

FHLB DES MOINES

Quarterly Economic Overview

Member Strategies Department

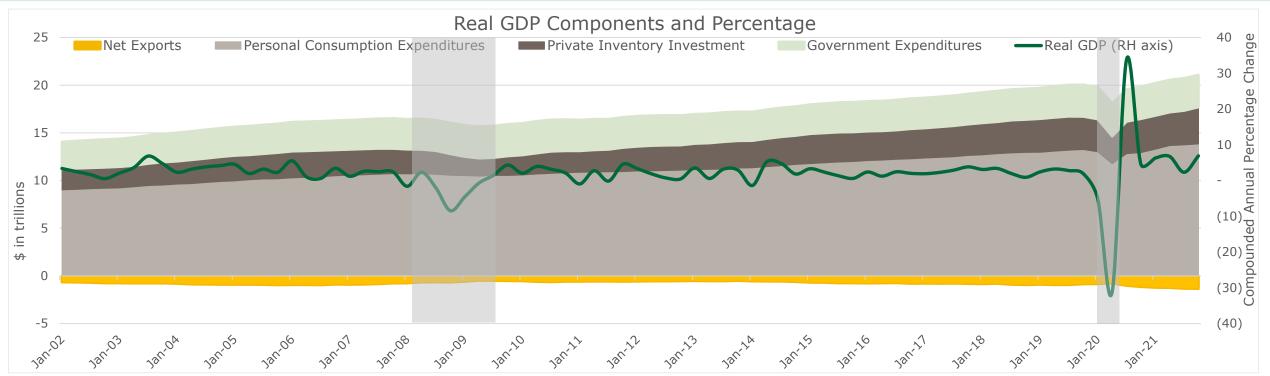
Fourth Quarter, 2021



Gross Domestic Product

As the U.S. Dealt with the Latest Covid Variant, Economic Growth was Better than Expected During the Fourth Quarter

U.S. Gross Domestic Product



Third-quarter (third estimate) Real GDP

• The third estimate for third-quarter real GDP came in at 2.3%.

Fourth-quarter (advance estimate) Real GDP

- The advance estimate for fourth-quarter real GDP was 6.9%, above expectations. The increase primarily reflected increases in private inventory investment, exports, personal consumption expenditures (PCE), and nonresidential fixed investment that were partly offset by decreases in both federal and state and local government spending. Imports, which are a subtraction in the calculation of GDP, increased.
- The increase in private inventory investment was led by retail and wholesale trade industries. Within retail, inventory investment by motor vehicle dealers was the leading contributor. The increase in exports reflected increases in both goods and services. The increase in exports of goods was widespread, and the leading contributors were consumer goods, industrial supplies and materials, and foods, feeds, and beverages. The increase in exports of services was led by travel. The increase in PCE primarily reflected an increase in services, led by health care, recreation, and transportation. The increase in nonresidential fixed investment primarily reflected an increase in intellectual property products that was partly offset by a decrease in structures.

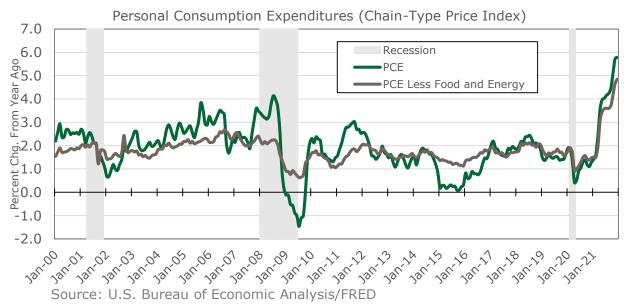


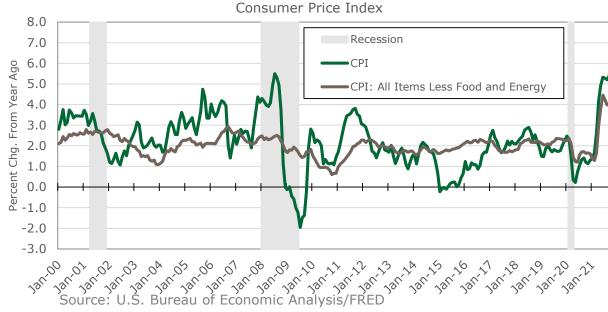
Prices

Inflation Stagnated Somewhat, but Remained Near Historical High Levels

Consumer Prices

- The all items index rose 7.0% for the 12 months ending December, the largest increase since June 1982. The energy index increased 29.3% over the past year, while the food index rose 6.3%.
- On a month-over-month basis, the all items index rose 0.5% in December after rising 0.8% in November. The energy index fell 0.4%, with both gasoline and natural gas decreasing. The food index was up 0.5%, with both the away from home index and at home index contributing.
- The index for all items less food and energy rose 5.5% for the 12 months ending December, the most since February 1991.
- The index for all items less food and energy rose 0.6 percent in December. Along with
 the index for shelter and for used cars and trucks, the indexes for household
 furnishings and operations, apparel, new vehicles, and medical care also rose in
 December. The indexes for motor vehicle insurance and recreation were among the
 few that declined over the month.

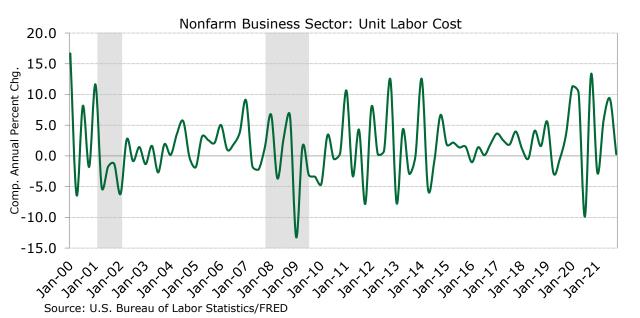


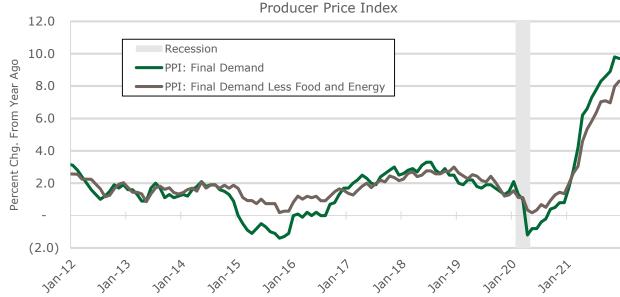


- The price index for PCE posted a year-over-year increase of 5.8%. When backing out food and energy, Core PCE was 4.9%.
- On a month-over-month basis, December's PCE, the value of goods purchased by persons who reside in the U.S., decreased \$95.2 billion. Breaking it down, goods decreased \$147.2 billion, which was partially offset by a \$52.0 billion increase in services. Within goods, decreases were widespread across most components and were led by recreational goods and vehicles, "other" nondurable goods (which includes newspapers, household supplies, and games and toys), and furnishings and durable household equipment. Within services, the largest contributor to the increase was spending for health care.
- Personal income increased by \$70.7 billion (0.3%) and outlays decreased by \$93.5 billion in December.

Producer Prices

- The PPI for final demand rose 9.7% in 2021 (on an unadjusted basis), the most since the series began in 2010. The index for final demand less food, energy and trade services rose 6.9% in 2021.
- Month-over-month, the final demand index (seasonally adjusted) increased 0.2% in December.
 The increase is attributed to a 0.5% increase in final demand services. Final demand goods fell
 0.4%.
- Over a quarter of the December increase in the index for final demand services can be attributed to margins for fuels and lubricants retailing, which rose 13.0%. The indexes for airline passenger services, food retailing, machinery and vehicle wholesaling, machinery and equipment parts and supplies wholesaling, and traveler accommodation services also moved higher. In contrast, margins for automobile and automobile parts retailing decreased 2.7%. The indexes for deposit services (partial) and for health, beauty, and optical goods retailing also declined.
- A major factor in the December decrease in prices for final demand goods was the index for gasoline, which moved down 6.1%. Prices for meats, gas fuels, fresh and dry vegetables, diesel fuel, and primary basic organic chemicals also declined. In contrast, the index for ethanol increased 6.4%. Prices for residential electric power and for chicken eggs also moved higher.

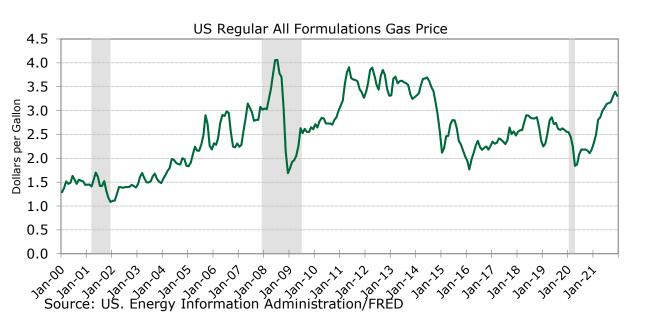


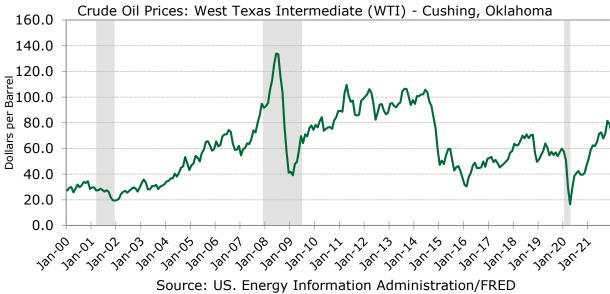


- Unit labor costs increased at an annual rate of 0.3% (preliminary) in the fourth quarter of 2021, the combined effect of a 6.9% increase in hourly compensation and a 6.6% increase in productivity. Unit labor costs increased 3.1% over the last four quarters.
- The manufacturing sector unit labor costs increased 4.2% in the fourth quarter of 2021, as hourly compensation increased 3.4% and productivity decreased 0.8%. Over the last four quarters, manufacturing unit labor costs increased 3.2%.
- 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 averaged 11.2 million barrels per day (b/d) in 2021, down 0.1 million b/d in 2020. EIA forecasts production will average 11.8 million b/d in 2022 and 12.4 million b/d in 2023, which would be the highest annual average on record.
- Brent crude oil spot prices averaged \$71 per barrel (b) in 2021, compared to \$42/b in 2020. Prices reached their highest in October, \$84/b, before falling to \$74/b in December. EIA expects Brent prices will average \$75/b in 2022.





- For 2021, U.S. regular gasoline retail prices averaged \$3.02 per gallon (gal), up from an average of \$2.18/gal in 2020. The EIA expects prices to average \$3.06/gal in 2022 and \$2.81/gal in 2023.
- U.S. diesel fuel prices averaged \$3.29/gal in 2021, compared with \$2.56/gal in 2020, and we forecast diesel prices will average \$3.33/gal in 2022 and \$3.27/gal in 2023.

