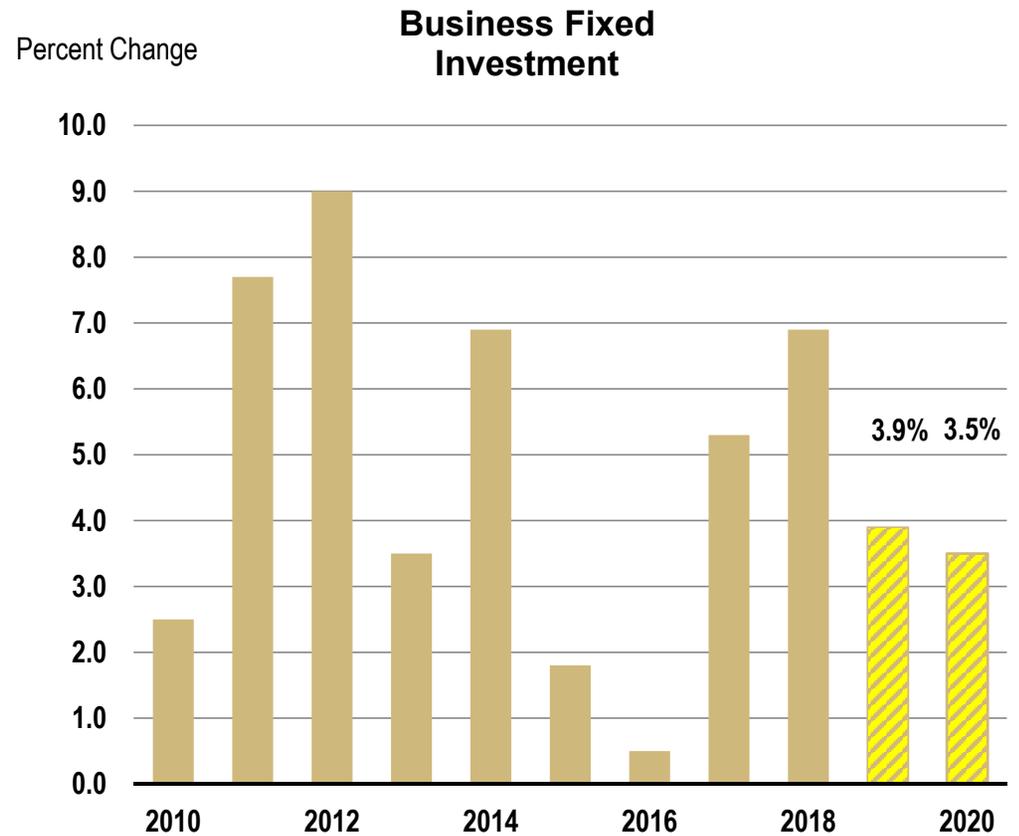
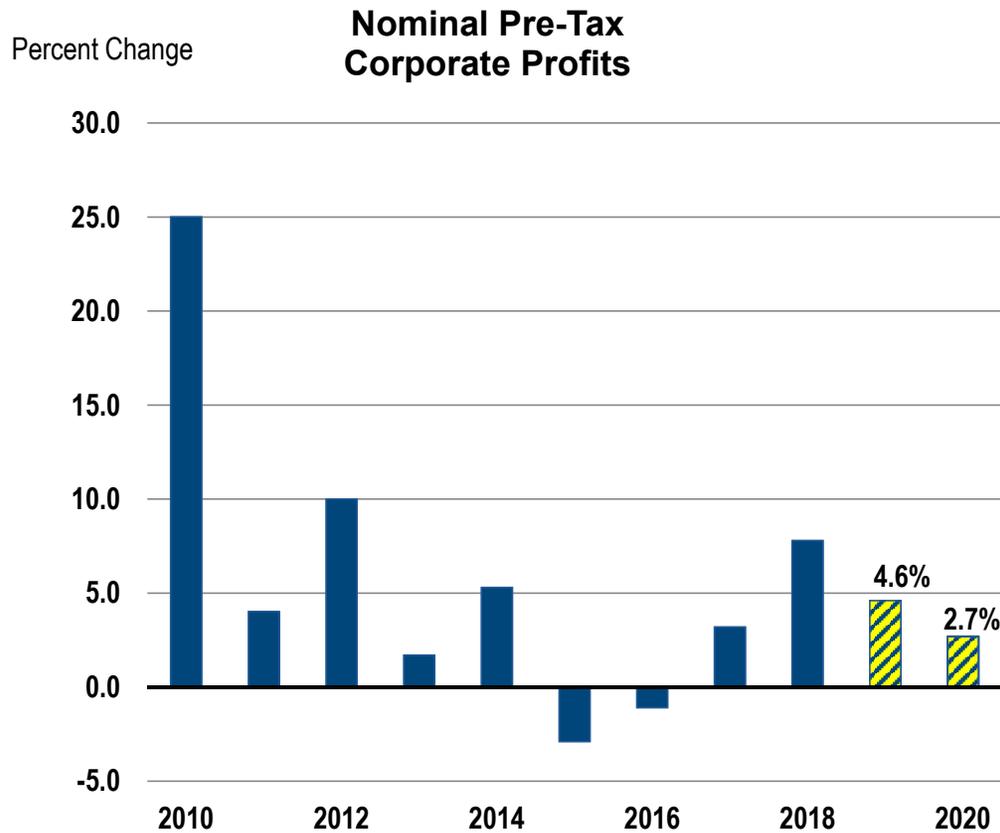


Retail and Food Services Sales



Sources: Bureau of Economic Analysis, Moody's Analytics, U.S. Census Bureau (Seasonally Adjusted Annual Rate).

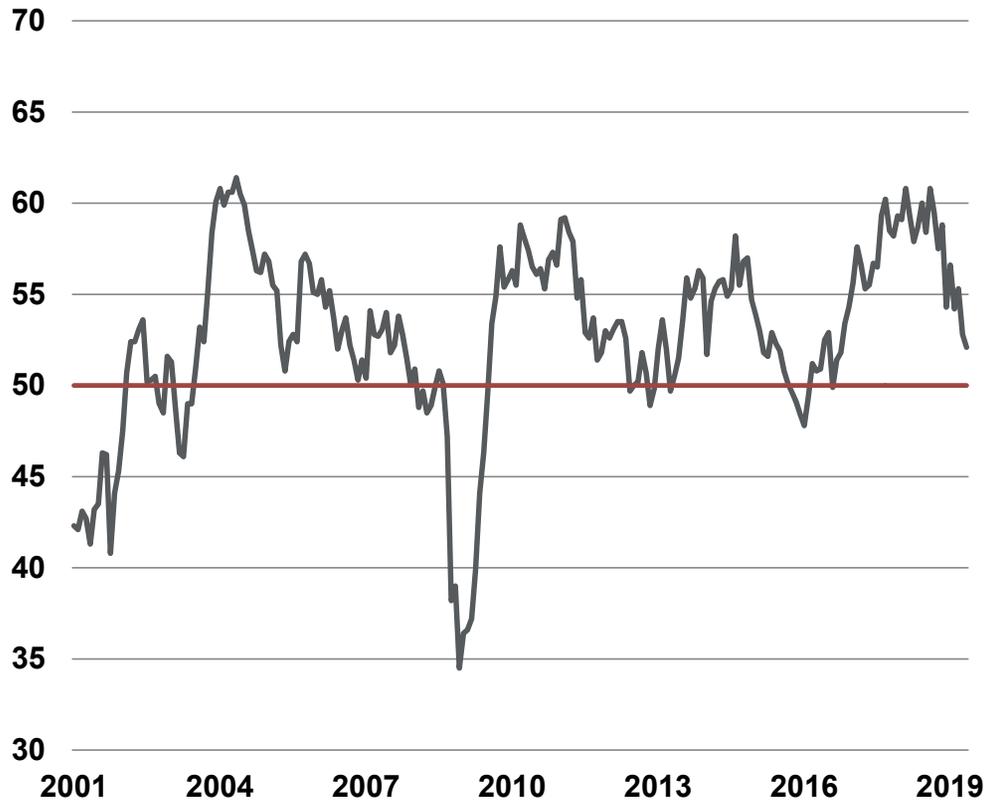
Nominal Corporate Profits and Business Fixed Investment



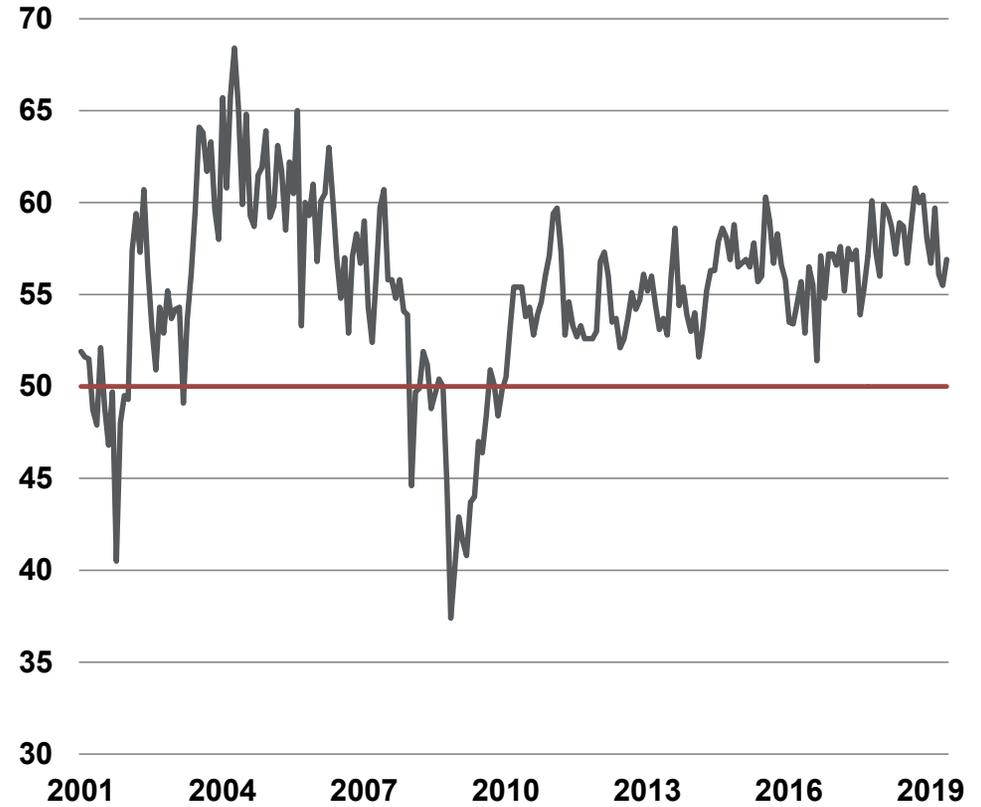
Sources: Bureau of Economic Analysis, Consensus Forecasts.

ISM Indices

ISM Manufacturing Index



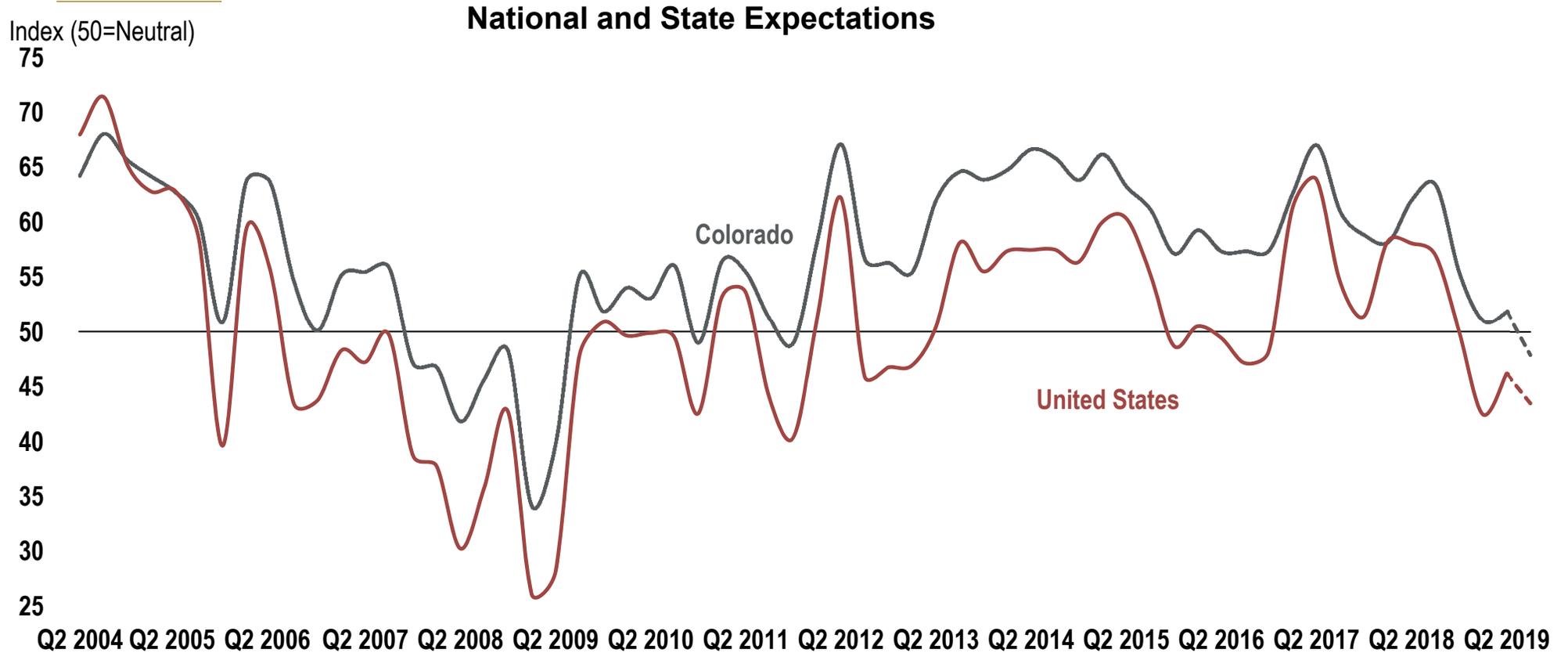
ISM Non-Manufacturing Index



Source: Institute for Supply Management (ISM).

