

DELTA COUNTY ECONOMIC UPDATE

Third Quarter 2018



Provided by the Business Department
of Colorado Mesa University

Economic Summary

- Overall the Delta County economy shows signs of improvement over the past few years. Delta County has a tight labor market with a 3.2% non-seasonally adjusted unemployment rate. Both employment and the labor force are rising, as well as sale tax income.
- Other economic indicators including median household income and poverty indicators show that Delta County is still stagnating.
- The Delta County real estate market is tight. Falling inventory is pushing home values higher (26.4% year over year), meanwhile foreclosures continue to fall.
- The national economy is very strong, with a high growth rate of 4.1%. Unemployment remains low at 3.9%, and investment is high. Slowly rising inflation and interest rates are the only negative news.

The Delta 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.

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LOCAL ECONOMIC INDICATORS

	Q2 2018	Q1 2018	Q2 2017	% change since last quarter	% change since last year (comparable quarters)
Local Labor Market					
Unemployment Rate Delta County-NSA	3.2%	4.6%	3.9%	-1.4%	-0.7%
Unemployment Rate Colorado - NSA	2.7%	3.2%	2.7%	-0.5%	0.0%
Unemployment Rate U.S. - NSA	3.8%	4.3%	4.2%	-0.5%	-0.4%
Labor Force	14,900	14,147	14,084	5.3%	5.8%
Employed	14,425	13,500	13,539	6.9%	6.5%
Unemployed	474	647	545	-26.7%	-13.0%
Business Confidence					
Leeds Colorado Business Confidence Index	59.6	61.3	59.7	-2.8%	-0.2%
Sales/Use Taxes					
City of Delta Sales/Use Taxes (Quarterly)	\$1,423,827	\$1,388,980	\$1,340,622	2.5%	6.2%
City of Delta Sales/Use Taxes (YTD)	\$2,812,808		\$2,646,887		6.3%
Delta County Sales Tax (Quarterly)	\$1,279,360	\$1,128,027	\$1,195,891	13.4%	7.0%
Delta County Sales Tax (YTD)	\$2,407,387		\$2,285,224		5.3%
Lodging Tax (Quarterly)	\$12,268	\$23,110	\$11,140	-46.9%	10.1%
Lodging Tax (YTD)	\$35,378		\$25,478		38.9%

Yearly Indicators	2016	2015	2014	% change since 2015	% change from 2014
Median Household Income	\$41,798	\$42,586	\$45,283	-1.9%	-7.7%
% of Population Below Poverty Line	16.8%	16.3%	16.2%	0.5%	0.6%
	2017	2016	2015	% change since 2016	% change from 2015
County Population	30,568	30,346	29,902	0.7%	2.2%
	2015	2014	2013	% change since 2014	% change from 2013
# of SNAP Recipients as % of Population	13.1%	13.5%	13.1%	-0.4%	0.0%

SOURCES IN ORDER OF LISTING: State and 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; Leeds Colorado Business Confidence Index: Leeds School of Business; Sales/Use Tax information: City of Delta and Delta County; Yearly Indicators: U.S. Census Bureau

The Local Labor Market

The Delta County labor market is performing well compared to recent years with a low unemployment rate of 3.2% (non-seasonally adjusted). This is higher than the Colorado rate, but lower than the national rate. The Delta County labor force has risen 5.8% year over year, while employment has risen 6.5% year over year. This is positive news since both the labor force and employment levels have largely stagnated since 2010. This horizontal trend in the labor force and employment is also present in the population data. The population of Delta County is down slightly from 2010, falling from 30,859 in 2010 to 30,568 in 2017 (most recent Census numbers). Note that 2010 was the first year after the commodity bubble burst, where almost all Western Slope economies suffered a severe drop in labor force and employment numbers. While both the Mesa County and Montrose County labor force numbers have recovered from the 2008/2009 economic boom/bust, Delta County has not. Both the labor force and employment are still below the numbers from Q2 2008, or 10 years ago. Compared to 5 years ago (2013) which was the post financial crisis "bottom" for the labor market, employment is up 1,700 or 13.4%, while labor force participants have increased by 6.6%.