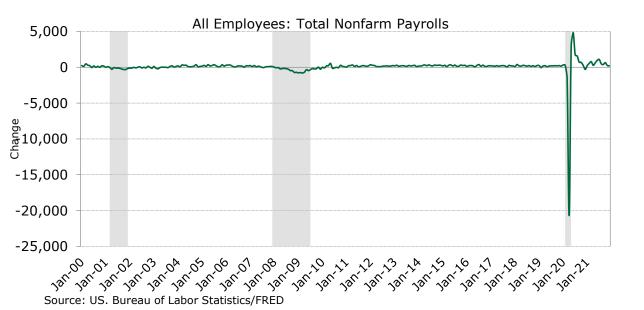


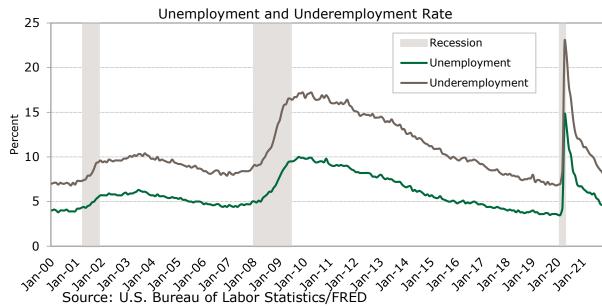
Employment

Labor Market Continued to Trend Back Toward Pre-Pandemic Levels

Employment

- The December unemployment rate fell 0.3% to 3.9%, just 0.4% higher than February 2020 prior to the pandemic. The number of unemployed persons who were on temporary layoff was little changed at 812,000, down 2.3 million yearover-year.
- The number of long-term unemployed (those jobless for 27 weeks or more) decreased by 185,000 to 2.0 million in December, down from 4.0 million a year ago.
- The seasonally adjusted underemployed rate, or the U-6 rate, was 7.3% in December, the lowest since February 2020.

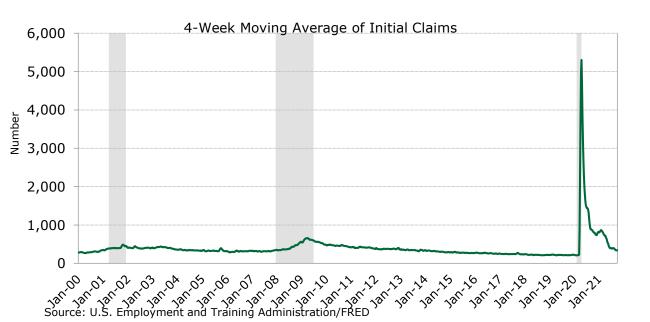


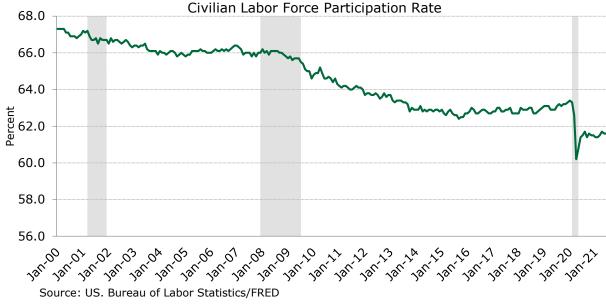


- Total nonfarm payroll employment for December increased by 199,000 but is down by 3.6 million, or 2.3%, from the pre-pandemic peak in February 2020.
- In December, employment continued to trend up in leisure and hospitality, professional and business services, manufacturing, construction, and transportation and warehousing.
- Nonfarm employment in October was revised up 102,000 to 648,000 and November was revised up 39,000 to 249,000.

Employment

- The labor force participation rate, at 61.9%, was unchanged month-over-month. The employment-population ratio (not shown in graphs), increased 0.2% to 59.5%, but is still below the 61.1% from February 2020.
- At the current participation rate and population growth rate, improving to an unemployment rate of 3.5%, the pre-pandemic level, suggests the economy needs to add 119.3k 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 199,750 as of the week ending December 25, the lowest level on record. The previous historic low was set in October 2018, when the reading was 206,000.
- The weekly initial claims for the week ending December were 200,000, a decrease of 6,000 from the previous week's revised level. Initial claims reached 188,000 in early December, the lowest level since 1969.

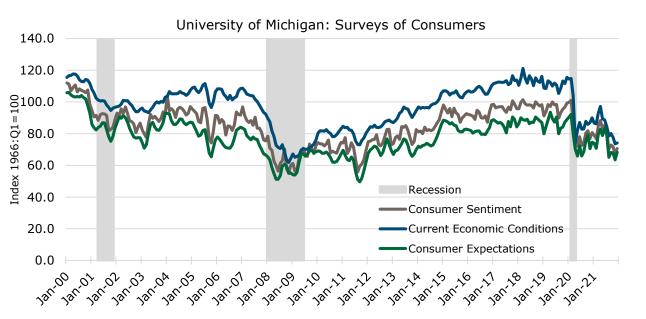


Consumer

Spending Saw a Slight Increase, While Optimism Continued to Fall Due to Inflation and Covid-19 Concerns

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 December posted an decrease of 1.9% month-over-month, but 16.9% higher than December 2020.
- When excluding motor vehicles and gasoline stations, retail sales increased 16.5% over the last twelve months.

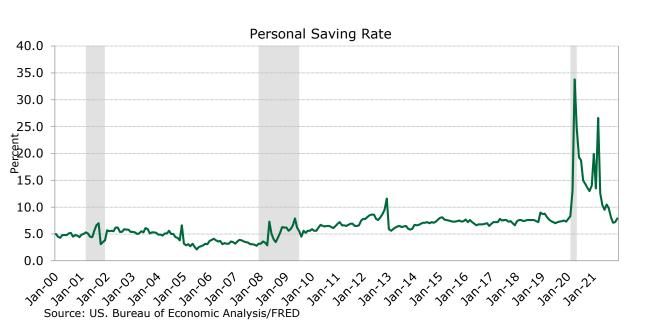




- The University of Michigan's Surveys of Consumers rose to a reading of 70.6 in December, up from 67.4 in November, which was the lowest level since November 2011. Both current conditions and expectations were slightly higher.
- Year-ahead inflation expectations were 4.8% in December, just below November.
- Expected year-ahead incomes for the bottom third were 2.8%, the highest level since 1999.

Consumer

 Real disposable personal income decreased 0.2% in December and 0.2% yearover-year.





Personal savings was \$1.44 trillion in December. The personal savings rate was 7.9%.



Housing

Sales and Prices Were on the Rise During the Quarter

Housing

- Building permits, which lead housing starts by 1-3 months and are subject to less volatility, in December were at a seasonally adjusted annual rate of 1,873,000, 9.1% above the revised November rate, and 6.5% above the December 2020 level. Single-family building permits were at a rate of 1,128,000, 2.0% above the revised November rate. Building permits for 5+ units were at a rate of 675,000 in December.
- Housing starts in December were at a seasonally adjusted rate of 1,702,000, 1.4% above the revised November rate and 2.5% above the December 2020 rate. Single-family housing starts in December were at a rate of 1,172,000, 2.3% above the revised November rate. Housing Starts for 5+ units was 524,000 in December.
- New home sales in December were at a seasonally adjusted rate of 811,000, 11.9% above the revised November rate, but 14.0% below the December 2020 rate. The median sales price of new houses sold in December was \$377,700. The average sales price was \$457,300. The seasonally adjusted estimate of new houses for sale at the end of December was 403,000, which represents a supply of 6.0 months at the current sales rate.

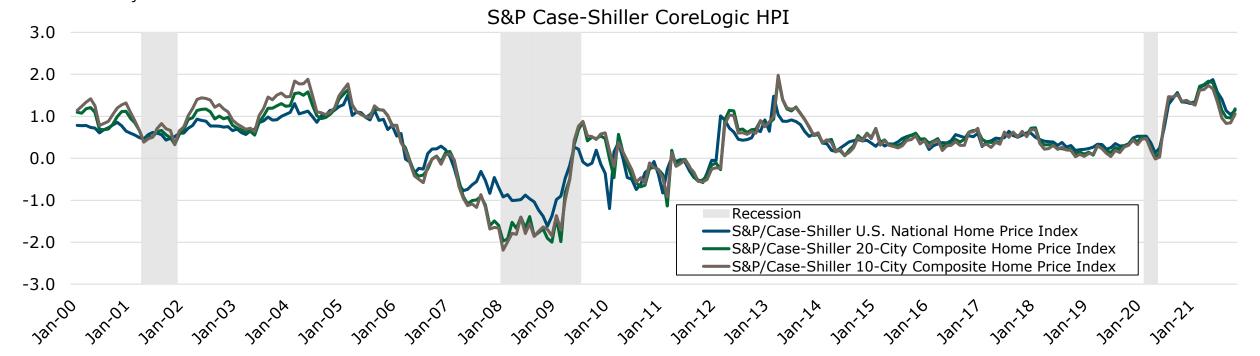
- Existing-home sales (not graphed), as reported by the National Association of Realtors, fell 4.6% in December, to a seasonally adjusted annual rate of 6.18 million. In 2021, sales were up 8.5% to 6.12 million, the highest annual level since 2006.
- The median price for existing-home sales was \$358,000, up 15.8% from a year ago.
- Supply was at 910,000 in December, down 18.0% from one year ago. Relative to sales, supply is at 1.8 months, down from 2.1 last month, and 1.9 months a year ago.
- According to Freddie Mac, the average commitment rate for a 30-year, conventional, fixed-rate mortgage was 3.10% in December, up from 3.07% in November. The average commitment rate for all of 2021 was 2.96%.
- Existing-home sales in the Midwest were down 1.3% in December and 2.6% year-over-year. The median price was \$256,900, up 10.0% from a year ago. Sales in the West fell 6.8% in December, but down 10.2% year-over-year. The median price was \$507,100, up 8.4% 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 gain in November of 18.8%, down from 19.0% the prior month. The National Index rose 0.9% in the month of November before seasonal adjustments and 1.1% after seasonal adjustments.
- The S&P CoreLogic Case-Shiller U.S. 10-City Composite reported an annual gain in November of 16.8%, down from 17.2% the prior month. The 10-City Composite rose 0.9% in the month of November before seasonal adjustments and 1.1% after seasonal adjustments.
- The S&P CoreLogic Case-Shiller U.S. 20-City Composite reported an annual gain in November of 18.3%, down from 18.5% the prior month. The 20-City Composite rose 1.0% in the month of November before seasonal adjustments and 1.2% after seasonal adjustments.