U.S. and Colorado Economies

Q2 2004 – Q2 2019

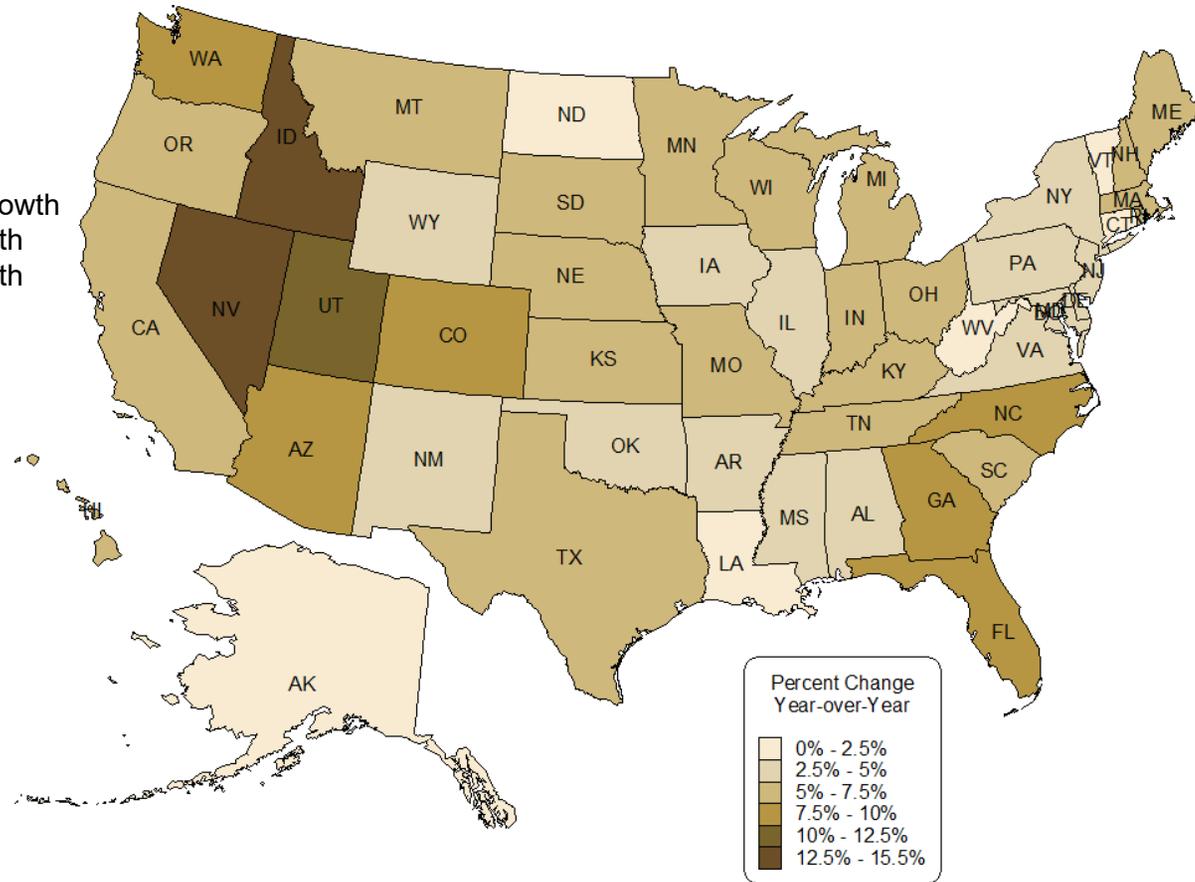


Source: Business Research Division.

Home Price Growth by State

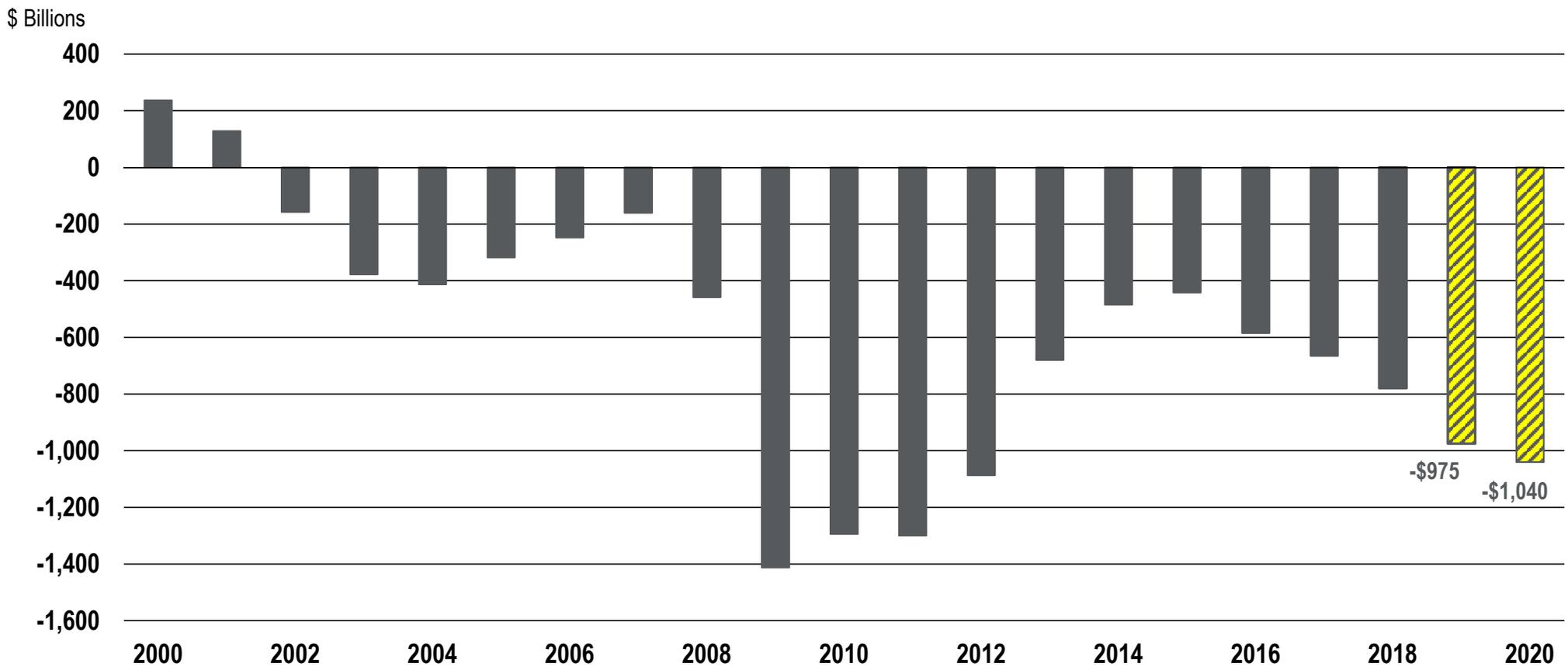
Year over Year Q4 2018

- All states recorded growth
- 31 had 5%+ growth
 - 3 had 10%+ growth



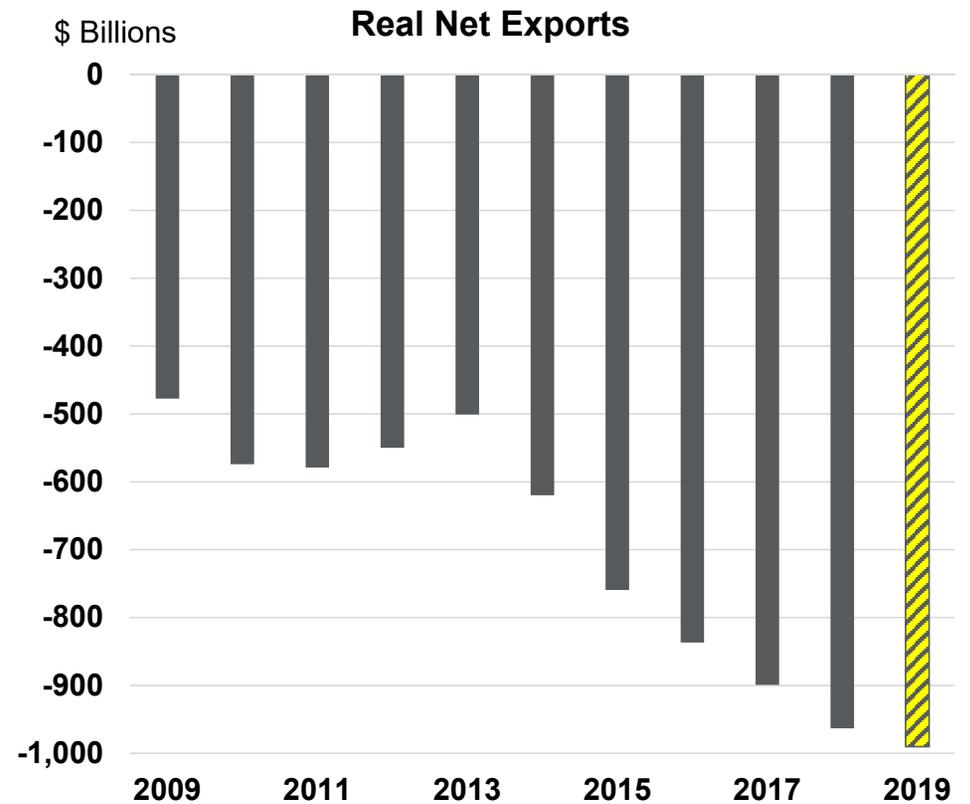
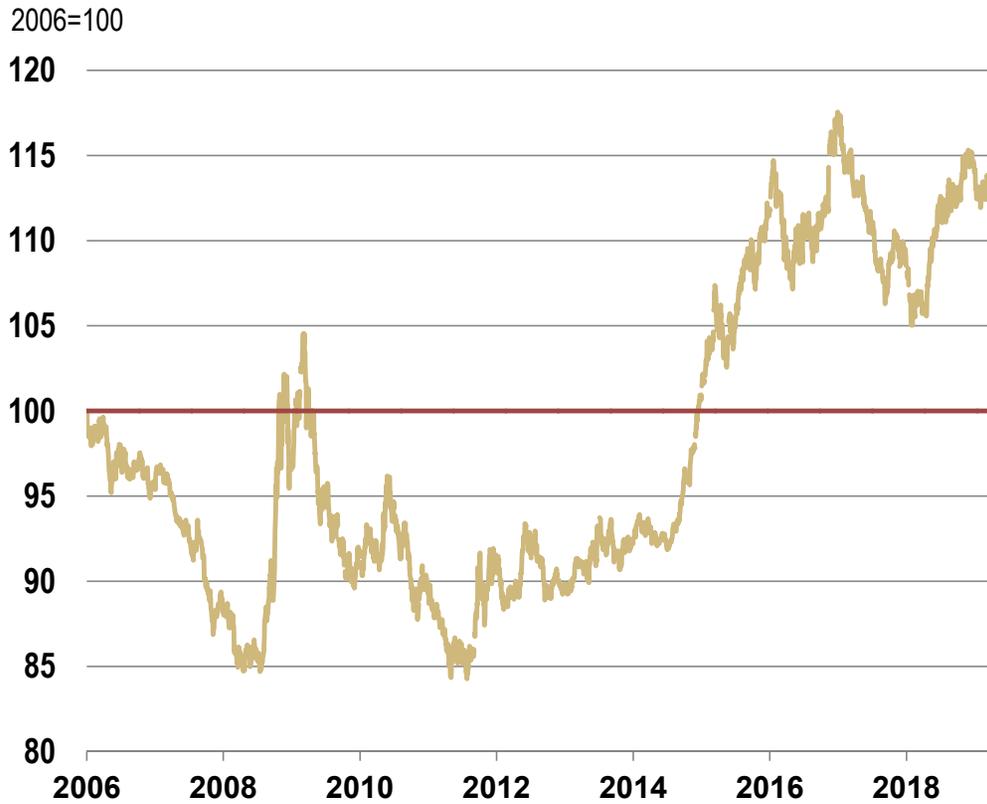
Source: Federal Housing Finance Agency Home Price Index, All Transactions Index.

Federal Budget Balance



Sources: Office of Management and Budget and Consensus Forecasts.

U.S. Nominal Broad Dollar Index and Real Net Exports

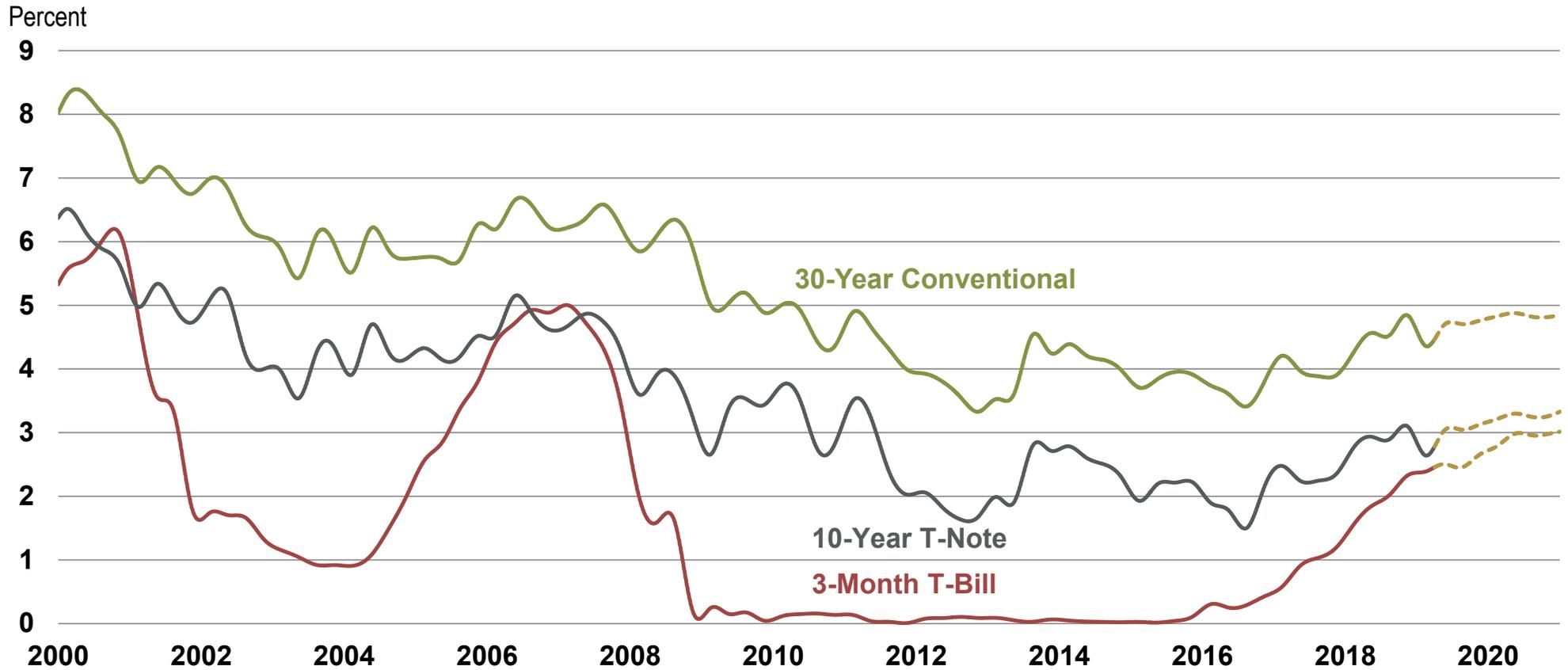


Sources: Federal Reserve, Bureau of Economic Analysis, and Consensus Forecasts.