Delta County Economic Progress

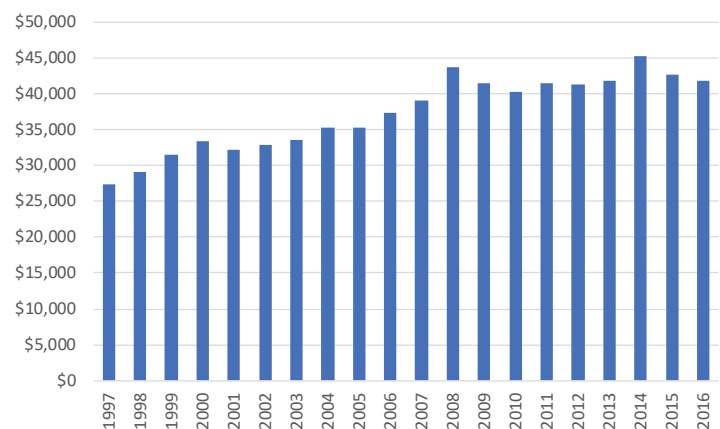
Although the Delta County unemployment rate is currently low and labor market indicators are tight, the unemployment rate is only one of many economic indicators. Other indicators show a county that is in a state of economic stagnation.

Median household income has fallen 3 years in a row, from 2014 to 2016 (figure 1). Note that 2016 is the most recent estimate of median household income. The good news is that the 2014-2016 numbers are higher than 2010-2013 numbers, but it would be more positive to see a more consistent upward trend. 2016 was a bad year economically for Delta County and the Western Slope in general. 2017 data will tell us more about the trend of median household income moving forward. Given labor market indicators, it is likely that median household income increases for 2017.

Table 1:
1, 5, and 10 year Employment Comparison (Based on Q2, 2018)

	Labor Force	Employed	Unemployed
Annual	816	886	-71
5-Year	929	1,700	-771
10-Year	-1,295	-1,052	-243
Annual %	5.8%	6.5%	-13.0%
5-Year %	6.6%	13.4%	-61.9%
10-Year %	-8.0%	-6.8%	-33.9%

Figure 1:
Median Household Income



Two measures of poverty are listed under "yearly indicators" above, including the % of people below the poverty line and the # of SNAP recipients as a % of the population. The % of population below the poverty line has increased every year since 2012 and is now at 16.8%. The number of SNAP recipients (Supplemental Nutrition Assistance Program) has been increasing every year since 2008 and as of 2015 (most recent data point) is at 13.1%. This number seems to have leveled off the last 3 years. SNAP can be seen as a proxy for poverty.

Sales and Use Taxes

Delta County sales tax collection is up 7% from last year, while the City of Delta has seen a 6.2% increase from last year. Lodging taxes are up 38.9% year over year, which is quite a large increase. Sales and Use tax gains reflect increases in spending in the county. A good national and state economy, a low unemployment rate in Delta County, general consumer and business optimism, and increased stock market and real estate prices have people confident about spending more. This business optimism is reflected in the Leeds Business School Colorado Business Confidence Index, which shows an index of 59.6. There has been an average index of 55 since 2003, which means we have higher than average business confidence currently. The majority of 2018 indicators are positive, and the hope is that the reasonably good economy pushes up median household income and pushes down poverty rates. This makes the 2017 release of this data important for Delta County.