- The FHFA House Price Index (not pictured but data can be found in the appendix) rose 1.1% in November. Prices were up 17.5% year-over-year.
- For the nine census divisions, seasonally adjusted monthly house price changes from October 2021 to November 2021 ranged from 0.5 percent in the West North Central division to 1.9 percent in the South Atlantic division. The 12-month changes were all positive, ranging from 13.3 percent in the West North Central division to 22.8 percent in the Mountain division



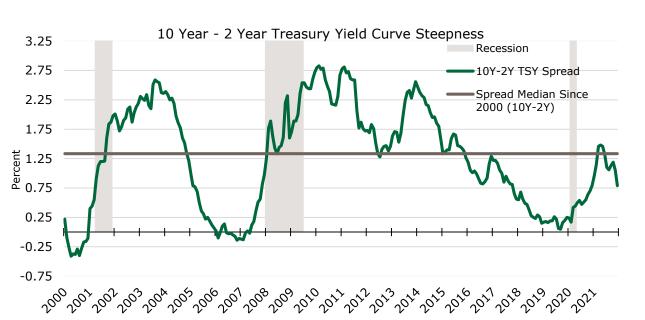


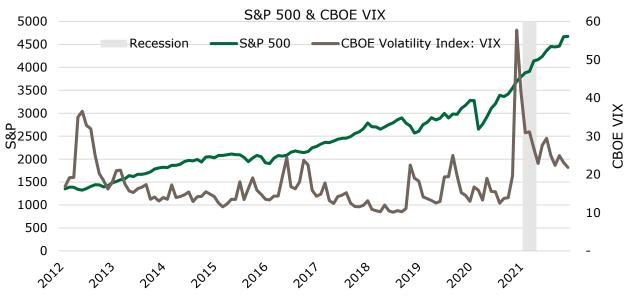
Market Indices

Yields Flattened, Equities Continued to Move Higher

Market Indices

• S&P 500 closed December at 4,766.18, 26.9% higher than a year ago and near the highest level on record. 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 21.4%, which is still elevated from pre-pandemic levels. Overnight SOFR ended December at 0.05%.





• U.S. Treasury yield curve flattened quarter-over-quarter, reaching the lowest levels of 2021. The 10-year Treasury Note minus 2-year Treasury Note spread ended December at 0.79%, below the 1.34% median dating back to the start of the century.

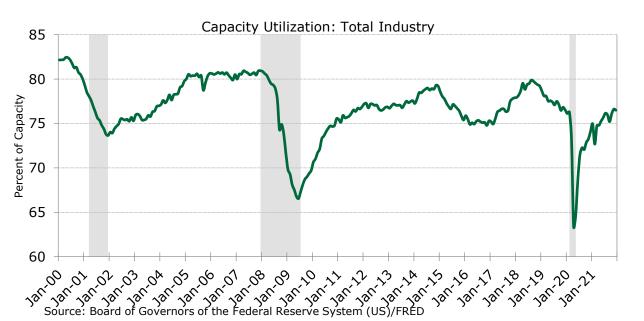


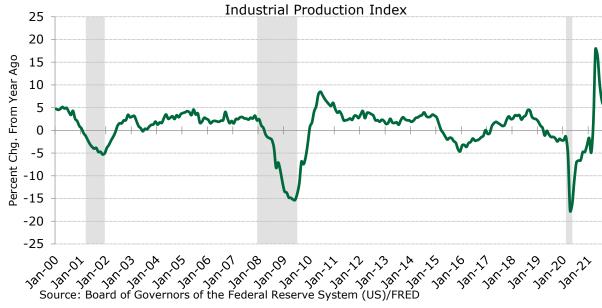
Economic Activity

Despite a Poor Finish, Industrial Activity Posted Another Quarterly Gain

Economic Activity

- Industrial production fell 0.1% in December after moving up 0.7% in November. For the fourth quarter, the index rose 4.0% overall at an annualized rate. Output growth in December for manufacturing, mining, and utilities, posted month-over-month changes of -0.3%, 2.0%, and -1.5%, respectively. Year-over-year, industrial production rose 3.7% with manufacturing, mining, and utilities changing by 3.5%, 11.0%, and -3.4%, respectively.
- Manufacturing grew two of the three months during the quarter.
- Mining rose all three months of the quarter.
- The utilities index fell two of three months during the quarter.





- Capacity utilization was 76.5% in December, a rate that is 3.4% below its long run average.
- The manufacturing component was at 77.0%, below the long-run average of 78.2.
- Utilization for mining was at 79.1%, below its long-run average of 86.2%.
- The operating rate for utilities was at 71.0%, well below its long-run average of 85.0%.

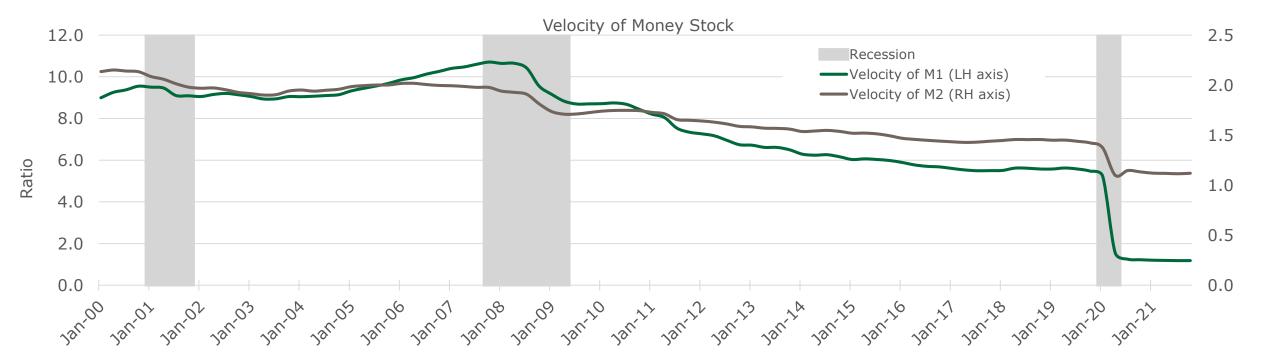


Money Supply and Velocity

Supply and Velocity Remained Near Record Lows

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 unchanged at 1.12, remaining near the record low, 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 1.18 versus the peak reading of 10.68 in the 4th quarter 2007. The latest reading remained the lowest level since 1959.





