

FHLB DES MOINES

Quarterly Economic Overview

Member Strategies Department

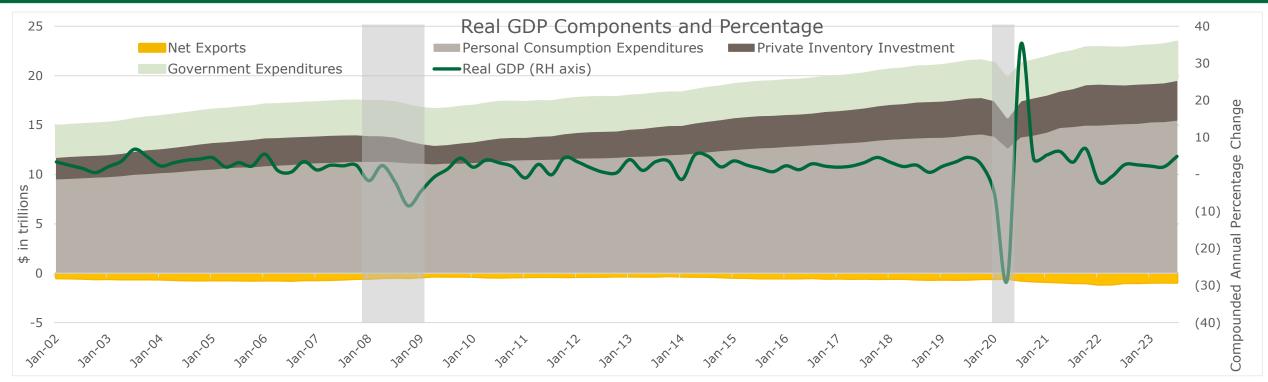
Third Quarter, 2023



Gross Domestic Product

The U.S. Economy Expanded for a Fifth Consecutive Quarter, the Most Since 2021

U.S. Gross Domestic Product



Second-quarter (third estimate) Real GDP

• The third estimate for second-quarter real GDP came in at 2.1%.

Third-quarter (advance estimate) Real GDP

- The advance estimate for third-quarter real GDP was 4.9%. The third quarter increase reflected increases in consumer spending, private inventory investment, exports, state and local government spending, federal government spending, and residential fixed investment that were partly offset by a decrease in nonresidential fixed investment. Imports, which are a subtraction in the calculation of GDP, increased.
- The increase in consumer spending reflected increases in both services and goods. Within services, the leading contributors were housing and utilities, health care, financial services and insurance, and food services and accommodations. Within goods, the leading contributors to the increase were other nondurable goods (led by prescription drugs) as well as recreational goods and vehicles. The increase in private inventory investment reflected increases in manufacturing and retail trade. Within nonresidential fixed investment, a decrease in equipment was partly offset by increases in intellectual property products and structures.

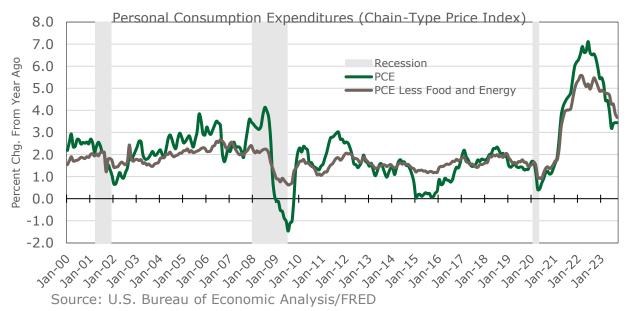


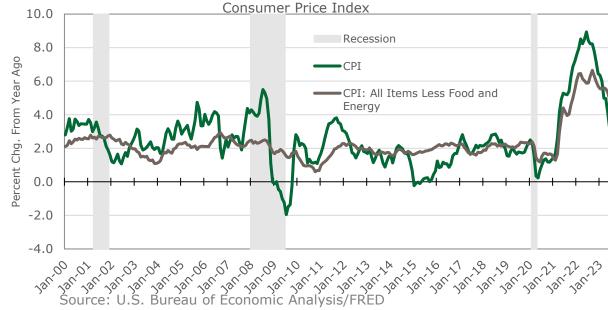
Prices

Inflation Levels Appeared to Stagnate in the Third Quarter

Consumer Prices

- The all-items index rose 3.7% for the 12 months ending September, the same increase as August. The energy index decreased 0.5% over the past year, while the food index rose 3.7%.
- On a month-over-month basis, the all-items index rose 0.4% in September after rising 0.6% in August. The energy index rose 0.6%, as major components were mixed. The food index increased 0.2%, with the food away from home index rising 0.1%, while food at home index increased 0.4%
- The index for all items less food and energy rose 4.1% for the 12 months ending September.
- The index for all items less food and energy rose 0.3% in September, the same as August. Indexes which increased in September include rent, owners' equivalent rent, lodging away from home, motor vehicle insurance, recreation, personal care, and new vehicles. The indexes for used cars and trucks and for apparel were among those that decreased over the month.

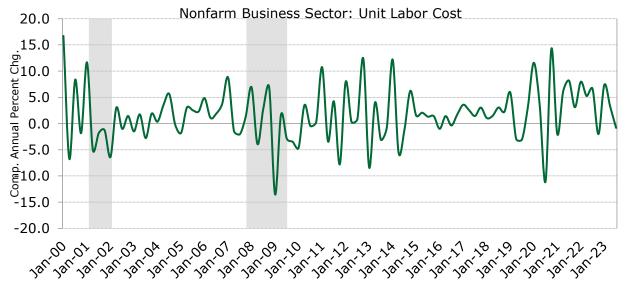


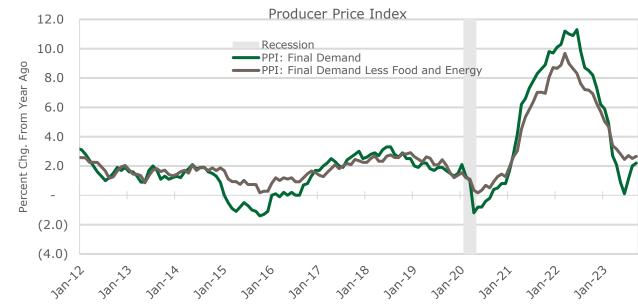


- The price index for PCE posted a year-over-year increase of 3.4% in September. When backing out food and energy, Core PCE was up 3.7%.
- On a month-over-month basis, September's PCE increased \$138.7 billion. Breaking it down, goods increased \$42.5 billion, while services increased \$96.2 billion. Within services, the largest contributors to the increase were other services (led by international travel), housing and utilities (led by housing), health care (led by hospitals and nursing homes), and transportation (led by air transportation). Within goods, other nondurable goods (led by prescription drugs) and motor vehicles and parts (led by new motor vehicles) were the leading contributors to the increase.
- Personal income increased by \$77.8 billion (0.3%) and outlays increased by \$175.1 billion in September.

Producer Prices

- The PPI for final demand rose 2.2% over the last 12 months ending in September (on an unadjusted basis), the largest increase since April. The index for final demand less food, energy and trade services rose 2.8% over the same period.
- Month-over-month, the final demand index (seasonally adjusted) rose 0.5% in September. The increase is due to a 0.3% rise in services and 0.9% increase in goods. Prices for final demand less foods, energy, and trade services edged 0.2% higher.
- A 13.9% jump in the index for deposit services (partial) was a major factor in the September rise in prices for final demand services. The indexes for machinery, equipment, parts, and supplies wholesaling; health, beauty, and optical goods retailing; traveler accommodation services; outpatient care (partial); and application software publishing also moved higher. In contrast, prices for airline passenger services fell 2.1%. The indexes for automobile retailing (partial) and for bundled wired telecommunications access services also decreased.
- Over 40% of the September increase in prices for final demand goods can be traced to a 5.4% rise in the index for gasoline. Prices for jet fuel, processed young chickens, meats, electric power, and diesel fuel also advanced. In contrast, the index for fresh and dry vegetables declined 13.9%. Prices for wood pulp and for utility natural gas also fell.

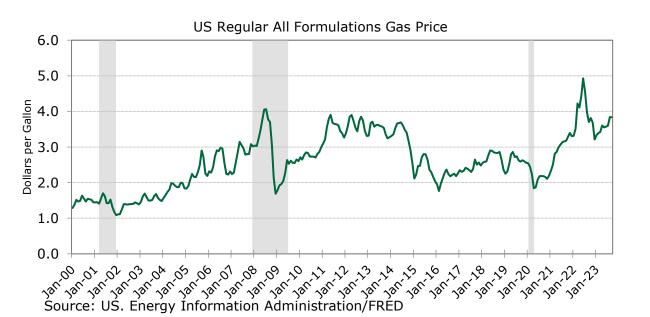


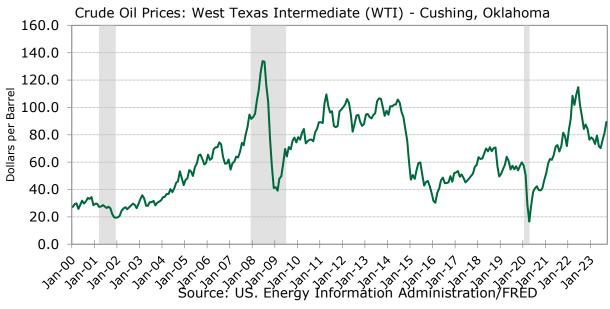


- Unit labor costs decreased at an annual rate of 0.8% (preliminary) in the third quarter of 2023, the combined effect of a 5.5% increase in hourly compensation and a 3.7% increase in productivity. Unit labor costs increased 1.9% over the last four quarters.
- The manufacturing sector unit labor costs increased 7.0% in the third quarter of 2023, as hourly compensation increased 6.2% and productivity decreased 0.7%. Over the last four quarters, manufacturing unit labor costs increased 5.8%.
- An overall unit labor cost of 3.0% and above is widely seen as feeding overall inflation.

Oil Prices

- The U.S. Energy Information Administration (EIA) estimates U.S. crude oil production will average 12.8 million barrels per day (b/d) in 2023. The EIA estimates U.S. crude oil production will average 13.2 million (b/d) in 2024.
- The EIA estimates Brent crude oil prices to average \$93 per barrel (b) during the fourth quarter, up from \$86/b in August. EIA expects Brent prices will average \$87/b after the first half of 2024.





• The EIA estimates U.S. retail gasoline prices will average \$3.60 per gallon (gal) in 2023 and \$3.52/gal in 2024.

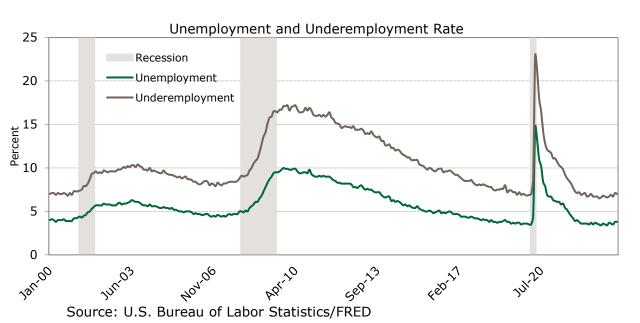


Employment

Labor Market Remained Resilient During the Third Quarter

Employment

- Total nonfarm payroll employment for September increased by 336,000, compared to an average of 267,000 over the prior twelve months.
- In September, notable job growth occurred in leisure and hospitality, government, and health care.
- Nonfarm employment in July was revised up 79,000 to 236,000 and August was revised up 40,000 to 227,000.
- It should be noted, the high and low points of the pandemic are excluded from the graph.