Figure 2:
Delta County Labor Force 2008-Present

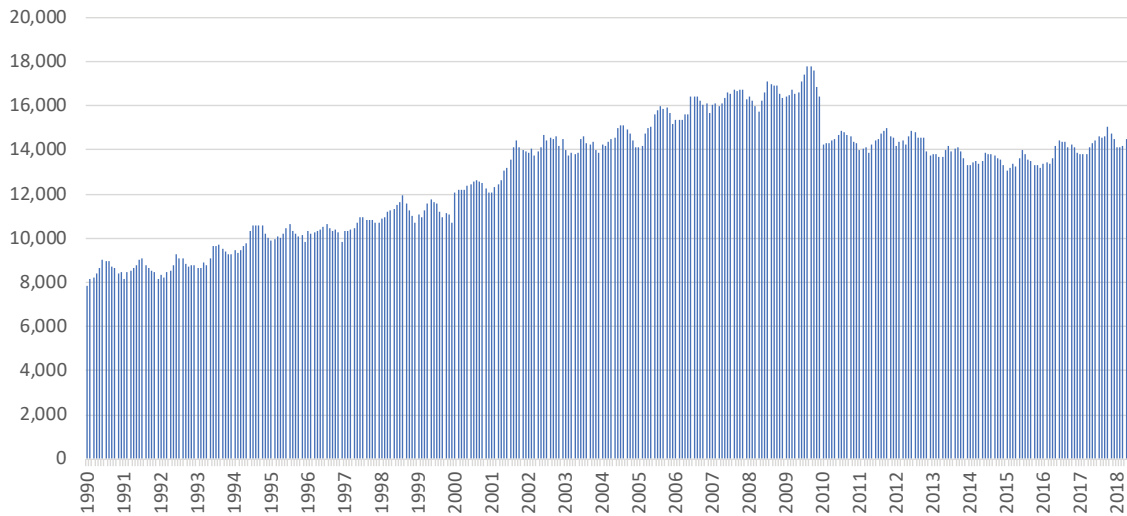
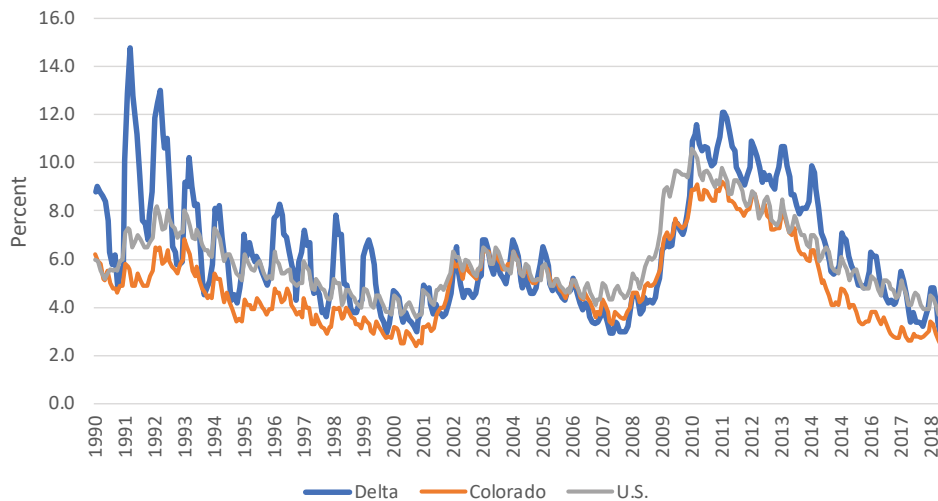


Figure 3:
Unemployment Rates (NSA) 1990-Present



SOURCE: Figure 2: Colorado Department of Labor and Employment. Figure 3: Bureau of Labor Statistics

Delta County Employment Trends

Table 2 illustrates average employment, total quarterly wages, and average weekly wage for all major industries in Delta County. The QCEW data utilizes employment insurance information to collect its data. This has a tendency to exclude many agricultural workers (migrant work, family workers, H1B1 Visas), as well as sole proprietors. Despite this, the QCEW data is one of the best sources for changes in industry employment and wages. Please note that the numbers for real estate and rental/leasing and finance and insurance have a data issue. A company that had previously been coded as finance and insurance was recoded this quarter for real estate and rental/leasing, which has made the real estate employment gains seem far higher than they actually were, and finance and insurance losses larger than they actually were. Also note that this data is for Q1 2018 and is the most recent data available as of the writing of this report. Note that a different and more accurate estimate of agricultural employment is in table 3 below, showing 1,073 agricultural workers in 2016.

Table 2:
Quarterly Census of Employment and Wages for Q1 2018

Sector	Average Employment 1st Quarter 2018	Total Quarterly Wages	Average Weekly Wage	Annual Percent Change in Employment (Compared to Q1 2017)	Annual Percent Change in Average Weekly Wages (Compared to Q1 2017)
Total	8,359	\$72,880,775	\$671	3.49%	4.19%
Government Total	2,424	\$26,854,363	\$852	1.81%	3.27%
Total Private	5,935	\$46,026,412	\$597	4.20%	5.11%
Health Care and Social Assistance	1,423	\$9,568,491	\$517	7.97%	0.58%
Retail Trade	1,151	\$8,042,817	\$538	-2.70%	6.53%
Construction	412	\$4,341,924	\$811	11.05%	5.05%
Manufacturing	462	\$4,213,633	\$702	8.45%	4.78%
Real Estate and Rental and Leasing	206	\$3,255,391	\$1,216	154.32%	117.92%
Accommodation and Food Services	696	\$2,467,739	\$273	-3.60%	5.41%
Finance and Insurance	211	\$2,214,467	\$807	-33.44%	-11.42%
Agriculture, Forestry, Fishing & Hunting	290	\$2,116,581	\$561	-0.68%	-1.23%
Professional and Technical Services	187	\$1,984,041	\$816	10.65%	13.18%
Other Services, Ex. Public Admin	219	\$1,586,978	\$557	0.46%	-3.13%
Information	117	\$1,021,628	\$672	-3.31%	-8.82%
Administrative and Waste Services	181	\$1,006,053	\$428	38.17%	-17.21%
Wholesale Trade	106	\$996,650	\$723	3.92%	2.55%
Utilities	43	\$676,749	\$1,211	4.88%	-5.02%
Transportation and Warehousing	51	\$444,781	\$671	4.08%	5.01%
Management of Companies and Enterprises	22	\$387,793	\$1,356	-4.35%	48.52%
Arts, Entertainment, and Recreation	4	\$18,750	\$361	0.00%	-20.83%
Educational Services	N/A	N/A	N/A	N/A	N/A
Mining, Oil, and Gas Extraction	N/A	N/A	N/A	N/A	N/A

