

MESA COUNTY ECONOMIC UPDATE

First Quarter 2020



Provided by the Business Department of Colorado Mesa University

Economic Summary

- The number of employed increased by 1,962 from 2018 to 2019. This makes four strong years of employment growth, with 2017-2019 being exceptionally strong.
- GDP came in strong at 4.7% growth, while poverty numbers have fallen for the second year in a row.
- Healthcare continues its march upwards, adding 382 jobs and contributing \$10.5 million dollars in new wages to the area. Educational services, retail trade, and agriculture are the next three biggest wage contributors year over year. The contribution of agriculture increased due to the increase in hemp farming.
- The national economy remains strong with a 3.5% unemployment rate, while consumer spending remains steady. The coronavirus is a real threat to global supply chains, financial markets, and the global economy, and has the potential to slow U.S. and global growth during its outbreak.

The Mesa County Economic Update is provided by the Business Department of Colorado Mesa University and is published quarterly. Please direct all correspondence to Dr. Nathan Perry, Associate Professor of Economics, 970.248.1888, naperry@coloradomesa.edu.

CONTENTS

Local Economic Indicators.....	1
The Local Labor Market	2
Mesa Industry Trends	4
Local Real Estate Indicators	7
Regional Energy.....	8
Drilling Permits and Gas Jobs	9
National Economic Indicators	10
National Economic Performance	11
State of National Economy.....	12

LOCAL ECONOMIC INDICATORS

	Q4 2019	Q3 2018	Q4 2018	change since last quarter	change since last year (comparable quarters)
Local Labor Market					
Unemployment Rate Mesa County -SA	3.20%	3.60%	4.40%	-0.40%	-1.20%
Unemployment Rate Mesa County -NSA	2.90%	3.10%	4.30%	-0.20%	-1.40%
Unemployment Rate Colorado -SA	2.60%	2.80%	3.60%	-0.20%	-1.00%
Unemployment Rate U.S. -SA	3.50%	3.60%	3.80%	-0.10%	-0.30%
Labor Force	77,903	77,824	77,524	79	379
Employed	75,612	75,433	74,198	179	1,414
Unemployed	2,291	2,390	3,326	-100	-1,035
Business Confidence					
Leeds Colorado Business Confidence	50.8	46.9	50.1	8.32%	1.40%
Sales/Use Taxes					
	Q4 2019		Q4 2018		
City Sales/Use Taxes (YTD)	\$58,832,667		\$56,969,459		3.27%
Mesa County Sales/Use Tax (YTD)	\$38,388,057		\$36,202,899		6.04%
City Lodging Tax Revenue (YTD)	\$3,263,677		\$1,574,224		107.32%
Business Filings					
	2019		2018		
Mesa County New Business Entity Filings	1,927		1,830		5.30%

Grand Junction Regional Airport	Q4 2019	Q3 2019	Q4 2018	% change from last quarter	% change from last year
Scheduled Enplanements	71,173	69,573	62,758	2.30%	13.41%
Standard of Living and Growth	2018	2017	2016	% change since 2017	% change from 2016
Mesa County Gross Regional Product (in millions)	\$6,253	\$5,970	\$5,695	4.74%	9.80%
Percent of Population Below Poverty Line	15.70%	16.00%	16.30%	-0.30%	-0.60%
Median Household Income	\$51,132	\$52,623	\$49,825	-2.83%	2.62%
Population	151,616	149,794	148,116	1.22%	2.36%
Personal Income	\$6,884,366	\$6,395,255	\$5,967,780	7.65%	15.36%
Personal Income Per Capita	\$44,935	\$42,239	\$39,828	6.38%	12.82%

SOURCES IN ORDER OF LISTING: Local Unemployment Rates: Bureau of Labor Statistics (LAUS); National Unemployment Rate: Bureau of Labor Statistics; Labor Force, Employed, and Unemployed: Colorado Department of Labor and Employment; Business Confidence: Leeds Business Confidence Index; Sales/Use/Lodging Taxes: City of Grand Junction, Mesa County; Business Permits: Colorado Secretary of State's Office; Scheduled Enplanements: Grand Junction Regional Airport; Median Household Income, Poverty Rate, Population, and Personal Income: U.S. Bureau of the Census; Gross Regional Product: Bureau of Economic Analysis. Note that in all rows where percentages are presented the % change since last quarter and % change since last year represents the difference between the two percentages, not the actual percentage change.

Local Labor Market

The fourth quarter 2019 labor market numbers for Mesa County were outstanding, with a 3.2% seasonally adjusted unemployment rate and a 2.9% non-seasonally adjusted unemployment rate. This is exceptionally low for winter time, as seen by comparing to Q4 2018's rate of 4.3%

Employment increased by 179 from last quarter, which is rare from Q3 to Q4, as employment usually falls due to seasonal effects. Comparing Q4 of 2018 to Q4 of 2019 we see an increase of 1,414 people employed. When comparing the average employment of 2018 to 2019 (table 1), the number of employed increased by 1,962. This makes four strong years of employment growth, with 2017-2019 being exceptionally strong (figure 1). Looking back five years and creating a simple regression trend, Mesa County has added on average 159.24 employed people per month, or 1,910 per year (figure 3).

Other Local Data

Several new data points for Mesa County became available in the recent months, including Gross Domestic Product (GDP) numbers. GDP is the measure of total output, and for 2018 shows 4.7% growth, almost identical to 2017's 4.8% growth (see figure 3). It will be several months until we get 2019's GDP data, but based on labor market conditions I expect it to be as strong as 2017 and 2018. A 4.7% growth rate is significantly higher than the national GDP growth rate (see figure 3 in the National section).

The Census Department released a poverty estimate, which estimates the percentage of people below the poverty line. This fell from 16.3% in 2016 to 16% in 2017 to 15.7% in 2018, and has fallen two years in a row.

