SUMMARY: The Wyoming Economic Health Index (WEHI) reported an index value of 97.3 in June 2020 (see Figure 1). This value was higher than the May 2020 value of 95.5, but significantly lower than the June 2019 value of 108. The WEHI saw slight increases in both May and June after a huge drop in April, reflecting the slow recovery from the Covid-19 recession.

NOTE: The Wyoming Economic Health Index combines four state-level economic indicators into one number in order to sum up the current economic conditions in Wyoming. The four economic indicators are (1) the monthly unemployment rate, (2) monthly total non-farm employment, (3) monthly sales and use tax collections from the mining sector, and (4) monthly sales and use tax collections from lodging. All data used in the WEHI are seasonally adjusted. Additionally, both tax collection indicators are inflation adjusted.

SOURCES: U.S. Bureau of Labor Statistics (1), (2); Wyoming Department of Revenue (3), (4).
The total number of nonfarm payroll jobs in June 2020 was 266,300, higher than the May 2020 number by 2,500, but lower than the June 2019 number by 24,100 (see Figure 5). Although total employment over the past few months is the lowest it has been since 2005, it has increased for two consecutive months.

Wyoming’s collection of the 4% sales and use tax from the mining sector was $3.8 million in June 2020, $0.5 million less than May 2020 and $7.5 million less than June last year (see Figure 6). After six months of calendar year 2020 (January-June), total collections from the mining sector summed to $39.6 million, $11.7 million less (-22.9%) than the 5-year average sum over the same six months.

Note: July collections mostly reflect sales that occurred in June. Therefore, there is a 1-month lag implemented in order to accurately track sales activity in a given month.

Wyoming’s collection of the 4% sales and use tax from lodging was $1.7 million in June 2020, 46% less than June last year (see Figure 7). This is the fourth consecutive month of year-over-year declines over 35%. These large decreases in collections from lodging are not surprising because of the stay at home orders and lack of travel due to the Covid-19 pandemic.

Note: July collections mostly reflect sales that occurred in June. Therefore, there is a 1-month lag implemented in order to accurately track sales activity in a given month.
Wyoming Economic Health Index Addendum

The Wyoming Economic Health Index (WEHI) is a coincident economic indicator that is designed to provide a current assessment of the state’s economy. There are four components of the WEHI. The first two components, unemployment rate and total nonfarm employment, are included to capture overall labor market activity for Wyoming. The third component, sales and use tax collections related to the mining sector, captures economic activity related to mineral production in the state. The fourth component, sales and use tax collections related to lodging, serves as a proxy for tourism activity in the state.

Unemployment Rate: The first component of the WEHI is the unemployment rate. This statistic measures the percentage of people in Wyoming who are actively looking for work, but do not have jobs. In the WEHI model, the employment rate (100% minus the unemployment rate) is indexed rather than the unemployment rate because an increase in the employment rate, similar to an increase in total employment, mining activity, and tourism activity, is considered to be a positive for the state’s economy. The unemployment rate is available monthly, seasonally adjusted, from the U.S. Bureau of Labor Statistics.

Total Nonfarm Employment: The second component of the WEHI is total nonfarm employment. This statistic measures the number of people who have wage or salary jobs in Wyoming. The total nonfarm employment is available monthly, seasonally adjusted, from the U.S. Bureau of Labor Statistics.

Mining Sales & Use Tax: The third component of the WEHI is sales and use tax collections related to the mining sector (including oil and gas extraction). Because sales and use tax collections received by the state for a given month represent transactions that took place 4 to 6 weeks prior, the data is lagged one month in the WEHI model. This statistic is available monthly from the State of Wyoming’s Department of Revenue. The data is adjusted for inflation using the Consumer Price Index for All Urban Consumers from the U.S. Bureau of Labor Statistics. The data is also seasonally adjusted.

Lodging Sales & Use Tax: The fourth component of the WEHI is sales and use tax collections from lodging. Again, because sales and use tax collections received by the state for a given month of transactions represent transactions that took place 4 to 6 weeks prior, the data is lagged one month in the WEHI model. This statistic is available monthly from the State of Wyoming’s Department of Revenue. The data is adjusted for inflation using the Consumer Price Index for All Urban Consumers from the U.S. Bureau of Labor Statistics. The data is also seasonally adjusted.

Methodology: Each series for the components discussed above are standardized starting in January 2005, resulting in a value of 100 for each component and the WEHI. As each component changes from month to month, the WEHI value changes. Next, the standard deviation of each component’s standardized series values is calculated, followed by the calculation of the inverse of each component’s standard deviation. Lastly, the individual inverse standard deviations are standardized, resulting in weights that sum to 1. The rationale for this weighting approach is that the components that are more stable over time will have a smaller standard deviation and thus, a larger inverse standard deviation and weight. A large shift in a typically stable data series would provide a better signal of a change in the economy than a large shift in a data series that typically has large fluctuations. Therefore, this weighting approach allows the WEHI to put a larger weight on the more stable components so that if they do experience a large shift, the WEHI’s value will be affected more to represent the change in the state’s economic conditions.