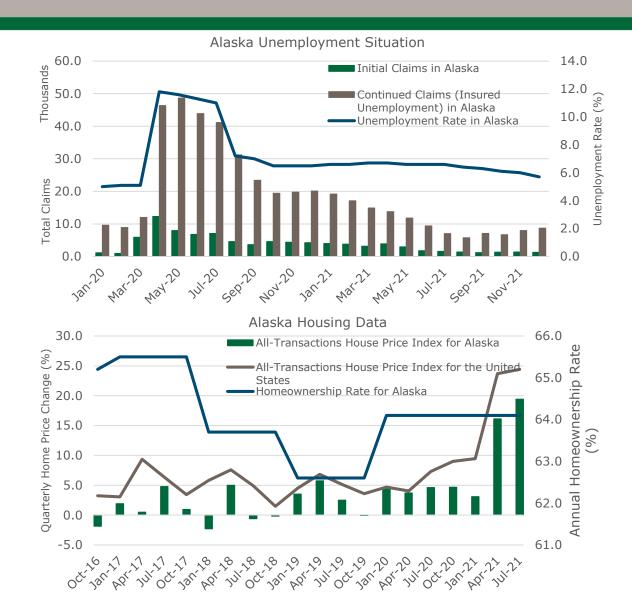
Appendix

State Level Data

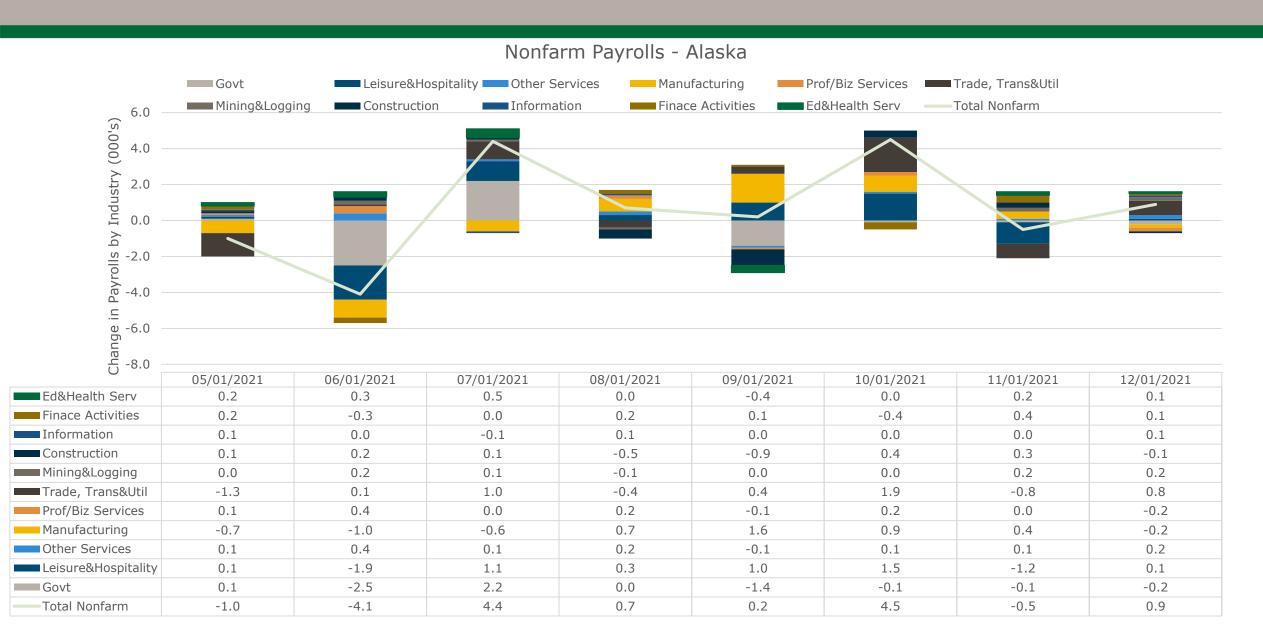
Alaska



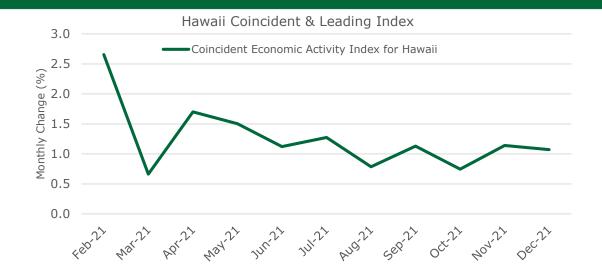


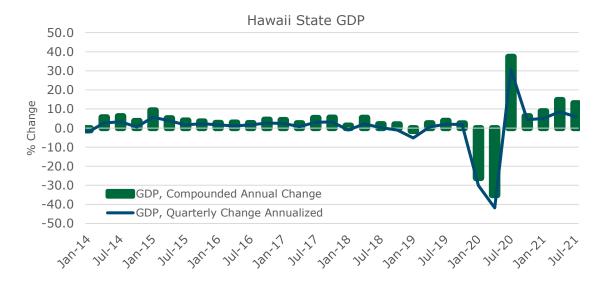


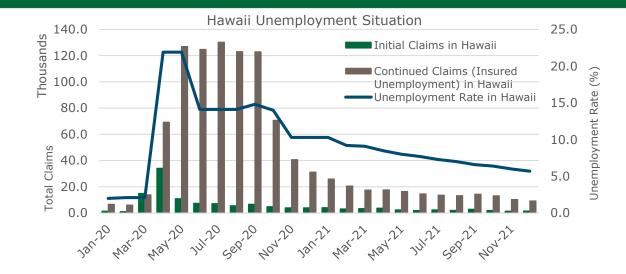
Alaska

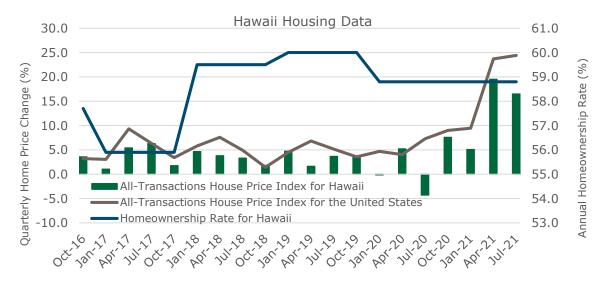


Hawaii

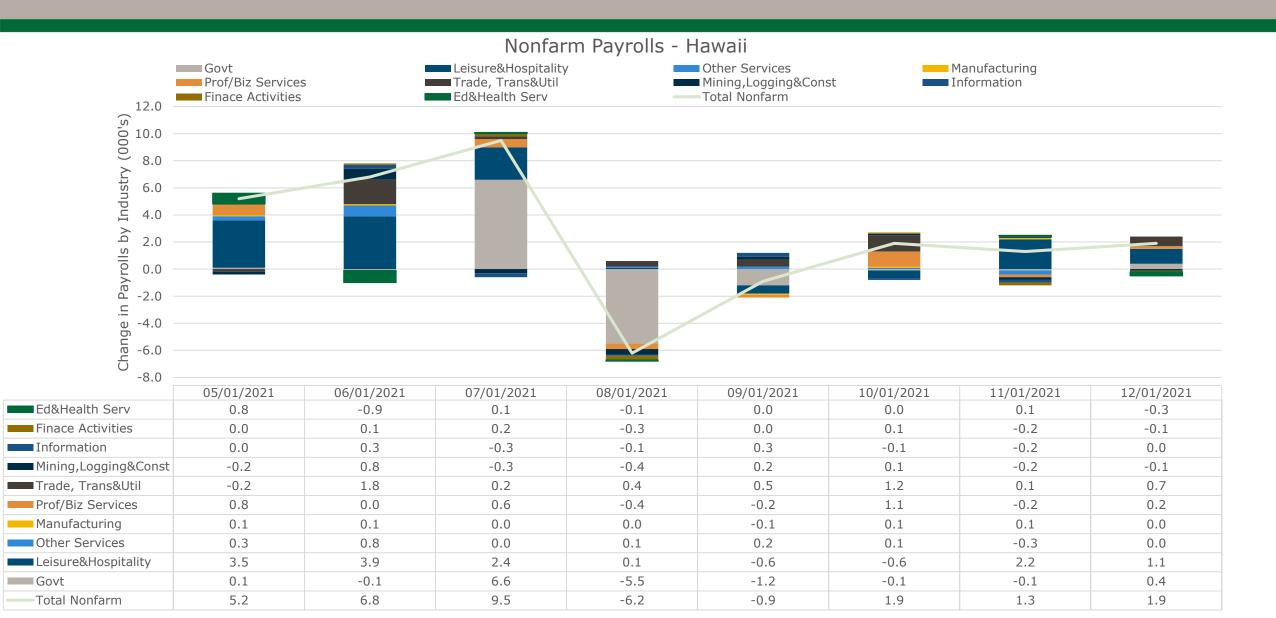




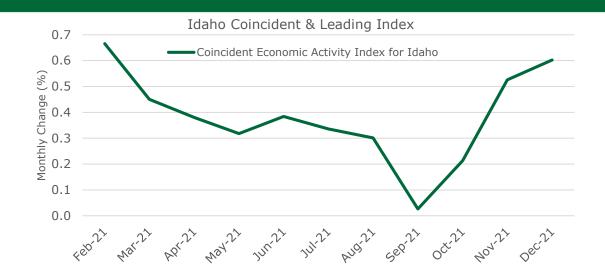


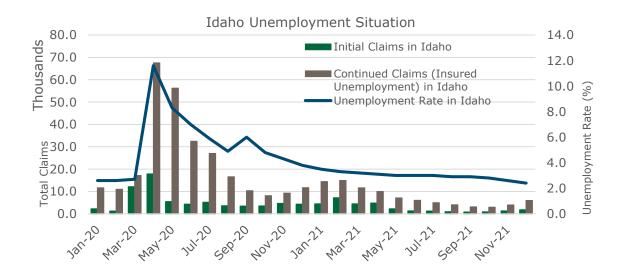


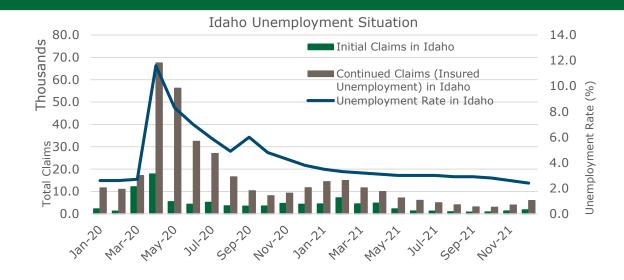
Hawaii

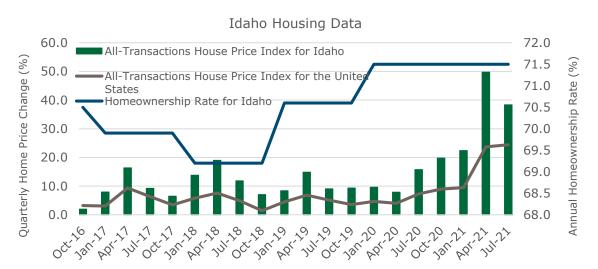


Idaho

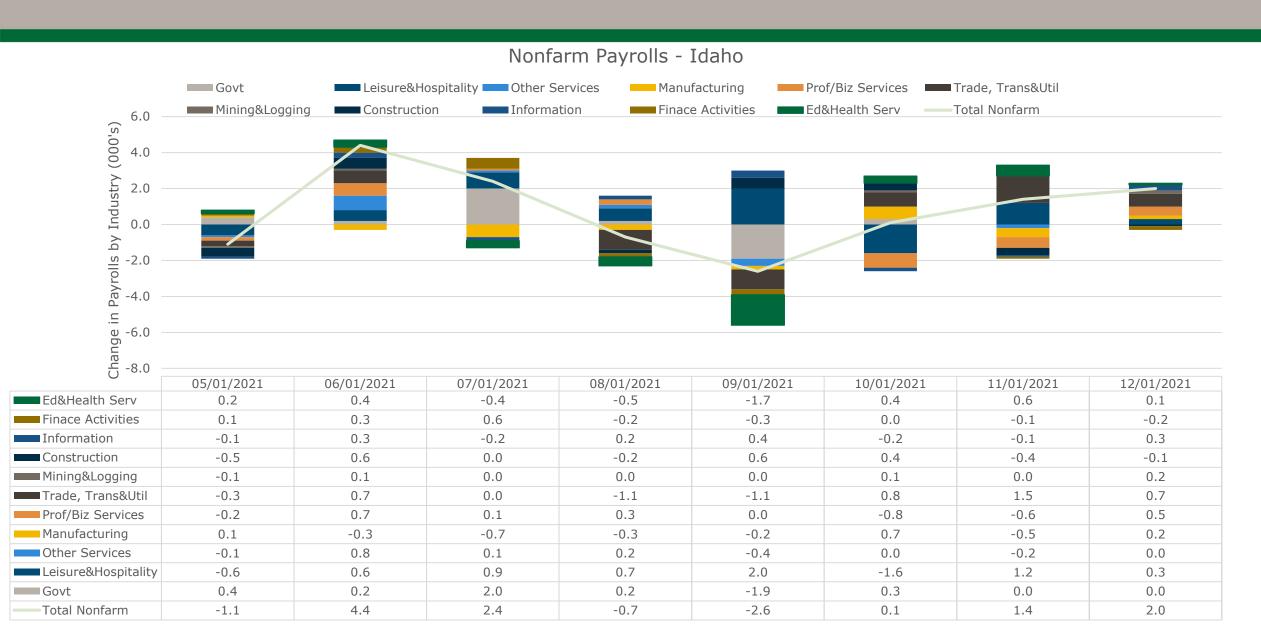