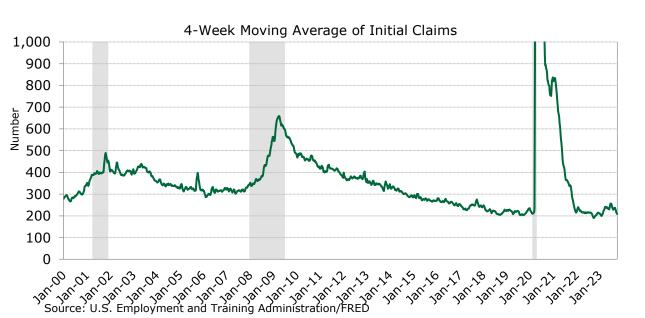
September.

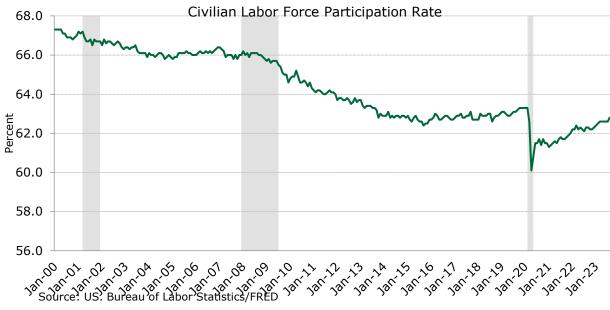


- The September unemployment rate was unchanged at 3.8%. The number of unemployed persons was 6.4 million.
- The number of long-term unemployed (those jobless for 27 weeks or more) was little changed at 1.2 million in September.
- The seasonally adjusted underemployed rate, or the U-6 rate, was 7.0% in

Employment

- The labor force participation rate was at 62.8%, unchanged from the prior month. The employment-population ratio (not shown in graphs), was at 60.4%, unchanged from the prior month.
- At the current participation rate and population growth rate, maintaining an unemployment rate of 3.8% suggests the economy needs to add 104.9k jobs on average each month over the next twelve months. (Source: Federal Reserve Bank of Atlanta/Jobs Calculator)





- The 4-week moving average for initial claims was 209,250 as of the week ending September 30.
- The weekly initial claims for the week ending September 30 were 209,000, near the highest level in over a year.
- It should be noted, the high point of the pandemic have been excluded from the graph.

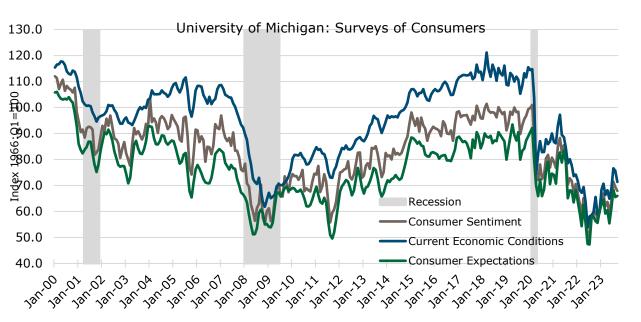


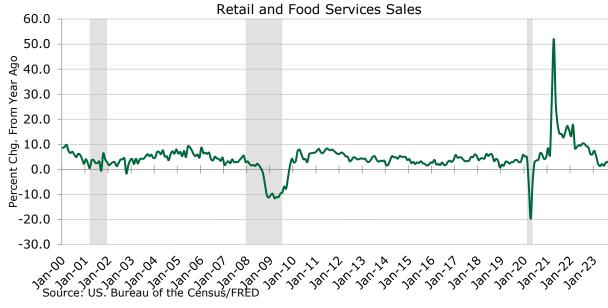
Consumer

Both Spending and Optimism Were Higher During the Third Quarter

Consumer

- Advance estimates of U.S. retail and food services sales, which is adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, for September rose 0.7% month-over-month and is 3.8% higher than September 2022.
- When excluding motor vehicles and gasoline stations, retail sales increased 4.0% since September 2022.





- The University of Michigan's Surveys of Consumers increased to a reading of 68.1 in September. Both current conditions and expectations were higher, at 71.4 and 66.0, respectively.
- Year-ahead inflation expectations fell to 3.2% in September, down from 3.5% and the lowest level since March 2021.

Consumer

• Real disposable personal income fell 0.1% in September and was up 3.5% year-over-year.





 Personal savings was \$687.7 billion in September. The personal savings rate was 3.4%.



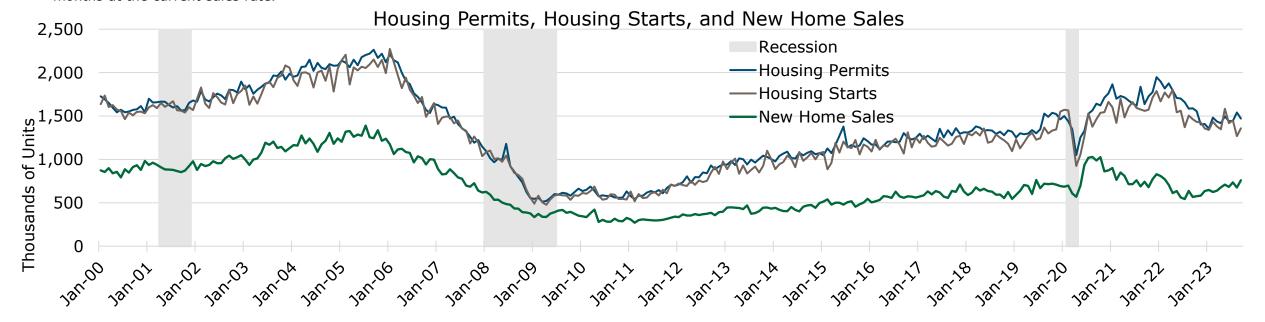
Housing

The Housing Sector Showed Some Signs of Rebounding During the Third Quarter

Housing

- Building permits, which lead housing starts by 1-3 months and are subject to less volatility, in September were at a seasonally adjusted annual rate of 1,473,000, 4.4% below the revised August rate and 7.2% below the September 2022 level. Single-family building permits were at a rate of 965,000, 1.8% above the revised August rate. Building permits for 5+ units were at a rate of 459,000 in September.
- Housing starts in September were at a seasonally adjusted rate of 1,358,000, 7.0% above the revised August rate, but 7.2% below the September 2022 rate. Single-family housing starts in September were at a rate of 963,000, 3.2% above the revised August rate. Housing Starts for 5+ units was 383,000 in September.
- New home sales in September were at a seasonally adjusted rate of 759,000, 12.3% above the revised August rate and 33.9% above the September 2022 rate. The median sales price of new houses sold in September was \$418,800. The average sales price was \$503,900. The seasonally adjusted estimate of new houses for sale at the end of September was 435,000, which represents a supply of 6.9 months at the current sales rate.

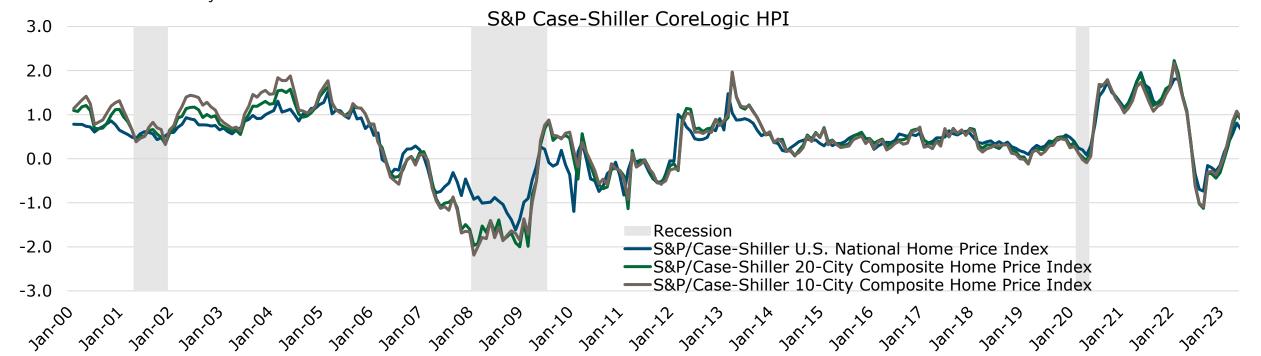
- Existing-home sales (not graphed), as reported by the National Association of Realtors, fell 2.0% in September, to a seasonally adjusted annual rate of 3.96 million. Sales are down 15.4% from a year ago.
- The median price for existing-home sales was \$394,300, up 2.8% from the record high a year ago.
- Supply was at 1.13 million in September, down 8.1% from one year ago. Relative to sales, supply is at 3.4 months, up from 3.3 months last month and 3.2 months a year ago.
- Existing-home sales in the Midwest were down 4.1% in September and down 11.7% year-over-year. The median price was \$293,300, up 3.1% from a year ago. Sales in the West were down 5.3% in September and 19.3% year-over-year. The median price was \$606,100, up 1.8% year-over-year.



Housing

- The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, covering all nine U.S. census divisions, reported an annual increase in August of 2.6%, up 1.0% from the prior month. The National Index rose 0.4% in the month of August before seasonal adjustments and 0.9% after seasonal adjustments.
- The S&P CoreLogic Case-Shiller U.S. 10-City reported an annual increase in August of 3.0%, up from 1.0% the prior month. The 10-City Composite rose 0.4% in the month of August before seasonal adjustments and 1.0% after seasonal adjustments.
- The S&P CoreLogic Case-Shiller U.S. 20-City Composite reported an annual increase in August of 2.2%, an increase of 0.2% from the prior month. The 20-City Composite rose 0.4% in the month of August before seasonal adjustments and 1.0% after seasonal adjustments.