Money, Interest Rates, and Prices



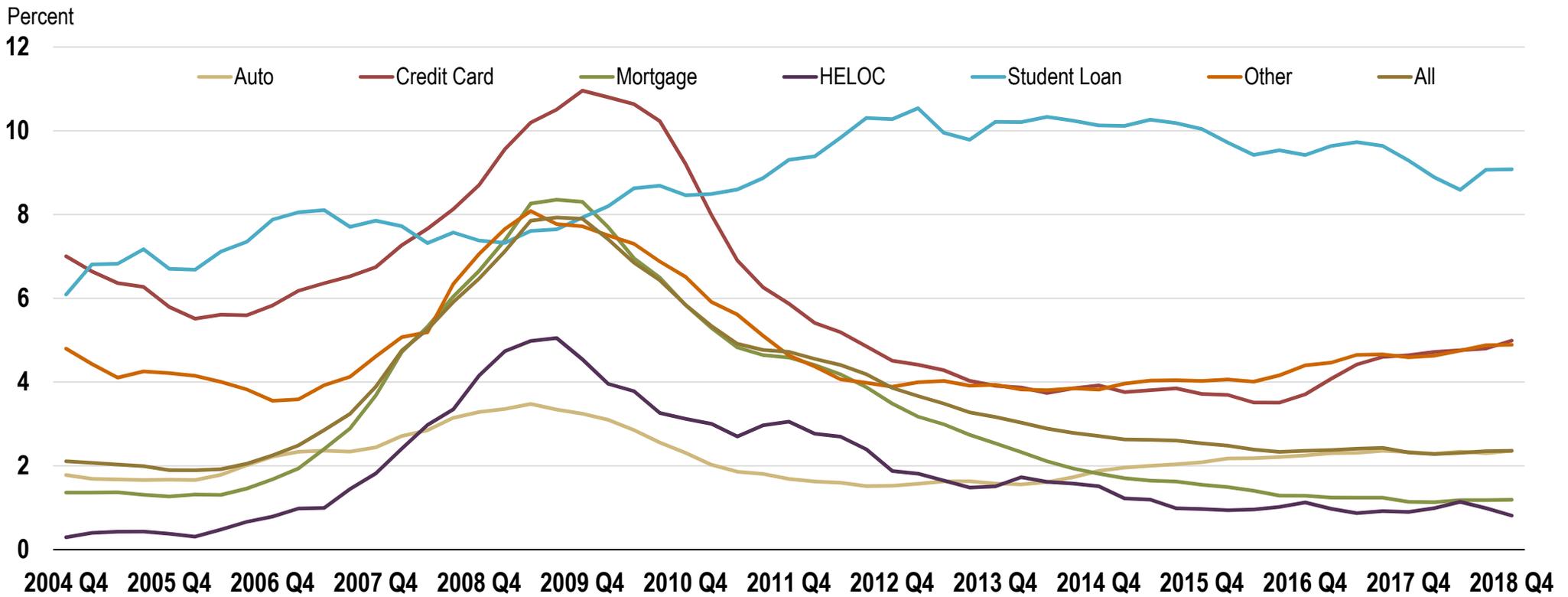
Interest Rates



Sources: Federal Reserve and Moody's Analytics.

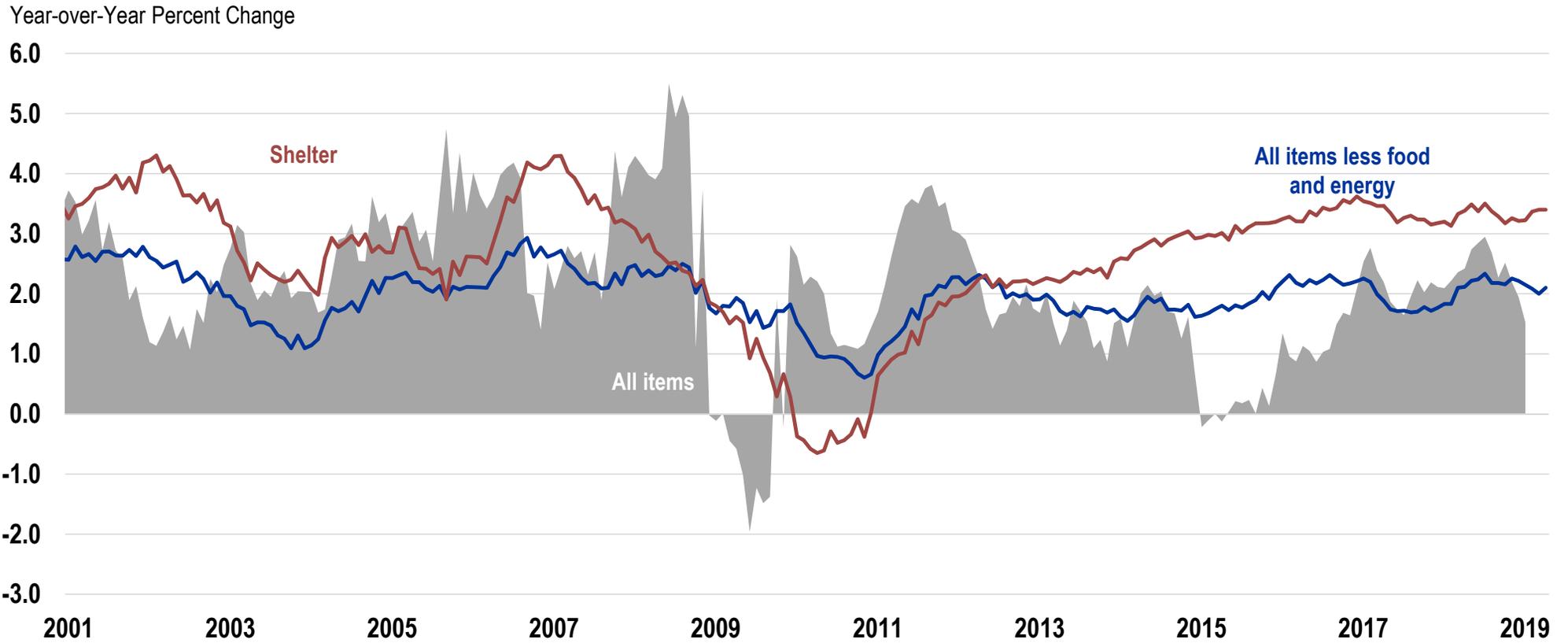
Loan Delinquency

Percent of Balance 90+ Days Delinquent by Loan Type



Source: FRBNY Consumer Credit Panel.

National Inflation

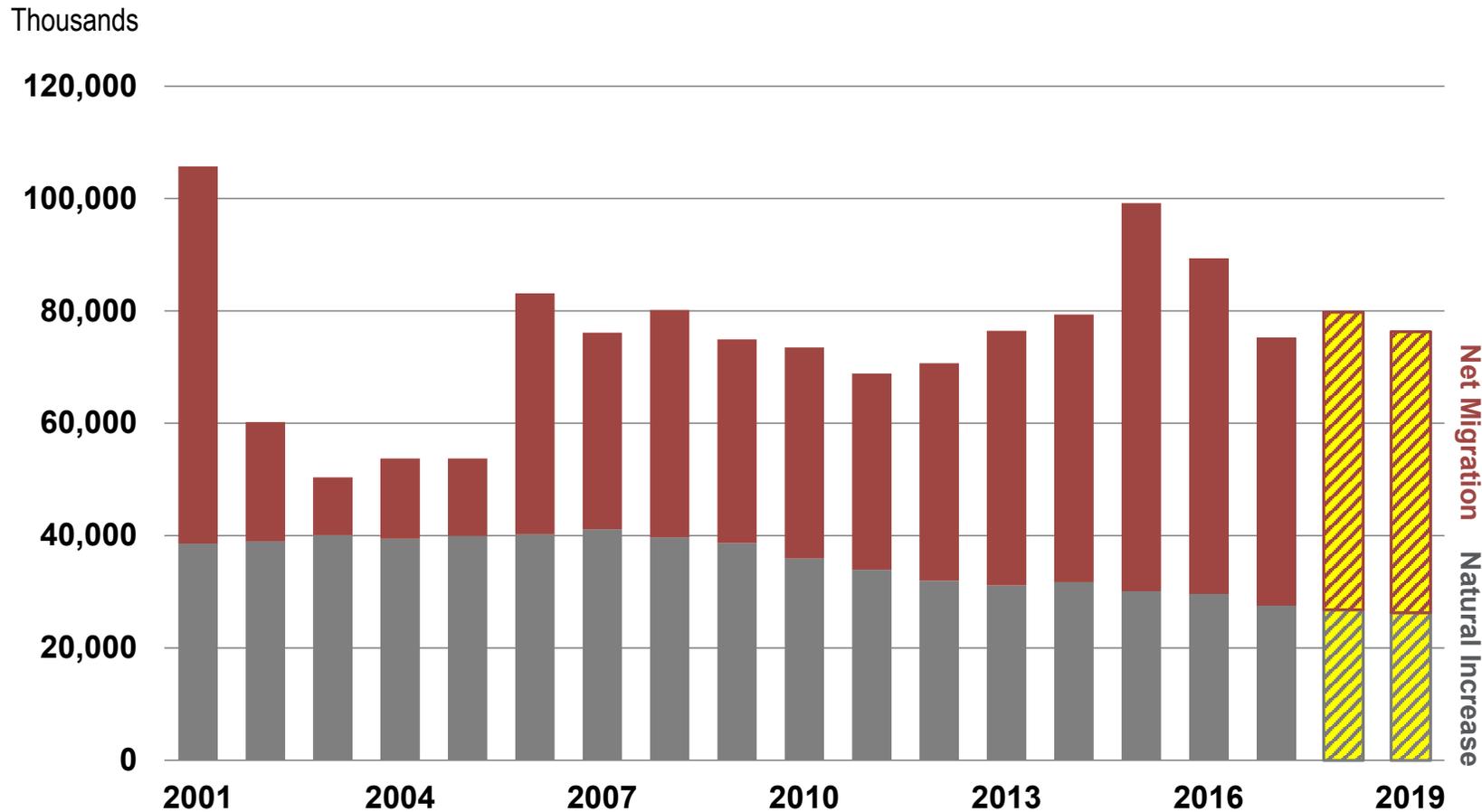


Source: Bureau of Labor Statistics, Consumer Price Index (CPI), (SA).

Colorado Population, Employment, and Prices



Colorado Change in Population



Colorado's population changes

- 79,800 in 2018
- 76,300 in 2019

Ranked 8th in total state growth

Ranked 9th for fastest growth

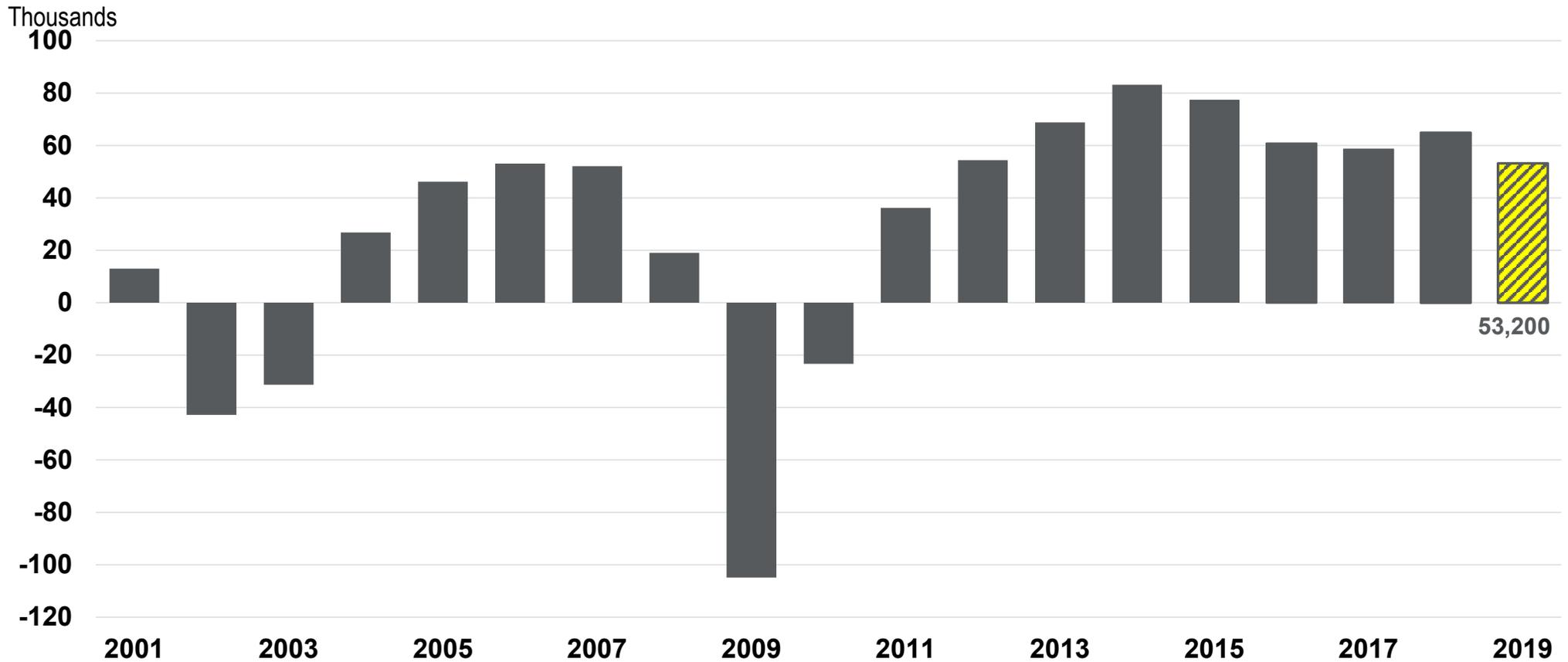
Continued net migration into the state

Net Migration
Natural Increase

Sources: Colorado Demography Office, U.S. Census Bureau, and the Business Research Division.