Table 3:
Farm Employment

Agriculture	2016	2015	2014	% change since 2015	% change from 2014
Farm Employment Estimate	1,073	1,087	1,111	-1.3%	-3.4%

SOURCE: Table 2: Colorado Department of Labor and Employment (QCEW). Table 3: Bureau of Economic Analysis

LOCAL REAL ESTATE

	Q2 2018	Q2 2017	% change since last year
Real Estate			
New Total Residential Listings	261	250	4.4%
Sold Residential Listings	165	172	-4.1%
Cumulative Days on Market	140	136	2.7%
Median Sales Price	\$234,583	\$185,633	26.4%
Inventory of Homes For Sale (quarterly average)	226	256	-12.0%
Total Building Permits	49	58	-15.5%
Total Building Permit Valuation	\$2,383,678	\$2,721,026	-12.4%
Single Family Home Permits	8	10	-20.0%
Single Family Home Permit Valuation	\$1,460,615	\$1,228,760	18.9%
Foreclosures			
Foreclosure Filings	15	19	-21.1%
Foreclosure Sales	11	9	22.2%
Mortgage Rates			
15 Year Mortgage Rate	4.0%	3.2%	0.8%
30 Year Mortgage Rate	4.5%	4.0%	0.6%

SOURCES IN ORDER OF LISTING: New and Sold Residential Listings, Cumulative Days on Market, Median Sales Prices, Inventory of Homes for Sale: Colorado Real Estate Network (CREN); Building Permits and Valuation: City of Delta, Orchard City, and Paonia totals; Foreclosure Filings and Sales: Delta County; Mortgage rates: Freddie Mac.

Local Real Estate Indicators

The Delta County real estate market is relatively tight, with rising prices and falling inventory. New residential listings are up and sold listings are down, while the inventory of homes for sale fell 12%. As inventory falls, prices will increase. Prices shot up 26.4% from last year, moving from a median home sales price of \$185,633 to \$234,583. Cumulative days on market has increased, moving from 140 to 136, indicating that homes are taking slightly longer to sell. Falling inventory is a trend in the Western Slope and across the nation, although some bigger markets are showing signs of slowing with rising inventory (Denver, Sacramento). Many economists question if the slow wage gains seen the past few years are enough to compensate for rising home values. There is a reasonable argument that home price gains are not sustainable without more growth and income gains. With incomes and jobs not drastically improving, these types of large price increases over time will eat into consumer budgets. To add to the tight real estate market, foreclosure filings fell slightly (figure 4), while foreclosure sales increased. This is good news that reflects the tight national and local labor market.