- The FHFA House Price Index (not pictured but data can be found in the appendix) increased 0.6% in August. Prices were up 5.6% year-over-year.
- For the nine census divisions, seasonally adjusted monthly house price changes from April 2023 to August 2023 ranged from -0.2% in the South Atlantic division to 1.1% in the Pacific and East North Central division. The 12-month changes ranged from 2.4 percent in the Mountain division to 8.6 percent in the Middle Atlantic division



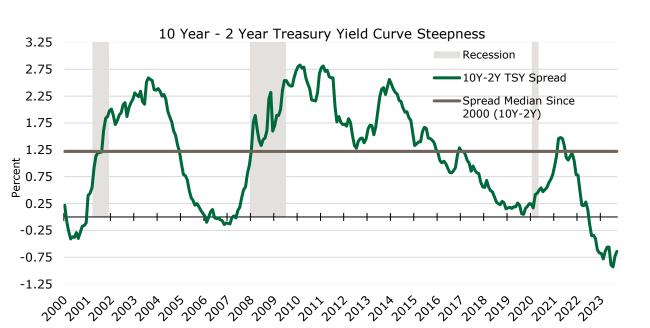


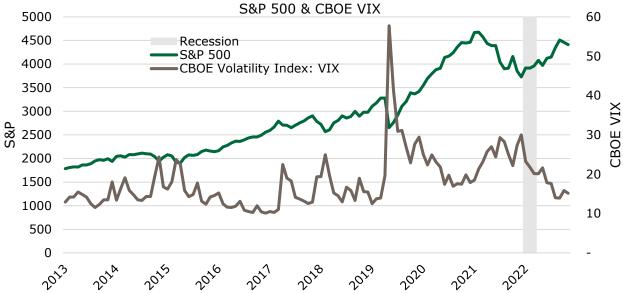
Market Indices

Yield Were Less Inverted, While Equities Began to Falter

Market Indices

 S&P 500 closed September at 4,300, down 3.4% during the second quarter. The CBOE Volatility Index, a measure representing the market's expectation of stock market volatility, indicates that the market expects the range of movement, up or down, in the S&P 500 index over the next year to be 15.2%, which is right around pre-pandemic levels. Overnight SOFR, not pictured, ended September at 5.31%.





 U.S. Treasury yield curve remained inverted, though the spread between the 2-year and 10-year did shrink during the third quarter. The 10-year Treasury Note minus 2-year Treasury Note spread ended September at 0.47%, below the 1.22% median dating back to the start of the century.

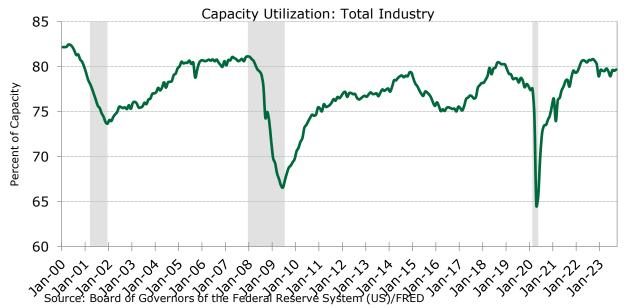


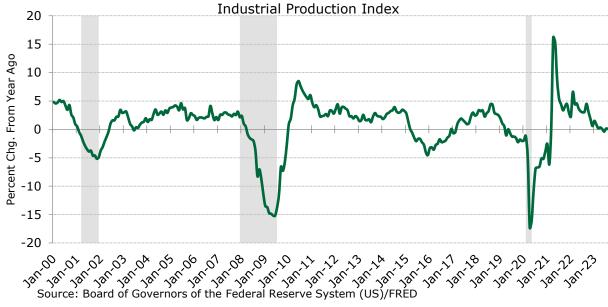
Economic Activity

Industrial Activity Was Higher for the Quarter

Economic Activity

- Industrial production rose 0.3% in September after being unchanged in August. For the third quarter, the index rose 2.5% overall at an annualized rate. Output growth in September for manufacturing, mining, and utilities, posted month-over-month changes of 0.4%, 0.4%, and -0.2%, respectively. Year-over-year, industrial production rose 0.5% with manufacturing, mining, and utilities changing by -0.8%, 3.4%, and 2.0%, respectively.
- Manufacturing rose two of three months during the quarter.
- · Mining has increased four straight months.
- The utilities index decreased two of three months during the guarter.





- Capacity utilization was 79.7% in September, the same as its long run average.
- The manufacturing component was at 77.8%, just below the long-run average of 78.2.
- Utilization for mining was at 95.1%, above its long-run average of 86.4%.
- The operating rate for utilities was at 72.7%, well below its long-run average of 84.7%.

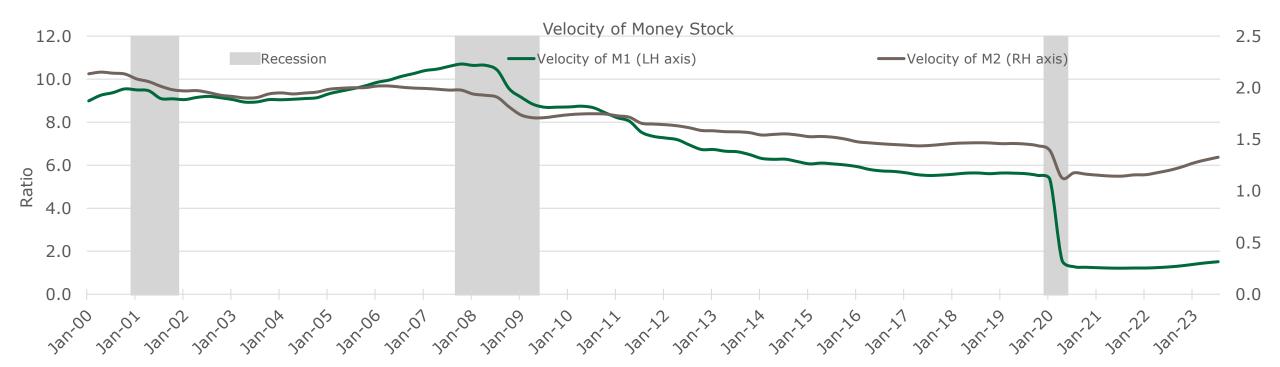


Money Supply and Velocity

Supply and Velocity Continued to Edge Higher

Money Supply and Velocity

- The velocity of M2, which includes M1 and savings deposits, CDs, and money market deposits, is the most common measurement referenced for the velocity of money and provides some insight into how quickly the economy is spending versus saving when compared to the velocity of M1.
- The velocity of M2 was higher at 1.33, continuing to move higher from the record low, but still indicating that money isn't changing hands and
 consumers continue to save.
- The velocity of M1, which is the money supply of currency in circulation and represents everyday short-term consumption transactions, is 1.51 versus the peak reading of 10.68 in the 4th quarter 2007. The latest reading continues to move up from the lowest level since 1959.