Colorado Employment Growth

Jobs Added



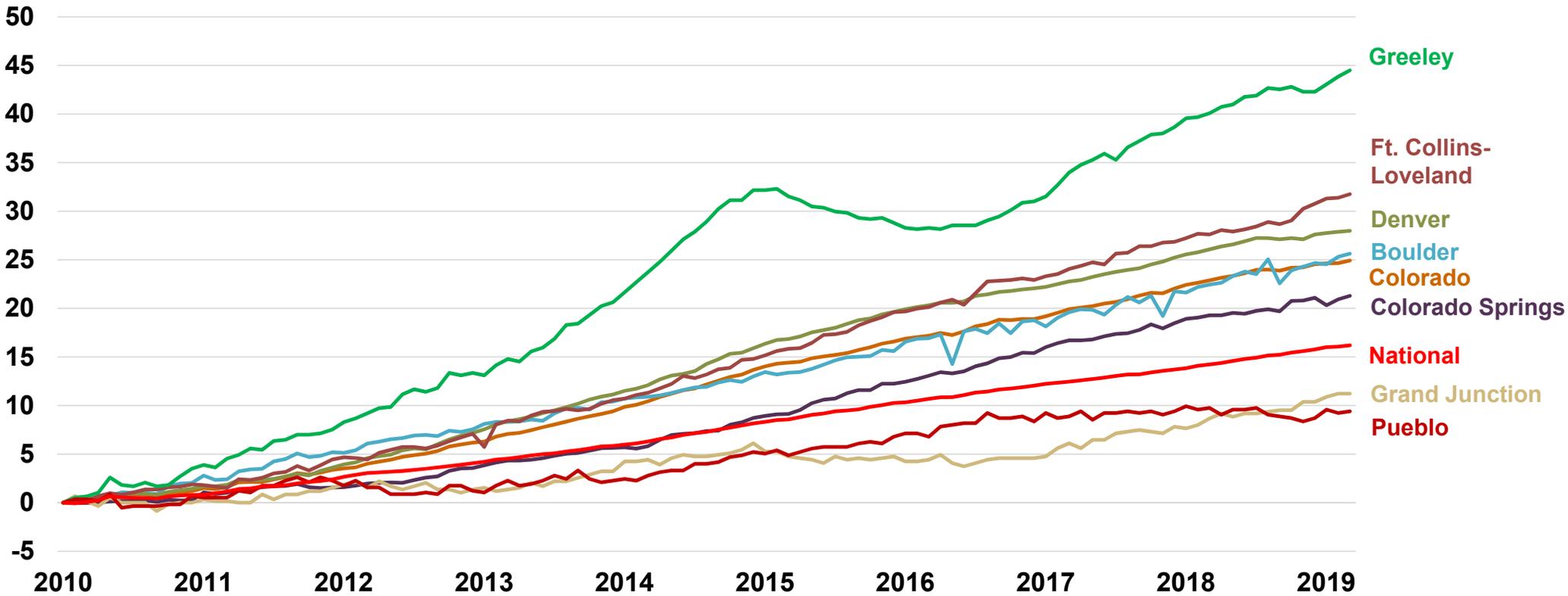
53,200

Sources: Colorado Department of Labor and Employment and the Colorado Business Economic Outlook Committee.

Employment In Current Decade

National, State, and Local

Percent Change from January 2010

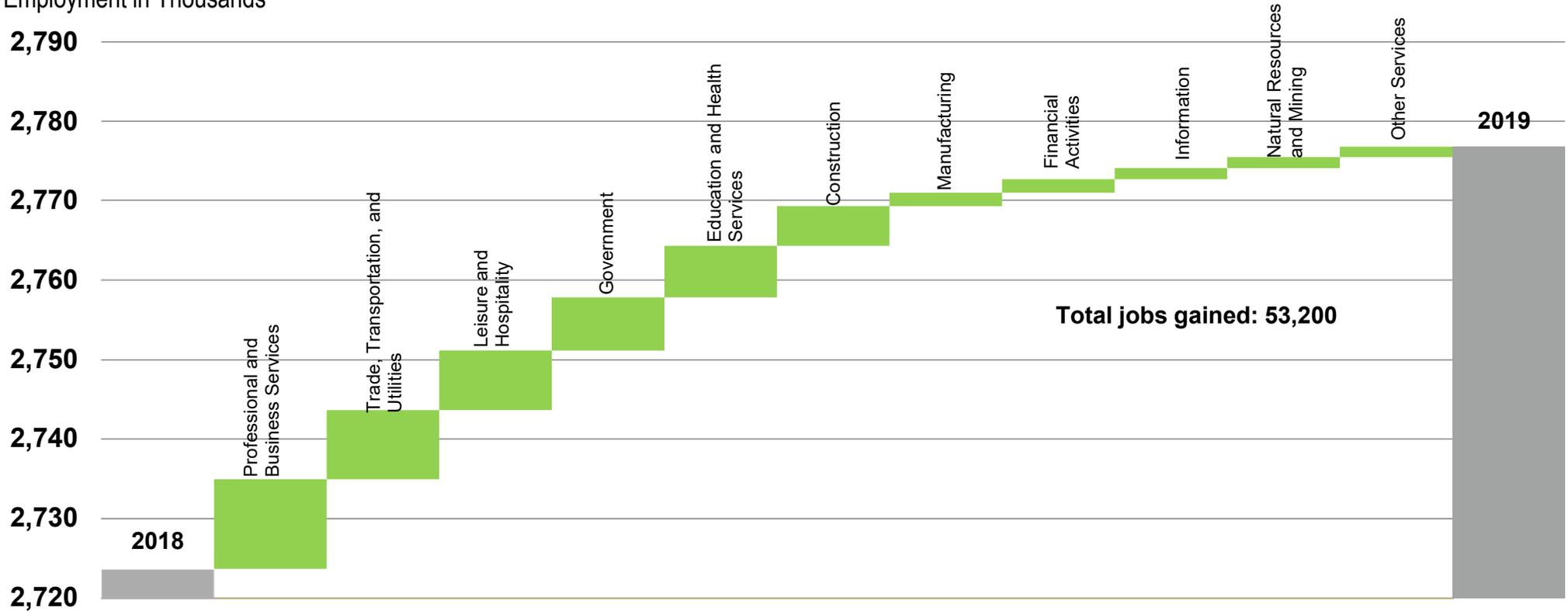


Source: Bureau of Labor Statistics, CES (Seasonally Adjusted).

Colorado Employment Change

2019 Growth

Employment in Thousands



Source: Bureau of Labor Statistics, Current Employment Statistics (SA).

Colorado Wages

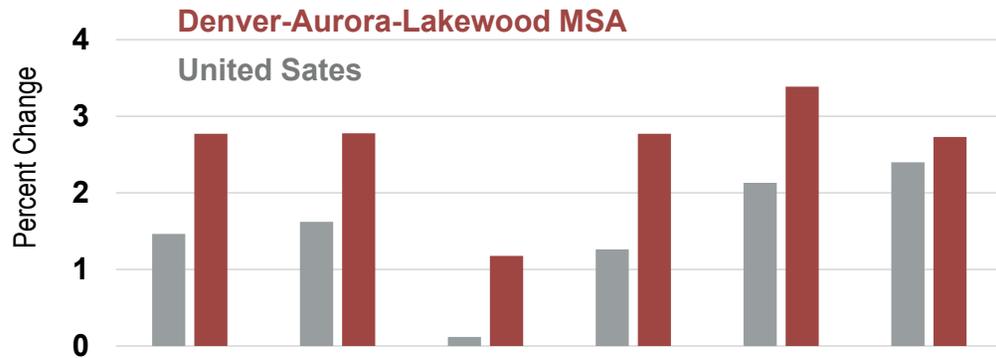
2018 Q4 (4Q Rolling Average)

Sector	Total Employment	YoY Employment Growth	Average Wages	YoY Wage Growth
Management of companies and enterprises	41,446	5.7%	\$136,060	-8.6%
Utilities	8,033	0.2%	\$104,512	4.8%
Information	75,210	4.1%	\$100,757	0.0%
Professional and technical services	228,191	4.3%	\$96,242	4.0%
Finance and insurance	112,822	1.0%	\$95,315	3.4%
Natural Resources and Mining	46,931	7.3%	\$87,526	3.9%
Wholesale trade	109,076	1.4%	\$85,486	3.0%
Federal Government	52,916	-0.5%	\$84,020	5.7%
Manufacturing	148,099	2.4%	\$70,680	1.8%
State Government	103,411	1.6%	\$64,912	3.7%
Construction	176,213	4.7%	\$62,414	5.0%
Real estate and rental and leasing	52,583	2.3%	\$59,452	3.9%
All Industries	2,697,493	2.3%	\$58,942	3.6%
Transportation and warehousing	81,018	7.3%	\$56,746	1.6%
Health care and social assistance	300,305	1.5%	\$51,211	2.9%
Local Government	266,103	1.9%	\$48,461	3.4%
Administrative and waste services	160,056	-0.1%	\$44,041	7.2%
Educational services	36,358	3.8%	\$41,575	3.1%
Other services, except public administration	82,527	2.4%	\$40,992	3.6%
Arts, entertainment, and recreation	54,240	2.8%	\$37,979	5.2%
Retail trade	276,173	0.4%	\$32,452	2.8%
Accommodation and food services	281,282	1.1%	\$23,442	5.9%

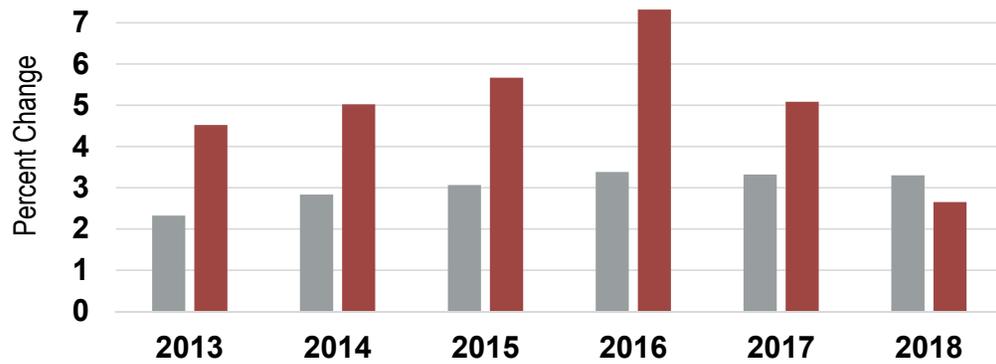
Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Inflation

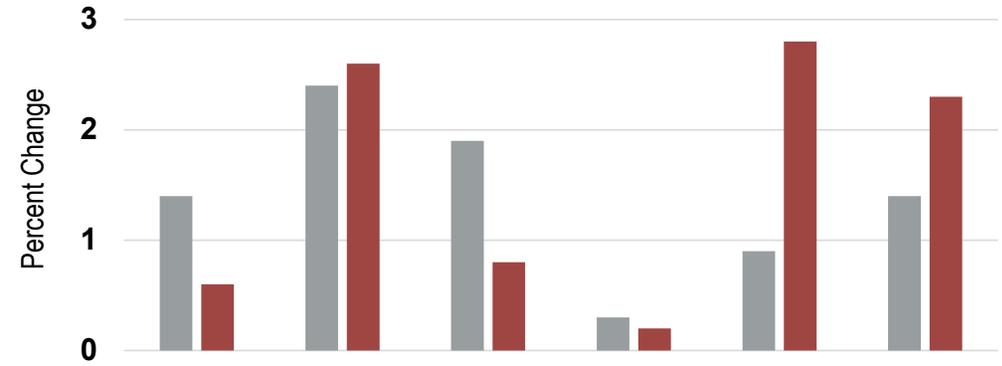
All Items



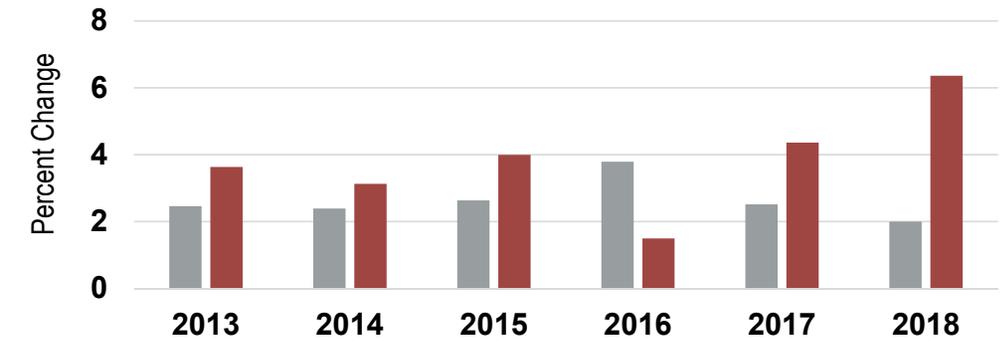
Shelter



Food



Medical Care



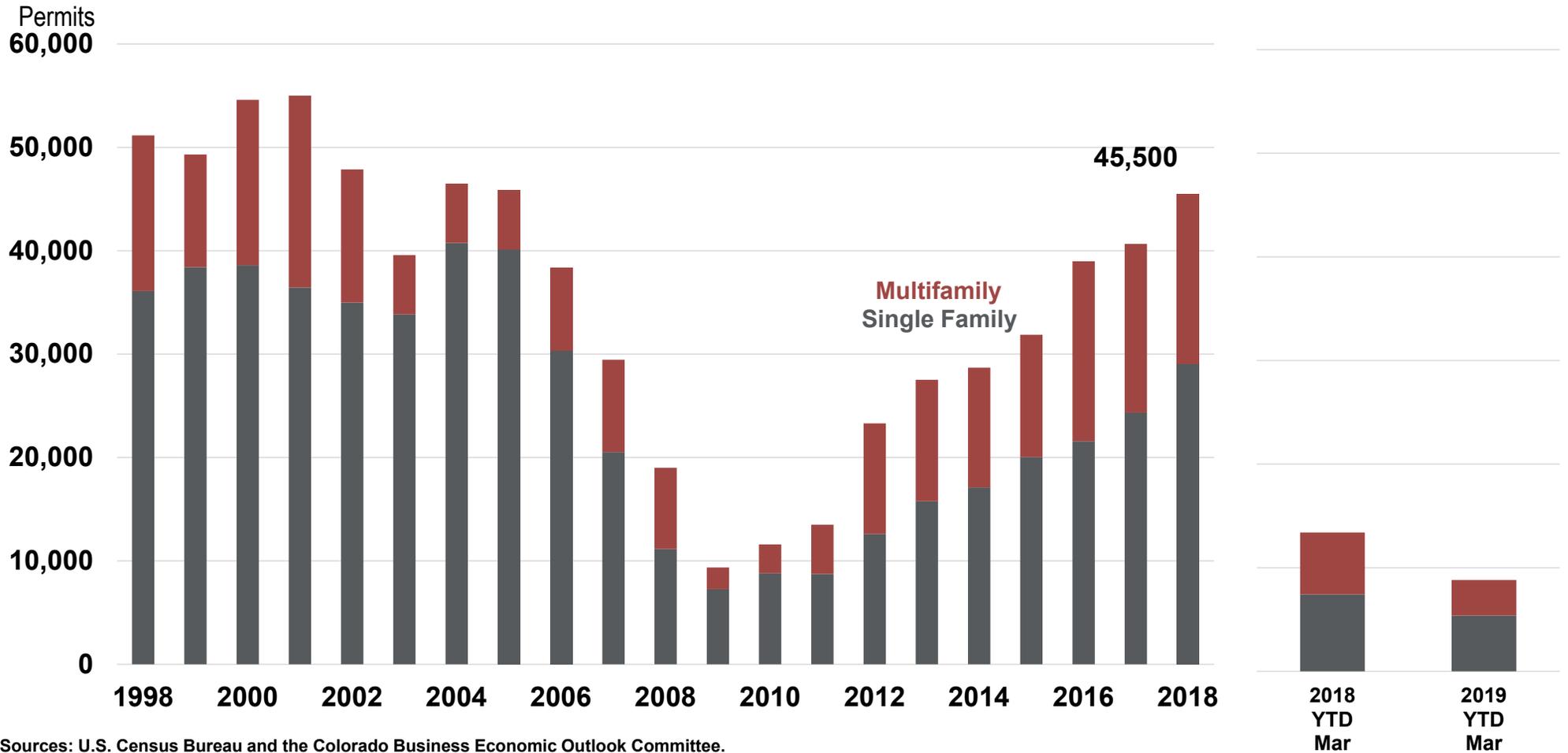
Source: Bureau of Labor Statistics (NSA).

