

Effects of COVID-19 on Wyoming Employment

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Introduction

This report details some of the early economic impacts of the COVID-19 pandemic on employment across Wyoming. Impacts from disrupted supply chains and changes in consumer behavior have rippled throughout Wyoming's economy causing spikes in unemployment. While some industries appear to be recovering or adapting, employment levels still lag across all industries. While the most recent economic data have not yet been released, this report considers how COVID-19 is affecting Wyoming's economy and residents through October 2020. This report is the first of a series focusing

on COVID-19's economic impacts on employment, households, and more specific industries as more economic data becomes available.

There are two primary effects of the COVID-19 pandemic on Wyoming's economy. The first effect results from changes in economic activity from the virus itself. Examples include changes in consumer behavior and voluntary business closures to prevent exposure and spread. The second effect results from federal and state government responses to both mitigate the virus' spread and to support economic

activity. Examples of both effects include the two-week public closure order issued by Wyoming Governor Mark Gordon on March 19, and the series of business financial relief funds specified in the graph and table below. The public closure order applied to schools, restaurants, bars, gyms, and theaters, among other recreational and accommodation services not deemed essential. While this report does not separate out these two primary effects, both effects are represented in the data and are considered in this analysis.

For context, Figure 1 shows new COVID-19 cases per 100,000 people on a seven-day rolling average, according to data collected by Johns Hopkins University. The virus first appeared in Wyoming in mid-March, and until September, Wyoming’s confirmed case intensity was less than the U.S. average. While the statewide business closure order

lasted for two-weeks in the beginning phases of the pandemic, local governments in Wyoming have also issued similar orders in response to their local conditions. Similarly, new rounds of business relief programs including the Agricultural and Endurance Funds are being issued as Wyoming continues to assess and respond to COVID-19 economic fallout (Table 1).

While economic data is not yet available after September, the more recent months of COVID-19 cases on the graph below

Table 1. Wyoming COVID-19 Business Relief Programs

Fund	Program Dates	Applicants Paid	Total Payments
Interruption Fund	June 8 – July 2	3,980	\$98.75 mil.
Relief Fund	Aug. 4 – Sept. 15	2,415	\$177.7 mil.
Mitigation Fund	Aug. 4 – Sept. 15	687	\$25.6 mil.
Agriculture Fund	Nov. 2 – Nov. 18	--	\$90 mil. available
Endurance Fund	Nov. 2 – Nov. 18	--	\$24 mil. available