Table 1:
**10, 5, and 1 Year Employment Comparison
(Yearly Comparisons)**

	Labor Force	Employed	Unemployed
Annual	1,570	1,962	-392
5-Year	4,403	6,246	-1,843
10-Year	-4,436	-288	-4,148
Annual %	2.06%	2.69%	-12.59%
5-Year %	6.01%	9.10%	-40.40%
10-Year %	-5.41%	-0.38%	-60.40%

Another important standard of living indicator is median household income. The point estimate for median household income fell from 2017 to 2018, which was very unexpected. After digging into the data, there are a couple of potential explanations for this fall: 1) Mesa County is aging, and as a population gets older incomes can fall. 2) There is a lower marriage rate and higher divorce rate for 2018, which can equate to lower incomes. 3) The sample of the survey was relatively small, and the confidence interval around the point estimate very large. Because of the sample size, one cannot say with statistical confidence that 2018 had a legitimately lower median household income than 2017. With these three factors combined, I am not concerned with the fall in median household income and expect that the strong growth in the county will push this number up in 2019.

Other positive data points include the continued upward trend in airport enplanements, which are up 13% from Q4 2018, and rising sales tax income for both the County and City.

Figure 1:
Mesa County Employment Gains/Losses

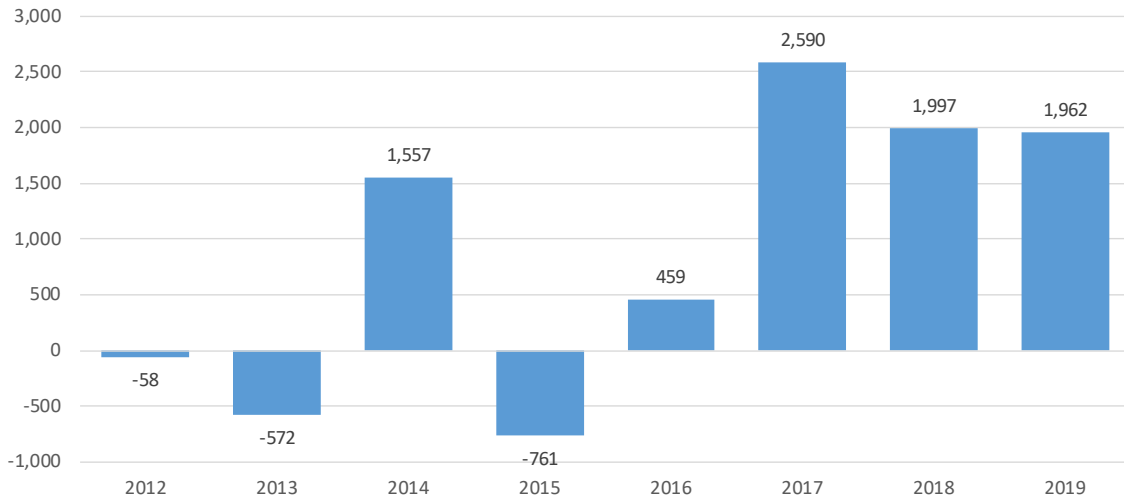


Figure 2:
Mesa County 5 Year Employment

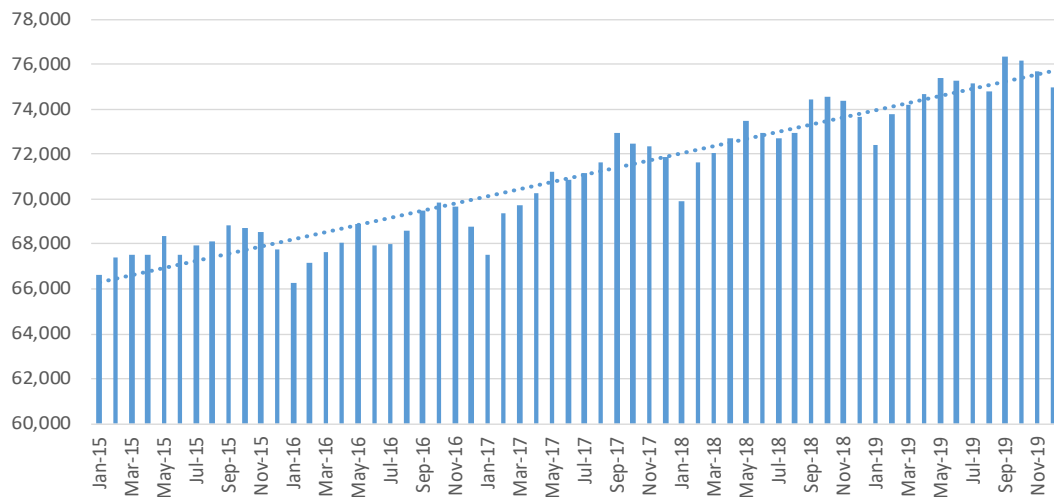
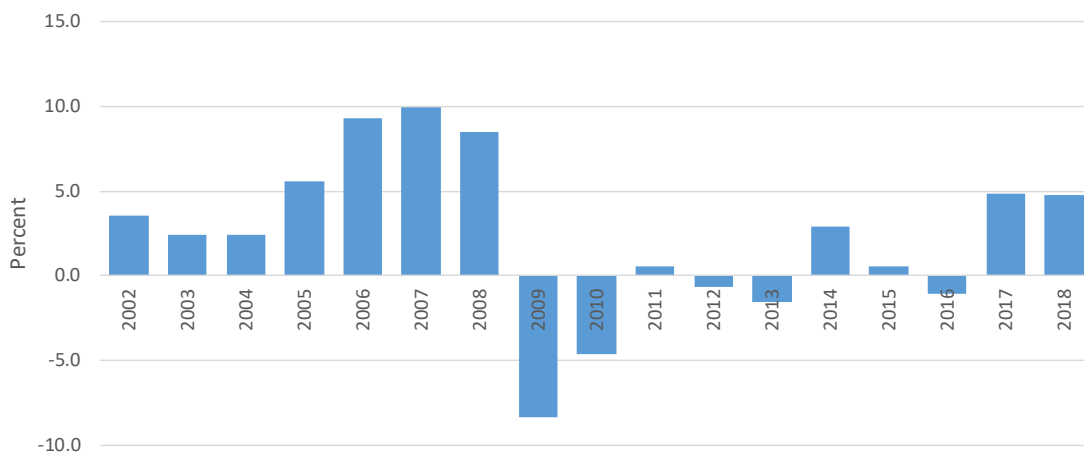


