# MESA COUNTY ECONOMIC UPDATE

COLORADO MESA

**Third Quarter 2021** 

Provided by the Business Department of Colorado Mesa University

## **Economic Summary**

- The most recent monthly unemployment rate for August is at 5.7%, which is lower than August 2020 (6.8%). The August numbers are important, because before August, Mesa County could not seem to breach below the 6% unemployment rate, with rates of 6.3% in October 2020 and 6% in May 2021.
- As of July, sales tax collection continues its significant growth, rising 22.86% for the city compared to the same time last year, and 24.23% for the county. Lodging revenue is also up significantly, up more than 50% from the same time last year. Data from the Grand Junction Regional Airport is also positive, with scheduled enplanements increasing 70% year over year. Mesa County business permit applications are up 24% compared to last year, showing improved optimism for business creation.
- Although most industries have recovered fully from the lows of April 2020, several have not. Using the most recent industry jobs data from Q1 2021, oil and gas is down 40% since Q4 of 2019 (the peak), although the industry has a couple of quarters of positive momentum. Agriculture, forestry, fishing, and hunting is down 25%, administrative and waste services down 16%, arts, entertainment, and recreation 12%, and accommodation and food services down 9.6%.

# CONTENTS

Local Economic Indicators	1
The Local Labor Market	2
Mesa Industry Trends	6
Local Real Estate Indicators	9
Regional Energy	10
Drilling Permits and Gas Jobs	
	11

## LOCAL ECONOMIC INDICATORS

	Q2 2021	Q1 2021	Q2 2020	change since last quarter	change since last year (comparable quarters)
Local Labor Market					
Unemployment Rate Mesa County -SA	7.10%	7.30%	11.50%	-0.20%	-4.40%
Unemployment Rate Mesa County -NSA	6.50%	7.60%	11.60%	-1.10%	-5.10%
Unemployment Rate Colorado -SA	6.30%	6.50%	11.70%	-0.20%	-5.40%
Unemployment Rate U.SSA	5.90%	6.20%	13.10%	-0.30%	-7.20%
Labor Force	76,224	76,036	73,808	188	2,416
Employed	71,247	70,259	65,264	988	5,983
Unemployed	4,977	5,777	8,544	-801	-3,567
Business Confidence					
Leeds Colorado Business Confidence	67.3	64.4	44.3	4.50%	51.92%
Sales/Use Taxes	2021 (YTD)		2020 (YTD)		
City Sales/Use Taxes (YTD)	\$39,359,948		\$32,035,940		22.86%
Mesa County Sales/Use Tax (YTD)	\$27,585,389		\$22,205,137		24.23%
City Lodging Tax Revenue (YTD)	\$1,818,414		\$1,202,286		51.25%
Business Filings	2021 (YTD)		2020 (YTD)		
Mesa County New Business Entity Filings (as of Sept 10th, 2021)	1,732		1,392		24.43%

Grand Junction Regional Airport	2021		2020		% change from last year
Scheduled Enplanements (YTD, through July 2021)	134,652		78,965		70.52%
Standard of Living and Growth	2019	2018	2017	% change since 2018	% change from 2017
Regional GDP	\$6,214,937	\$6,058,926	\$5,771,124	2.57%	7.69%
Personal Income	\$7,204,611	\$6,944,767	\$6,496,022	3.74%	10.91%
Personal Income Per Capita	\$46,719	\$45,405	\$42,972	2.89%	8.72%
Median Household Income	\$60,249	\$51,132	\$52,623	17.83%	14.49%
Percent of Population Below Poverty Line	14.20%	15.70%	16.00%	-1.50%	-1.80%
	2020	2019	2018	% change since 2019	% change from 2018
Population	155,603	154,210	152,951	0.90%	1.73%

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 Mesa County labor market held steady during the second quarter of 2021, with a non-seasonally adjusted unemployment rate of 6.5% for the quarter. The seasonally adjusted rate is 7.1%, showing the effect that seasonality has on employment during the spring and summer months. The most recent monthly unemployment rate, which is non-seasonally adjusted, is at 5.7% in August, which is lower than August 2020 at 6.8%. The August numbers are important, because before August, Mesa County could not seem to breach below the 6% unemployment rate, with rates of 6.3% in October 2020 and May 2021 at 6% (see figure 2).