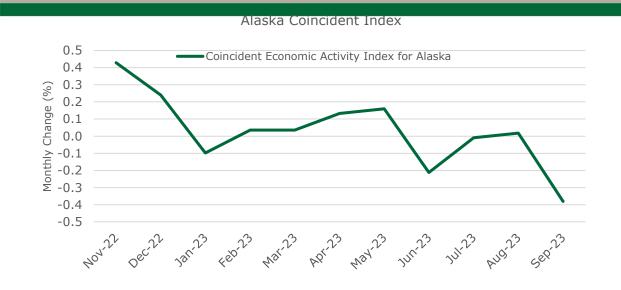


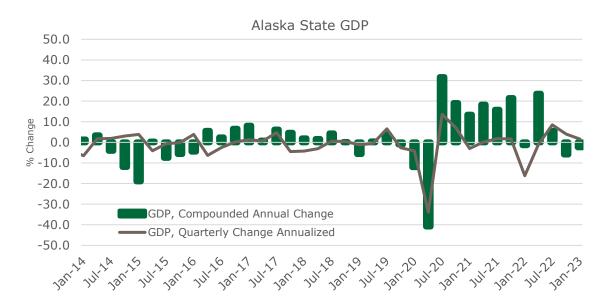


Appendix

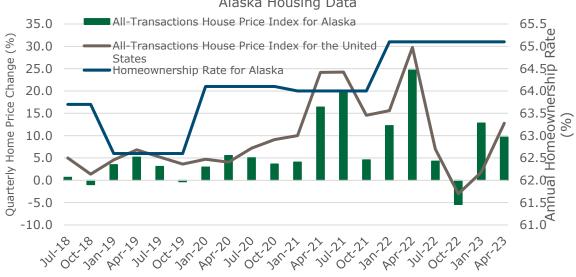
State Level Data

Alaska

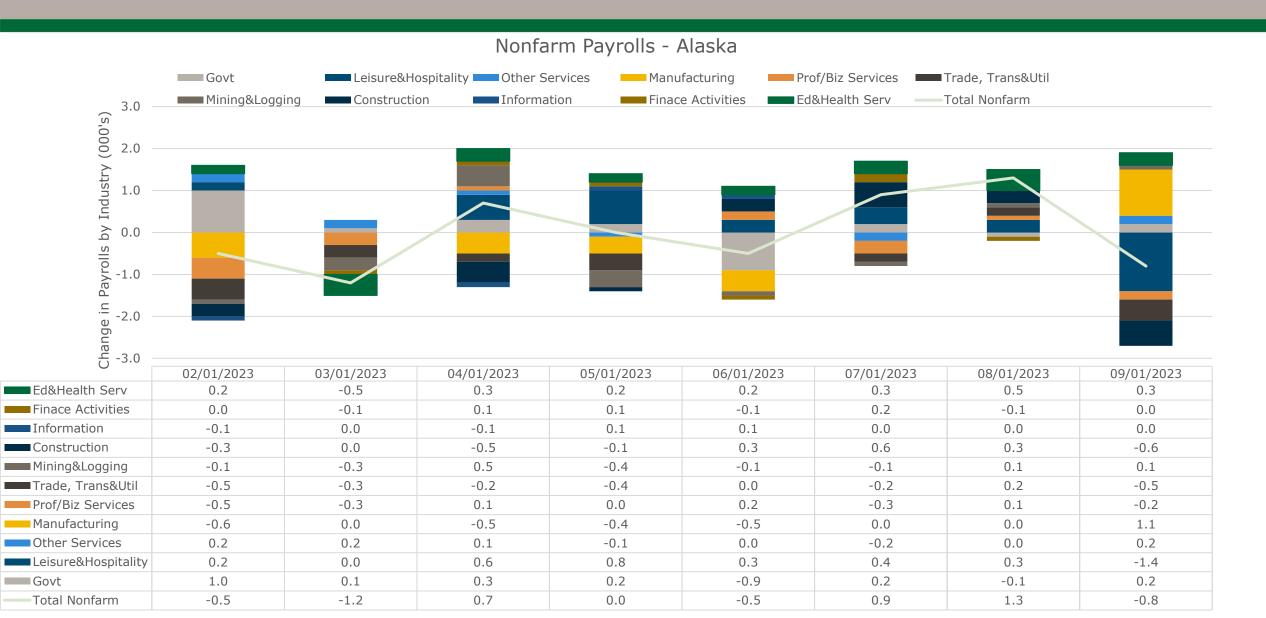




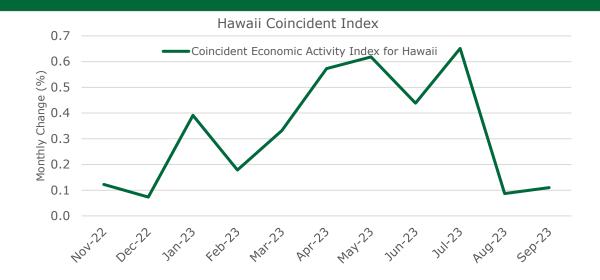


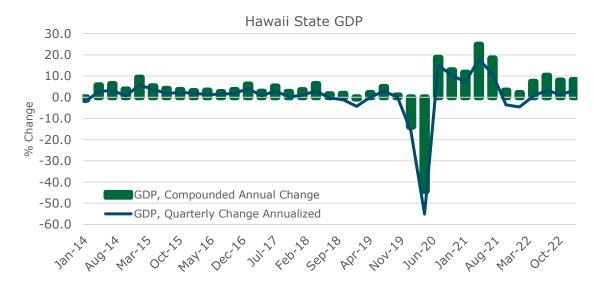


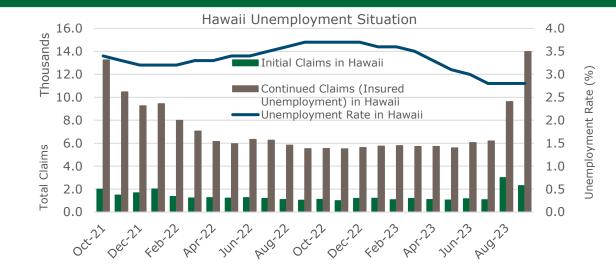
Alaska

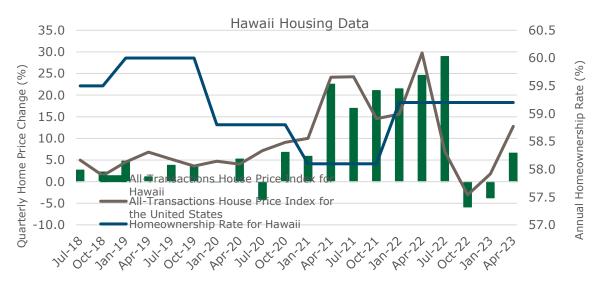


Hawaii

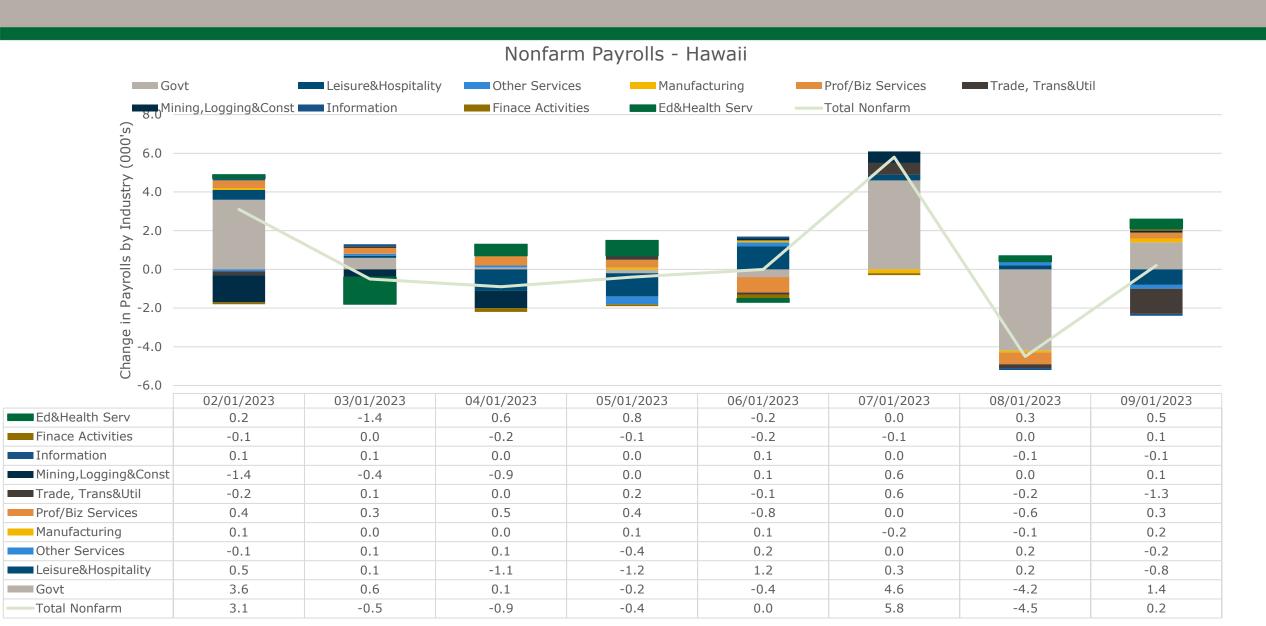




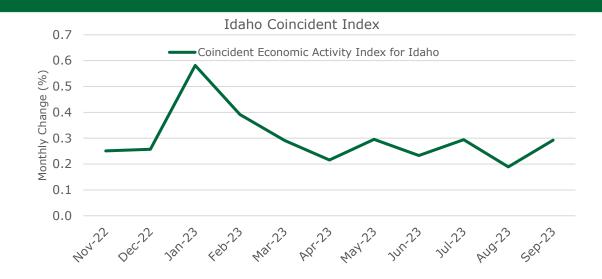


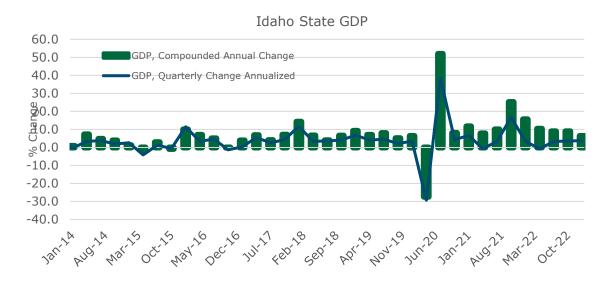


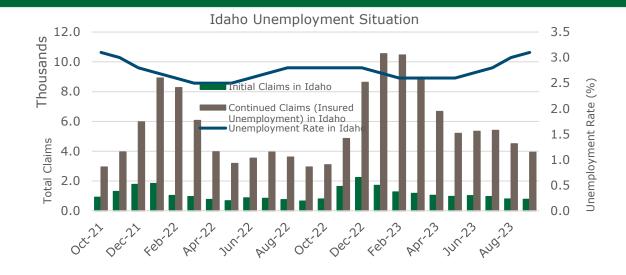
Hawaii

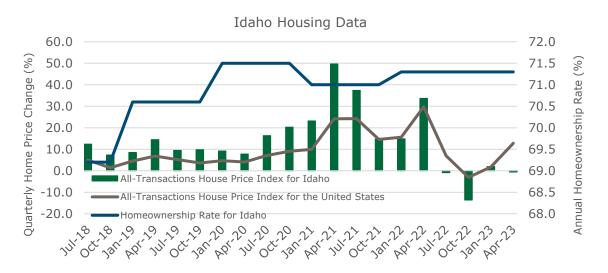


Idaho

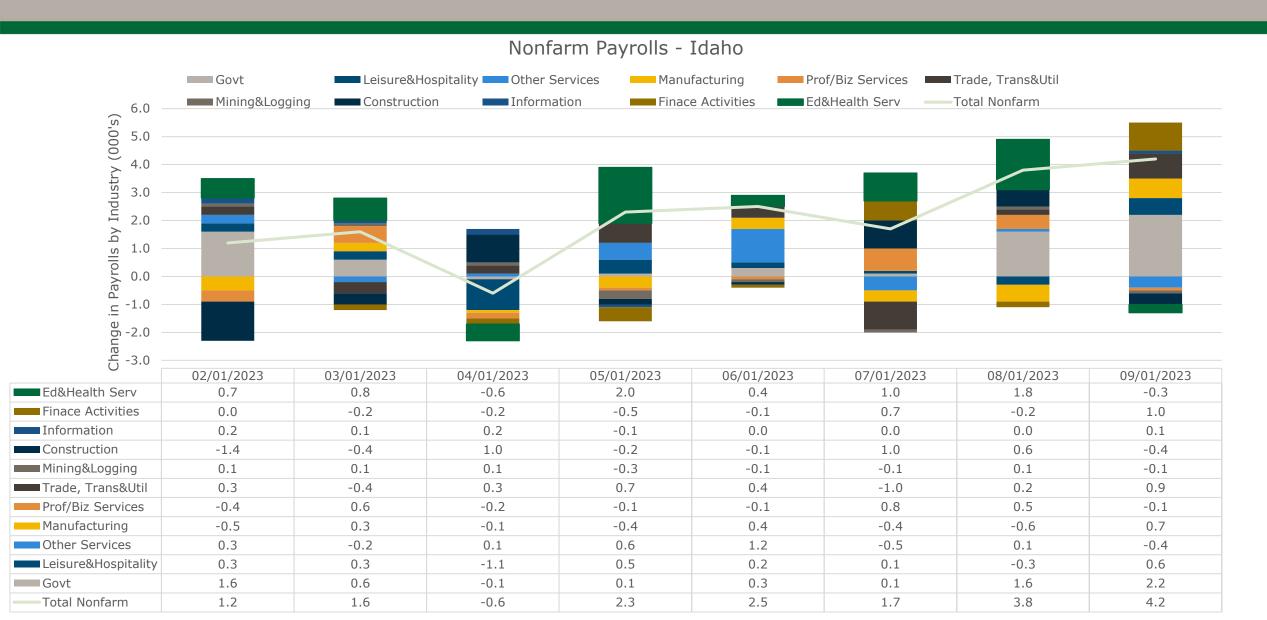




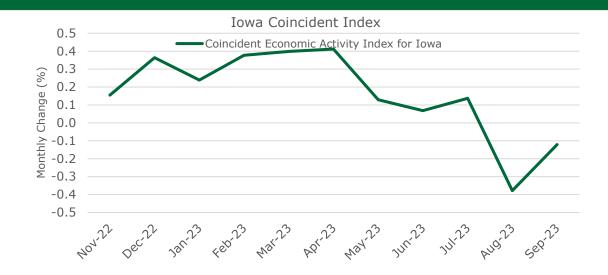


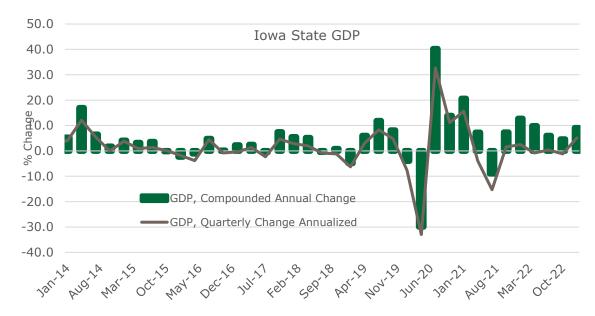


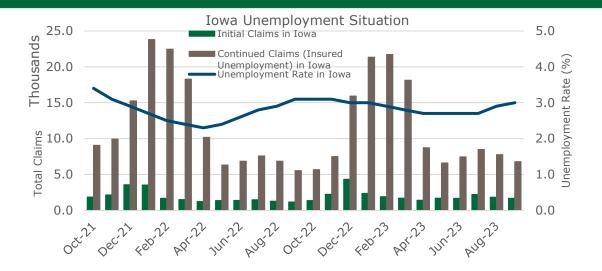
Idaho

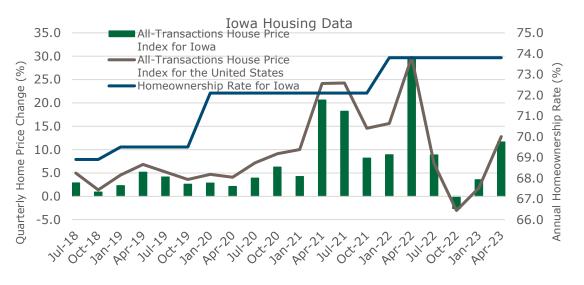


Iowa