Figure 3:
Mesa County GDP Growth Rate



Mesa County Employment Trends

Third quarter QCEW data shows a total wage increase of \$35.7 million dollars and 766 new jobs. QCEW is industry level data that illustrates wages and employment by industry, but does not capture 100% of employment (sole proprietors and many farm employees are not included in this dataset). Healthcare continues its march upwards, adding 382 jobs and contributing \$10.5 million dollars in new wages to the area (see figures 4 and 5). Educational services, retail trade, and agriculture are the next three biggest wage contributors year over year. Agriculture, forestry and fishing added 160 new jobs, with agriculture alone adding 169 jobs (with 9 job losses spread amongst the other subcategories). This agriculture jump was primarily in hemp farming, as the whole state has seen a jump in hemp numbers (Colorado Department of Labor and Employment). Construction took an abrupt hit to its recent trend upwards, losing 51 jobs. Construction losses were focused in heavy and civil engineering construction, with slight gains in construction of buildings and slight losses in specialty trade contractors. The biggest job losses were in oil/gas/mining, which lost 160 jobs and \$1.4 million in wages. In Q2 of 2019 the QCEW data indicated job losses in oil and gas of 130, Q3 shows losses of 160. This trend is expected to continue for the next several quarters as long as natural gas prices stay low. Currently QCEW oil and gas employment is at 2,148, I expect this industry to test the employment lows of 2016 of 1,600 jobs.

Table 2:

Quarterly Census of Employment and Wages (QCEW) Q3 2019 Compared to Q3 2018

Sector	Average Employment Q3 2019	Total Quarterly Wages (Q3 2019)	Average Weekly Wage (Q3 2019)	Total Employment Change (Q3 2018 to Q3 2019)	Total Wage Change (Q3 2018 to Q3 2019)
Total, All Industries	64,243	\$740,409,465	\$887	766	\$35,753,197
Health Care and Social Assistance	12,164	\$161,801,270	\$1,023	382	\$10,568,036
Educational Services	4,631	\$48,811,360	\$811	172	\$4,183,553
Retail Trade	8,223	\$67,630,429	\$633	0	\$3,852,231
Agriculture, Forestry, Fishing & Hunting	722	\$6,842,567	\$729	160	\$2,716,476
Public Administration	3,464	\$54,021,542	\$1,200	78	\$2,302,637
Accommodation and Food Services	7,016	\$36,711,450	\$403	64	\$2,227,313
Professional and Technical Services	2,312	\$33,097,785	\$1,101	80	\$1,947,713
Administrative and Waste Services	2,983	\$28,985,082	\$747	-34	\$1,828,376
Finance and Insurance	1,940	\$33,603,740	\$1,332	-32	\$1,695,265
Wholesale Trade	2,402	\$35,756,982	\$1,145	-49	\$1,622,093
Transportation and Warehousing	2,602	\$33,372,663	\$987	84	\$1,573,728
Other Services, Ex. Public Admin	1,962	\$16,322,224	\$640	134	\$1,278,205
Construction	5,031	\$67,550,921	\$1,033	-51	\$981,626
Real Estate and Rental and Leasing	1,058	\$10,743,261	\$781	14	\$726,246
Utilities	338	\$6,557,588	\$1,492	4	\$347,181
Arts, Entertainment, and Recreation	1,249	\$5,205,764	\$321	41	\$340,535
Information	693	\$8,052,777	\$894	-10	\$86,667
Manufacturing	3,142	\$34,609,573	\$847	-79	-\$229,823
Management of Companies and Enterprises	146	\$3,236,467	\$1,705	-19	-\$906,771
Mining, Oil and Gas	2,148	\$47,188,059	\$1,690	-160	-\$1,427,611

SOURCE: Colorado Department of Labor and Employment (QCEW). The most recent quarterly data available is reported.

Table 3:

Farm and Sole Proprietor Employment

BEA Data	2018	2017	2016	% change since 2017	% change from 2016
Farm Employment	2,751	2,824	2,671	-2.6%	3.0%
Sole Proprietors (non-farm)	24,582	23,978	23,501	2.5%	4.6%