Source: <https://www.wyobizrelief.org/>

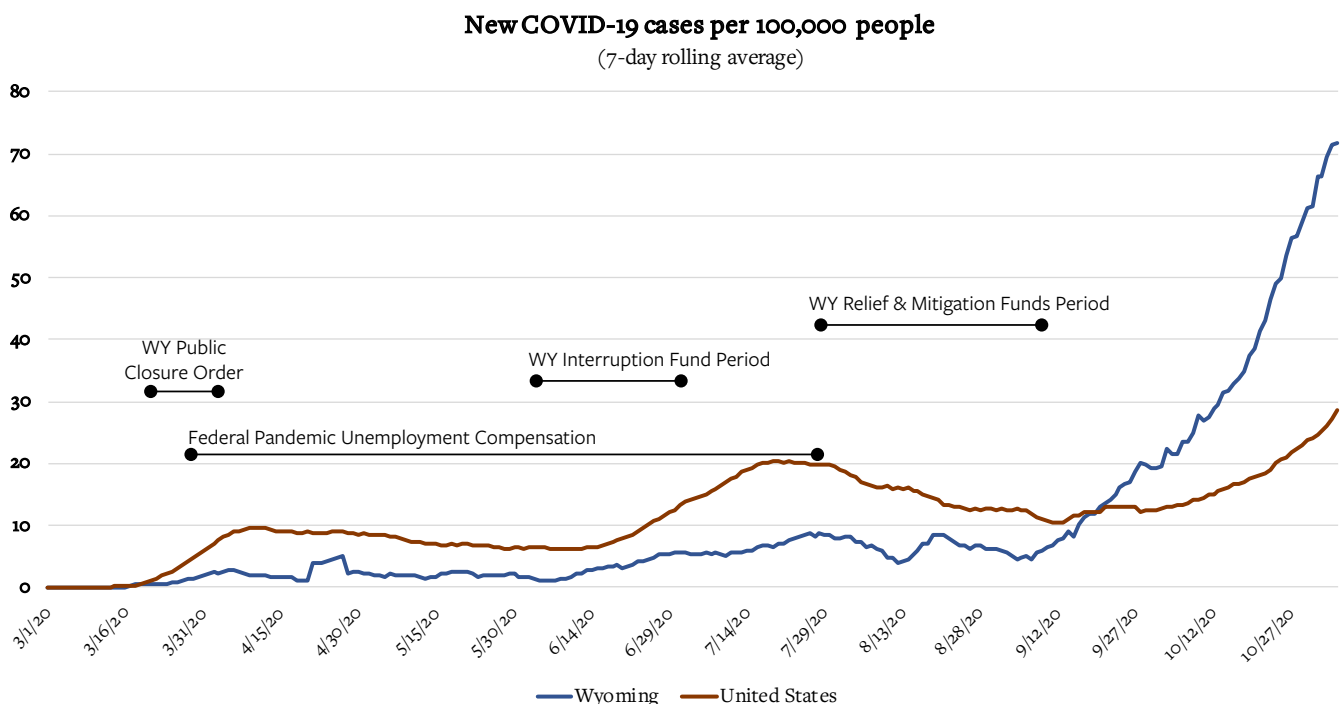


Figure 1. New COVID-19 cases per 100,000 people on a seven-day rolling average for Wyoming as compared to the United States.

can provide insights into how findings from this analysis may be extended. However, it is important to remember future economic effects may differ from those presented here as consumers and governments continue to learn, adapt, and respond to the virus.

Initial and continued unemployment claims

Initial unemployment claims (UCs) represent the additional number of people who file for unemployment each month. Many industries' monthly initial UCs are dependent on the time of year as certain economic activities are seasonally dependent. To account for seasonality, Table 2 shows the excess initial UCs, or the difference in initial UCs between the month specified and that month's five-year average initial UCs. Blue cells represent less initial UCs, while the white (0.00–5.00) and yellow cells (≥5.00) represent higher levels of initial UCs. The industries included in Table 2 make up over 60 percent of Wyoming's labor force. One of these missing industries, agriculture, is captured through different data sources and will be analyzed in a future report.

At the beginning of 2020, many industries were experiencing fewer initial UCs than in the previous

five years. By March, COVID-19 had begun to spread in U.S. communities and governments responded with business closures and travel restrictions (refer to Figure 1 and Table 1). While each industry experienced higher initial UCs, Leisure and Hospitality businesses, including food services, entertainment, recreation, and accommodation, experienced initial UCs 11.52 percentage points (pp.) higher in March 2020 compared to the industry's average for the previous five Marches. By April, six of the seven industries shown experienced initial UCs 5pp. above their five-year average, with Leisure & Hospitality and Mining & Natural Resources topping 10pp.

The Mining & Natural Resources industry experienced a compounding effect. First, the industry experienced a slowdown from the direct effects of COVID-19 and government responses, followed by a second, indirect, effect caused by other industries requiring less energy as they too slowed down. Indeed, these dual effects highlight Mining & Natural Resources' important role in supporting many other industries in our economy. The compounding effect is represented by the Mining & Natural Resources' initial UCs being relatively higher than the other six industries between May and September. This means

Table 2. Excess Initial Unemployment Claims – Percentage Point Differences

Date	Trade, Transportation & Utilities	Mining & Natural Resources	Construction	Manufacturing	Education & Health	Leisure & Hospitality	Professional & Business Services
Jan. 2020	-0.07	-0.17	0.12	-0.28	-0.05	-0.18	-0.10
Feb. 2020	-0.07	-0.52	1.21	-0.15	-0.05	-0.10	0.15
Mar. 2020	1.58	2.55	4.13	2.53	3.80	11.52	2.06
Apr. 2020	5.38	10.23	7.12	4.25	6.72	18.23	5.20
May. 2020	2.48	7.31	2.39	2.08	2.30	5.48	2.61
Jun. 2020	1.75	5.95	2.48	2.18	1.55	2.92	2.32
Jul. 2020	1.56	3.86	2.68	1.76	1.26	3.38	2.21
Aug. 2020	0.73	3.44	1.66	0.81	0.59	1.29	1.46
Sep. 2020	0.58	2.12	1.76	0.64	0.62	1.06	1.04

Yellow italic: lower initial UCs. White: 0-5pp. higher, Blue bold: above 5pp.