Employment has risen year over year, rising from 70,978 last August to 72,309 this August. This is still significantly lower than the peak employment number in October of 2019 of 74,564. Thus far, Mesa County has not experienced a full labor market recovery, but neither has Colorado. Figure 4 illustrates employment gains and losses per year for Mesa County. Mesa County lost 3,573 jobs in 2020, and thus far in 2021 has gained 1,081 of those jobs back.

Figure 1 illustrates employment for the last two years, and the trend since the initial recovery out of April of 2020 is that employment is moving horizontally. With the recent August numbers, Mesa County has pushed past the October 2020 employment peak of 72,245. Before the August numbers, there was short term ceiling on employment. Peak seasonal employment is generally in October, so two more months of continued employment gains are very possible. With oil and gas prices picking up, it is hopeful that job growth in that industry will translate to more employment gains this fall.

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

	Labor Force	<b>Employed</b>	Unemployed
Annual	2,416	5,983	-3,567
5-Year	4,065	2,936	1,130
10-Year	921	3,983	-3,062
Annual %	3.27%	9.17%	-41.75%
5-Year %	5.63%	4.30%	29.36%
10-Year %	1.22%	5.92%	-38.09%

There is a good chance that this pushes Mesa County out of the horizontal employment trend the county has been in the last year (this can be seen in figure 1 and 5). Even if this "horizontal" employment trend continues for a year, it will likely be a short term phenomenon, as labor constraints work themselves out.

For context, the state is experiencing a similar phenomenon, but Mesa is lagging a bit behind the rest of the state. If you take October of 2019 employment numbers for Colorado and compare to August 2021 numbers, Colorado is down 41,968 or 1.37%. If you do the same calculation for Mesa County, Mesa is down 2,255 in employment, or 3%, which is worse than the state. Montrose for comparison is in line with the state, down 1.2%. Mesa County lagging the state was not the case through most of COVID, but it is the case now, even if it is by a very small percentage. Both moved quickly towards recovery out of the depths of early 2020, but employment growth is moving more slowly now as we approach previous employment levels.

This is an interesting time for labor markets, as both employment and the labor force are down nationwide since Fall 2019. Several explanations for the lack of recovery in the labor market have been given, including extended unemployment benefits, lack of childcare, people wanting to work remotely and willing to leave their job to find this option, skills mismatch, a work culture mismatch between employers and new workers entering the job market, baby boomers retiring earlier than expected, the continued threat of the Delta variant for the immunocompromised, new workforce participants having a higher reservation wage due to increased cost of living, and a variety of other explanations. Concerns in the labor market are not just a local issue, it is an issue everywhere, and it is proving to be a constraint on employment growth.

#### **Editorial Comment**

I want to explain some comments I made in a presentation in September regarding my "concerns" for the county. My concerns are not long run concerns, nor are they intermediate concerns, only short term concerns. The first concern is what the 2020 standard of living data will show us. Mesa County made real strides in GDP, median household income, poverty rates, income, and a variety of other measures between 2017 and 2019. Before this stretch, standard of living stagnated in Mesa County. My concern is that 2020 numbers may show that the county has taken a step back, as can be the case during a recessionary period. This data will be released later this year, so it is lagging data, so this concern is for something that has already happened and we are awaiting data on. As an example, national median household income, which has been released, fell from \$68,703 to \$67,521. I do not see this concern persisting into 2021 standard of living data. It is also quite possible that there will not be a drop in standard of living measures due to federal and state economic policy, including extended unemployment benefits, coronavirus stimulus checks, Federal Reserve policy and interest rate policy, and other policies, or that the drop could be minimal. This of course would be the point of the policies. We will not know until the data is released in late 2021, and I will be writing in detail about these measures in the next newsletter.