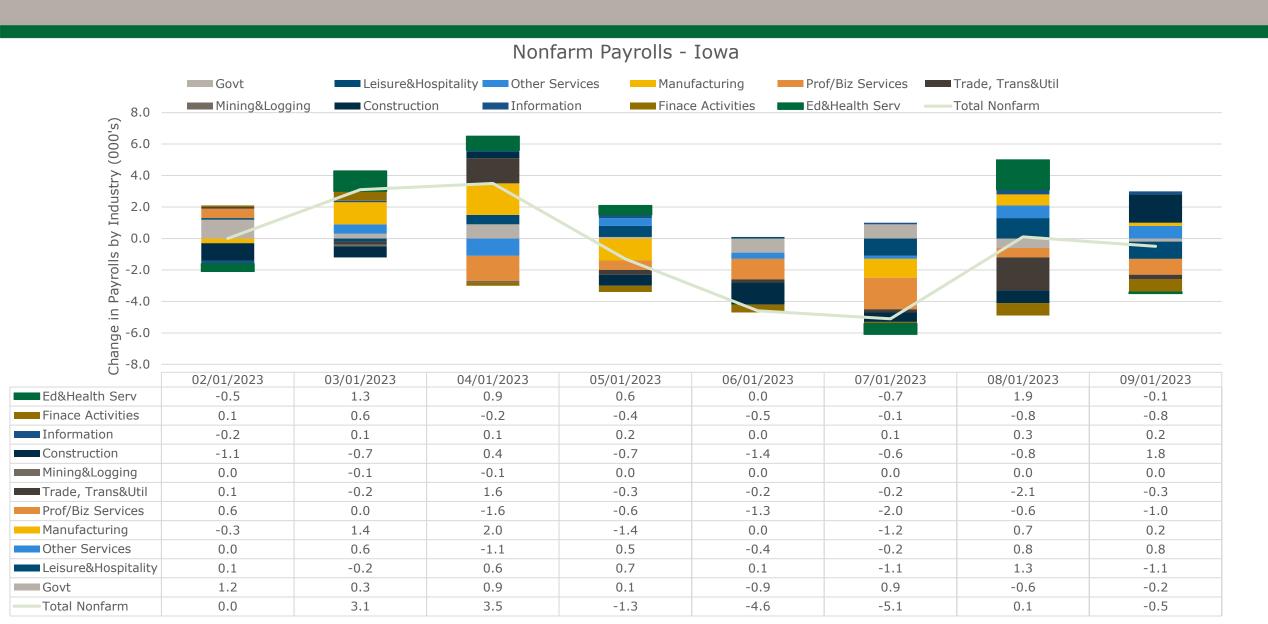




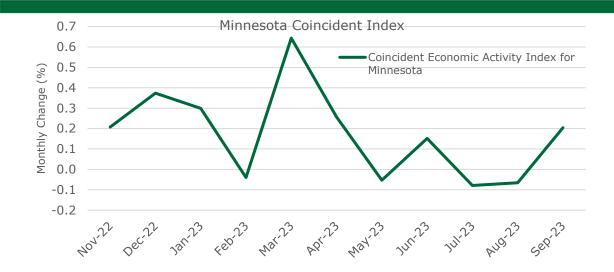


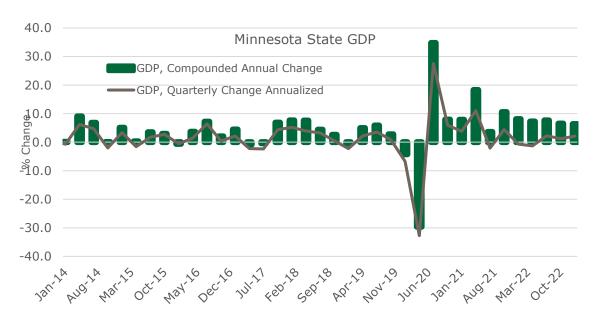


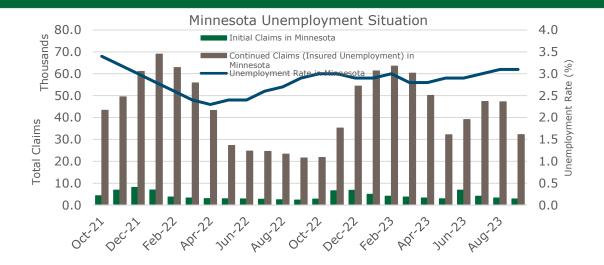
Iowa

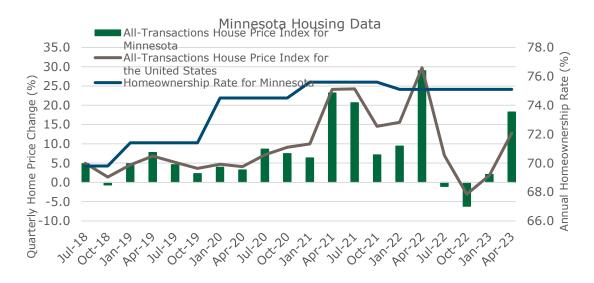


Minnesota

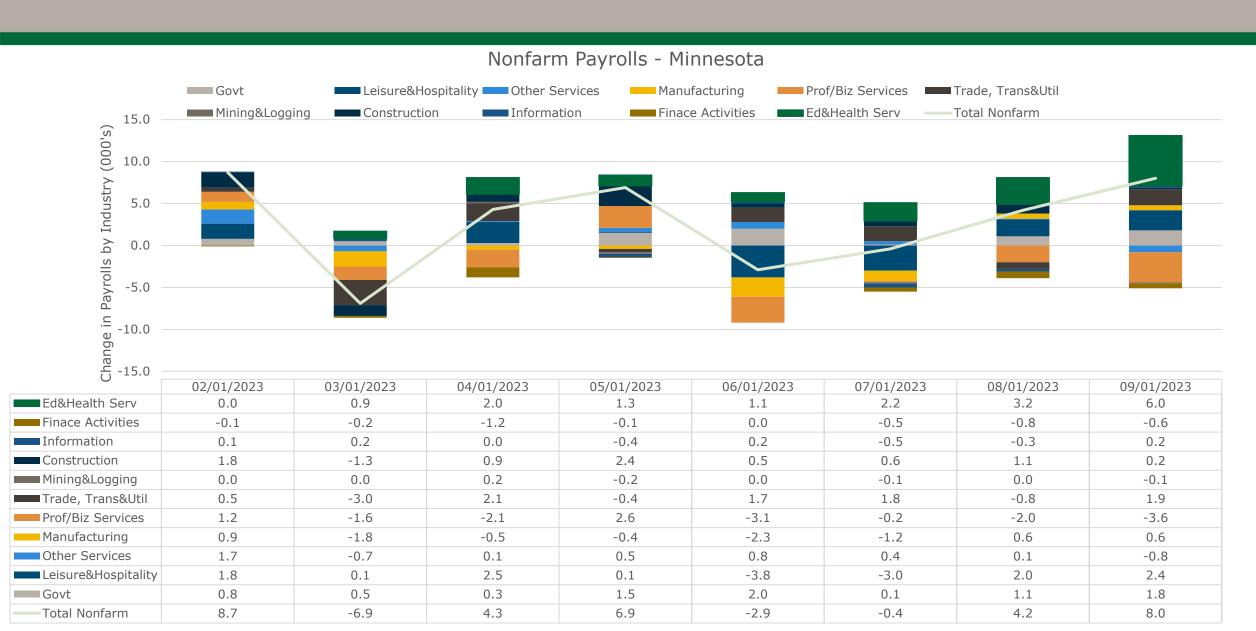




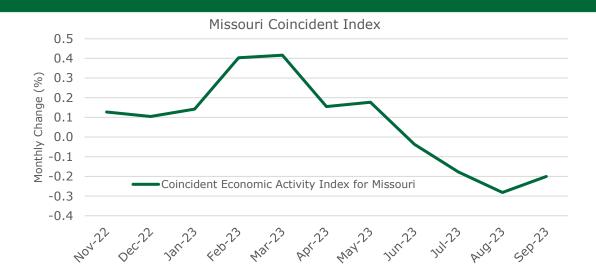


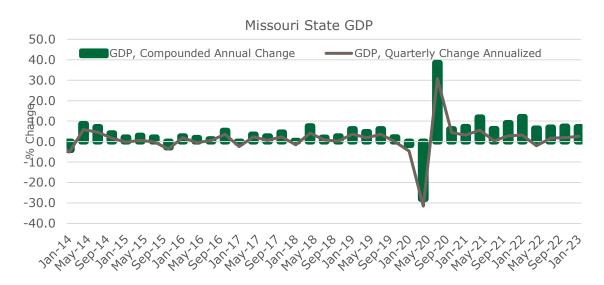


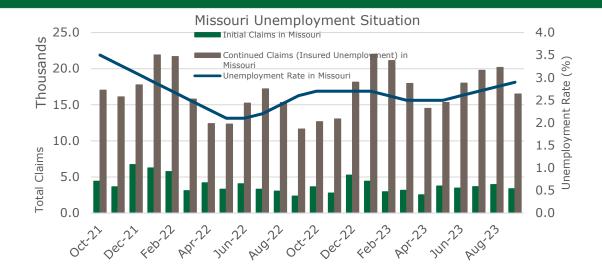
Minnesota

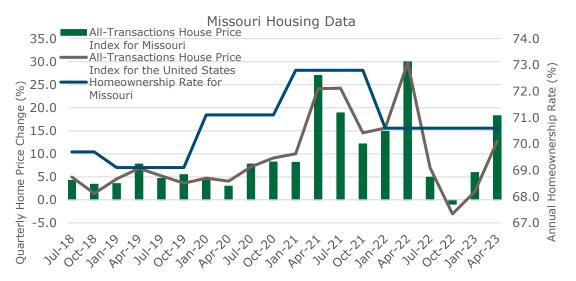


Missouri

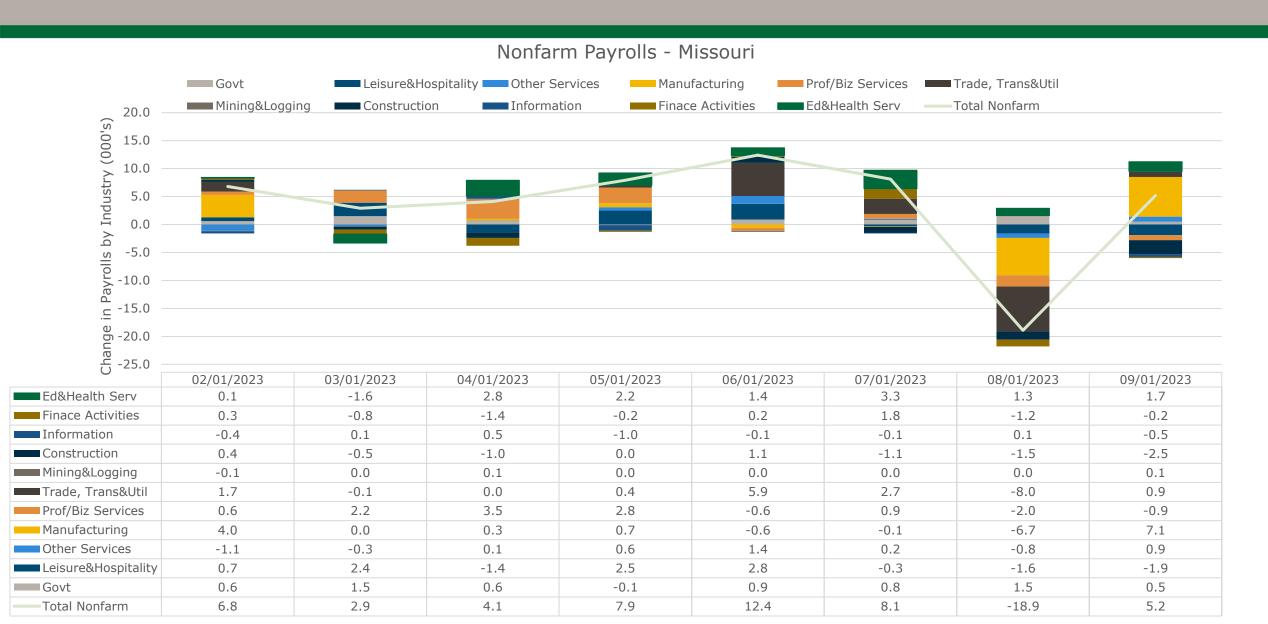




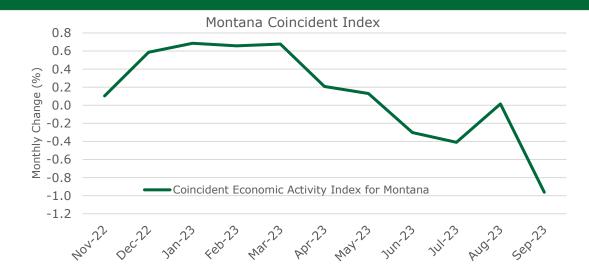


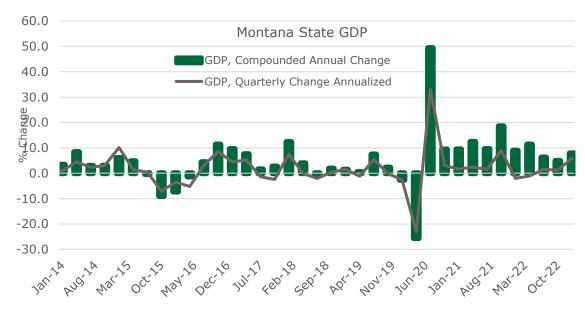


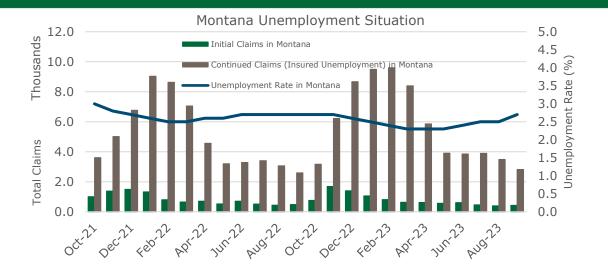
Missouri



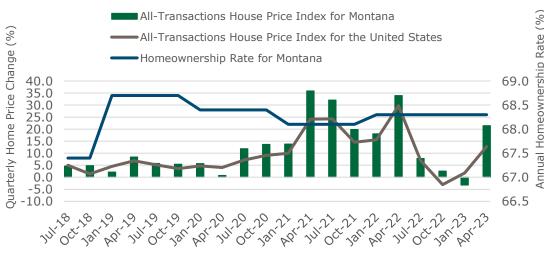
Montana



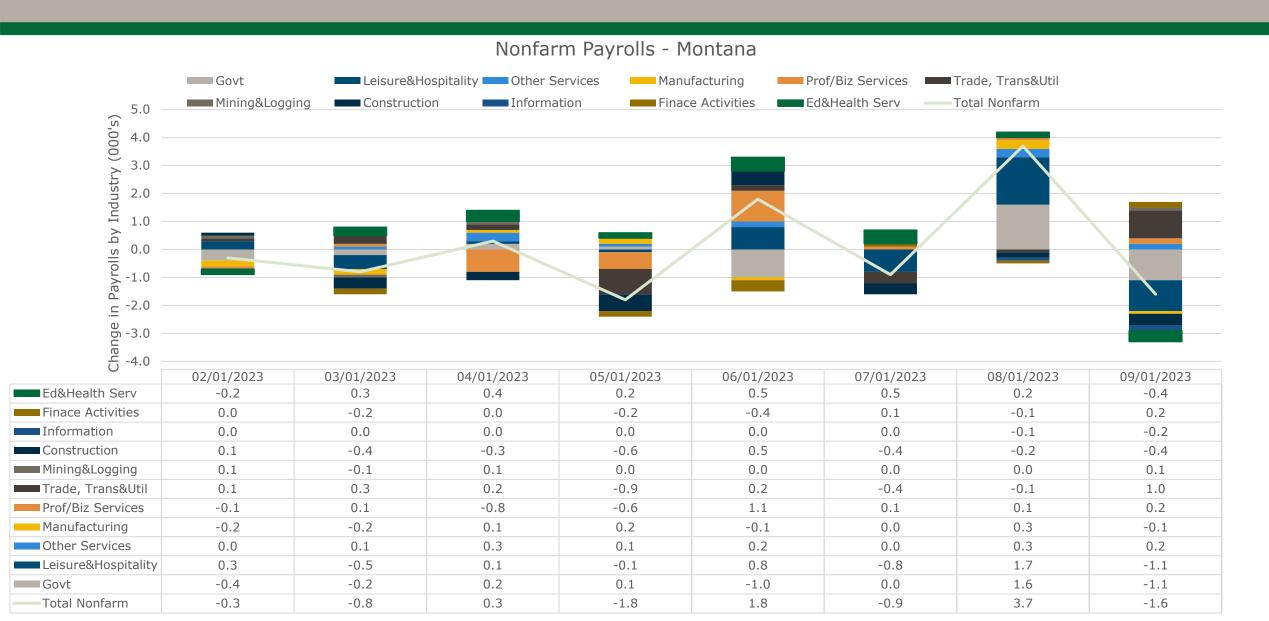




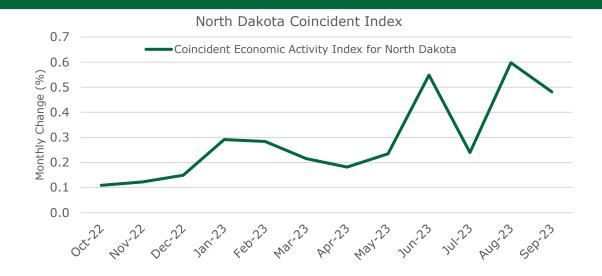


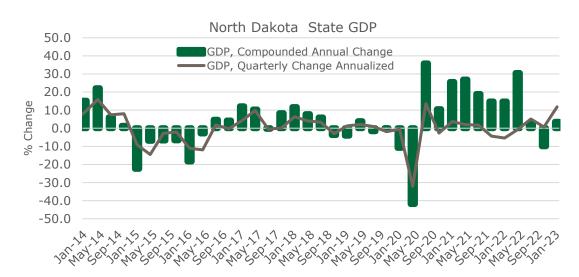


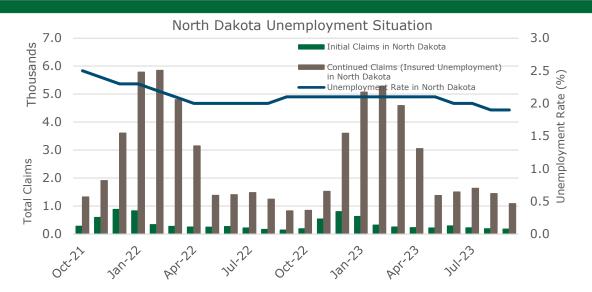