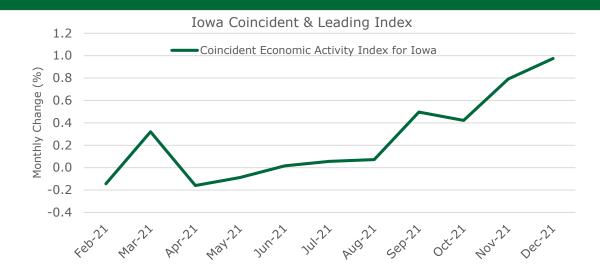


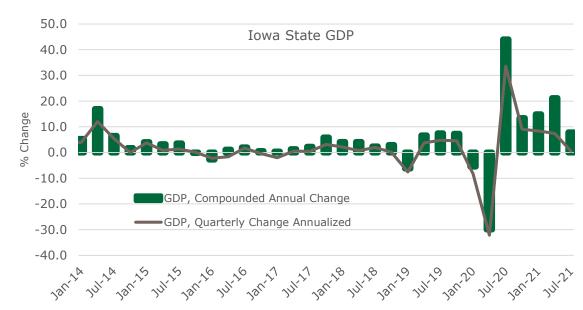


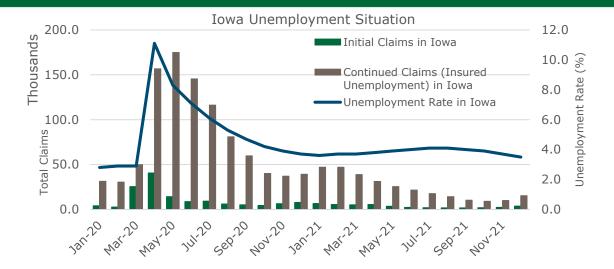
Idaho

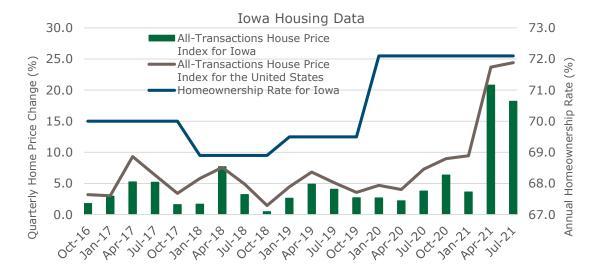


Iowa

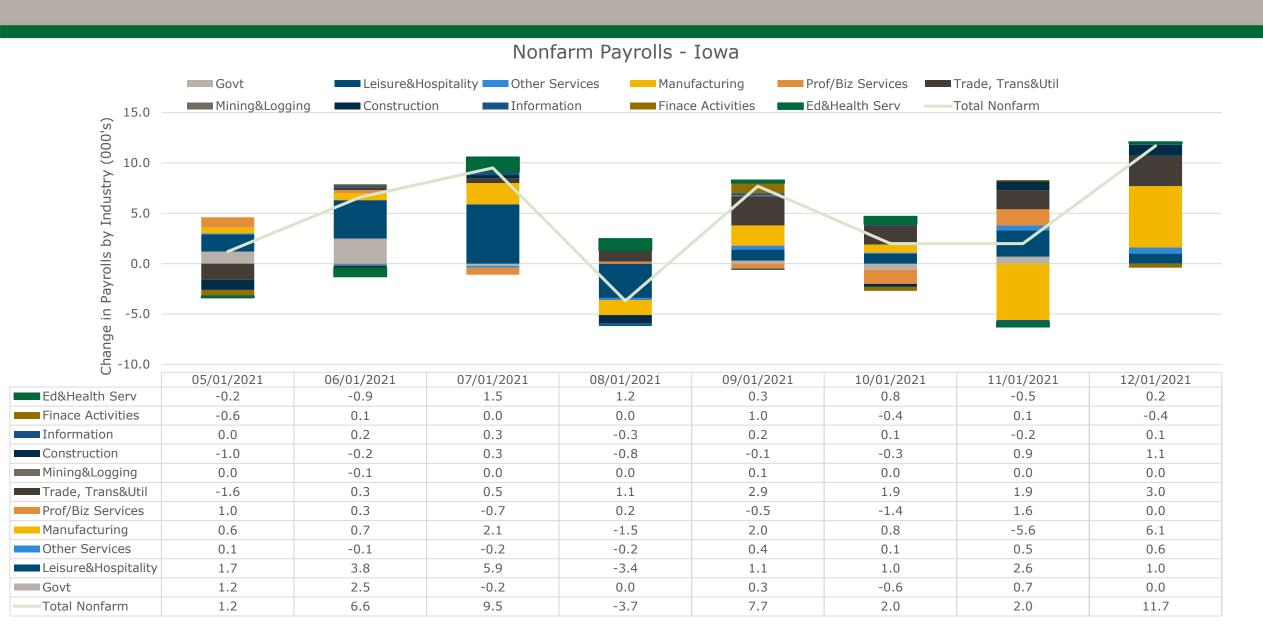




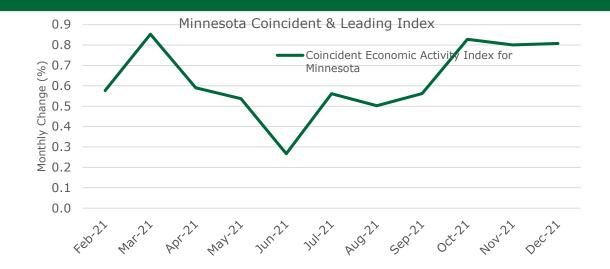


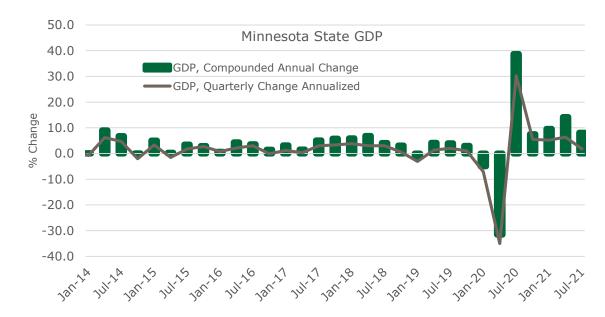


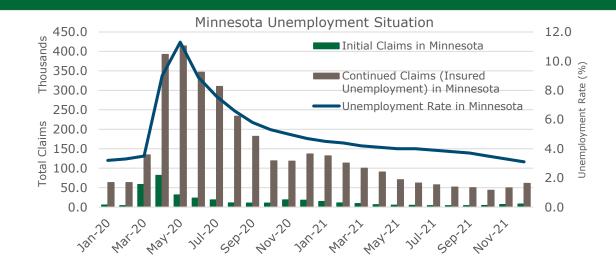
Iowa

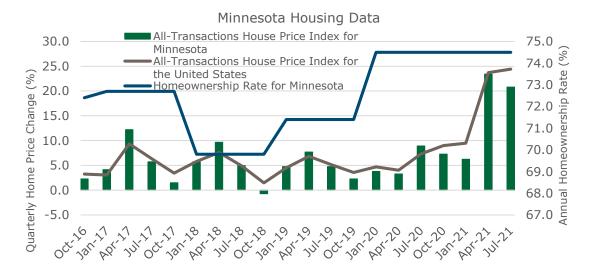


Minnesota

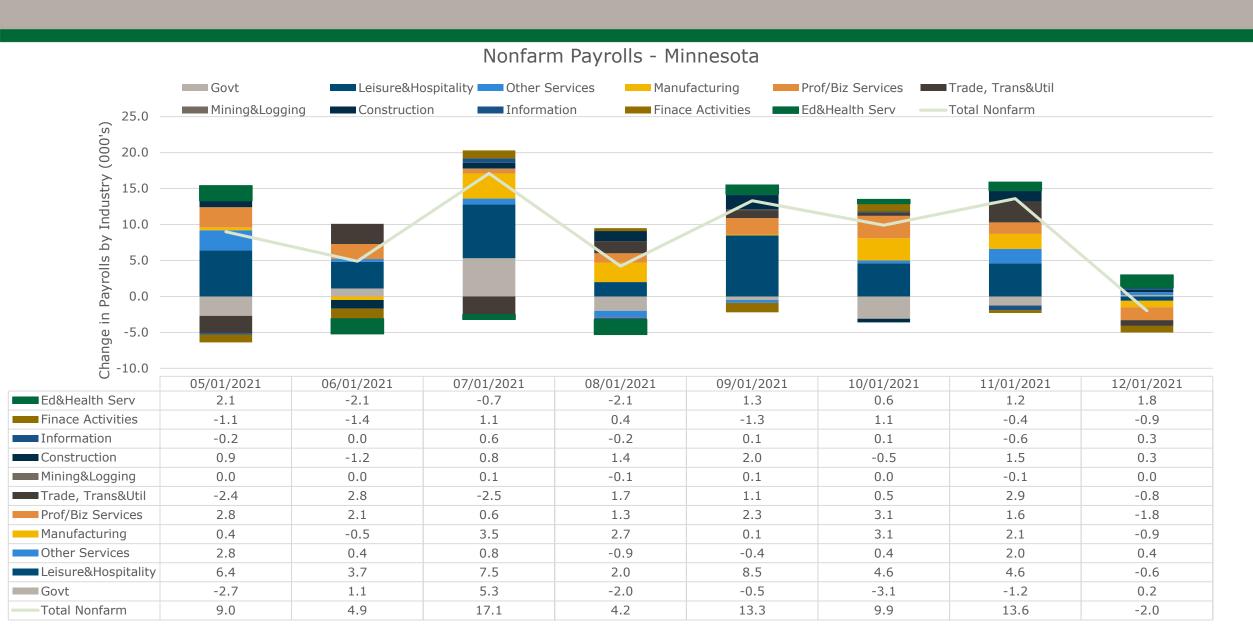




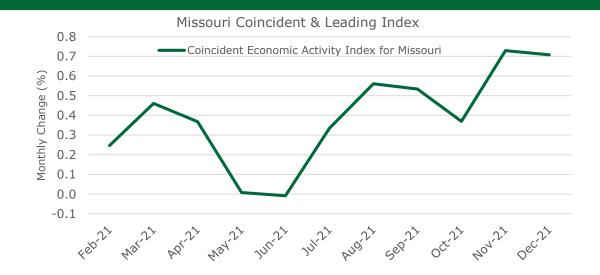


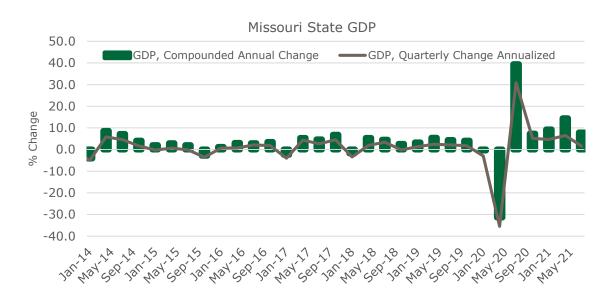


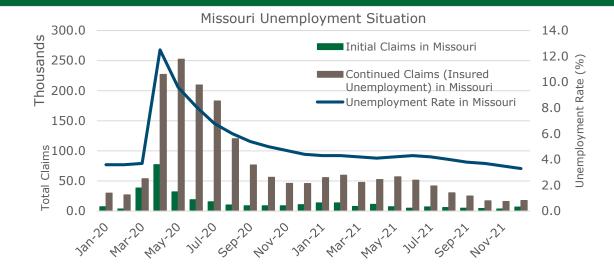