Figure 4:
Total Wage Changes from Q3 2018 to Q3 2019

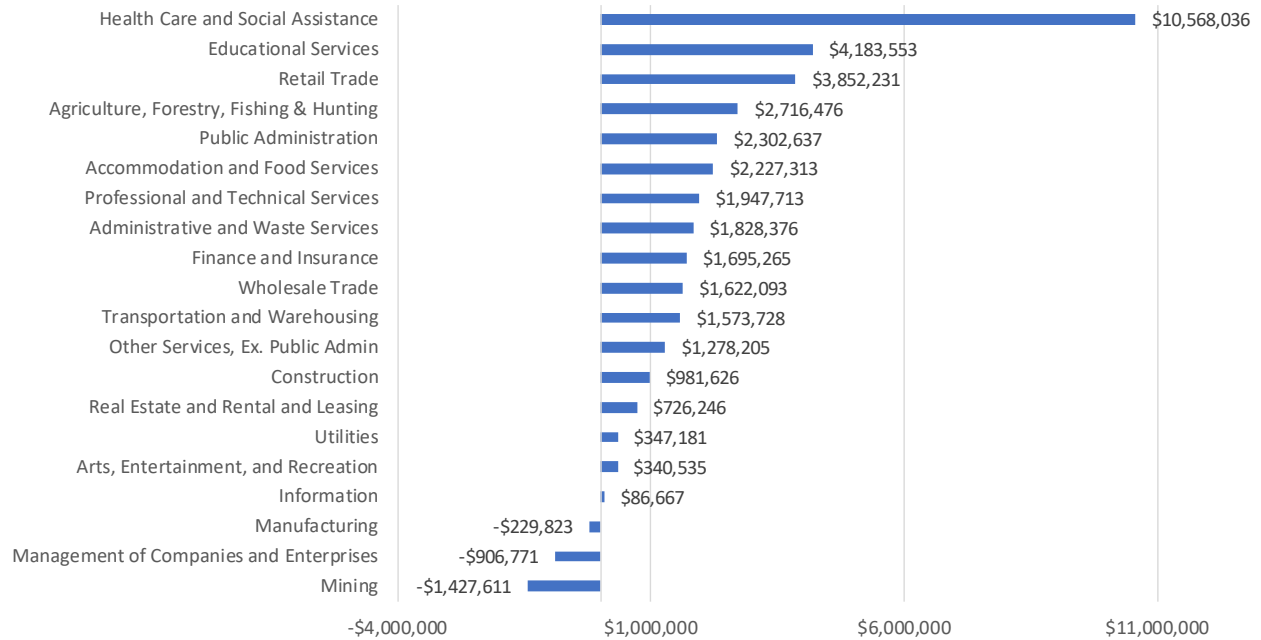
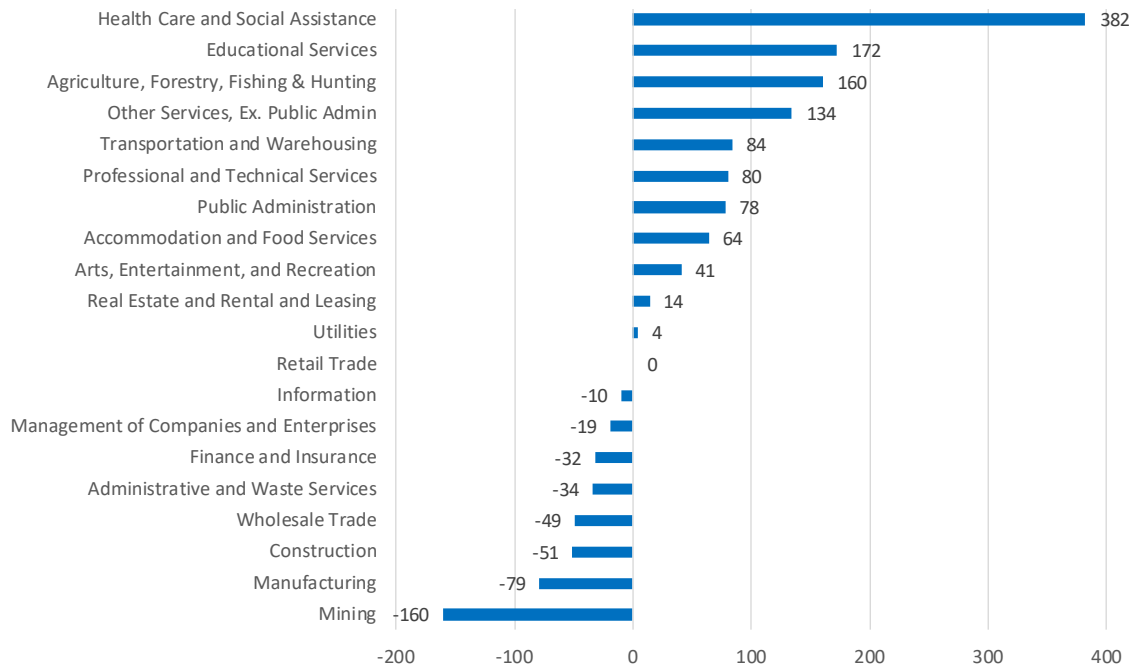


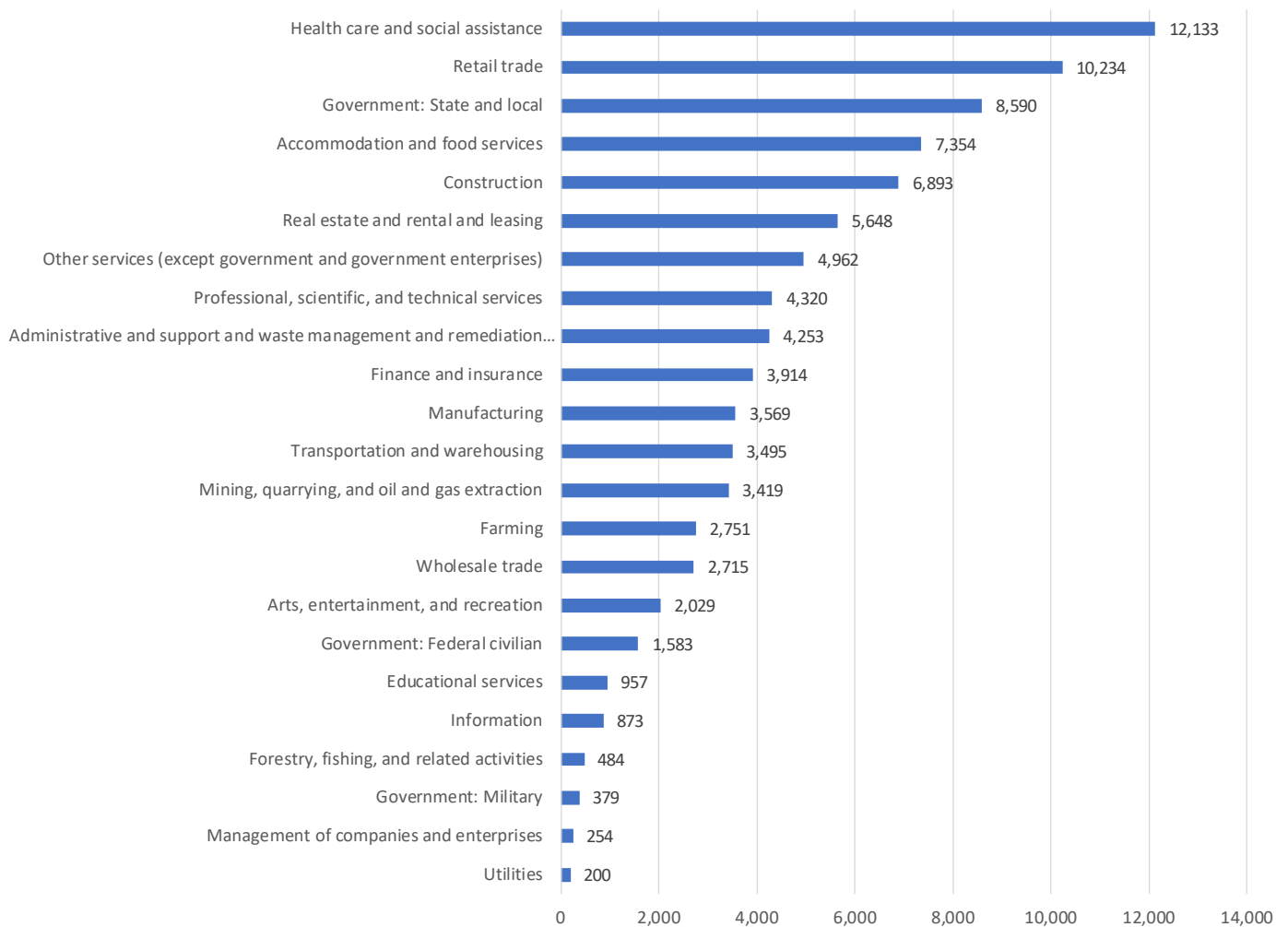
Figure 5:
Total Jobs Change from Q3 2018 to Q3 2019