Montana

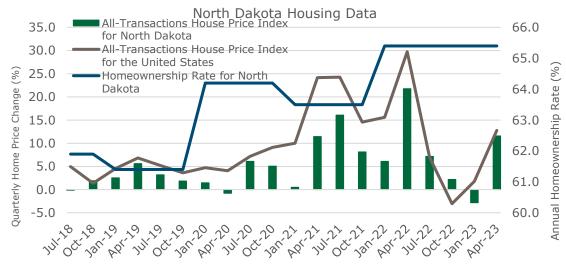


North Dakota

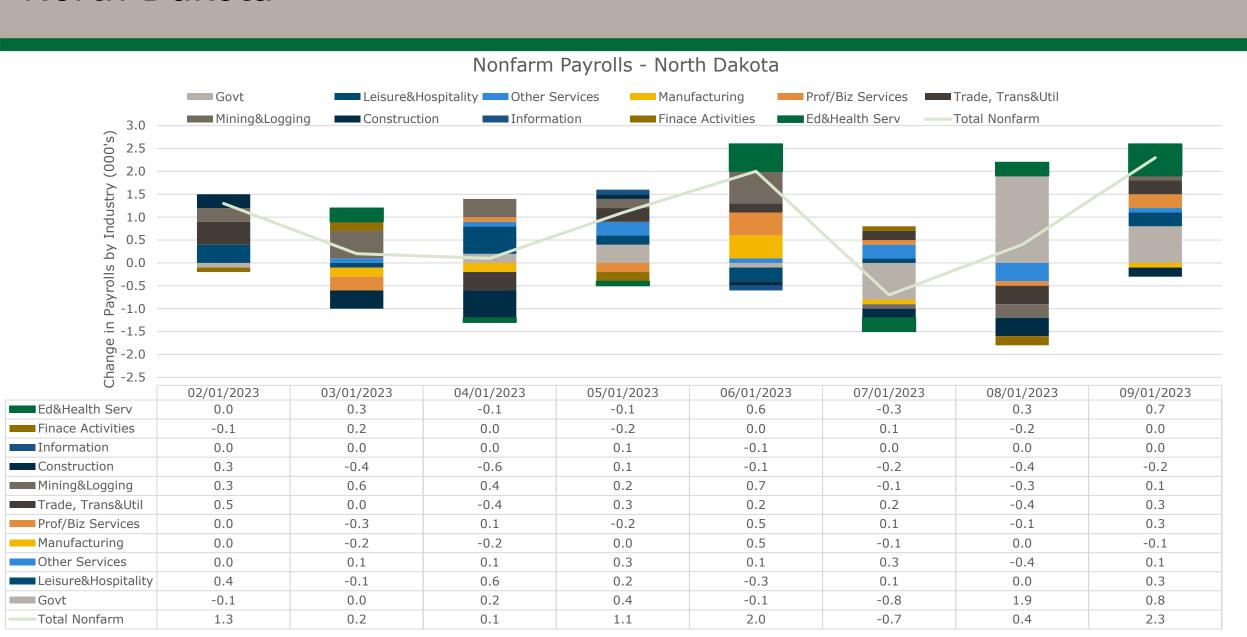






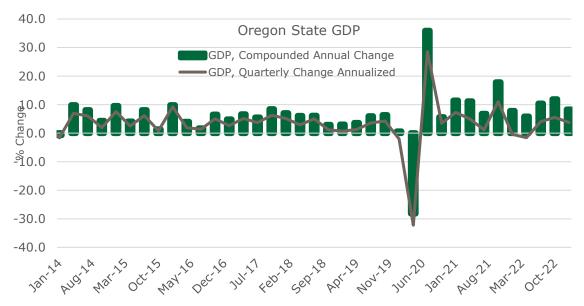


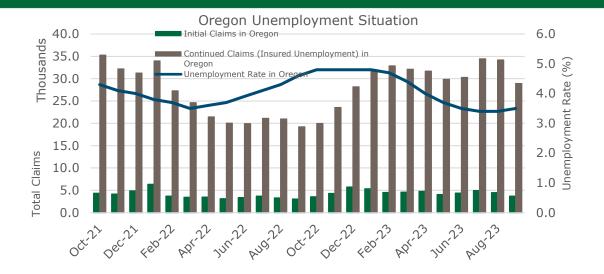
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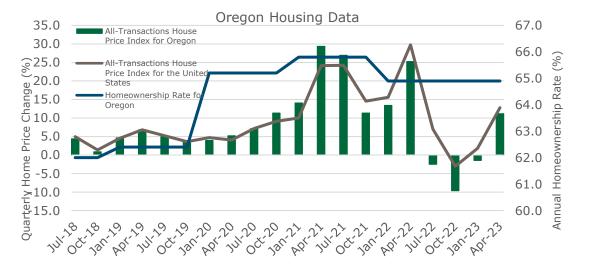


Oregon

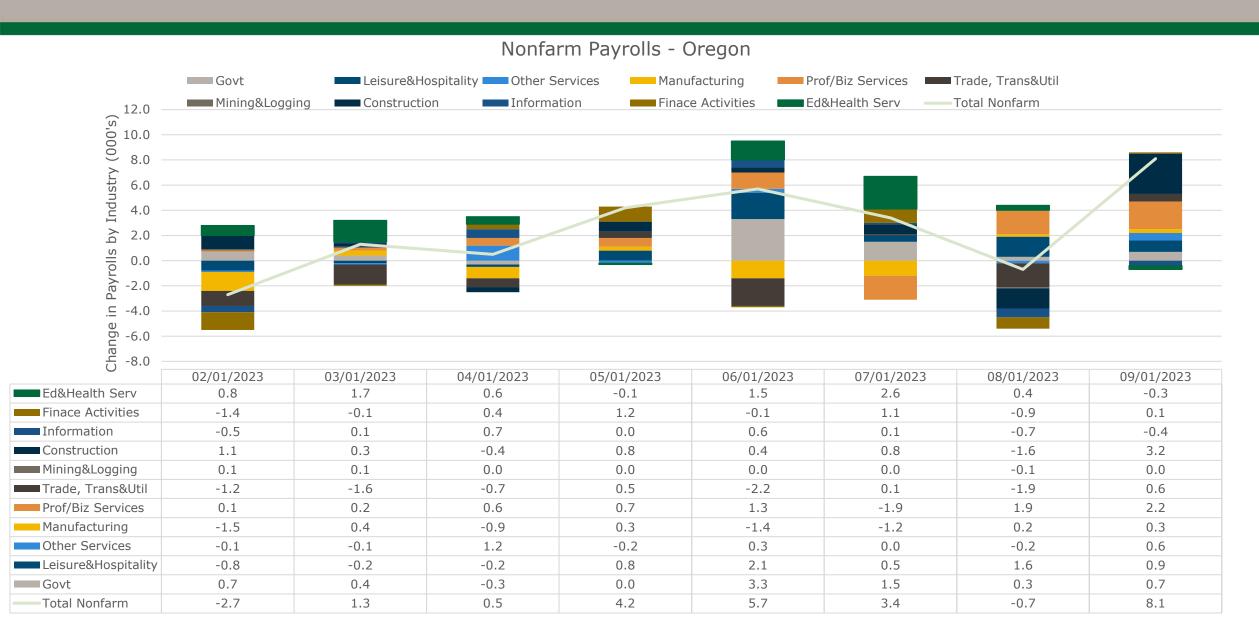




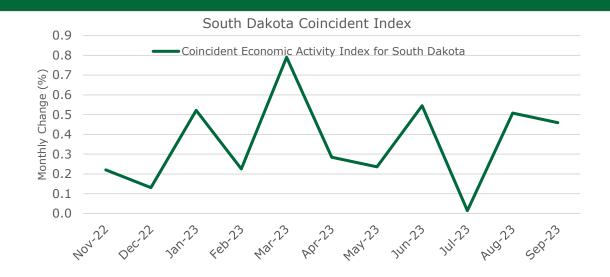


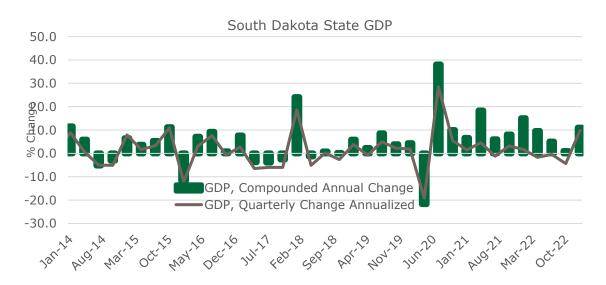


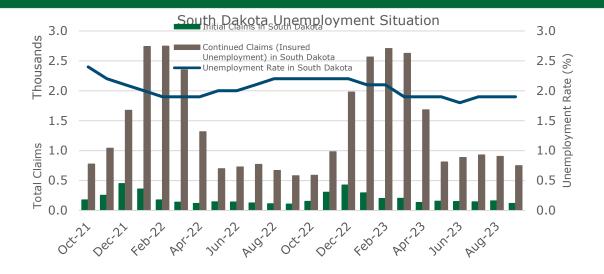
Oregon

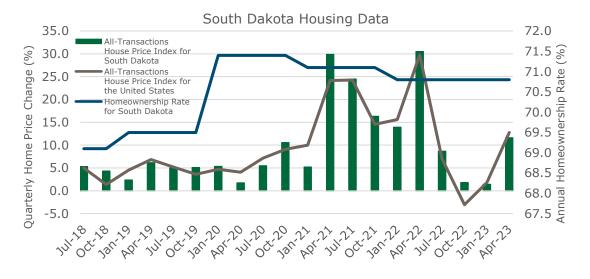


South Dakota





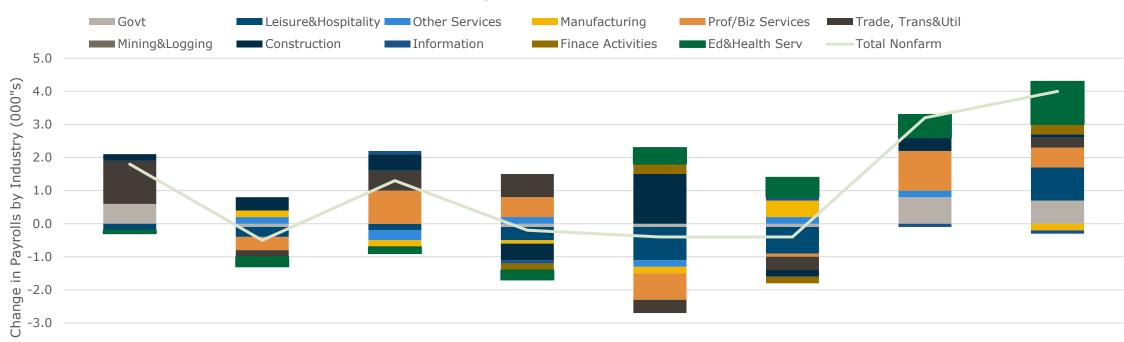




South Dakota

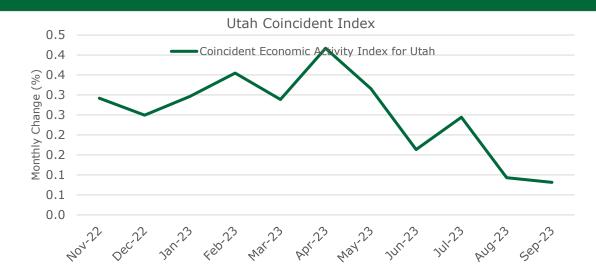
-4.0

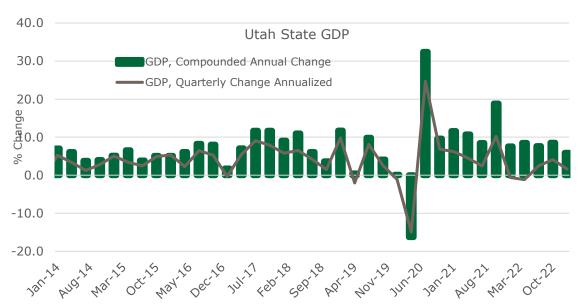
Nonfarm Payrolls - South Dakota

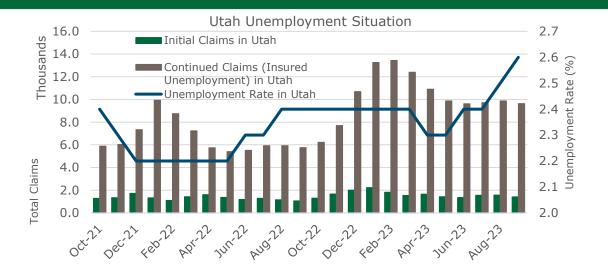


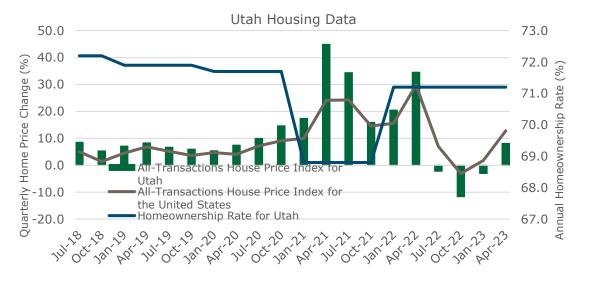