Figure 4:
Delta County Foreclosures

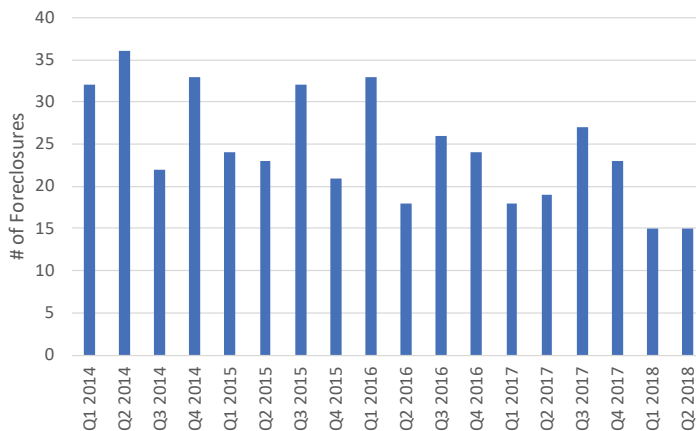


Figure 5:
30 year Mortgage Rate 2000-Present



REGIONAL ENERGY

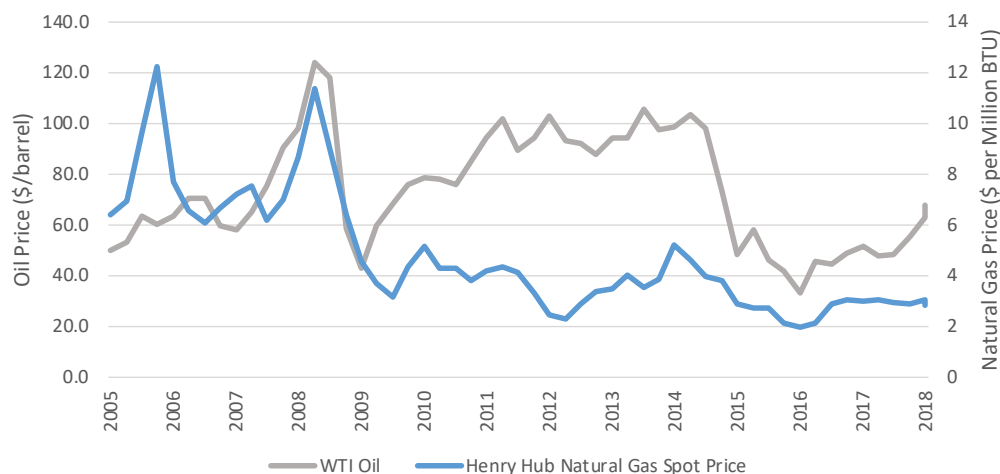
	Q2 2018	Q1 2018	Q2 2017	% change since last quarter	% change since last year (comparable quarters)
Energy Prices					
WTI Crude Oil	\$68.1	\$62.9	\$48.1	8.2%	41.5%
Henry Hub Natural gas	\$2.9	\$3.1	\$3.1	-7.1%	-7.1%
National Retail Gasoline Price	\$2.8	\$2.5	\$2.3	11.0%	19.7%

Drilling Permits	2018 YTD (as of June 1st)	2017 YTD (as of June 1st)	2017 Total	% Change since same time last year
Drilling Permits (Mesa County)	24	110	215	-78.2%
Drilling Permits (Rio Blanco County)	56	31	118	80.6%
Drilling Permits (Garfield County)	250	164	612	52.4%
Drilling Permits (Moffat County)	2	3	5	-33.3%
Total Permits (Mesa, Rio Blanco, Garfield, Moffat)	332	308	950	7.8%
Total Permits (Colorado)	1,389	1,565	3,909	-11.2%

Local Rig Count	Aug-18	May-18
Rig Count for Western Colorado (Mesa, Rio Blanco, Garfield, Moffat)	7	7

SOURCES IN ORDER OF LISTING: 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 August 8th, 2018.

Figure 6:
Oil and Natural Gas Prices



SOURCE: Energy Information Agency

Natural Gas Prices

Natural gas prices fell in Q2 2018 from \$3.1/MMBtu to \$2.9/MMBtu. This decrease in price happened despite higher than average temperatures. Large natural gas supply injections have largely offset the increase in demand caused by warmer weather. Despite high natural gas demand and low natural gas inventories, prices have not risen due to the constant flow of natural gas production that is hitting the market. The EIA estimates that production is now at 81.8 Bcf, an 11% increase from last year. March through July saw the largest production increases in history, largely due to drilling productivity increases. EIA forecasts that production will continue to increase, reaching 84.3 Bcf/d by 2019. EIA also forecasts an average price of \$2.96/MMBtu for natural gas through 2018, and a small increase to \$3.10/MMBtu for 2019.

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

Oil and Gasoline Prices

Oil prices have risen 8.2% since last quarter, and a whopping 41.5% since the same time last year. West Texas Intermediate (WTI) prices now stand at \$68.10 for Q2. Prices could have risen higher, but higher OPEC and Russia production, and the return of Libyan oil to the oil market have kept oil below \$70. There are an assortment of current geo-political risks that are being priced into oil, including Iranian threats to block the Strait of Hormuz, and some oil supply shipments being halted due to the Saudi Arabia-Yemen conflict.