Bureau of Economic Analysis 2018 Employment Data

This newsletter tracks quarterly employment trends (above) using a quarterly dataset called Quarterly Census of Employment and Wages (QCEW). This data is reported by companies when reporting unemployment insurance to the Government. QCEW data does not cover sole proprietors, some farm employment and a few other small categories. The data point is important because we get it every six months and it serves to show industry trends. Every year the Bureau of Economic Analysis (BEA) creates its employment dataset using the QCEW data, and a variety of other datasets to fill in the gaps with sole proprietors, farmers, etc., and this dataset provides a more comprehensive view of employment. The only problem with this dataset is it is created annually, and takes almost a year to release, hence it cannot be used as a leading or current indicator, it can only show us what happened in the past. This more comprehensive employment data is graphically illustrated below in figure 6. There were 91,009 full or part time jobs in Mesa County in 2018. This is different from the figures earlier in the newsletter which shows that 75,612 people are employed. Figures 4 and 5 are not “people employed” but “number of jobs,” as one person can work multiple jobs. Any difference between the BEA data in figure 6 and the QCEW data in table 2 is likely the result of sole proprietors.

Figure 6:
BEA Total Jobs for 2018 by Industry



SOURCE: Bureau of Economic Analysis

LOCAL REAL ESTATE

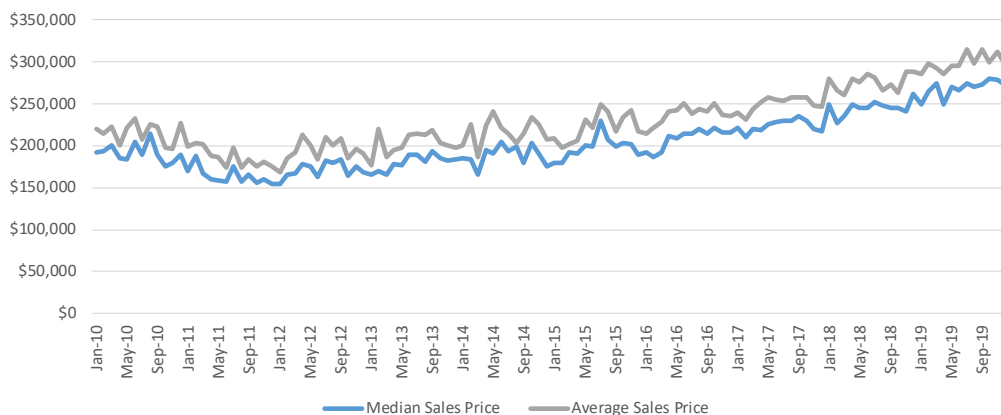
	Q4 2019	Q4 2018	% change since last year
Real Estate			
Inventory of Homes for Sale (3 month avg)	664	718	-7.56%
New Residential listings (3 month total)	744	757	-1.72%
Sold Residential Listings (3 month total)	806	715	12.73%
Median Sales Price	\$277,417	\$249,327	11.27%
Average Sales Price	\$302,965	\$279,655	8.33%
Days on Market	85.67	86.18	-0.59%
Months Supply of Inventory	2.33	2.43	-4.00%
Total Building Permits	1,143	1,198	-4.59%
Single Family Permits	161	160	0.63%
Foreclosures			
Foreclosure Filings	44	64	-31.3%
Foreclosure Sales	24	25	-4.0%
Freddie Mac House Price Index			
Grand Junction	202.9	190.7	6.40%
Colorado	210.5	202.4	4.03%
National	195.9	188.9	3.69%
Mortgage Rates			
15 Year Mortgage Rate	3.16%	4.21%	-1.05%
30 year Mortgage Rate	3.70%	4.78%	-1.08%

SOURCES: Real Estate: Colorado Association of Realtors Market Trends Program through ShowingTime. Note that real estate data is just single family homes; Permit data: Mesa County; Foreclosure Filings and Sales: Mesa County Public Trustee Office; Freddie Mac House Price Index and Mortgage rates: Freddie Mac.