| | 02/01/2023 | 03/01/2023 | 04/01/2023 | 05/01/2023 | 06/01/2023 | 07/01/2023 | 08/01/2023 | 09/01/2023 |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ed&Health Serv | -0.1 | -0.3 | -0.2 | -0.3 | 0.5 | 0.6 | 0.7 | 1.3 |
| Finace Activities | 0.0 | 0.0 | 0.0 | -0.2 | 0.3 | -0.2 | 0.0 | 0.3 |
| Information | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | 0.1 | -0.1 | -0.1 |
| Construction | 0.2 | 0.4 | 0.5 | -0.5 | 1.5 | -0.2 | 0.4 | 0.1 |
| Mining&Logging | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trade, Trans&Util | 1.3 | -0.2 | 0.6 | 0.7 | -0.4 | -0.4 | 0.0 | 0.3 |
| Prof/Biz Services | 0.0 | -0.4 | 1.0 | 0.6 | -0.8 | -0.1 | 1.2 | 0.6 |
| Manufacturing | 0.0 | 0.2 | -0.2 | -0.1 | -0.2 | 0.5 | 0.0 | -0.2 |
| Other Services | 0.0 | 0.2 | -0.3 | 0.2 | -0.2 | 0.2 | 0.2 | 0.0 |
| L eisure&Hospitality | -0.2 | -0.3 | -0.2 | -0.4 | -1.0 | -0.8 | 0.0 | 1.0 |