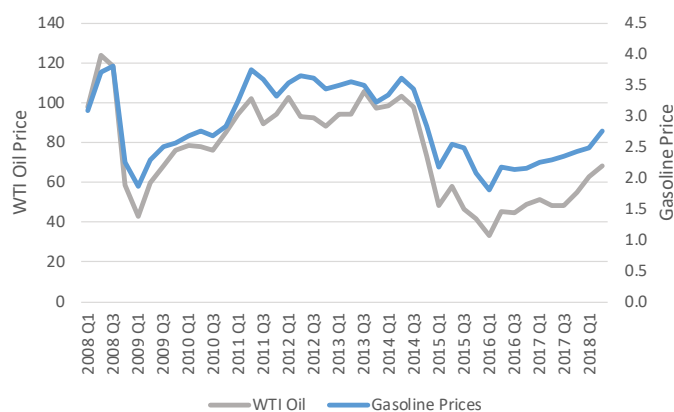
Gasoline prices are up 11.7% since Q1 and almost 20% since last year. Summer months generally have higher gasoline prices, and the EIA believes that gasoline prices peaked in Q2 of 2018 for the year. As of September 18th, 2018, Gasbuddy.com lists the average gas price in Delta County between \$2.71 and \$2.99 per gallon. The EIA expects gasoline prices to average \$2.76 in 2019. Figure 7 illustrates the relationship between crude oil prices and gasoline prices. In the event of international turmoil, it is likely that gasoline prices would rise with crude oil values.

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

Western Slope Drilling Activity

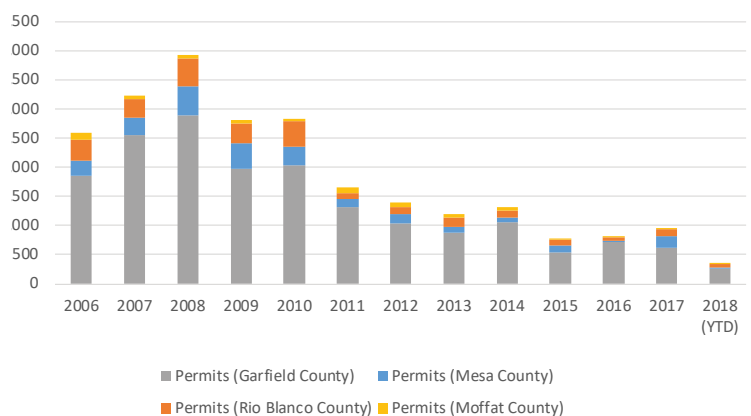
Western Slope drilling activity in Q2 of 2018 is unchanged from Q1 staying at 7 rigs. All rigs in the Piceance are currently engaged in natural gas drilling. Drilling permits for the first quarter went down considerably, but in Q2 of 2018 total Western Slope drilling permit applications are up from Q2 the previous year, rising 7.8%. Drilling permits for Mesa County are down considerably from last year but Garfield and Rio Blanco both have more drilling permits than last year, pushing the total Western Slope numbers higher than 2017. Low natural gas prices and growing national supply will likely cap drilling potential in the Western Slope in the near term.

Figure 7:
Oil and Gasoline Prices



SOURCE: Energy Information Agency

Figure 8:
Drilling Permits: Western Slope



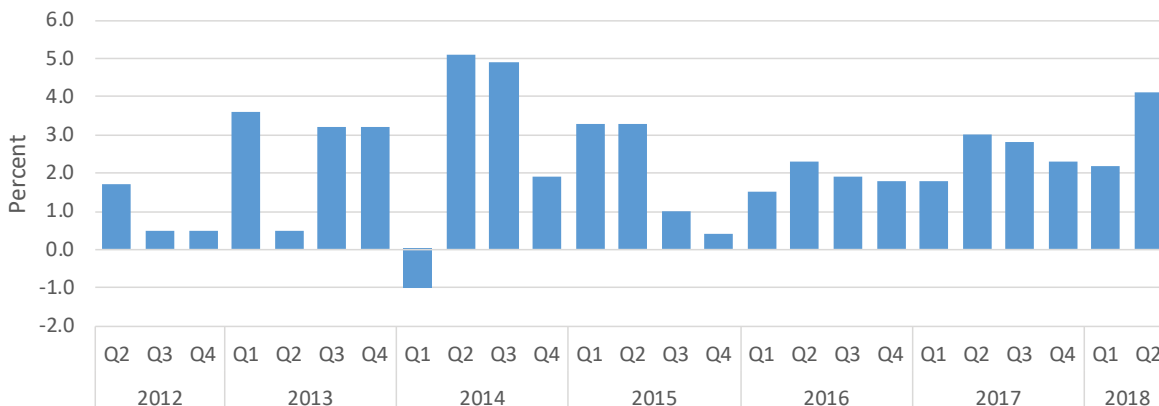
SOURCE: Colorado Oil and Gas Conservation Commission

