**Summary:** The LEI-N rose by 2.41% during February 2022. The increase in the leading indicator, which is designed to predict economic activity six months in the future, signals continued economic growth in Nebraska through August 2022. The indicator improved for two primary reasons. First, respondents to the February Survey of Nebraska Business reported plans to increase sales and employment. Second, initial claims for unemployment insurance fell sharply during the month. Airline passenger counts and manufacturing hours-worked also rose during February, while there was a modest increase in building permits for single-family homes.

**Leading Economic Indicator – Nebraska**

Figure 1 shows the change in the Leading Economic Indicator – Nebraska (LEI-N) during February 2022 compared to the previous month. The LEI-N predicts economic growth six months into the future. The LEI-N rose by 2.41% during February.

![Figure 1: Change in LEI-N February 2022](image)

Figure 2 shows the change in the leading indicator over the last six months. The leading indicator has risen four of the last six months. This pattern suggests that the Nebraska economy will continue to grow through mid-2022.
Figure 3 shows the components of change in the Leading Economic Indicator – Nebraska during February. The change in the LEI–N is the weighted average of changes in each component (see page 5). The February rise in the LEI-N was primarily due to two components. The first was business expectations. In particular, respondents to the February Survey of Nebraska Business reported plans to increase employment and sales over the next six months. There also was another decline in initial claims for unemployment insurance, suggesting continued strength in Nebraska’s labor market. Airline passenger counts and manufacturing hours-worked also rose during February. There also was a modest increase in building permits for single-family homes on a seasonally adjusted basis.

![Figure 2: Change in LEI - N Last 6 Months](image)

![Figure 3: LEI-N Components of Change February 2022](image)
Coincident Economic Indicator – Nebraska

The Coincident Economic Indicator - Nebraska (CEI-N) is a measure of the current size of the Nebraska economy. The CEI-N rose by 0.31% during February 2022, as seen in Figure 4.

Figure 4: Change in CEI-N
January 2022

Figure 5 shows the change in the CEI-N over the last 6 months. The Nebraska economy has grown during five of the last six months, including rapid growth in October 2021.

Figure 5: Change in CEI-N
Last Six Months
One component of the CEI-N, electricity prices, rose during February. There were three falling components. First, there was a modest decline in real private wages, as the rate of inflation exceeded hourly wage growth. Second, there was a modest drop in agricultural commodity prices. Finally, business conditions deteriorated some during February according to respondents to the monthly Survey of Nebraska Business. A detailed discussion of the components of the CEI-N and LEI-N can be found at https://business.unl.edu/research/bureau-of-business-research/ in Technical Report: Coincident and Leading Economic Indicators-Nebraska.

Figure 6: CEI-N Components of Change
February 2022

Figure 7 shows a forecast for the CEI-N over the next six months. The forecast calls for modest growth in the first months of 2022 and consistent growth later in the year. In particular, economic growth will be moderate in the summer of 2022. These expectations are consistent with the recent changes in the LEI-N reported in Figure 2.

Figure 7: 6-Month Forecast of
Coincident Economic Indicator - Nebraska
Weights and Component Shares

Table 1 shows the weights used to aggregate the individual components into the LEI-N and CEI-N. The weights are the inverse of the “standardized” standard deviation of each component variable. The term standardized simply means that the inverse standard deviations are adjusted proportionately to sum to 1. This weighting scheme makes sense since individual components that are more stable have a smaller standard deviation, and therefore, a larger inverse standard deviation. A large movement in a typically stable economic series would provide a more powerful signal of economic change than a large movement in a series with significant month-to-month fluctuations.

![Table 1: Component Weights for LEI-N and CEI-N](image)

Table 2 and 3 show the calculation for the change in LEI-N and CEI-N between January and February of 2022. Weights (from Table 1) are multiplied by the change to calculate the contribution of each component. Contributions are converted to percentage terms and summed.

![Table 2: Component Contributions to the Change in Leading Economic Indicator](image)

![Table 3: Component Contributions to the Change in Coincident Economic Indicator](image)
Performance of the LEI-N and CEI-N

Further information is available on both economic indicators to demonstrate how well the CEI-N tracks the Nebraska economy and how well the LEI-N leads the CEI-N. Figure 8 shows the value of CEI-N and the real gross state product (real GDP) in Nebraska for 2001 through the first quarter of 2021, using data provided by the Bureau of Economic Analysis, U.S. Department of Commerce. CEI-N closely tracks Nebraska’s real GDP for the period. The correlation coefficient between the two pictured series is 0.96.

Figure 9 again shows the values for the CEI-N. It also graphs 6-months forward values for the LEI-N. Recall that the LEI-N is intended to forecast the Nebraska economy six months into the future. This implies that Figure 9 is comparing the predicted movement in CEI-N (predicted by LEI-N values six months earlier) with the actual movement in CEI-N. In Figure 9, predicted values using the LEI-N track trends and movement in the CEI-N. The long-run correlation coefficient between CEI-N and six-month forward values of LEI-N is 0.88.