The second concern I had was the lack of movement in employment, or what I call above the "horizontal" movement in employment. This is a short term concern, and is a concern for all labor markets. Other Western Slope counties have fully recovered their employment losses, Mesa County has not. As stated above if the oil and gas industry picks up with higher gas prices as expected, this could swing jobs forward to close much of the employment gap. There is no data point or structural issue that has me concerned for the intermediate to long run economy for the county.

Point of comparison is very important in economics, and compared to other counties, the state, and the nation, Mesa County and much of the Western Slope have performed very well during 2020/2021 and I have tried to communicate this clearly. In the presentation, the point of comparison was the recent past (2017-2019), in which case we have not fully recovered in employment and are not gaining like these years, and it is very possible we see a decline in some standard of living measures for 2020. Again, these are common concerns right now for many counties given the strange conditions of the past year and a half but are not a reason to dull optimism for the future.

#### Other Economic Indicators

The Leeds Business Confidence Index shows that business optimism is rising, although with a smaller increase from the previous quarter's jump, with an increase in the index from 64.4 to 67.3. The big increase in the index came last quarter, rising from 47.9 to 64.4.

As of July, sales tax collection continues its significant growth, rising 22.86% for the city compared to the same time last year, and 24.23% for the county. Lodging revenue is also up significantly, up more than 50% from the same time last year. Data from the Grand Junction Regional Airport is also positive, with scheduled enplanements increasing 70% year over year. Mesa County business permit applications are up 24% compared to last year, showing improved optimism for business creation.

Figure 1: **Employment: 2 Year View** 

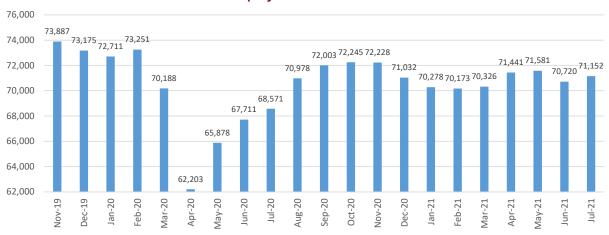


Figure 2: Mesa and Colorado Unemployment Rate (NSA)

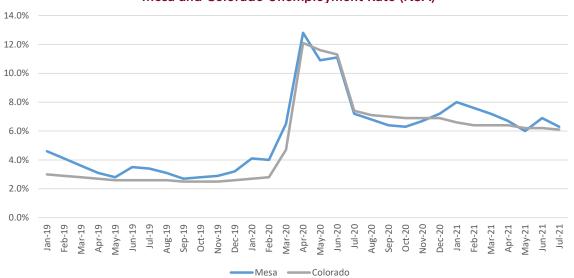


Figure 2: Mesa County Unemployed

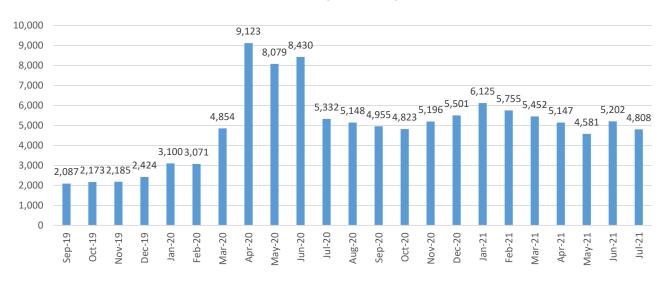


Figure 4:
Yearly Employment Gains/Losses (average)