NATIONAL ECONOMIC INDICATORS

	Q2 2018	Q1 2018	Q2 2017	% change since last period	% change since last year (comparable quarters)
Business Cycle Indicators					
Real GDP	4.1%	2.2%	3.0%	1.9%	1.1%
Real Personal Consumption Expenditures (PCE)	2.7%	2.4%	2.5%	0.3%	0.2%
Private Fixed Investment	8.0%	7.7%	5.8%	0.3%	2.2%
National Consumer Confidence	98.3	98.9	96.4	-0.6%	2.0%
Industrial Production Index	107.5	105.9	103.7	1.5%	3.6%
Initial Weekly Unemployment Claims (4 week MA)	223,288	230,096	244,058	-3.0%	-8.5%
Non Farm Payroll Change (in thousands)	2,389	2,215	2,347	7.9%	1.8%
Unemployment					
Unemployment Rate-U3-SA	3.9%	4.1%	4.3%	-0.2%	-0.4%
Unemployment Rate-U6-SA	7.7%	8.1%	8.5%	-0.4%	-0.8%
Interest Rates					
Federal Funds Rate	1.7%	1.4%	0.9%	0.3%	0.8%
10 Year U.S. Treasury	2.9%	2.8%	2.3%	0.2%	0.7%
30 Year U.S. Treasury	3.1%	3.0%	2.9%	0.1%	0.2%
Inflation Measures					
Inflation Rate (CPI)	2.6%	2.3%	1.9%	0.4%	0.7%
Core Inflation Rate (All Items Less Food and Energy)	2.2%	1.9%	1.8%	0.2%	0.4%
Inflation Rate (Shelter)	3.4%	3.2%	3.4%	0.2%	0.1%
Producer Price Index (PPI)	4.8%	3.9%	4.2%	0.9%	0.6%
Employment Cost Index	2.8%	2.7%	2.4%	0.1%	0.4%
Stock Prices					
S&P 500	2,703	2,733	2,398	-1.1%	12.7%
Dow Jones Industrial Average	24,556	25,127	20,994	-2.3%	17.0%

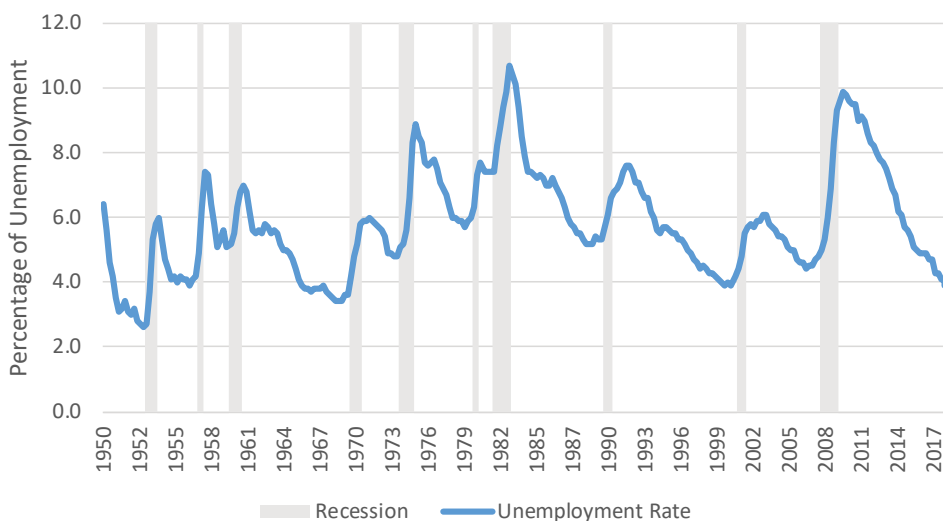
SOURCES IN ORDER OF LISTING: GDP, Consumption, and Investment: Bureau of Economic Analysis; Industrial Production: Board of Governors of the Federal Reserve System; Consumer Expectations: University of Michigan; Weekly Unemployment Claims: U.S. Employment and Training Administration. Non-Farm Payroll, Unemployment Rates, Inflation Measures: Bureau of Labor Statistics; Stock Prices: S&P Dow Jones Indices, LLC.