Minnesota

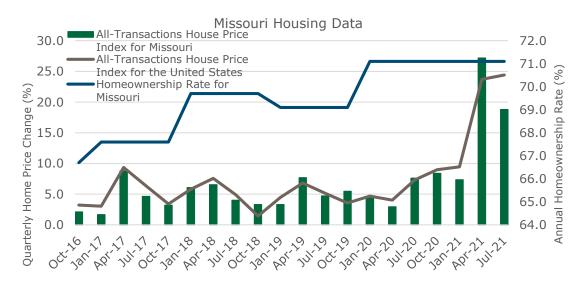


Missouri

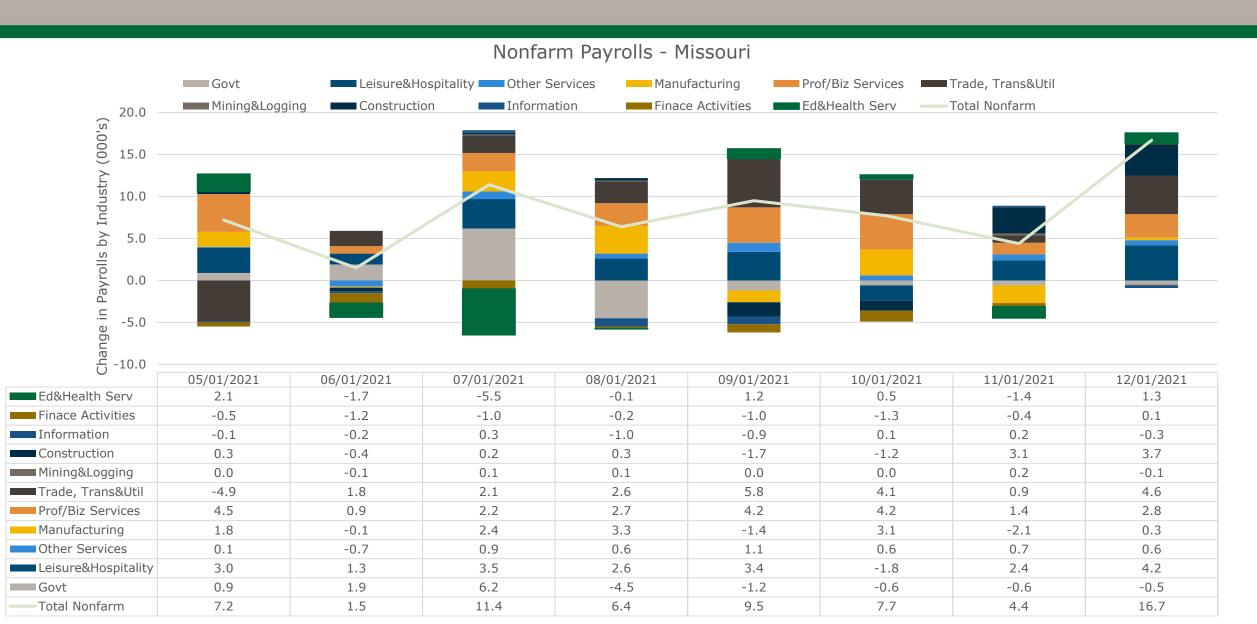




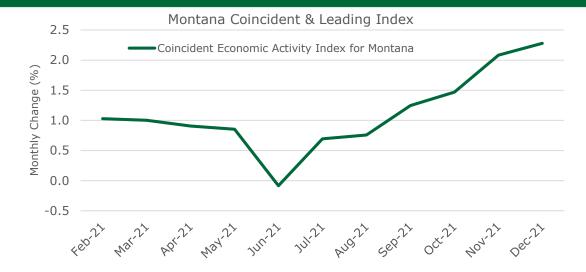


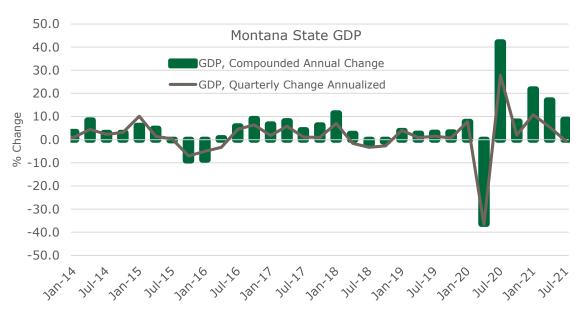


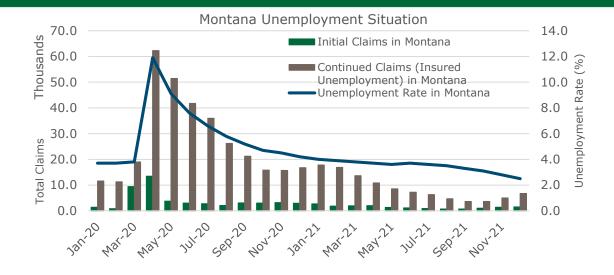
Missouri

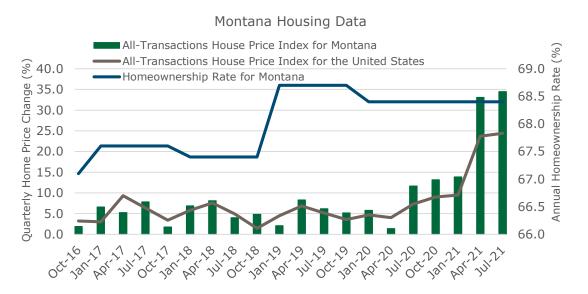


Montana

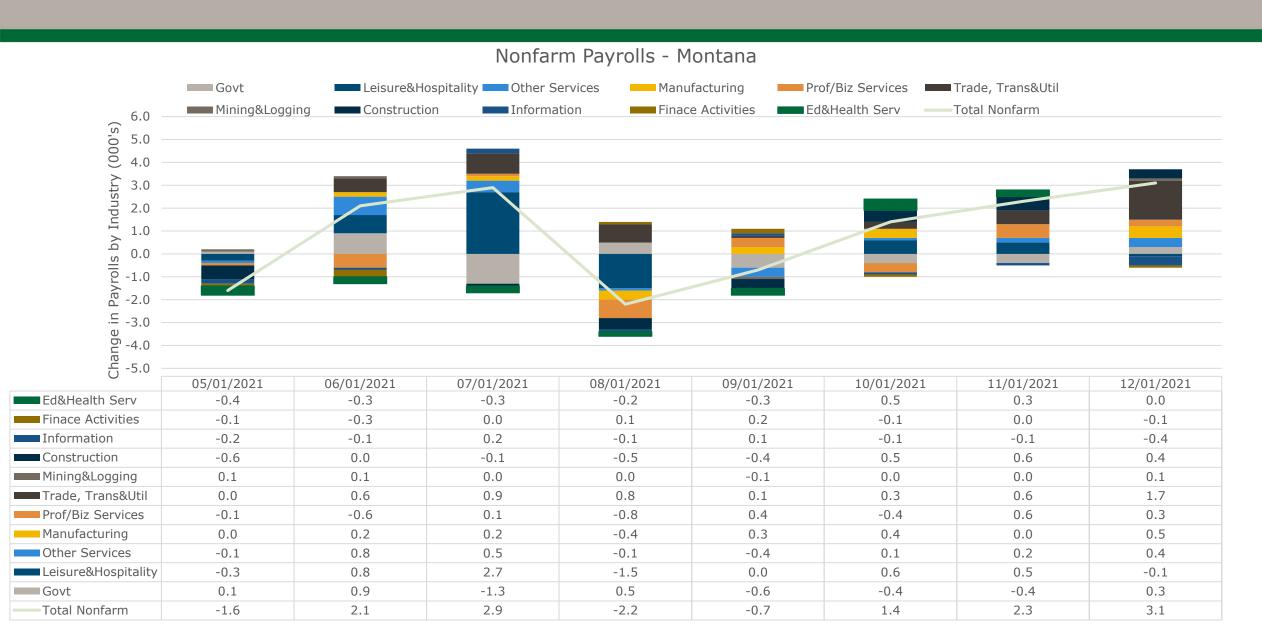




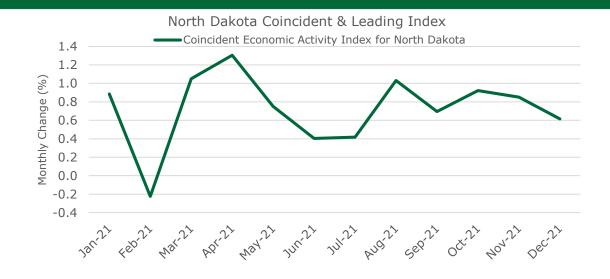


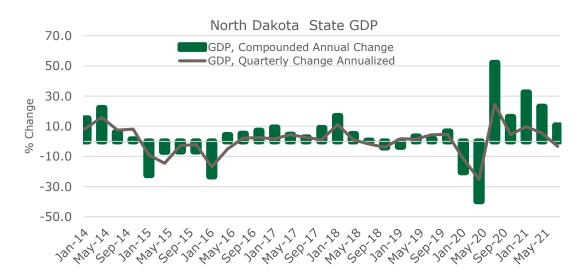


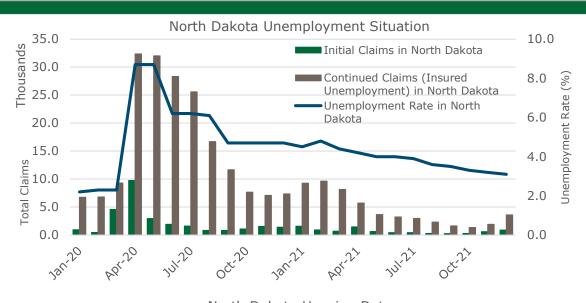
Montana

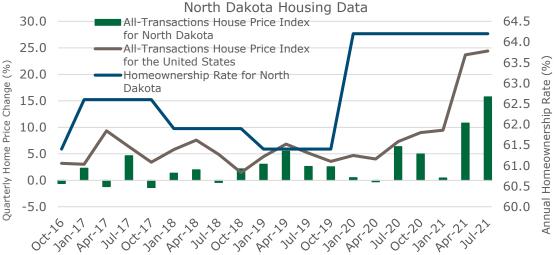


North Dakota

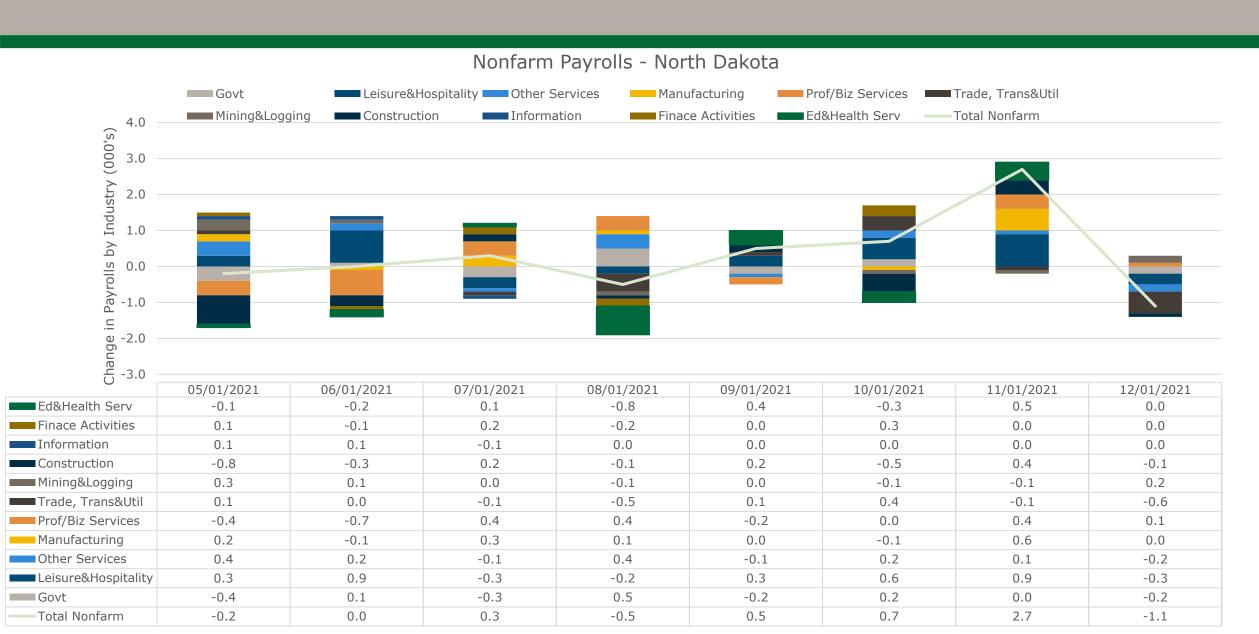