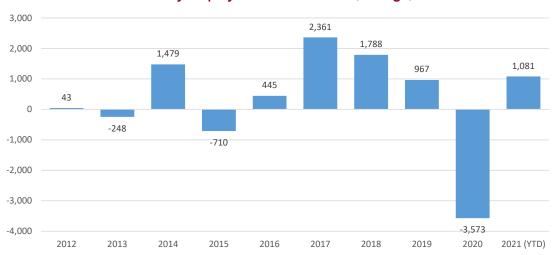


Figure 5: **5 Year Employment View** 

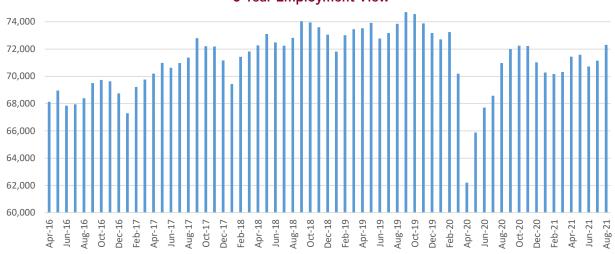
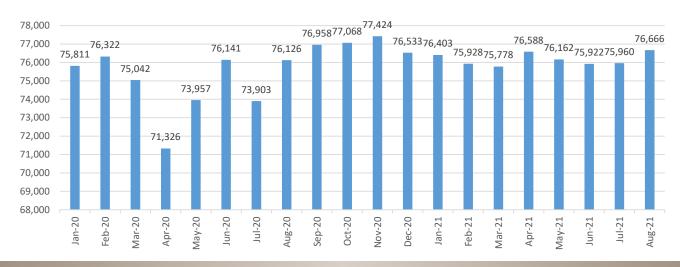


Figure 6: Labor Force: 2 Year View



## **Mesa County Employment Trends**

Q1 2021 Quarterly Census of Employment and Wage data shows job losses compared to both Q1 2020 and Q4 2020. The loss in jobs was expected comparing Q1 2020 to Q1 2021 because January and February of 2020 were "pre-Covid" months (figures 7 and 8). The job losses from the previous quarter were small, but not expected. Compared to Q4 2020, job gains were in oil and gas, healthcare, and arts, entertainment, and recreation. Job losses were in administrative and waste services, public administration, and retail trade. Figure 9 illustrates the percentage change in jobs losses/gains compared to Q4 2019, which was the top of the business cycle. Industries that have not fully recovered were selected for the graph. Oil and gas is down 40% since Q4 of 2019, although the industry has a couple of quarters of positive momentum (figure 9 and 14). Agriculture, forestry, fishing, and hunting is down 25%, administrative and waste services down 16%, arts, entertainment, and recreation 12%, and accommodation and food services down 9.6%. Comparing to job numbers in Q4 2019, the job losses from the peak to now are mostly in these industries. Note that QCEW data has a 6 month lag, so Q1 2021 is the most recent data point for industry level data.

Table 4:

Quarterly Census of Employment and Wages (QCEW) Q1 2021 Compared to Q1 2020

Sector	Average Employment Q1 2020	Total Quarterly Wages (Q1 2021)	Average Weekly Wage (Q1 2021)	Total Employment Change (Q1 2020 to Q1 2021)	Total Wage Change (Q1 2020 to Q1 2021)
Total, All Industries	61,214	\$709,713,875	\$892	-1,204	-\$11,916,048
Health Care and Social Assistance	12,672	\$164,067,140	\$996	156	-\$3,123,869
Retail Trade	8,501	\$79,262,686	\$717	278	\$10,093,120
Construction	4,839	\$68,404,138	\$1,087	210	\$3,209,313
Public Administration	3,256	\$48,346,175	\$1,142	-29	\$1,266,793
Educational Services	4,975	\$45,268,471	\$700	-155	-\$4,745,010
Finance and Insurance	1,940	\$42,004,697	\$1,666	19	\$5,421,796
Transportation and Warehousing	2,611	\$33,134,874	\$976	-15	-\$691,164
Manufacturing	3,096	\$33,063,503	\$821	3	-\$2,439,450
Wholesale Trade	2,191	\$32,567,238	\$1,143	-121	-\$2,767,944
Accommodation and Food Services	6,147	\$32,473,763	\$406	-365	-\$652,919
Professional and Technical Services	2,340	\$32,169,820	\$1,058	-18	\$100,052
Administrative and Waste Services	2,351	\$24,100,789	\$789	-179	-\$1,304,729
Mining	1,083	\$21,951,377	\$1,559	-408	-\$12,751,945
Other Services, Ex. Public Admin	1,807	\$15,194,318	\$647	-149	-\$924,261
Real Estate and Rental and Leasing	996	\$10,232,892	790	-21	-\$186,289
Information	641	\$8,698,396	\$1,044	-78	-\$497,022
Utilities	347	\$6,595,232	\$1,462	9	-\$107,676
Agriculture, Forestry, Fishing & Hunting	436	\$4,178,046	\$737	-107	-\$1,508,764
Arts, Entertainment, and Recreation	821	\$4,086,896	\$383	-240	-\$854,181
Management of Companies and Enterprises	161	\$3,807,555	\$1,819	12	\$781,780