Local Real Estate Indicators

Local real estate remains strong, with median home values increasing by 11.27% since last year. The market remains tight with inventory falling and sold listings rising, leaving buyers with less choices and higher asking prices. In a tight housing market, building activity generally increases to alleviate the shortage, however single family permits stagnate once again, rising by only one from the same time last year. The Freddie Mac House Price Index shows that Grand Junction house prices rose faster than both Colorado and the Nation, this has been the case for a few years now. Mortgage rates have fallen drastically, a full percentage point from the end of 2018, keeping housing demand strong. The constraint in housing is the supply of affordable single family homes in the \$200,000 to \$300,000 price

Figure 7:
Median and Average Home Price



REGIONAL ENERGY

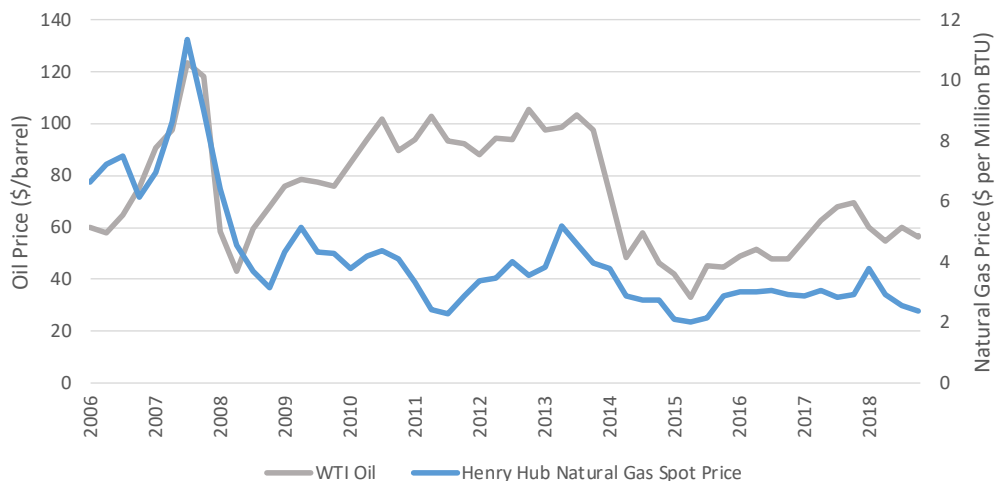
	Q4 2019	Q3 2019	Q4 2018	% change since last quarter	% change since last year (comparable quarters)
Energy Prices					
WTI Crude Oil	\$56.82	\$59.88	\$59.97	-5.11%	-5.25%
Henry Hub Natural gas	\$2.40	\$2.56	\$3.80	-6.25%	-36.84%
Retail Gasoline Price	\$2.48	\$2.68	\$2.54	-7.21%	-2.13%

Drilling Permits	2019	2018	% Change since same time last year
Drilling Permits (Mesa County)	0	64	-100.00%
Drilling Permits (Rio Blanco County)	59	83	-28.92%
Drilling Permits (Garfield County)	149	702	-78.77%
Drilling Permits (Moffat County)	7	4	75.00%
Total Permits (Mesa, Rio Blanco, Garfield, Moffat)	215	853	-74.79%
Total Permits (Colorado)	2,032	5,116	-60.28%

Local Rig Count	Feb-20	Nov-19	18-Dec
Rig Count (Western Colorado, Mesa, Rio Blanco, Garfield, Moffat)	3	5	7

SOURCES: All energy prices: Energy Information Agency; All permit data from Colorado Oil and Gas Conservation Commission (COGCC); Local Rig Count: Baker Hughes Rig Count as of September 1st, 2019. Note that drilling permits are from Q1 of 2019.

Figure 8:
Oil and Natural Gas Prices



Natural Gas Prices

The Henry Hub natural gas spot prices averaged \$2.40/MMBtu in Q4 of 2019. However, this number shot down in January to \$2.02/MMBtu due to warm weather keeping demand for natural gas inventories low. The Energy Information Agency (EIA) forecasts that the Henry Hub spot prices will be below \$2.00 for February and March, but will rise to an average of \$2.36/MMBtu in the third quarter of 2020. The yearly forecast for natural gas spot prices from EIA is \$2.21/MMBtu for 2020. These price expectations are the result of the record setting dry natural gas production in 2019, averaging 92.1 Bcf/d. EIA expects total natural gas production to be 2% higher in 2020 than in 2019. Production is expected to decline through the year, as production in the Appalachian region is falling due to such low prices. Permian production is expected to fall due to lower oil prices, as much natural gas production is the byproduct of oil fracking, so as oil production slows due to lower prices natural gas production will slow.

Source: <https://www.eia.gov/outlooks/steo/report/natgas.php>

Oil and Gasoline Prices

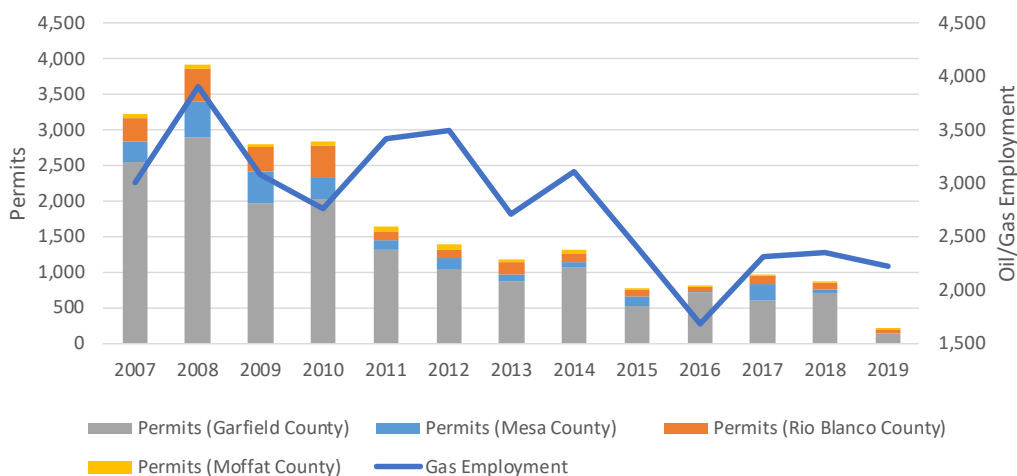
Crude oil prices averaged \$56.82 in Q4, steady with prices from Q3. Oil prices have been trending downward and are expected to move slightly lower in the short to medium term as a result of slowing economic conditions, and the potential effects of the coronavirus on international trade and Chinese GDP. Gasoline prices averaged \$2.48 in Q4, down from both last quarter and last year. Gasbuddy.com shows that as of early February, Mesa County gas prices average between \$2.26 and \$2.44, slightly lower than the national average.

