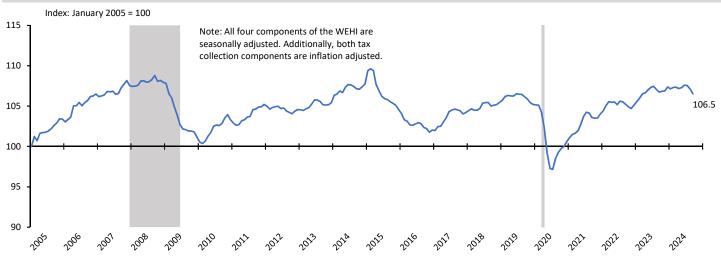
ECONOMIC ANALYSIS DIVISION • NOVEMBER 2024

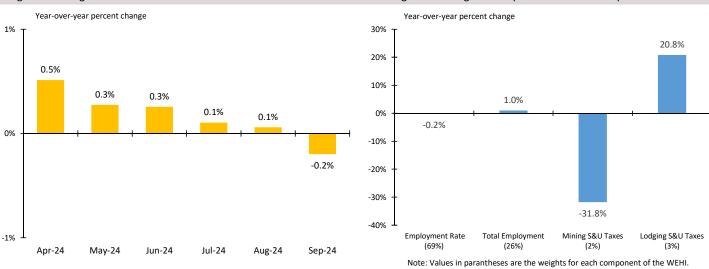
▶ Figure 1: Wyoming Economic Health Index as of September 2024



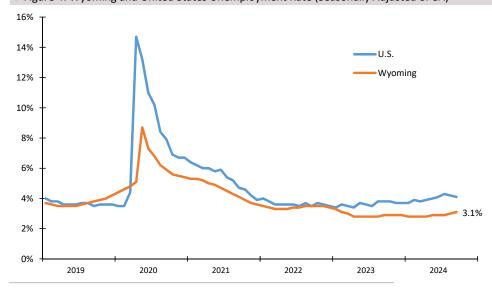
Note: Shaded areas represent U.S. recessions

▶ Figure 2: Change in WEHI - Last 6 Months

▶ Figure 3: Change in Components of WEHI - September 2024



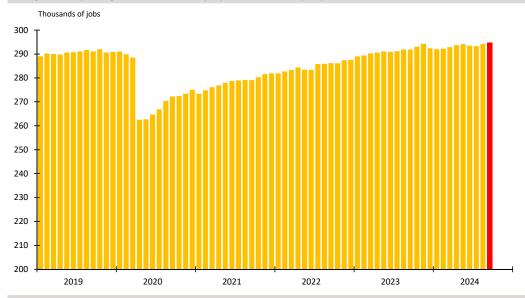
▶ Figure 4: Wyoming and United States Unemployment Rate (Seasonally Adjusted or SA)



- → SUMMARY: The Wyoming Economic Health Index (WEHI) reported a value of 106.5 in September 2024 (see Figure 1). This value is slightly lower than the September 2023 value of 106.7.
- ▶ As seen in Figure 2, in five of the past six months (April 2024 September 2024), the WEHI reported year-over-year increases, with the only decrease occurring in September (-0.2%).
- ➤ Two of the four WEHI components declined in September 2024 compared to September 2023 (see Figure 3). Mining sales & use taxes saw the largest year-over-year decrease, down 31.8%.
- ➤ The unemployment rate (SA) for Wyoming in September 2024 was 3.1%, higher than the September 2023 rate (2.9%), but lower than the September 2024 national unemployment rate (4.1%) (see Figure 4). This is the first time the unemployment rate has been above 3.0% since February 2023.

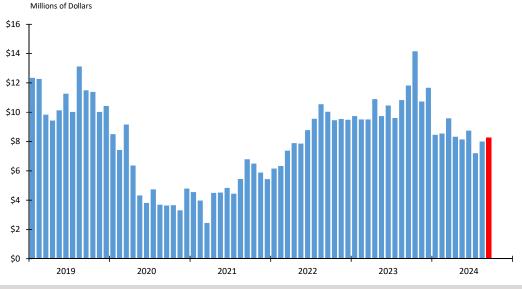


▶ Figure 5. Wyoming Total Nonfarm Employment (Seasonally Adjusted)



>> The total number of nonfarm payroll jobs in September 2024 was 294,800, higher than the September 2023 number by 2,900 (+1.0%) (see Figure 5). Total employment has continued to see year-over-year growth, but the growth rate is slowing.

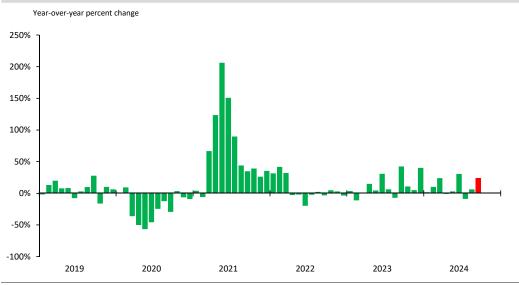
▶ Figure 6. Wyoming 4% Sales and Use Tax Collections - Mining Sector (1-Month Lag)



>> Wyoming's collection of the 4% sales and use tax from the mining sector was \$8.3 million in September 2024, \$3.5 million less (-30.1%) than September 2023 (see Figure 6).

Note: The value for September 2024 in Figure 6 is actually collections from October 2024 because there is approximately a 1-month lag between collections and sales activity.

▶ Figure 7. Change in Wyoming 4% Sales and Use Tax Collections - Lodging (1-Month Lag)



>> Wyoming's collection of the 4% sales and use tax from lodging was \$7.3 million in September 2024, 23.7% more than September 2023 (see Figure 7).

Note: The value for September 2024 in Figure 7 is actually based on collections from October 2024 because there is approximately a 1-month lag between collections and sales activity.



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Wyoming Economic Health Index Addendum

The Wyoming Economic Health Index (WEHI) is a coincident economic indicator 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 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 the sales and use tax collected from the mining sector (including oil and gas extraction). Because sales and use tax collections the state receives 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. Next, 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. Lastly, a 3-month moving average is used in order to smooth out the index. This helps eliminate large "spikes" that may occur due to a certain component recording an unusually high or low value in a given month.