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

Table 4: Farm and Sole Proprietor Employment

BEA Data	2019	2018	2017	% change since 2018	% change from 2017
Farm Employment	2,726	2,734	2,807	-0.3%	-2.9%
Sole Proprietors (non-farm)	24,818	24,236	23,771	2.4%	4.4%

Figure 7: Total Wage Changes from Q1 2020 to Q1 2021

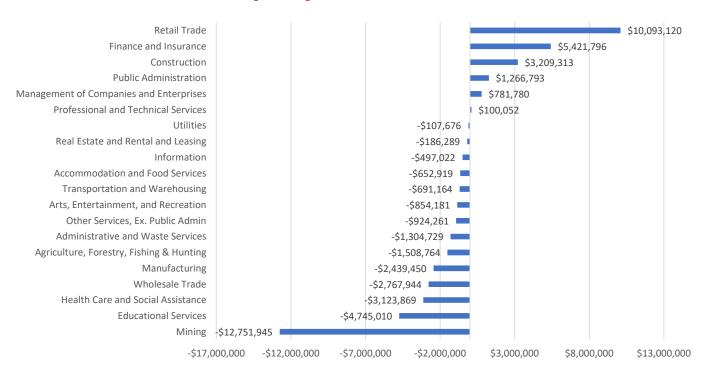


Figure 8: Total Jobs Change from Q1 2020 to Q1 2021

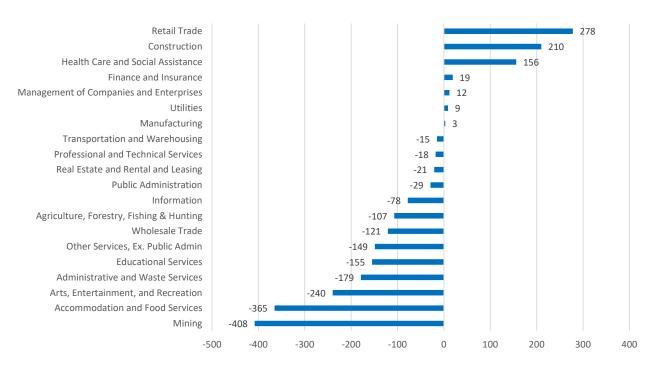


Figure 9:

Job Losses Percentage Compared to Q4 2019

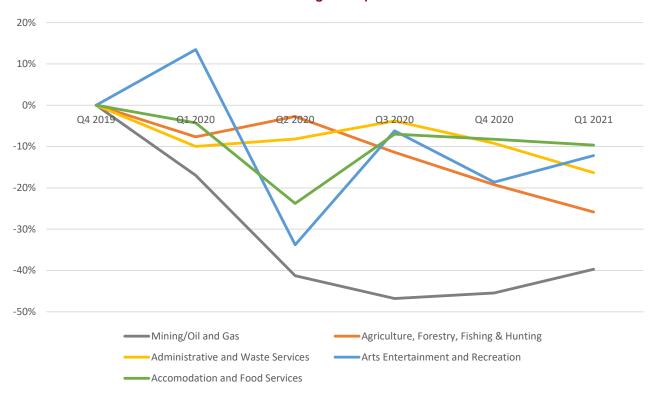
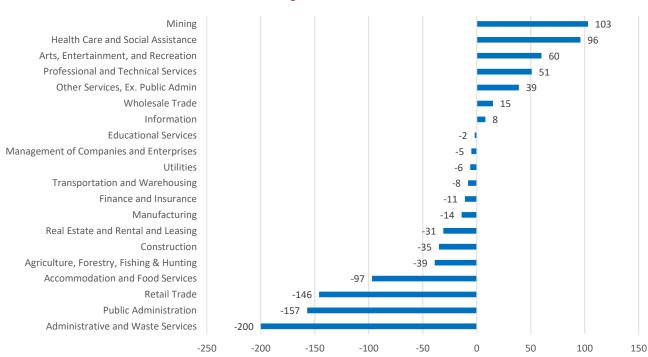