Construction

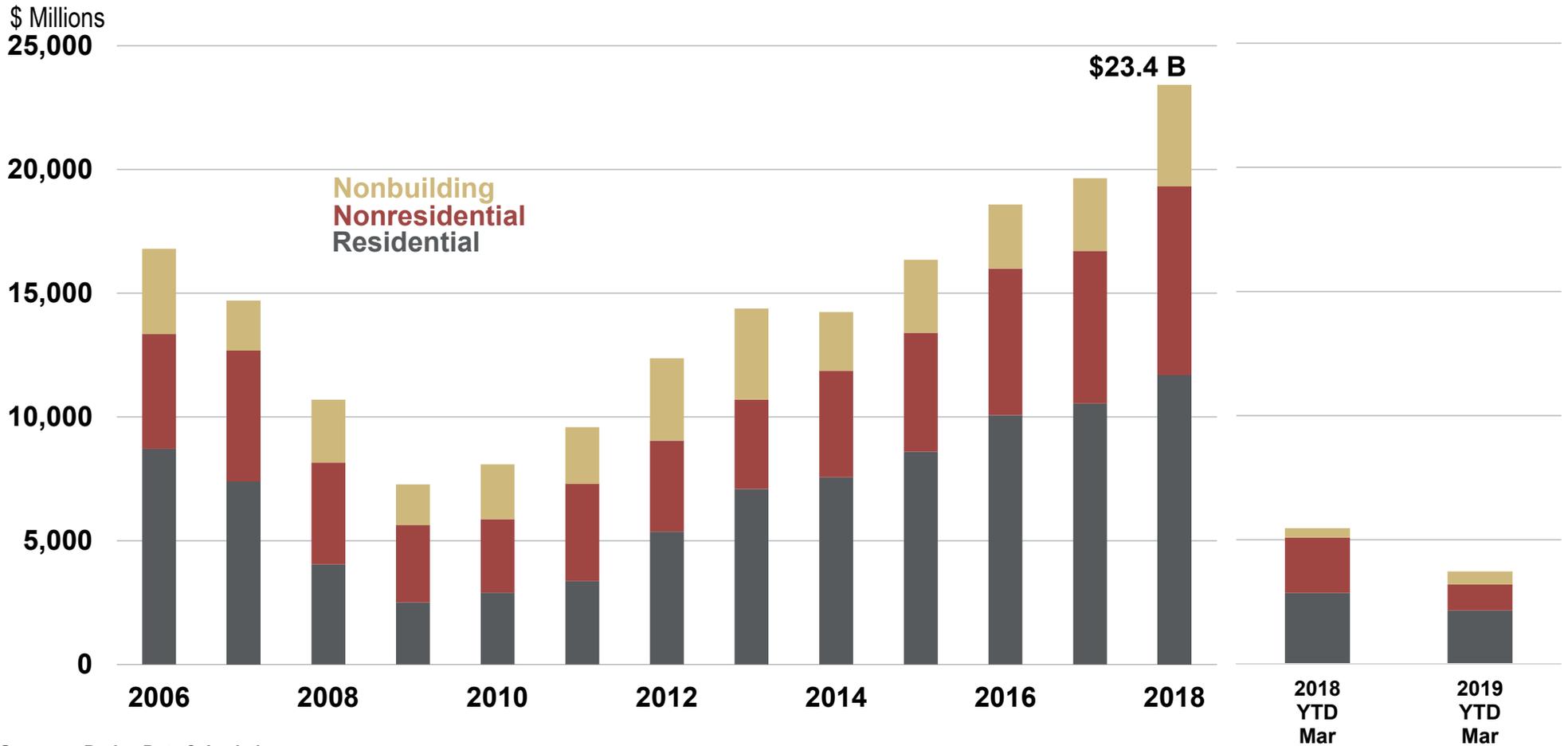


Photo courtesy of Denver International Airport.

Colorado Residential Building Permits



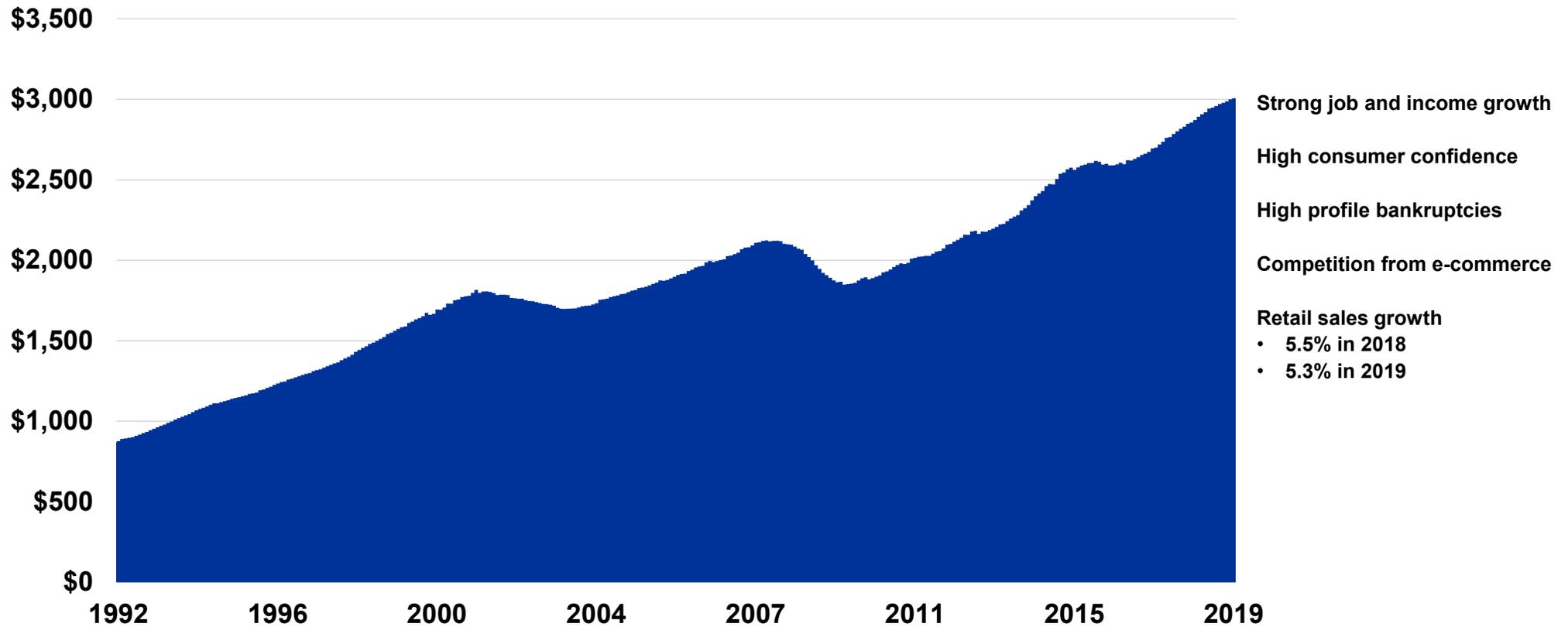
Colorado Value of Construction



Sources: Dodge Data & Analytics.

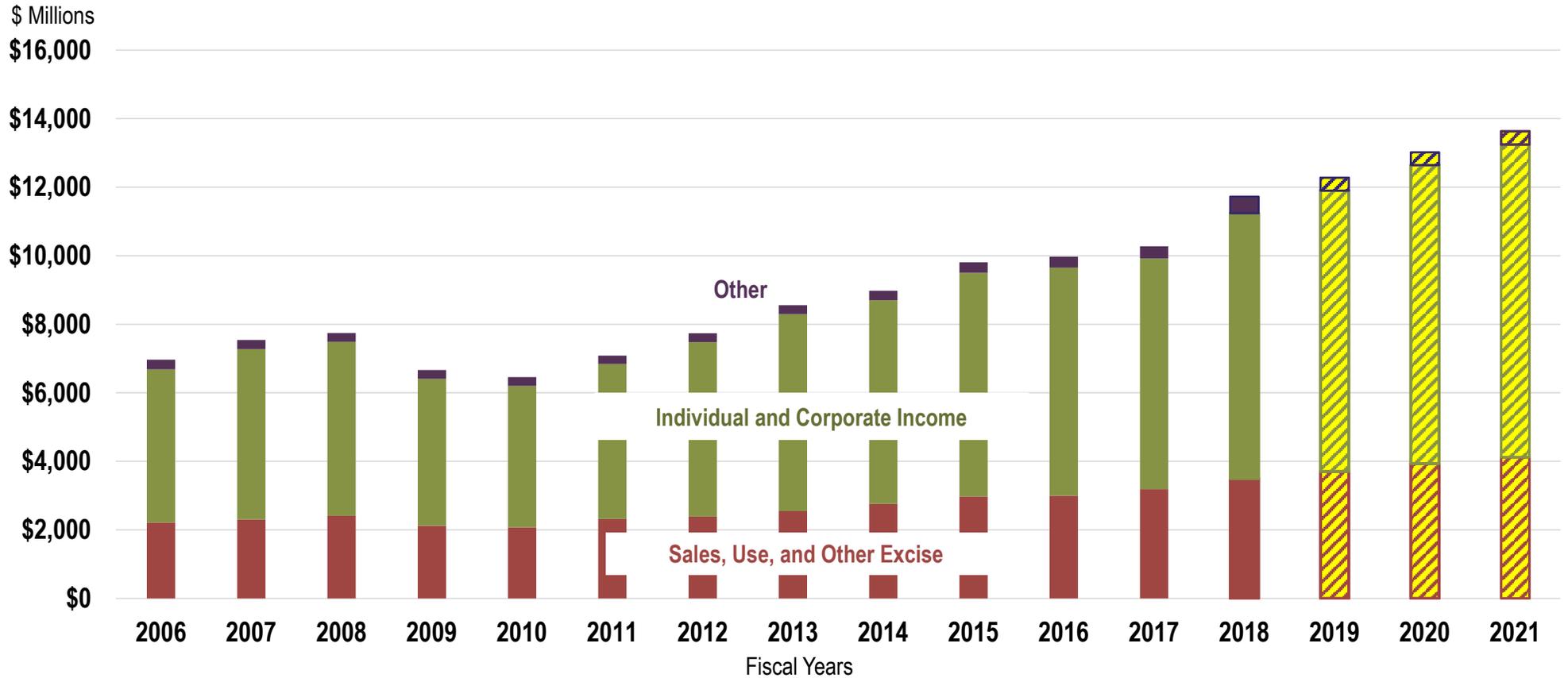
Colorado Sales Tax Collections

\$ Millions, 12-Month Rolling Sum



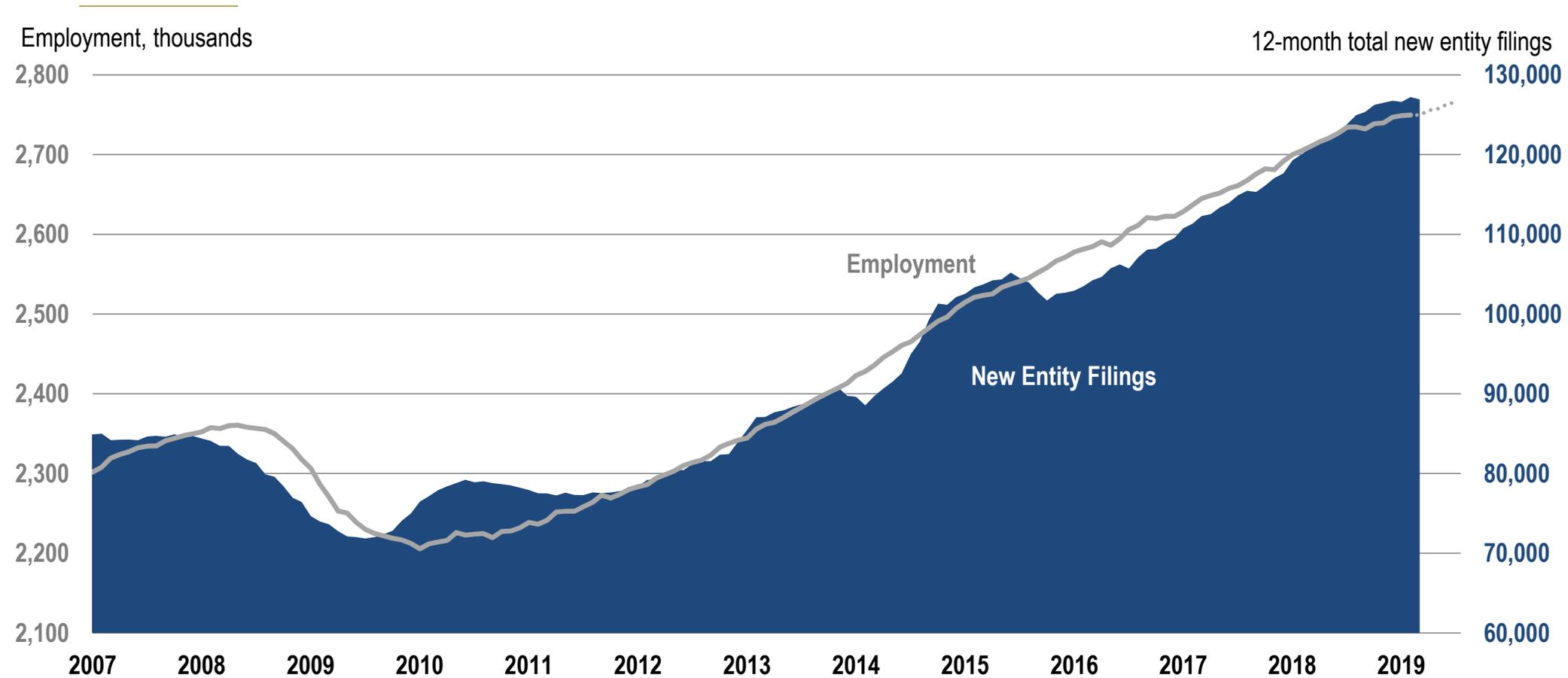
Sources: Colorado Office of the State Controller and the Colorado Department of Revenue.