Source: <https://www.eia.gov/outlooks/steo/>

Western Slope Drilling Activity

Rig counts have fallen from seven one year ago, to five in September, to currently three (as of February 2019). This drop in rigs will equate to job losses in the natural gas industry. In addition to this, figure 9 illustrates drilling permits and oil/gas employment with the full 2019 drilling permit data. There is a clear relationship between permits and oil/gas employment. The 2019 numbers are drastically lower for the Piceance than the 2018 numbers, showing a legitimate slowdown in this industry. The recent employment low of 2016 was approximately 1,600 oil/gas jobs (for Mesa County). QCEW data shows we are still above 2,000 oil/gas jobs, but with the decline in rigs and the decline in drilling permit applications, new employment lows in the industry will likely be tested in the coming quarters.

Figure 9:
Drilling Permits: Western Colorado



NATIONAL ECONOMIC INDICATORS

	Q4 2019	Q3 2019	Q4 2018	% change since last period	% change since last year (comparable quarters)
Business Cycle Indicators					
Real GDP	2.10%	2.10%	1.10%	0.00%	1.00%
Personal Consumption Expenditures	1.80%	3.20%	1.40%	-1.40%	0.40%
Gross Private Domestic Investment	-6.10%	-1.00%	3.00%	-5.10%	-9.10%
National Consumer Confidence	97.2	98.5	98.1	-1.32%	-0.92%
Industrial Production Index	109.3	109.2	110.3	0.17%	-0.89%
Initial Weekly Unemployment Claims (4 week MA)	220,231	215,904	220,058	2.00%	0.08%
Non Farm Payroll Change (in thousands)	572,667	437,333	649,333	30.95%	-11.81%
Unemployment					
Unemployment Rate-U3-SA	3.50%	3.60%	3.80%	-0.10%	-0.30%
Unemployment Rate-U6-SA	6.80%	7.20%	7.50%	-0.40%	-0.70%
Interest Rates					
Federal Funds Rate	1.66%	2.40%	2.21%	-0.74%	-0.55%
10 Year U.S. Treasury	1.79%	2.33%	3.03%	-0.54%	-1.24%
30 Year U.S. Treasury	2.25%	2.78%	3.27%	-0.53%	-1.02%
Inflation Measures					
Inflation Rate (CPI)	2.04%	1.82%	2.22%	0.21%	-0.18%
Core Inflation Rate (All Items Less Food and Energy)	2.29%	2.07%	2.21%	0.23%	0.09%
Inflation Rate (Shelter)	3.30%	3.43%	3.21%	-0.14%	0.09%
Producer Price Index (PPI)	-1.84%	-2.16%	3.54%	0.32%	-5.39%
Employment Cost Index	2.74%	2.78%	2.89%	-0.04%	-0.16%
Stock Prices					
S&P 500	3,083	2,882	2,699	6.95%	14.22%
Dow Jones Industrial Average	27,537	26,096	24,916	5.53%	10.52%
Trade Balance and Debt					
USD Exchange Rate (trade weighted)	130	128	128	1.43%	1.69%
Trade Balance (% of GDP)	-578.387	-662.66	-684.148	-12.72%	-15.46%
Federal Debt (% of GDP)*	105.5%	103.2%	105.2%	2.3%	0.3%

SOURCES: GDP, Consumption, Investment, and Trade Balance: Bureau of Economic Analysis; Consumer Confidence: University of Michigan; Industrial Production, Interest Rates and USD Exchange Rate: Board of Governors of the Federal Reserve System; Weekly Unemployment Claims: U.S. Employment and Training Administration. Non-Farm Payroll, Unemployment Rates, Inflation Measures: Bureau of Labor Statistics; Stock Prices: S&P Dow Jones Indices, LLC.; USD Exchange Rate: Board of Governors of the Federal Reserve; Trade Balance: BEA; Federal Debt: U.S. Office of Management and Budget. * indicates data is lagged by one quarter.

Figure 10:
Real GDP

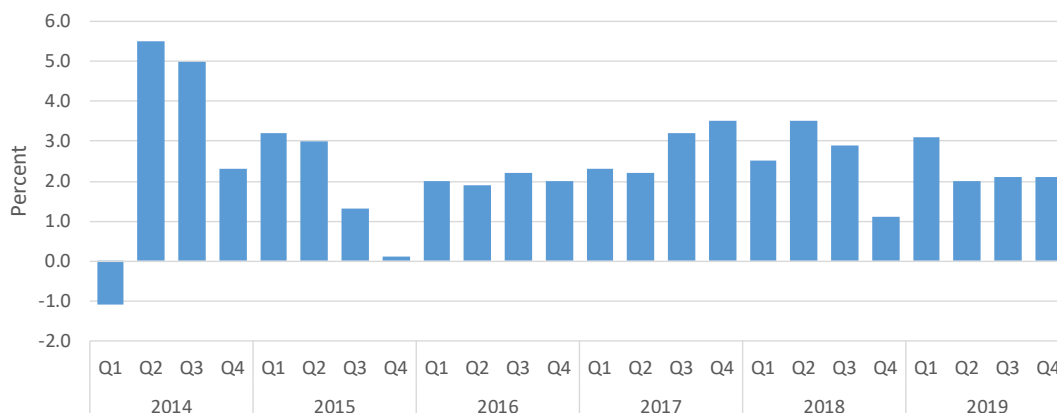
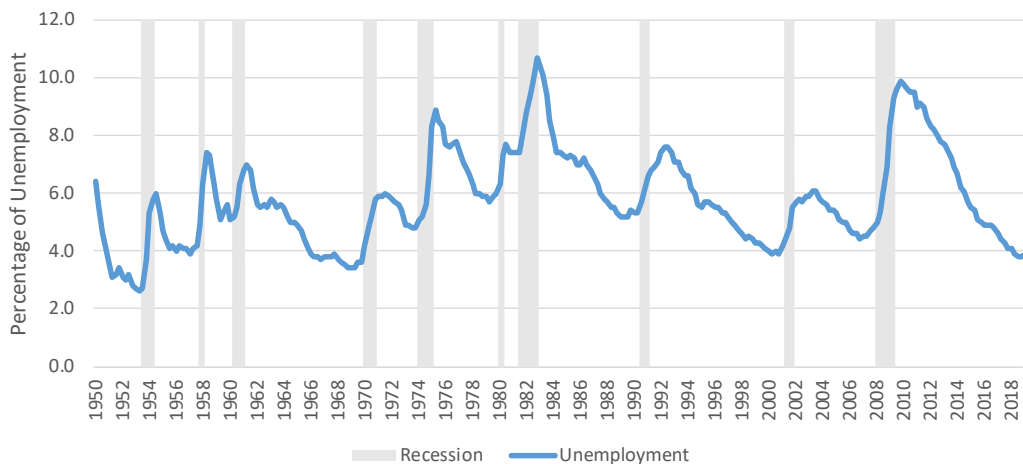