Figure 10: Total Jobs Change from Q4 2020 to Q1 2021



## LOCAL REAL ESTATE

Q2 2021	Q2 2020	% change since last year
236	664	-64.41%
1,087	988	10.02%
942	811	16.15%
\$350,846	\$285,317	22.97%
\$386,616	\$302,965	27.61%
63.00	85.67	-26.46%
0.73	2.33	-68.57%
3,913	3,237	20.88%
675	498	35.54%
7	9	-22.2%
1	3	-66.7%
256.5	213.0	20.39%
261.3	218.9	19.38%
238.4	202.7	17.62%
2.31%	2.71%	-0.40%
3.00%	3.24%	-0.24%
	236 1,087 942 \$350,846 \$386,616 63.00 0.73 3,913 675  7 1 256.5 261.3 238.4	236     664       1,087     988       942     811       \$350,846     \$285,317       \$386,616     \$302,965       63.00     85.67       0.73     2.33       3,913     3,237       675     498       7     9       1     3       256.5     213.0       261.3     218.9       238.4     202.7

SOURCES: Real Estate: Colorado Association fo 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**

The real estate market Q2 of 2021 was one of the tightest real estate markets in history, both nationally and locally. Inventory of homes fell to 236, a 64% drop from the same time last year. Median sales price was 23% higher than Q2 of 2020, while the average sales prices was 27.6% higher. Days on market fell from 85.67 to 63 days days, a drop of 26.46% from last year. Perhaps the most interesting data point for the quarter is the percentage of sales price received. The percentage of list price received moved past 100%, implying that home purchases were completed for more than the list price in the average transaction. The Freddie Mac House Price Index confirms the median house price increases from the Colorado Association of Realtors, also showing a 20% increase in prices, compared to Colorado (19%) and the nation (17.6%).

\$450,000 \$400,000 \$350,000 \$250,000 \$250,000 \$150,000 \$100,000 \$00,000 \$100,000 \$00,000 \$100,

MESA COUNTY ECONOMIC UPDATE, THIRD QUARTER, 2021

# **REGIONAL ENERGY**

	Q2 2021	Q1 2021	Q2 2020	% change since last quarter	% change since last year (comparable quarters)
Energy Prices					
WTI Crude Oil	\$66.19	\$58.09	\$27.96	13.94%	136.73%
Henry Hub Natural gas	\$2.94	\$3.56	\$1.71	-17.42%	71.93%
Retail Gasoline Price	\$2.87	\$2.46	\$1.83	16.79%	57.08%
Drilling Permits	2021 (YTD)	2020 (YTD)		% Change since same time last year	
Drilling Permits (Mesa County)	1	0	•••••	N/A	
Drilling Permits (Rio Blanco County)	33	59		-44.07%	
Drilling Permits (Garfield County)	127	149	•	-14.77%	
Drilling Permits (Moffat County)	1	7	•••••	-85.71%	
Total Permits (Mesa, Rio Blanco, Garfield, Moffat)	162	215		-24.65%	
Total Permits (Colorado)	1,543	2,032		-24.06%	
Local Rig Count	Sept-21	May-21	Sept-20		
Rig Count (Western Colorado, Mesa, Rio Blanco, Garfield, Moffat)	2	3	1		

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

Figure 12:

Oil and Natural Gas Prices Natural Gas Price (\$ per Million BTU) Oil Price (\$/barrel) 