Colorado General Fund



Source: Colorado Office of the State Controller and the Colorado Office of State Planning and Budgeting (March 2019). Note: Excludes revenue transferred to the State Education Fund.

Employment and New Entity Filings



Note: Solid line displays actual seasonally adjusted employment numbers; dotted line reflects calculated forecasts.
Source: Seasonally adjusted. Colorado total nonfarm employees from the Bureau of Labor Statistics, Current Employment Statistics (CES), calculations by BRD research team.

Colorado Ranking Among Other States

Metric	1-Year	3-Year	5-Year	10-Year
Real GDP Growth	13	10	5	6
Employment Growth	13	7	8	6
Population Growth	8	7	5	3
Personal Income Growth	4	7	7	3
PCPI Growth	10	22	15	NA
PCPI	11	13	14	NA
Average Annual Pay % Growth	11	21	16	24
Average Annual Pay	9	12	13	10
Unemployment Rate	20	1	11	22
Labor Force % Growth	3	1	2	4
LFPR	4	6	12	11
FHFA Home Price Index Growth	5	5	2	1

Data Sources: Bureau of Economic Analysis (2018), Bureau of Labor Statistics (01/19), U.S. Census Bureau (2017), Bureau of Labor Statistics (2019), Bureau Federal Housing Finance Agency All Transactions Index (Q3 2018), BRD calculations. Note: 1-year, 3-year, and 5-year are based on the compound annual growth rate.

Potential Headwinds for 2019

International/National

- Interest rates
- Global growth
- Value of the dollar
- Trade/Tariffs

State

- Commodity prices/cycle
- Drought and weather
- Housing affordability
- Talent shortage
- Real wage increases



The Boulder MSA and Louisville Economy



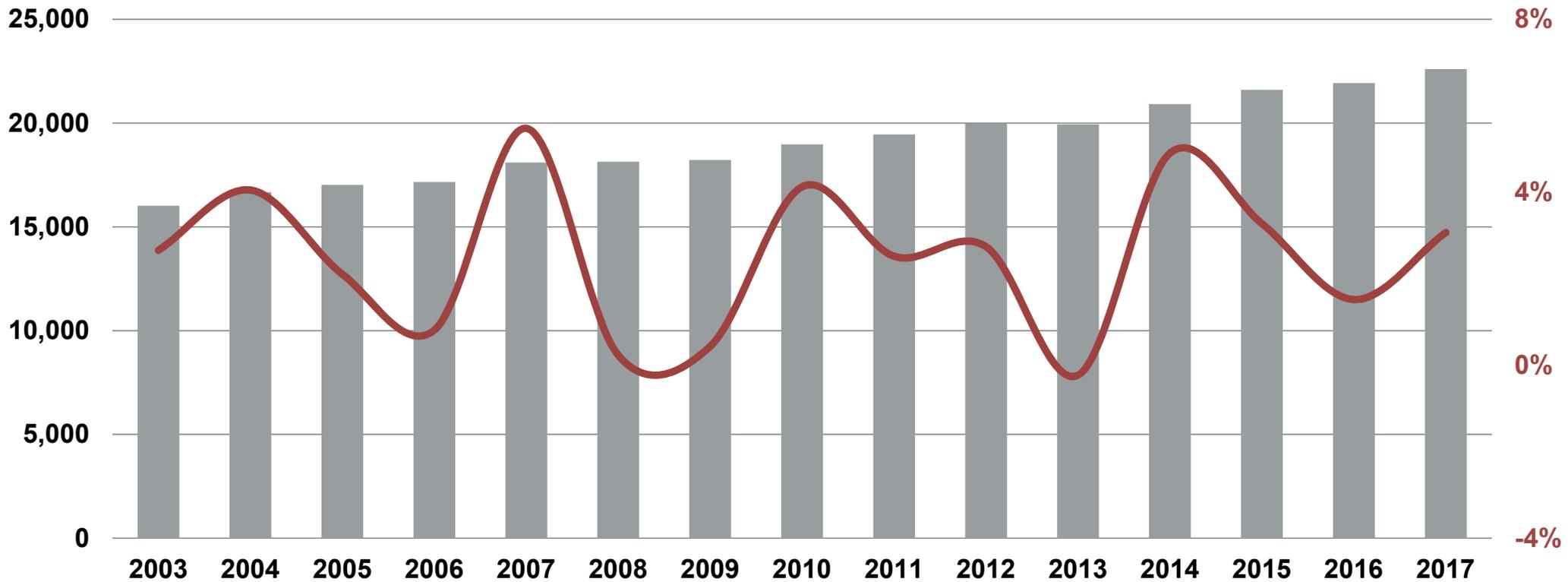
Photo courtesy of the Louisville Historical Museum.

Real Gross Domestic Product

Boulder MSA

Millions of Chained 2009
Dollars
25,000

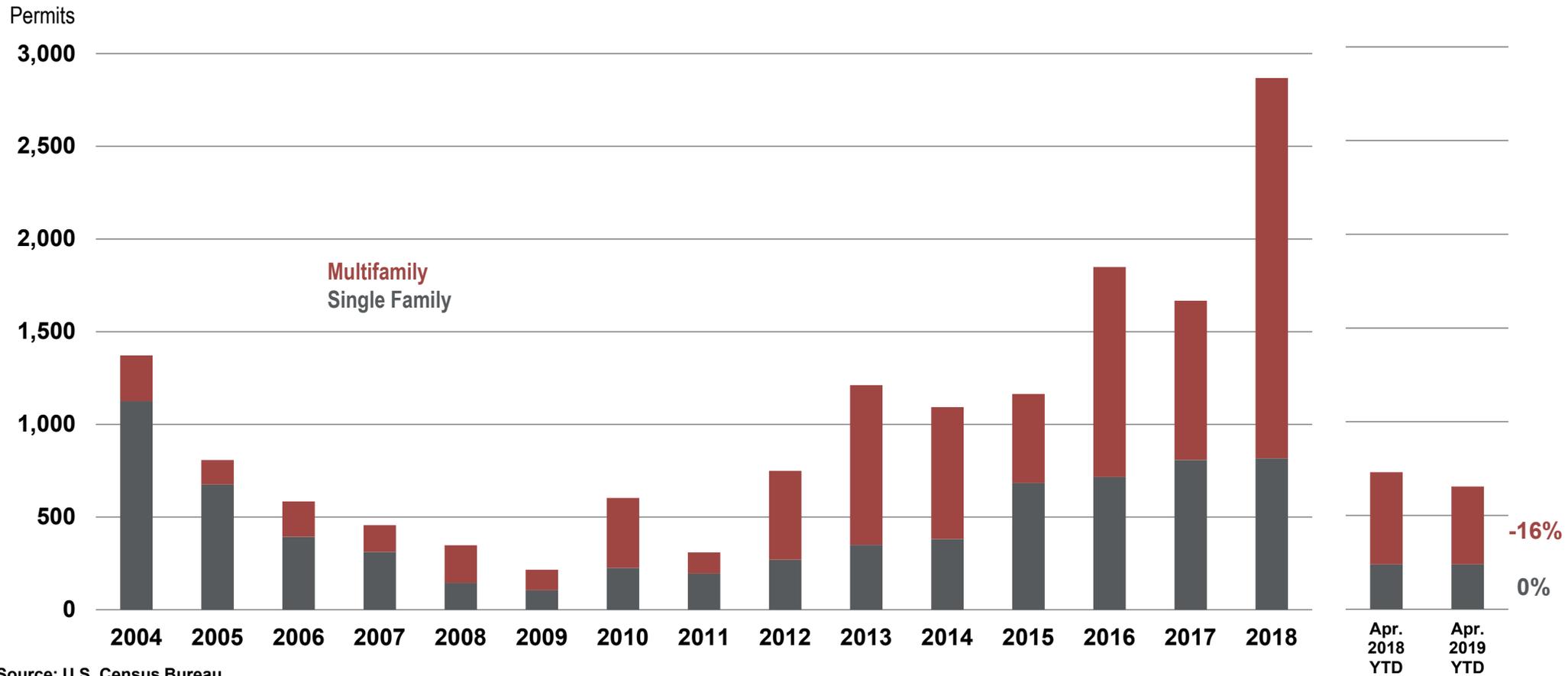
Percentage Change



Source: Bureau of Economic Analysis.

Single Family v. Multifamily Permits

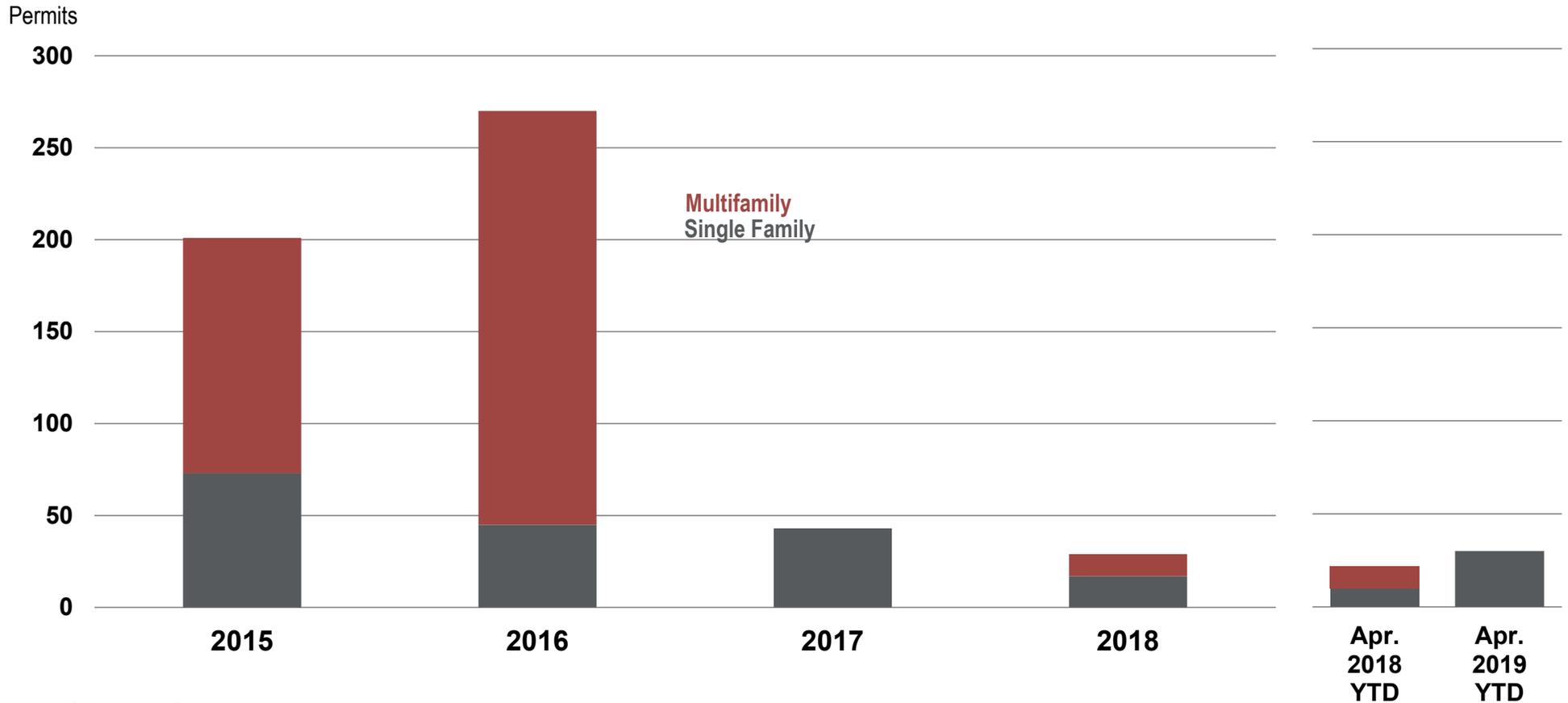
Boulder MSA, Year-to-Date



Source: U.S. Census Bureau.

Single Family v. Multifamily Permits

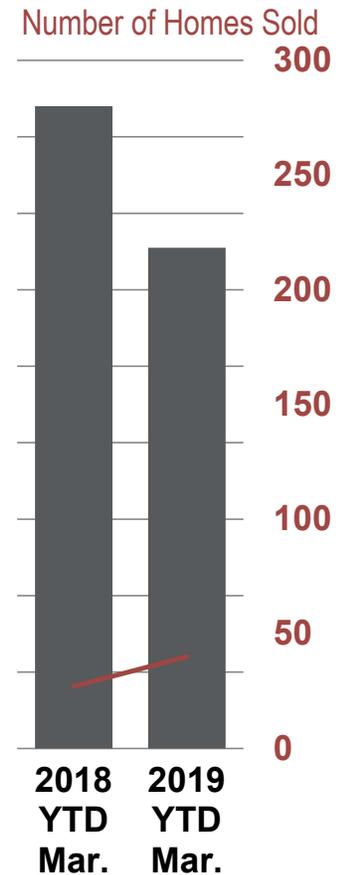
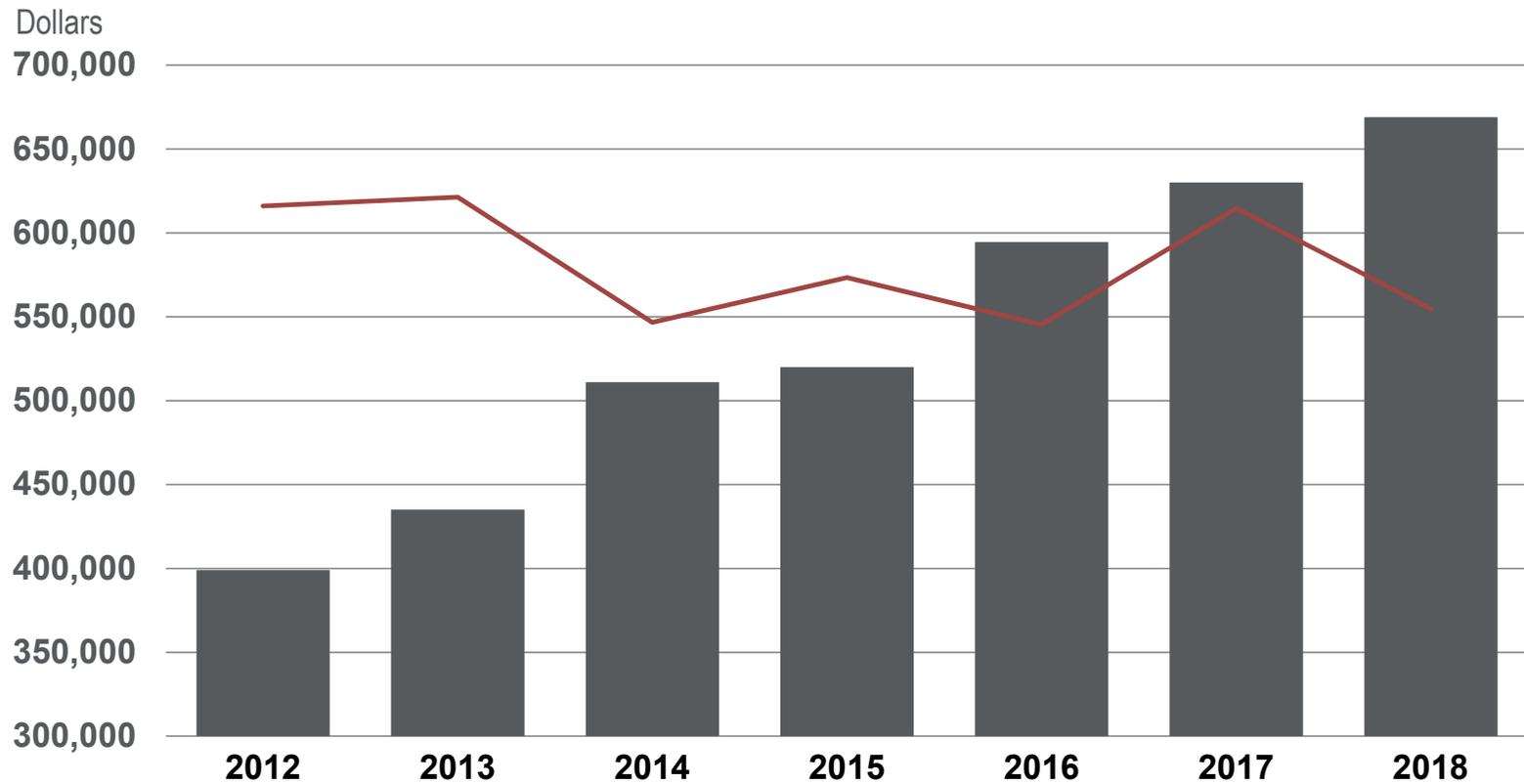
Louisville, CO, Year-to-Date



Source: U.S. Census Bureau.