Figure 11:
U.S. Unemployment: 1950-2019



National Economic Performance

GDP continues to stay reasonably strong, with a 2.1% increase in GDP for Q4 2019 (figure 10). The consumer continues to hold up GDP numbers as investment is negative for the third straight quarter. National consumer confidence ticked down but not enough to indicate any problems with the consumer.

The unemployment rate hit lows of 3.5% in November and December, but increased to 3.6% in January. The U6 unemployment rate, which includes so called “discouraged workers” fell from 7.2% to 6.8%, indicating that the low U3 rate is translating to a better job market for even those who are under-employed. Quarterly weekly unemployment claims as well as quarterly non-farm payrolls continue to be strong.

Interest Rates

Interest rates have been trending downward for almost a year, with the 10 year treasury bond falling from 3.27% in Q4 of 2018 to 2.25% in Q4 of 2019. That is a full percentage point drop, which is why mortgage rates have dropped by 1% as well. Part of this is due to the Federal Reserve dropping the Federal Funds rate, which is the rate at which banks borrow from other banks to meet their nightly reserve requirements. This rate has fallen by -0.74%, the rest of the drop in the 10 year treasury has been attributed to both perceived higher risk, or even a bubble in treasuries as some economists are claiming. Note that there is an inverse relationship between the price of a bond and its yield (interest rate), so if people are buying treasuries due to risk or speculation, it pushes the price up and the interest rate down.

Figure 12:
S&P 500 Stock Prices

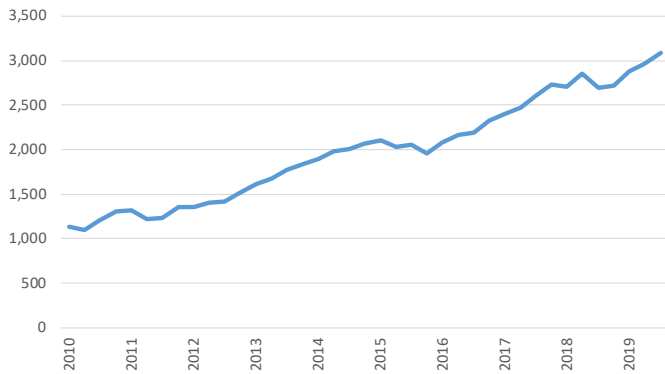
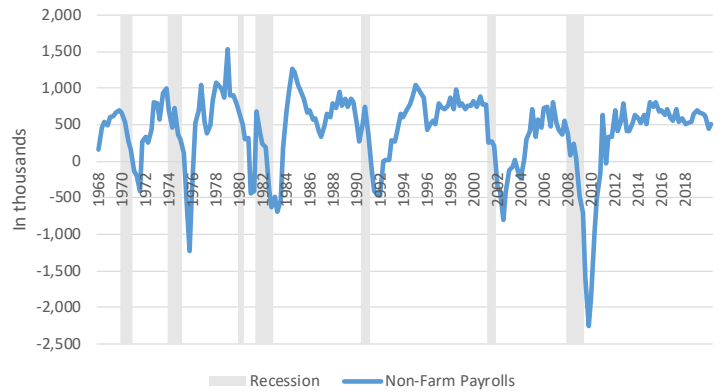


Figure 13:
Change in Non-Farm Payrolls



Inflation

Inflation continues to remain low, averaging 2.04% for Q4. The Federal Reserve targets around 2% inflation, and in previous months inflation was actually lower than 2%. Inflation has increased each of the past four months through January, but is however very low historically. If inflation were to rise significantly, the Federal Reserve would likely consider increasing rates to stop it. The producer price index (PPI) for all commodities fell for the second straight quarter, showing some slowing in raw materials. Wages are still relatively low for this point in the business cycle, helping to contain inflation. The employment cost index moved horizontally to 2.74%, and average hourly earnings of all private employees was at 3% in December. This shows that workers are only getting .75% to 1% real wage increases above inflation.

Risks to Growth

Despite last fall's recession watch, the national economy continues to perform well. The stock market continues to test new highs, and low interest rates continue to fuel a strong housing market and strong consumer. Some threats include slowing global growth, as several economies are on the brink of recession, including Japan, Germany, Italy, and even China. The biggest news as of February 2020 is the threat of the coronavirus on the global economy. As the coronavirus spreads, global supply chains, the global labor force, and financial markets will be hurt as workers have to stay home, miss work, and trade falls due to the risk of spreading disease. If the stock market were to get hit badly from the coronavirus news, it could be the blow to consumer confidence that finally puts the economy into a downturn. The bond market continues to see risk as one of the measures of the yield curve (the 10 year minus 3 month) has inverted for the second time this year. Yield curve inversions have predicted recessions well in the post WWII U.S.



The Mesa County Economic Update is compiled and written by Dr. Nathan Perry, Associate Professor of Economics at Colorado Mesa University.

📞 970.248.1888

✉️ naperry@coloradomesa.edu



1100 North Avenue
Grand Junction, Colorado 81501-3122
970.248.1778 • 970.248.1138 (f)

coloradomesa.edu