Figure 9:
Real GDP



Source: Bureau of Economic Analysis

Figure 10:
U.S. Unemployment: 1950-2018



Source: Bureau of Labor Statistics

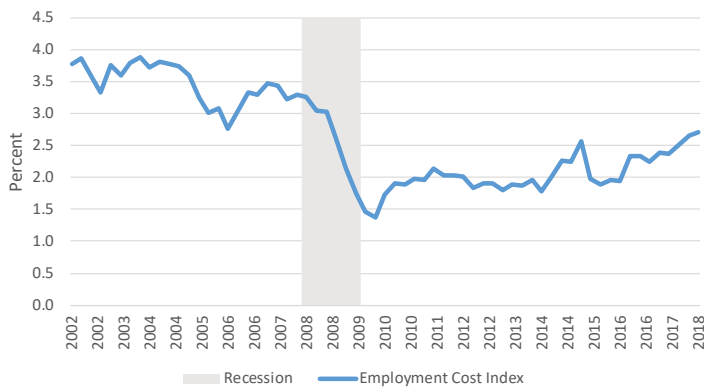
National Economic Performance

National economic growth registered at a very strong 4.1% (figure 9). The U.S. has not seen 4% growth since 2014. The economy is strong and this high growth rate confirms it. Consumption growth remains positive, as consumers continue to spend in good economic times. Investment numbers helped drive the high GDP numbers, with an 8% fixed private investment rate. Investment has a tendency to be volatile and can push business cycles higher or lower very quickly. National consumer confidence remains steady, while industrial production is up 3.6% since last year.

Unemployment remains historically very low at 3.9%. The U-6 measure of unemployment is also low at 7.7%. U-6 counts discouraged workers and is always higher than the standard unemployment rate of U-3.

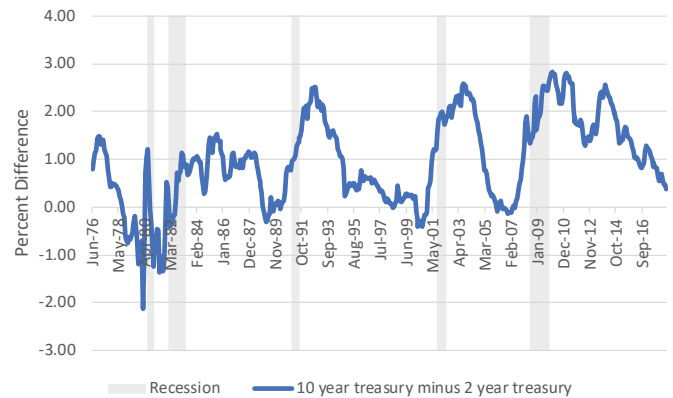
Inflation is creeping up at 2.6%, increasing from 2.3% last quarter and 1.9% last year. 2.6% inflation is still not considered high, especially historically. In fact, for how well the economy is doing, it is surprisingly low. Generally speaking at this point in the business cycle inflation is much higher. Between tariffs and the small trade war that is ensuing, slightly rising wages, and a booming economy, 2.6% inflation is surprisingly low. These factors have most economists convinced that inflation will continue to creep up. Rising wages will especially put upward pressure on inflation. The strong U.S. dollar is likely hiding much of the inflationary pressure in the economy. One measure of wages, the employment cost index, is rising very slowly, showing small wage gains at 2.8%, which is again very low for this point in the business cycle. The producer price index (PPI) is creeping up at 4.8%. The PPI represents costs to suppliers and can be a leading indicator of future inflation.

Figure 11:
Employment Cost Index



Source: Bureau of Labor Statistics

Figure 12:
10 Year Treasury Yield Minus the Two Year Treasury Yield



Source: Federal Reserve

National Economic Performance Continued

The 10 year treasury bond is inching up and is now at 2.9%. The Federal Reserve continues to increase the Federal Funds rate, and plans another rate increase in September. As the 10 year treasury increases, mortgage rates may also increase.

Recession Signals

In May of 2018, the Wall Street Journal took a poll of economists regarding when they thought the next recession would be. Six out of ten said the year 2020. The question for economists is what are signals to look for to know when there is a shift in the business cycle. Research titled "Recession Signals: The Yield Curve vs. Unemployment Rate Troughs" by Kevin Kliesen at the Federal Reserve Bank of St. Louis focused on two recessionary indicators to watch for: A trough in the unemployment rate and an inverted yield curve. Figure 10 illustrates the historical unemployment rate, and it is clear to see that after a trough forms that a recession shortly follows. In fact on average since 1969, it takes 9 months after the unemployment trough forms for the recession to begin. We are currently at 3.9% unemployment, and a trough as of yet has not formed. The other indicator is an inverted yield curve. When short term yields (say the 2 year treasury) rise higher than long term yields (the 10 year treasury), then the yield curve becomes inverted. Short term yields are supposed to be lower than long term yields. On average after the yield curve inverts, recession occurs 10 months after. Figure 12 illustrates the difference between the 10 year treasury bond and the 2 year treasury bond. When the difference falls below zero it means the yield curve has inverted. The yield curve has not inverted yet but has become more flat. Federal Reserve interest rate increases are expected to potentially flatten the yield curve more.

To be clear there are no current signs of recession. All signs point to strong continued economic growth in the short term. As business cycle indicators change they will be pointed out in this newsletter.



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