Utah

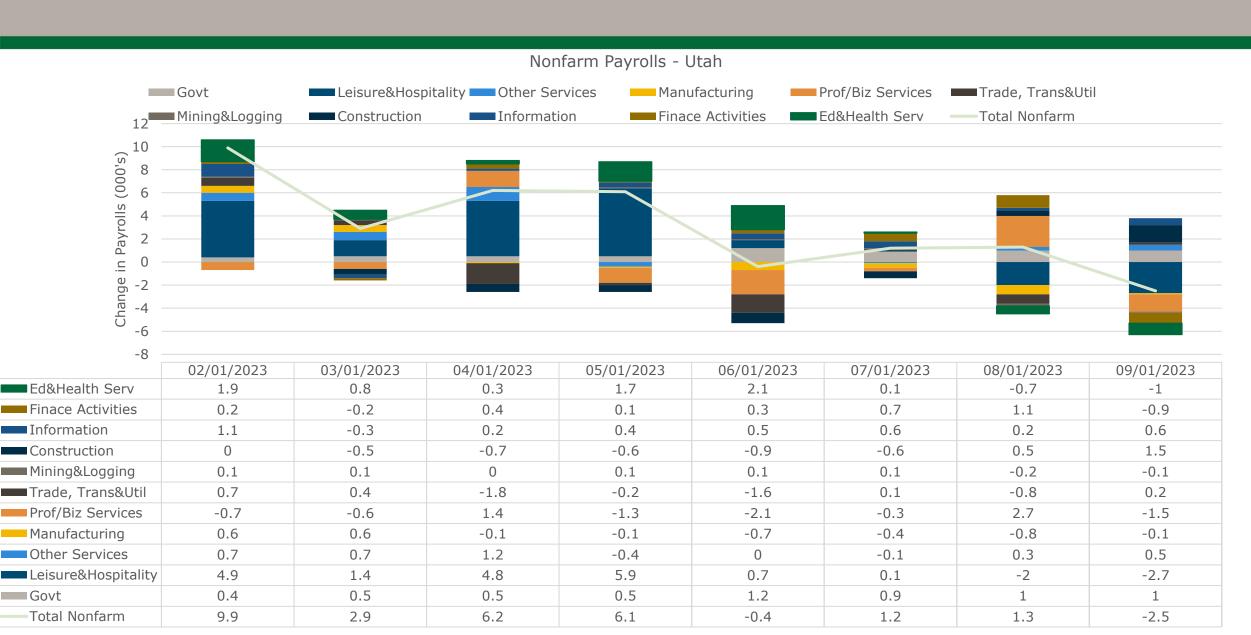




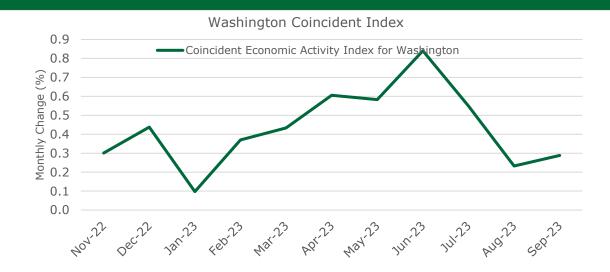


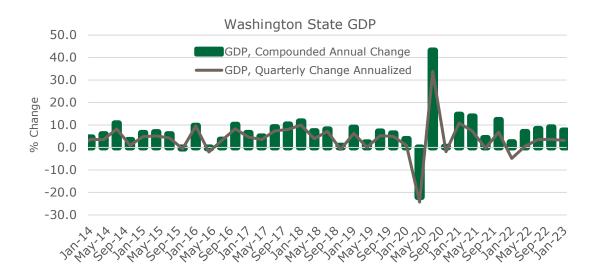


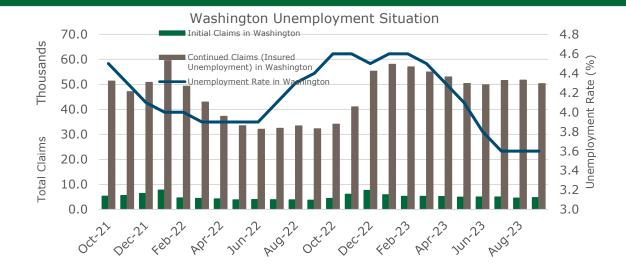
Utah

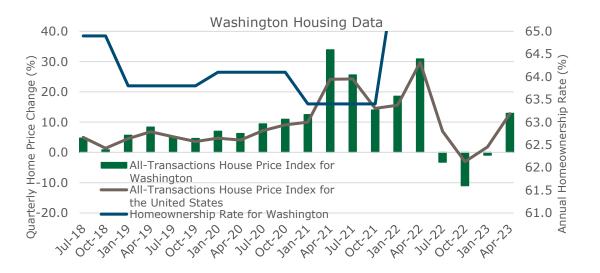


Washington

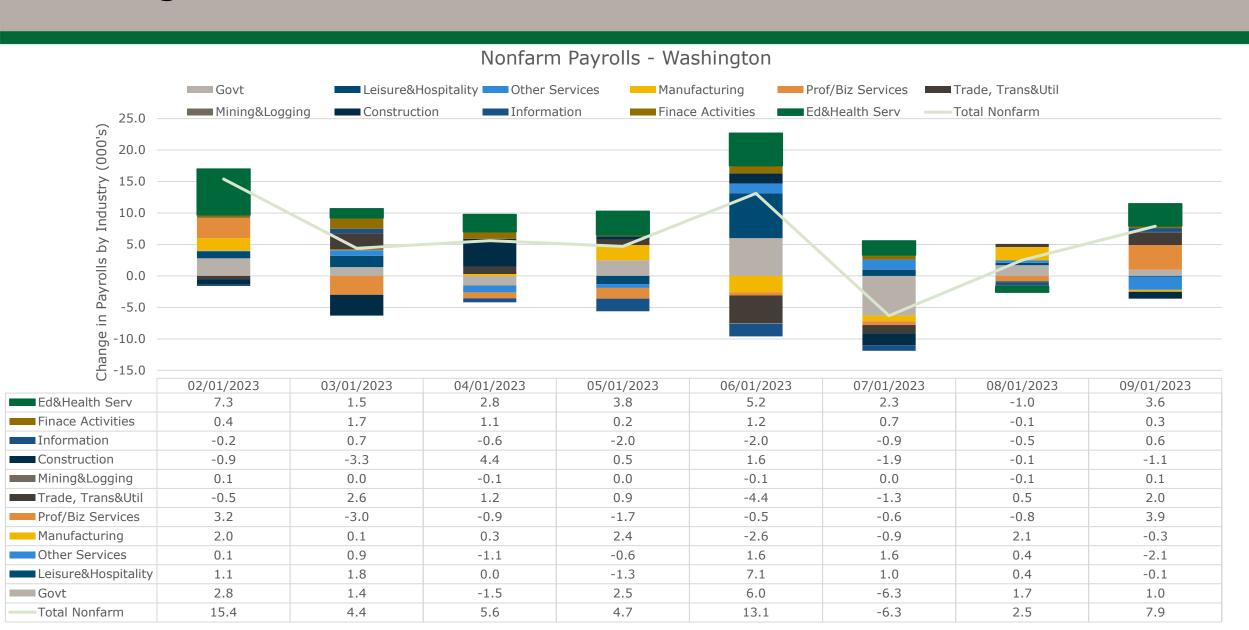




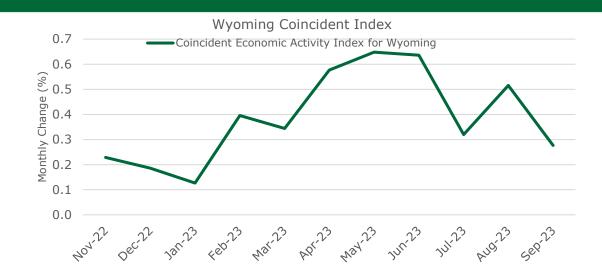


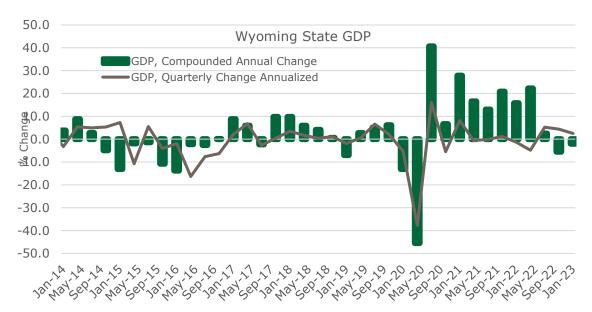


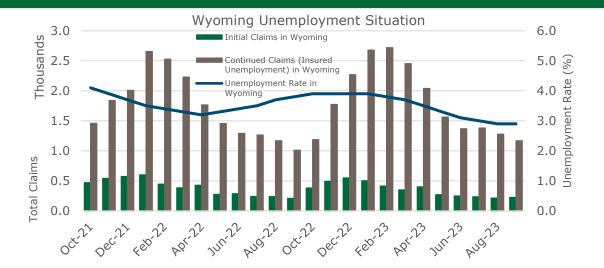
Washington

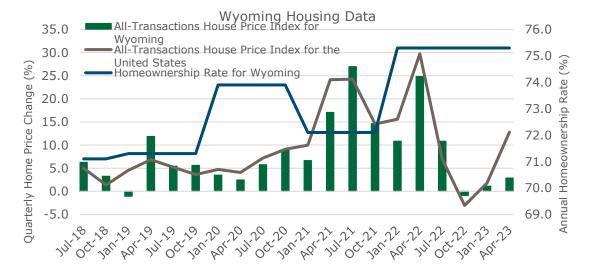


Wyoming









Wyoming