Source: Wyoming Department of Workforce Services & Bureau of Labor Statistics

For more information on the industries included in each group, visit: <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2017>

the Mining & Natural Resources industry is not only continuing to shed jobs each month faster than the industry did in the past five years, but it is also lagging the other industries in adapting or recovering.

It appears that monthly initial UCs are decreasing from their April highs across Wyoming's industries; however, the excess initial UCs in table 2 still show evidence of shrinking industry employment. Furthermore, table 2 only shows additional UCs and does not show the total number of unemployed persons in each industry. Figure 2 addresses this through continued UCs, or the total number of Wyomingites receiving unemployment assistance each month by industry. The figure shows the seasonal decrease in Construction continued UCs (orange) starting around week 10, but just as the industry becomes more active in these spring months

the effect of COVID-19 sets in causing Construction's continued UCs to rise again. This is notable, considering the summer months tend to be when the Construction industry increases its employment.

The Leisure & Hospitality industry experienced the highest continued UCs relative to other industries, reaching a maximum of 5,286 unemployed persons in May (week 19). The industry has since made progress in reducing continued UCs, but it is unclear from the present data if these people returned to work in the Leisure & Hospitality industry, found a job in a different industry, or are no longer active in the Wyoming labor force. As of September 2020, Mining & Energy, Construction, and Leisure and Hospitality have the highest continued UCs (1,804, 1,137, and 1,063 continued UCs respectively).

Continued Unemployment Claims

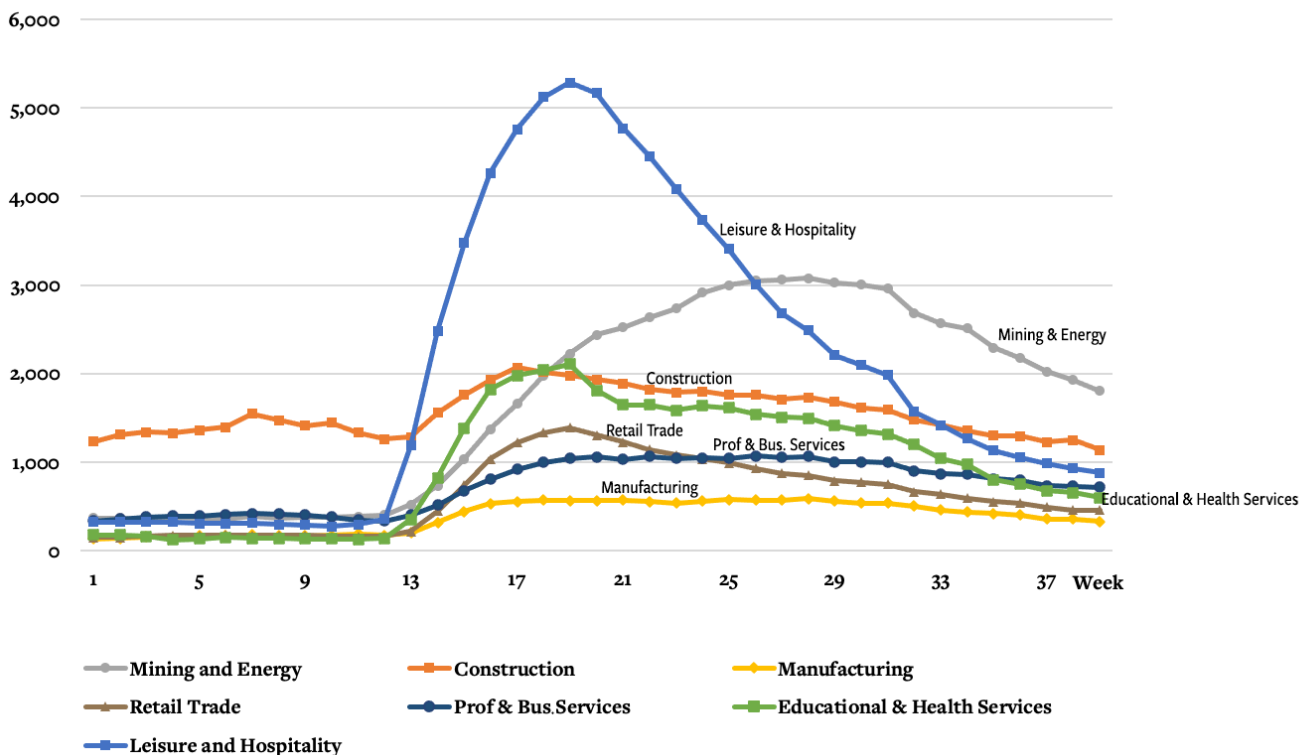


Figure 2. Continued unemployment claims (CUCs) for Wyoming by industry.