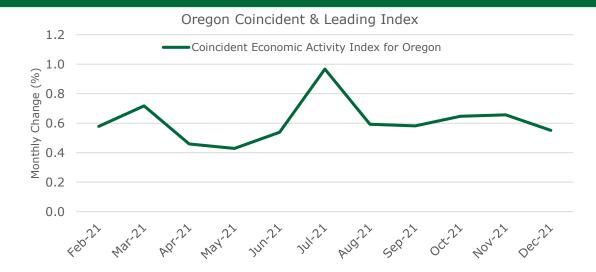


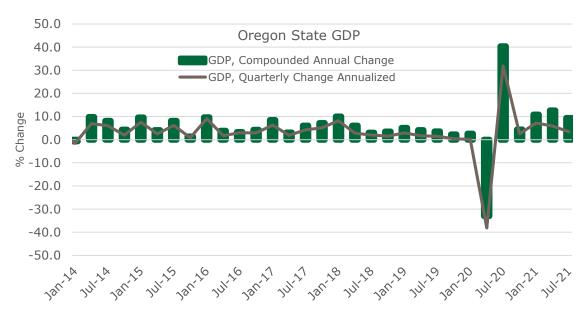


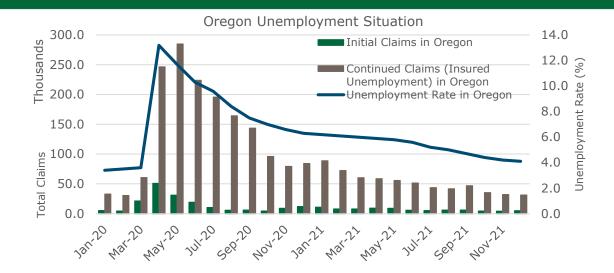
North Dakota

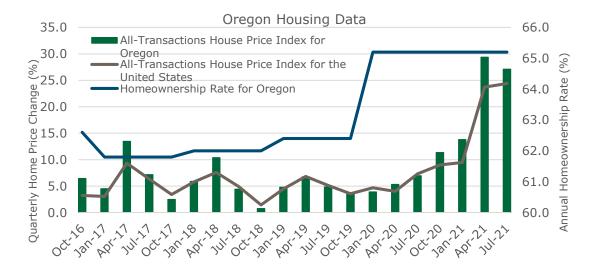


Oregon

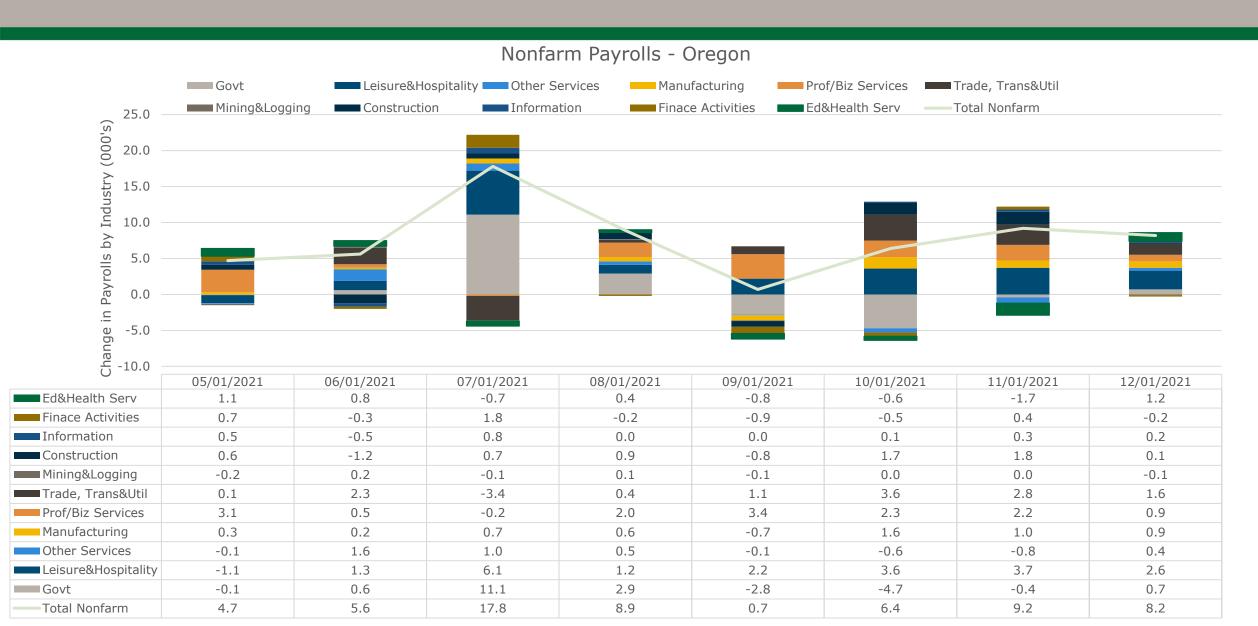




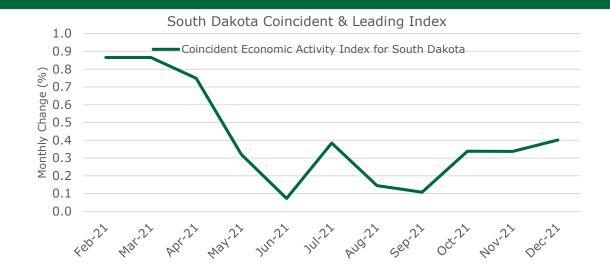


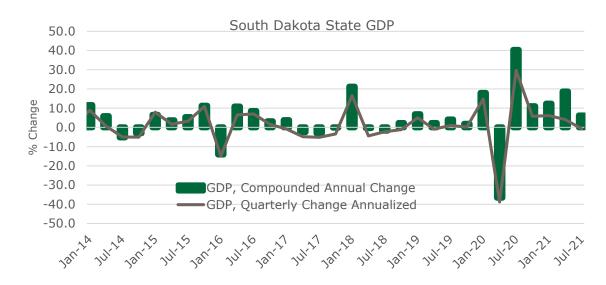


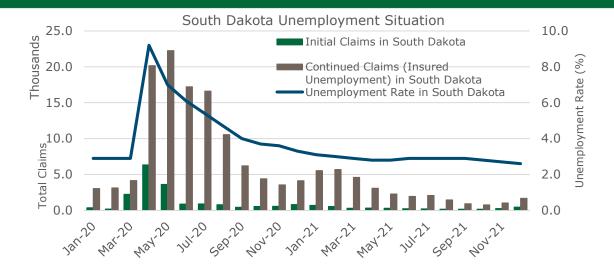
Oregon

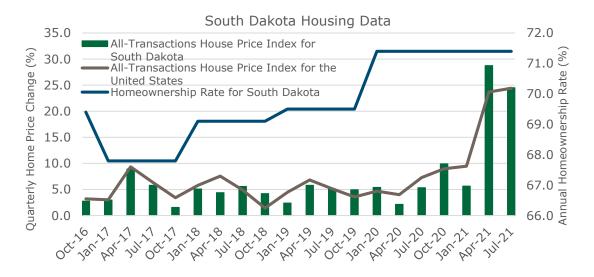


South Dakota

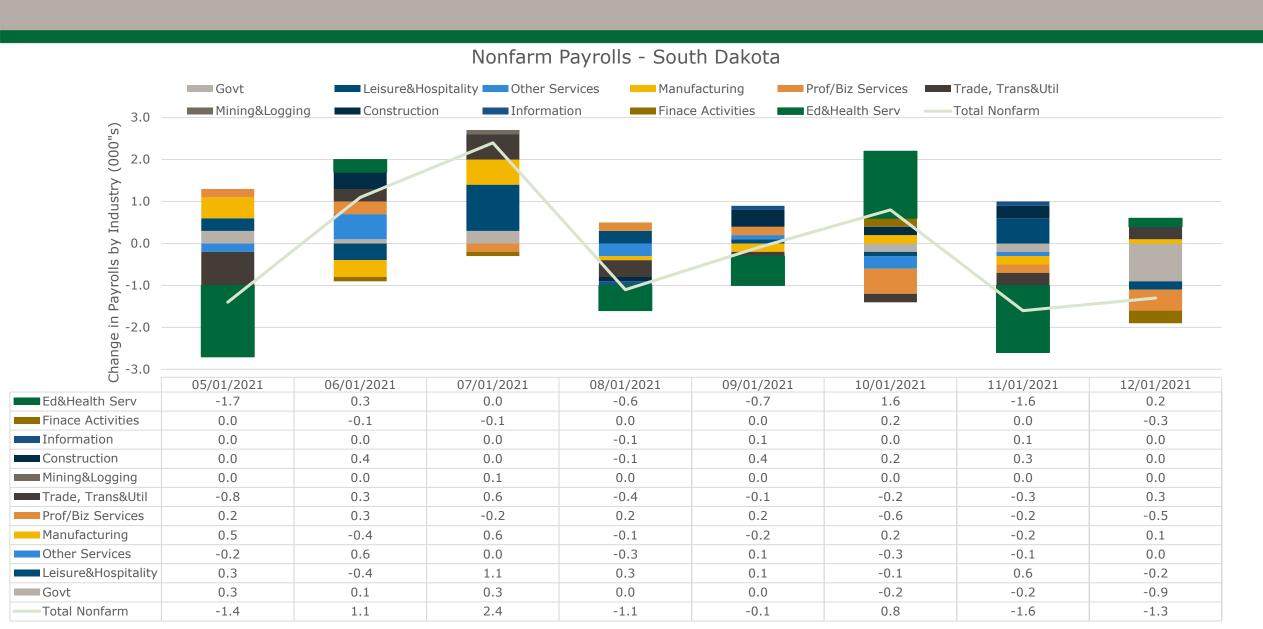




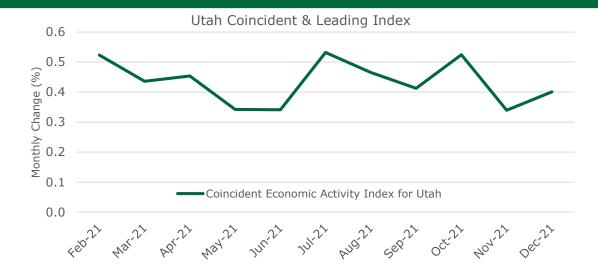


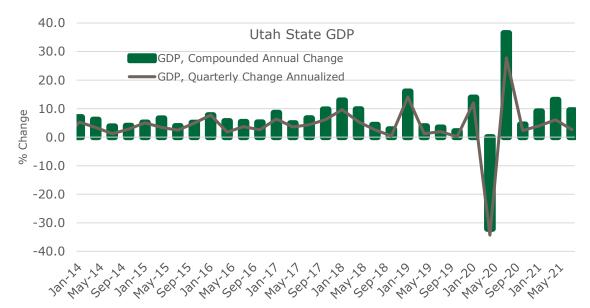