WTI Oil

Henry Hub Natural Gas Spot Price

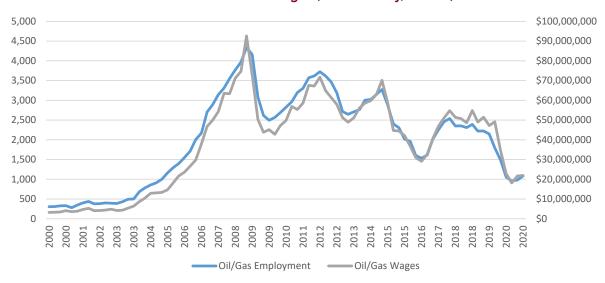
4,500 4,500 4,000 4.000 3,500 3,500 3,000 Permits 3,000 2,500 2,000 2,500 1,500 2,000 1,000 1,500 500 0 1,000 2007 2008 2009 2010 2011 2012 2013 2014 2015 2019 2020 2021 (YTD) Permits (Rio Blanco County) Permits (Garfield County) Permits (Mesa County)

Figure 13:
Oil/Gas Drilling Permits and Oil/Gas Jobs

Figure 14:
Oil/Gas Jobs and Wages (Mesa County, QCEW)

Mesa County Oil/Gas Jobs

Permits (Moffat County)



## Western Slope Drilling Activity

Natural gas prices have been steadily inceasing in 2021, rising to \$4.07/MMBtu in August, surpassing the EIA's forecast. Natural gas prices were high in August due to hot temperatures and Hurricane Ida. As of early September, there are two natural gas rigs in the Piceance. The EIA's forecast for natural gas futures by the end of the year is \$4.25/MMBtu, peaking in January, and declining through most of 2022. WTI oil prices averaged 67.73 in August, continuing a gradual increase in oil seen since the beginning of 2021. The EIA forecasts that Brent Crude oil prices will stay steady through 2021.

Rising oil and natural gas prices are good news for the Piceance, specifically rising natural gas prices. However, this so far has not led to significantly higher rig counts. In May of 2021, the rig count was three, with two oil rigs and one natural gas rig. In early September, the rig count is two, with both rigs for natural gas. This is better than one rig, which is the number of rigs Mesa County had for almost the entire year following the oil/gas decline in March 2020. Permit applications are looking to be higher than 2020, but slowed from May through September. It is important to note that drilling permit application data can be very unpredictable and can change quickly. The hope is that with a higher rig count (even 2 or 3 rigs), and higher oil/gas prices, that this industry can recover some of the job losses from 2020 by the end of the year and push employment growth out of it's horizontal range.

# NATIONAL ECONOMIC INDICATORS

	Q2 2021	Q1 2021	Q2 2020	% change since last period	% change since last year (comparable quarters)
Business Cycle Indicators					
Real GDP	6.60%	6.30%	-31.20%	0.30%	37.80%
Personal Consumption Expenditures	11.90%	11.40%	-33.40%	0.50%	45.30%
Gross Private Domestic Investment	-4.00%	-2.30%	-48.80%	-1.70%	44.80%
National Consumer Confidence	85.6	80.2	74.1	6.73%	15.52%
Industrial Production Index	99.8	98.3	87.1	1.50%	14.60%
Initial Weekly Unemployment Claims (4 week MA)	520,038	805,615	3,011,942	-35.45%	-82.73%
Non Farm Payroll Change (in thou- sands)	1,693,000	736,000	-18,200,667	130.03%	-109.30%
Unemployment					
Unemployment Rate-U3-SA	5.90%	6.20%	13.10%	-0.30%	-7.20%
Unemployment Rate-U6-SA	10.10%	11.00%	20.70%	-0.90%	-10.60%
Interest Rates					
Federal Funds Rate	0.07%	0.08%	0.06%	-0.01%	0.01%
10 Year U.S. Treasury	1.59%	1.32%	0.69%	0.27%	0.90%
30 Year U.S. Treasury	2.26%	2.09%	1.38%	0.17%	0.88%
Inflation Measures					
Inflation Rate (CPI)	4.80%	1.89%	0.43%	2.91%	4.37%
Core Inflation Rate (All Items Less Food and Energy)	3.74%	1.44%	1.30%	2.29%	2.44%
Inflation Rate (Shelter)	2.29%	1.59%	2.52%	0.70%	-0.23%
Producer Price Index (PPI)	18.59%	7.01%	-6.42%	11.58%	25.01%
Employment Cost Index	2.84%	2.72%	2.70%	0.13%	0.14%
Stock Prices					
S&P 500	4,184	3,866	2,932	8.22%	42.70%
Dow Jones Industrial Average	34,121	31,551	24,571	8.15%	38.87%
Trade Balance and Debt					
Trade Balance (% of GDP)	-884.675	-872.54	-538.876	1.39%	64.17%
Federal Debt (% of GDP)*	127.7%	108.1%	108.1%	19.5%	19.5%