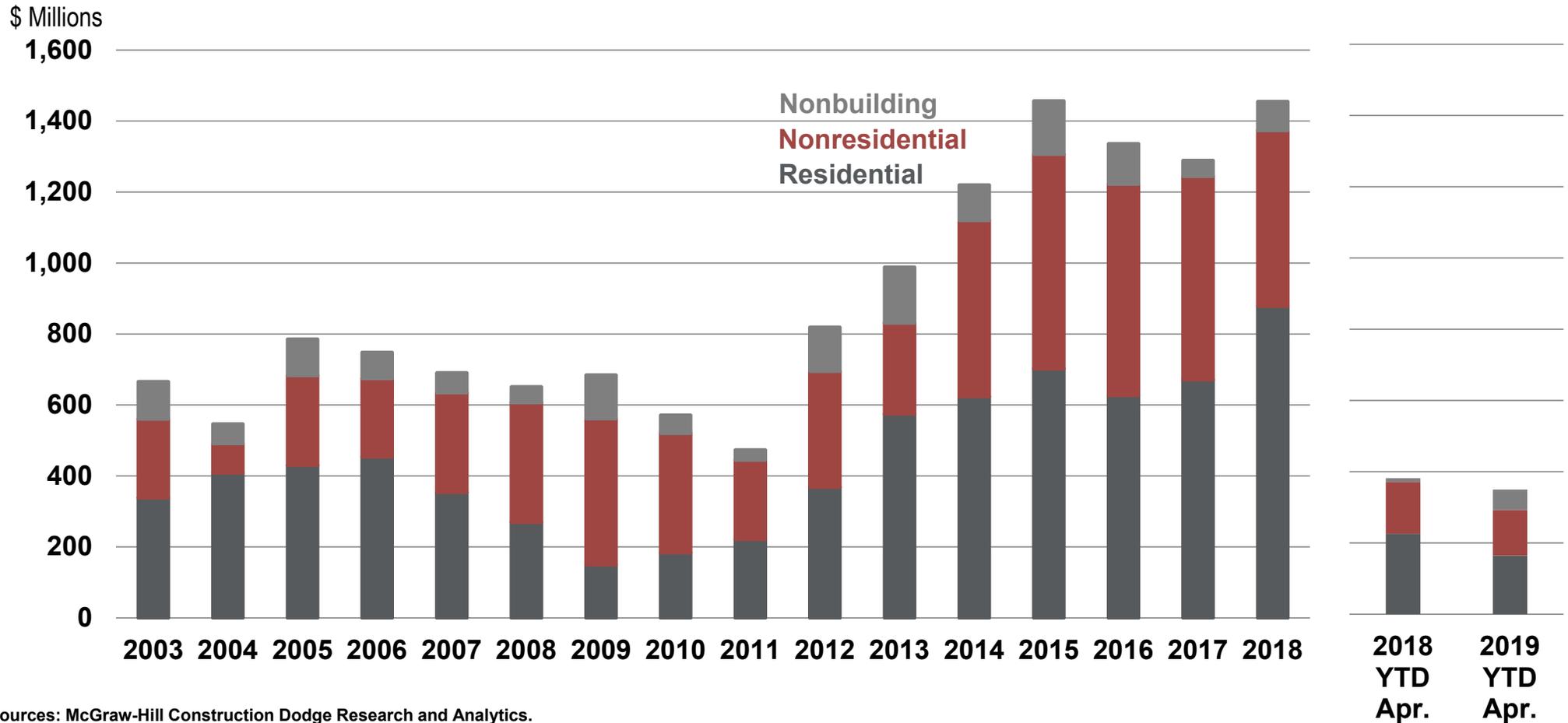
Median Price of Single Family Homes Sold

City of Louisville



Source: Boulder Area Realtor Association. Excludes condos and townhomes.

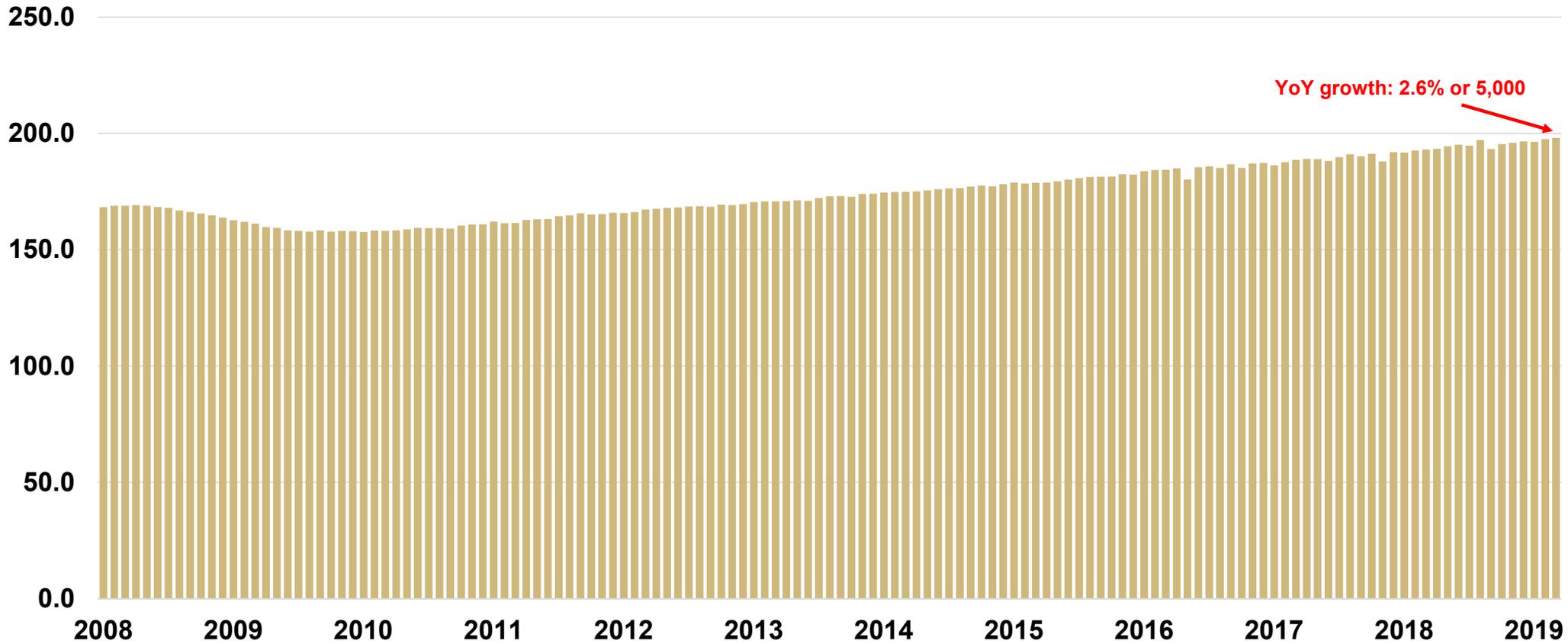
Boulder County Value of Construction



Sources: McGraw-Hill Construction Dodge Research and Analytics.

Boulder MSA Employment

Employment, in thousands

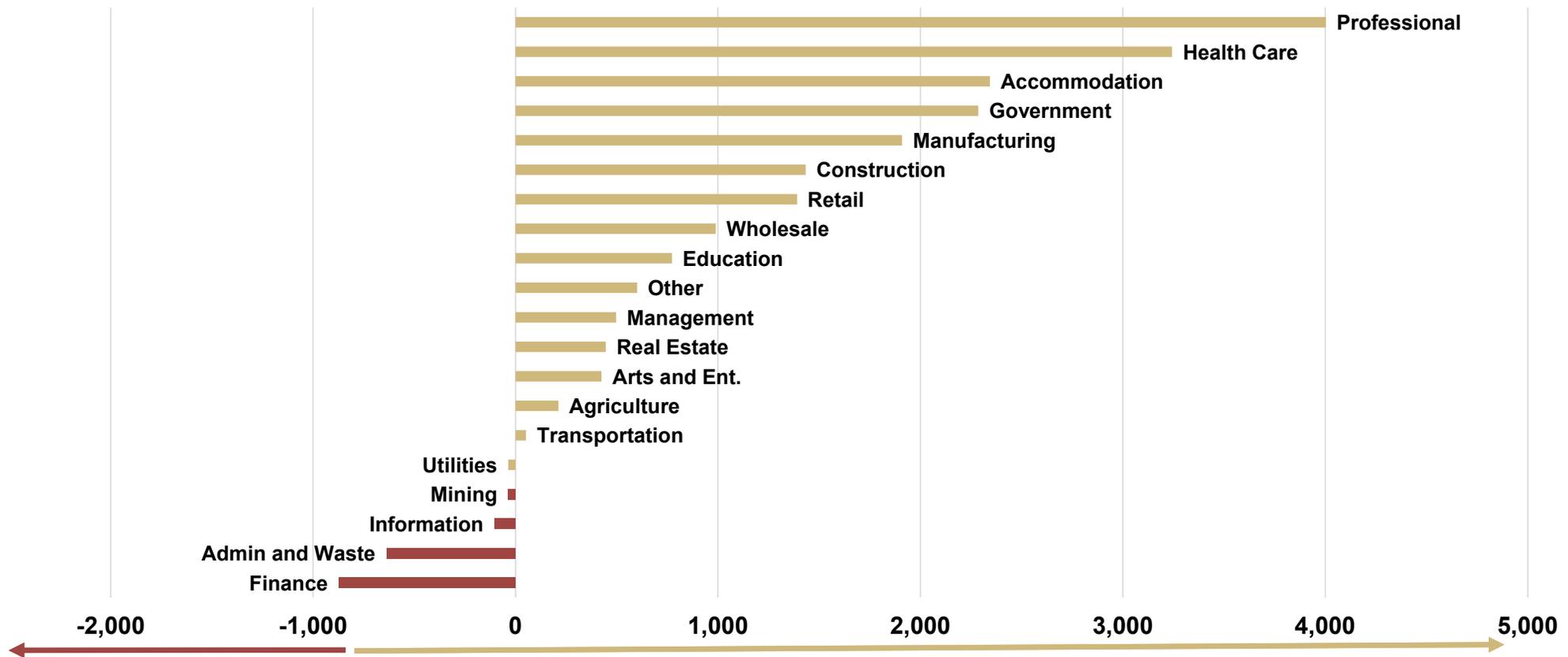


YoY growth: 2.6% or 5,000

Source: Bureau of Labor Statistics, CES (SA), March 2019.

Boulder County

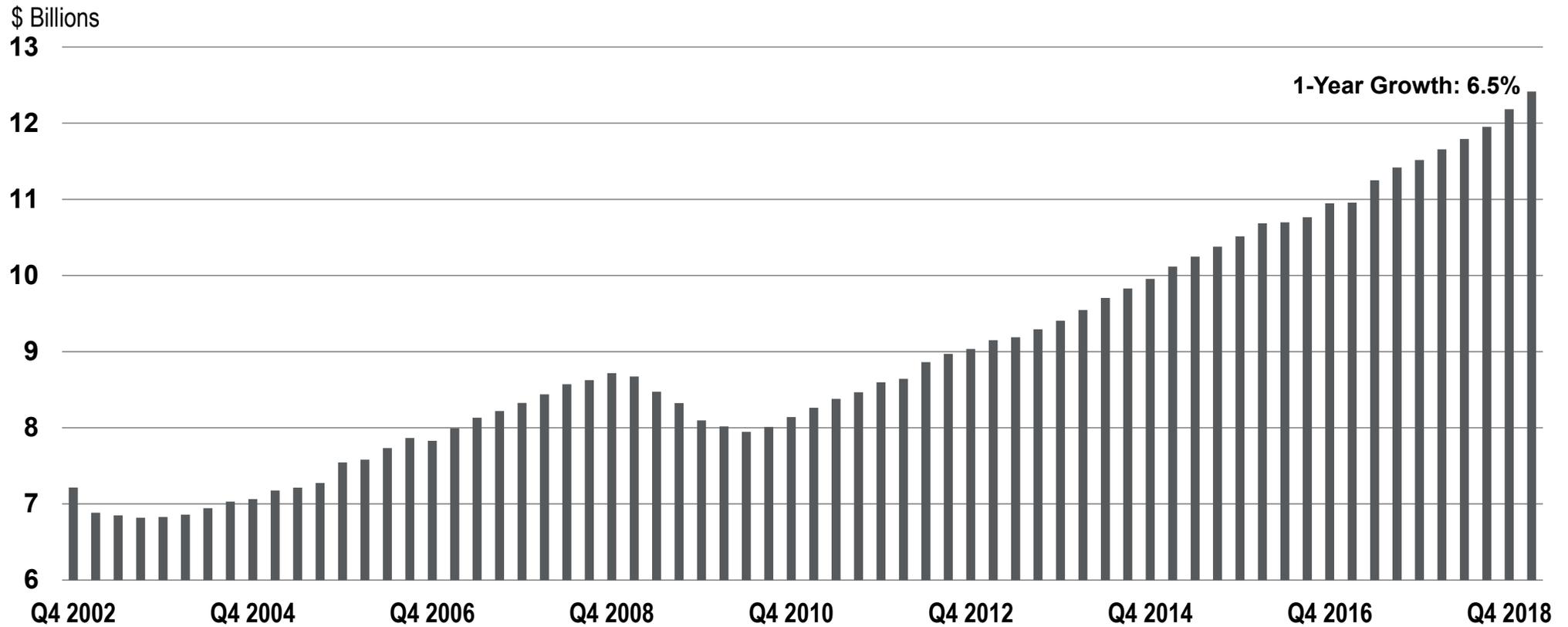
Jobs Added, 5 Years



Source: Colorado Department of Labor and Employment, QCEW.