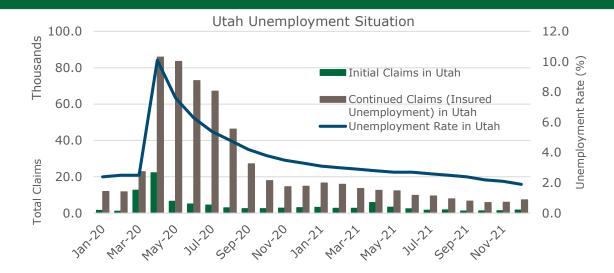
South Dakota

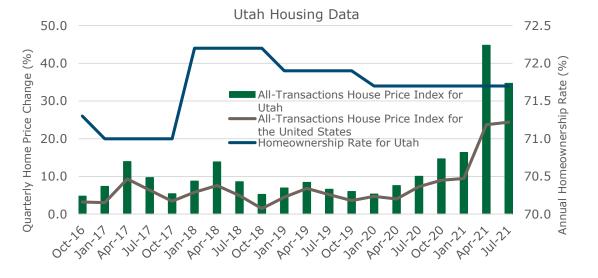


Utah

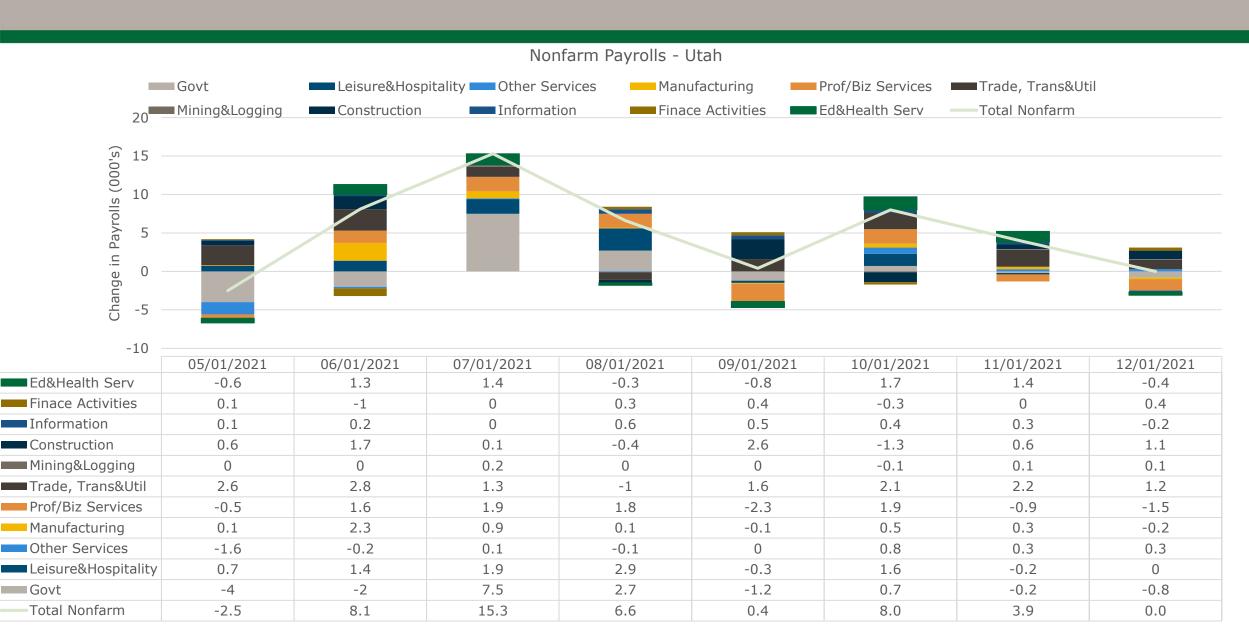




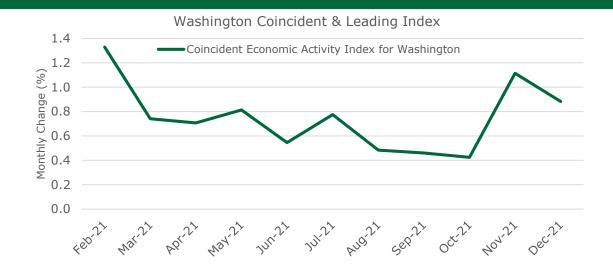


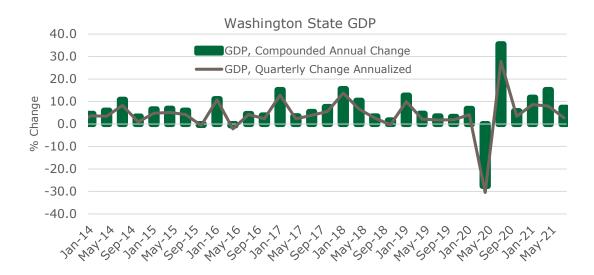


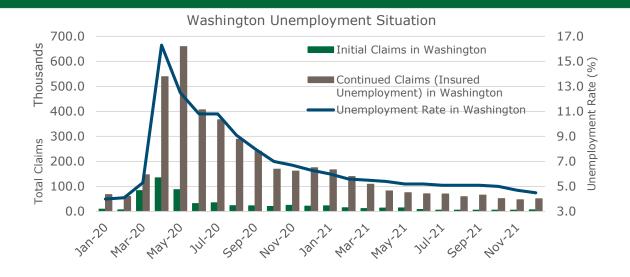
Utah

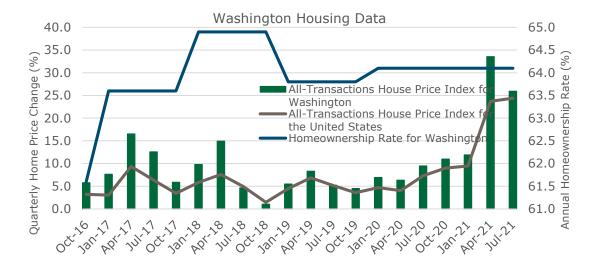


Washington

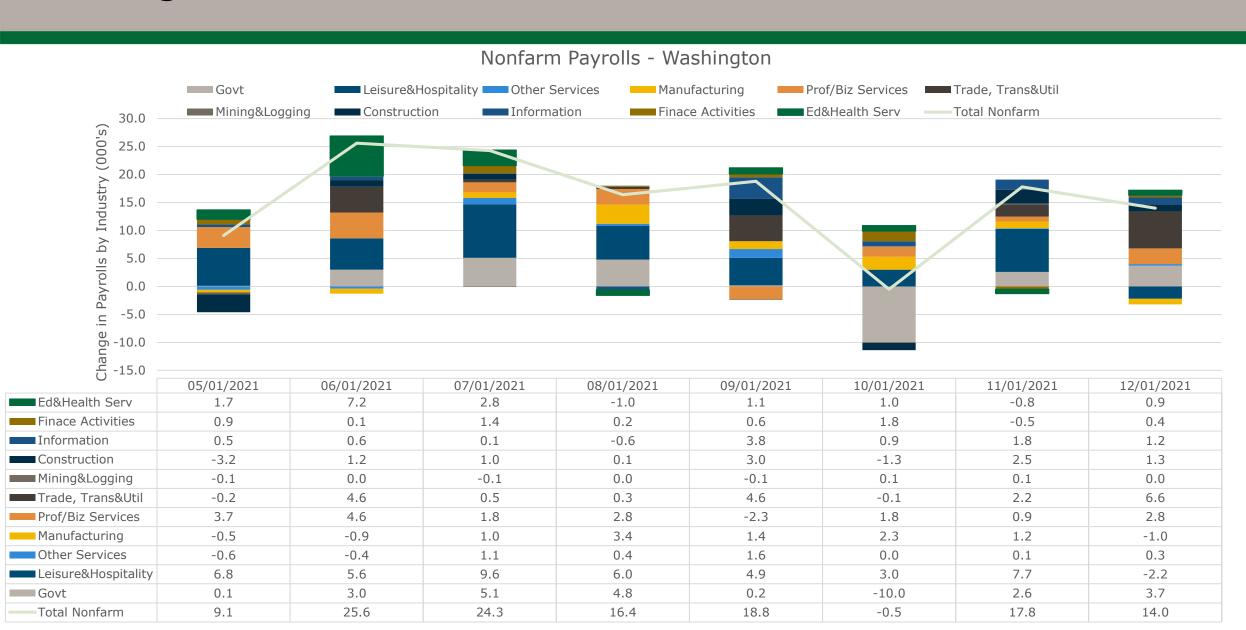




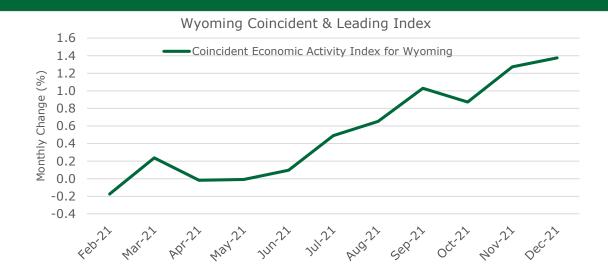


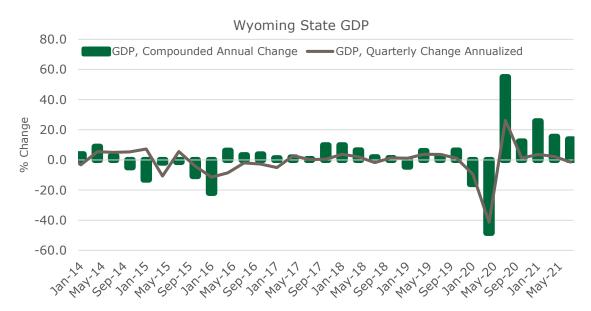


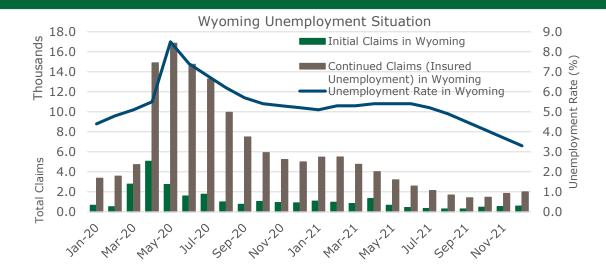
Washington

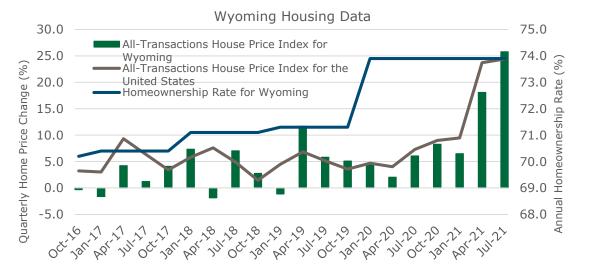


Wyoming









Wyoming