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 15: Real GDP

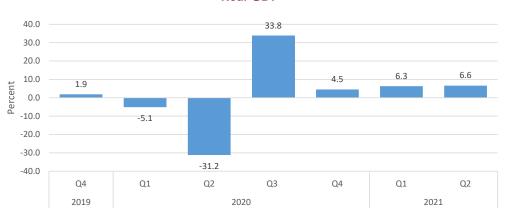


Figure 16:

U.S. Unemployment: January 2020 through August 2021



#### **National Economic Performance**

U.S. growth was strong in quarter 2 coming in at a 6.6% growth rate (figure 15). The Atlanta Federal Reserve's GDP Now forecast as of September 10th is 3.7% for Q3 GDP. The Delta variant spike over the last few months is expected to keep Q3 growth lower than was initially expected.

The national unemployment rate fell to 5.2% in August due to the U.S. economy adding 1,701,000 jobs in Q2 (figure 16). This Q2 jobs report was huge, as was the July employment number, but the August monthly report was disappointing, only adding 235,000 vs. the expected 720,000 jobs. The GDP gap now stands at \$336 billion. Figure 17 illustrates the GDP gap, and although we have now surpassed the previous high in GDP, reaching potential output is the ultimate goal for the economy.

## Inflation

After discussing the potential for inflation in last quarter's newsletter, inflation has finally arrived with a July inflation rate of 5.4%. The March rate was at 2.6%, rising to 4.2% in April, 5% in May, 5.4% in June, and finally 5.4% in July (figure 19). The debate over whether inflation will be transitory or not is still raging, however, the more months we have inflation the more likley it will persist. The last newsletter discussed four factors driving inflation including pent up demand, supply chain effects, a tight

labor market, and rising energy costs. I also explained how wages tend to be "sticky," and are a key indicator for persistent inflation, and also discussed the idea of inflation expectations.

One last point I would like to introduce is the idea of menu costs, the theory that as firms raise prices due to the factors listed above, even if intending to be temporary, the most likely they are to stay at the increased price. This is because there is a cost to changing prices for firms, as it both takes time and effort to change a price and creates consumer confusion. In addition to this, if firms know people are willing to pay these higher prices, and people are used to them, why would they lower the prices even after supply chain problems work themselves out? The point of the menu costs theory is to show that once prices rise, there are many logical reasons they may not come down, which can cause inflation.

The Fed has signalled in their meetings that they are considering inflation a bigger threat than before, although it is still not their top priority, as their top priority is full labor market recovery (reaching the natural rate of unemployment, or in GDP terms, reaching the point of potential output in figure 17). To prevent inflation, the Fed will likely start tapering their purchases of bonds, which means they will reduce over time their purchase of longer maturity treasury bonds, putting upward pressure on long term interest rates.

Figure 17:

GDP Gap

\$20,000
\$19,500
\$19,500
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000
\$1,510,000

Figure 19: **Inflation Rate** 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 Nov-06 Nov-92 Jan-94 Mar-95 May-96 Jul-97 Sep-98 Nov-99 Jan-01 Mar-02 Sep-05 -2.0 -4.0





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