Boulder County Wages

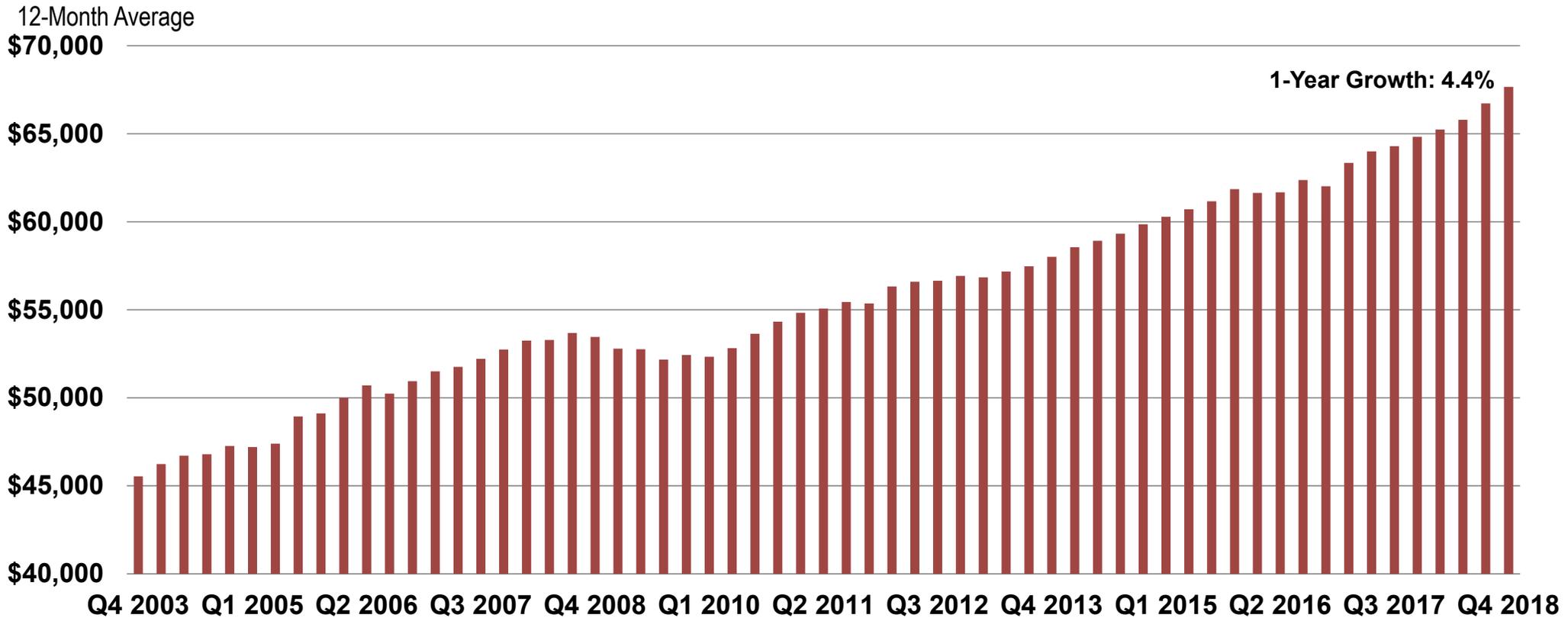
Annual Rate (4Q Rolling)



Source: Bureau of Labor Statistics, QCEW Data Series, NSA.

Boulder County Average Wages

Annual Rate (4Q)

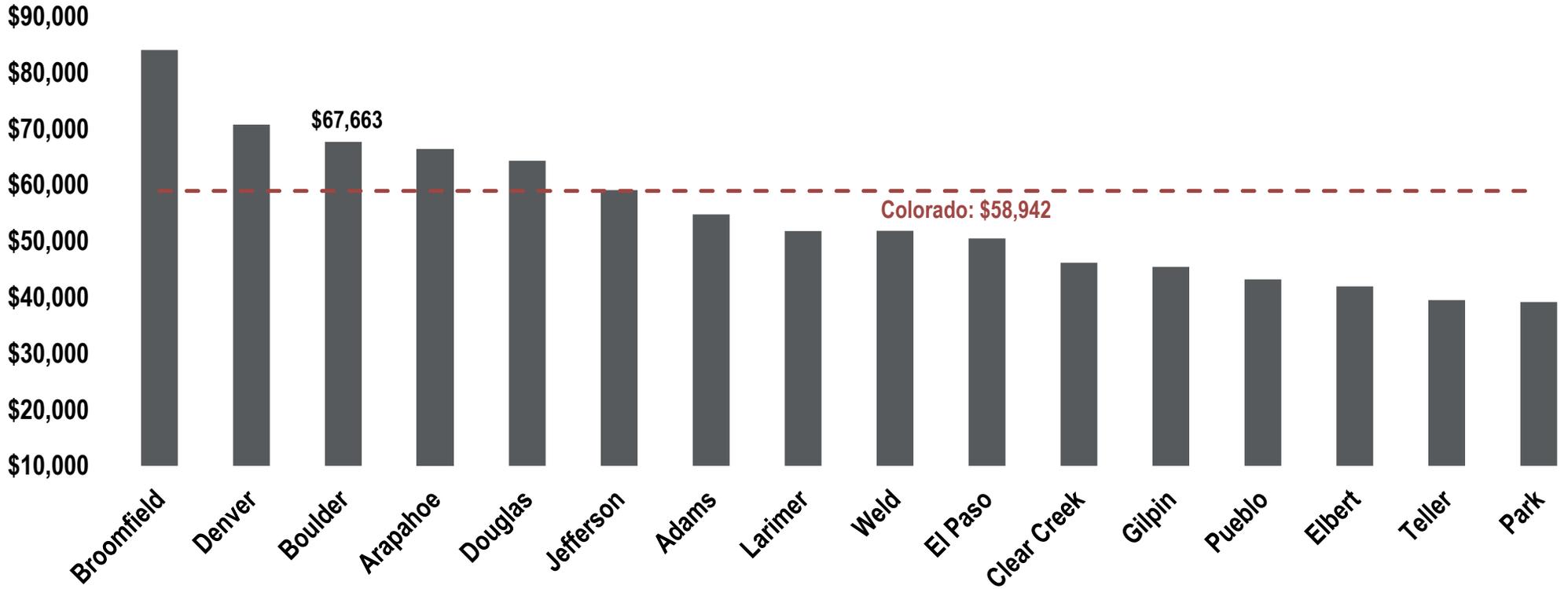


Source: Bureau of Labor Statistics, QCEW Data Series, NSA. Based on data through Q2 2018.

Average Annual Wages

Front Range

12-Month Average

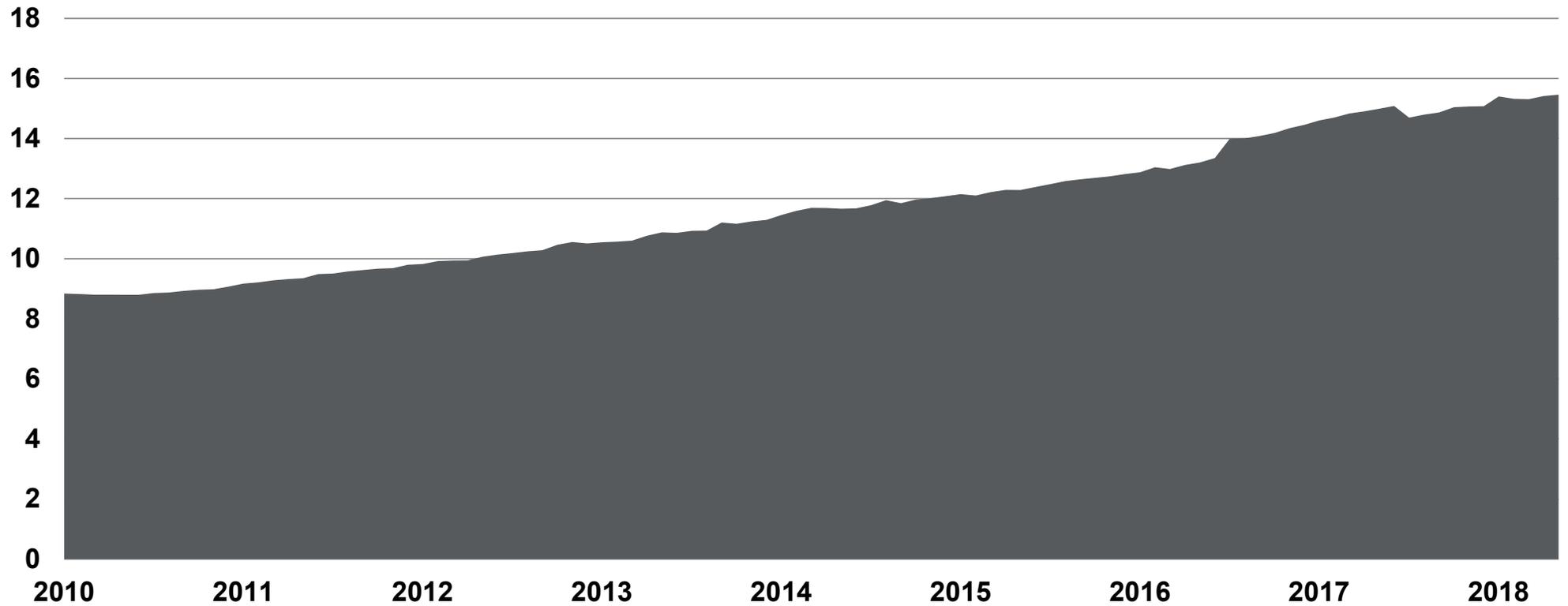


Source: Bureau of Labor Statistics, QCEW, as of Q4 2018.

Sales Tax Collections

City of Louisville, 12-Month Rolling Sum

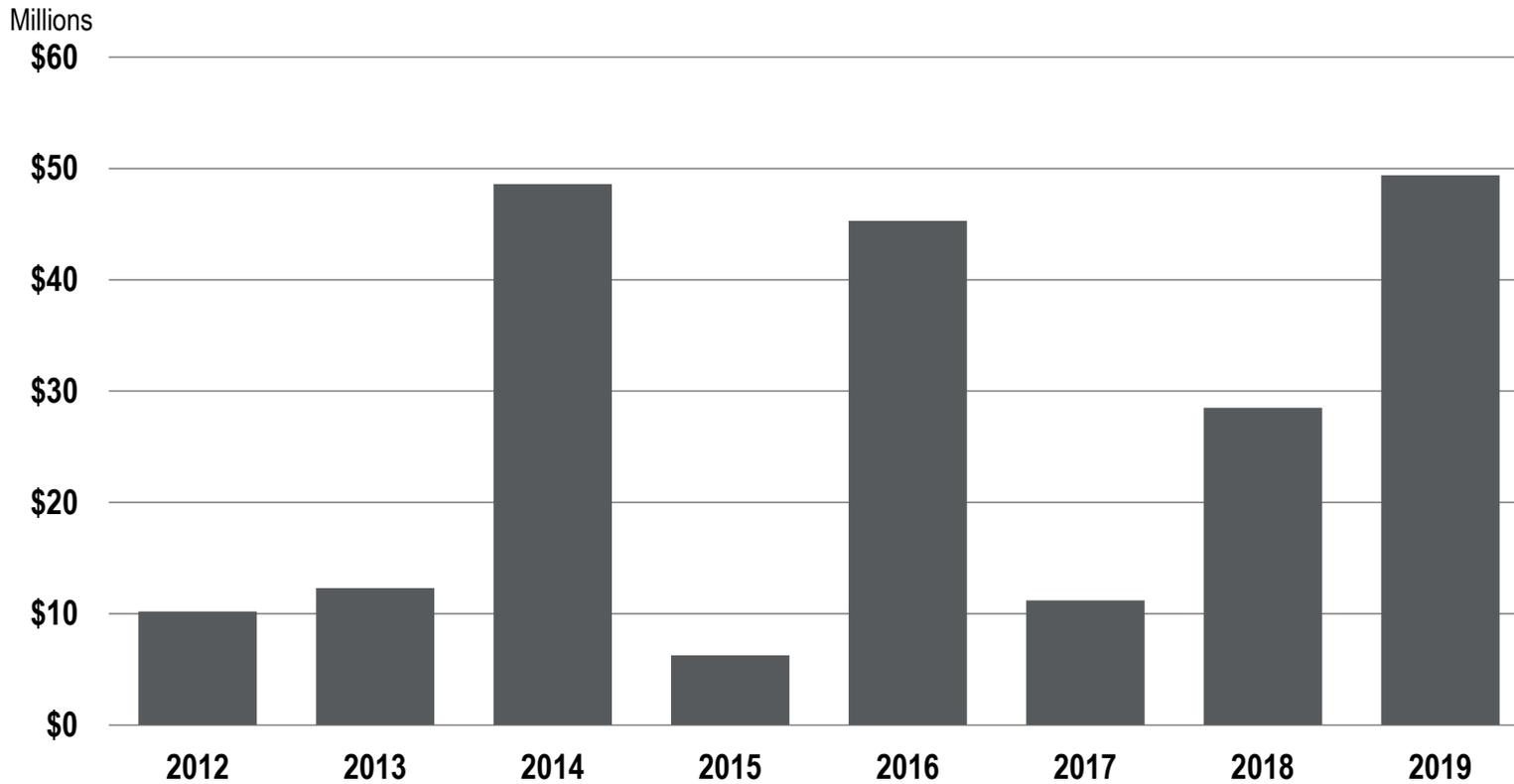
\$ Millions



Source: City of Louisville.

Venture Capital Investment

City of Louisville



Sample Deals:

Forge Nano
Boulder Surgical
Eximis Surgical
Solid Power
Threat X

Source: CB Insights.

FIFTY-FOURTH ANNUAL

COLORADO

BUSINESS ECONOMIC
OUTLOOK

2019

#COBizOutlook