Reframing these continued UCs as shares of each industry’s total employment (i.e., industry specific unemployment rates) reveals the intensity of continued UCs relative to a particular industry’s size. For example, although Manufacturing had the lowest continued UCs in June, Retail Trade is a much larger industry in terms of employment meaning Manufacturing actually had a higher unemployment rate than Retail Trade despite lower CUCs.

Table 3 shows these unemployment rates across eight Wyoming industries. Mining & Energy and Leisure & Hospitality saw the largest shares of their workforce unemployed, however Mining & Energy has not bounced back as much as Leisure & Hospitality. Educational Services employment was least affected among the industries, reaching a high of 3.5% in June, or approximately one in 29 Educational Service workers unemployed in June.

According to the Wyoming Department of Workforce Services, Wyoming’s statewide unemployment rate has continued to fall from its high of 9.6% in April. Given their industry compositions, Niobrara and Albany counties have had the lowest unemployment rates throughout the pandemic (4.4% and 5.4% in April, respectively) whereas Natrona county has had the highest consistent unemployment rate in the

state (12.7% in April). Teton County had the highest unemployment rate in April at 18.3%, however as the Leisure and Hospitality industry recovers, their unemployment rate fell to 5.7% in July. Nationally, Wyoming’s unemployment rate (6.8% in July) is well below average (10.5% in July). Wyoming ranked ninth among US states with the lowest unemployment rates in July.

Conclusions

This initial report reveals how the COVID-19 pandemic influenced Wyoming’s employment between January and September 2020. Initial unemployment claims show monthly additional unemployment slowing down, but still shows industries shedding employment faster than in previous years. Continued unemployment claims show that the total number of unemployed persons in each industry is decreasing but remains particularly high in the Mining & Natural Resources industry. Unemployment rates by industry support this finding, showing two out of five Wyoming Mining & Natural Resources workers unemployed in September 2020. Across the measures and industries considered in this report, Leisure & Hospitality has experienced the greatest employment recovery, moving from

Table 3. Wyoming unemployment rates by industry

Date	Retail Trade	Mining & Energy	Construction	Manufacturing	Health Services	Education	Leisure & Hospitality	Professional and Technical Services
Jan. 2020	0.9%	2.6%	8.9%	2.1%	0.6%	0.2%	1.2%	1.5%
Feb. 2020	0.8%	2.4%	9.3%	2.3%	0.5%	0.1%	1.0%	1.8%
Mar. 2020	1.6%	4.1%	10.4%	3.4%	1.8%	0.3%	6.7%	2.6%
Apr. 2020	6.1%	12.5%	14.0%	7.8%	6.1%	1.9%	27.7%	5.5%
May 2020	6.5%	19.9%	12.0%	8.2%	5.5%	3.2%	24.7%	6.7%
Jun. 2020	4.5%	23.6%	10.7%	7.8%	3.5%	3.5%	14.2%	6.3%

Industry unemployment rate highs are in bold italic highlighted with yellow.

Data Source: T Glover (01/04/2021), Custom Extract from Wyoming’s Quarterly Census of Employment and Wages and Unemployment Insurance Claims Data. Wyoming Department of Workforce Services, Research & Planning, Casper, WY.

For more information on the industries included in each group, visit: <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2017>

27.7% unemployment in April to 14.2% in June, but employment in Educational and Health Services appears to have been least effected by the pandemic. Moving forward, one should consider how different industries' economic activity might increase or decrease in the autumn and winter months, and how varying infection levels of COVID-19 may influence this expected economic activity.



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Signage at Canyon Village Visitor Center, Yellowstone National Park, July 6, 2020, letting visitors know the visitor center is closed due to COVID-19.



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