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# Nebraska Monthly Economic Indicators: October 18, 2013

Eric Thompson

*University of Nebraska-Lincoln*, [ethompson2@unl.edu](mailto:ethompson2@unl.edu)

William Walstad

*University of Nebraska-Lincoln*, [wwalstad1@unl.edu](mailto:wwalstad1@unl.edu)

Shannon McClure

*University of Nebraska-Lincoln*, [smcclure@steiergroup.com](mailto:smcclure@steiergroup.com)

Mihdi Vahedi

*University of Nebraska-Lincoln*

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# Nebraska Monthly Economic Indicators: October 18, 2013

Prepared by the UNL College of Business Administration, Department of Economics

**Authors:** Dr. Eric Thompson, Dr. William Walstad  
**Graduate Research Assistants:** Shannon McClure,  
Mihdi Vahedi

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**Summary:** *The Leading Economic Indicator – Nebraska (LEI-N) rose by 0.95% during September 2013. The increase in the LEI-N, which predicts economic growth in the state six months in the future, signals that the Nebraska economy will grow at a modest pace over the remainder of the year and in early 2014. Most of the increase in the LEI-N was due to a significant drop in initial unemployment claims in Nebraska during September. This drop in Nebraska claims followed a national trend. Among other components of the leading indicator, building permits and airline passenger counts both rose. There also was a decline in the value of the U.S. dollar, which is positive for the state’s exporters. Among negative trends, both manufacturing hours and business expectations declined during September. Finally, the authors note that it was not possible to include a September value for the CEI-N in this report. Data for several components of the CEI-N was not available as the report was prepared, due to the federal government shutdown.*

## Leading Economic Indicator – Nebraska

Figure 1 shows the change in the Leading Economic Indicator – Nebraska (LEI-N) in September 2013, compared to the previous month. The LEI-N predicts economic growth six months into the future. The LEI-N increased by 0.95% in September.

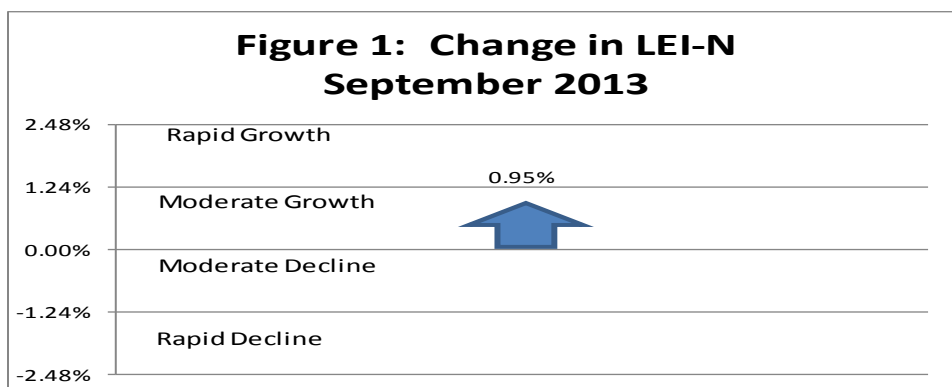


Figure 2 shows the growth in the LEI-N over the last 6 months. There was little growth in the indicator from May through July. But, the LEI-N grew in both August and September. Taken together these recent results suggest only modest economic growth in the Nebraska through the rest of 2013 and early 2014.

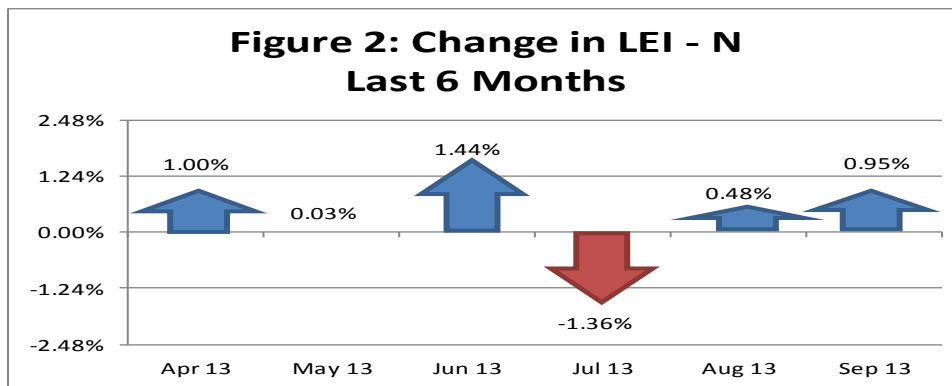
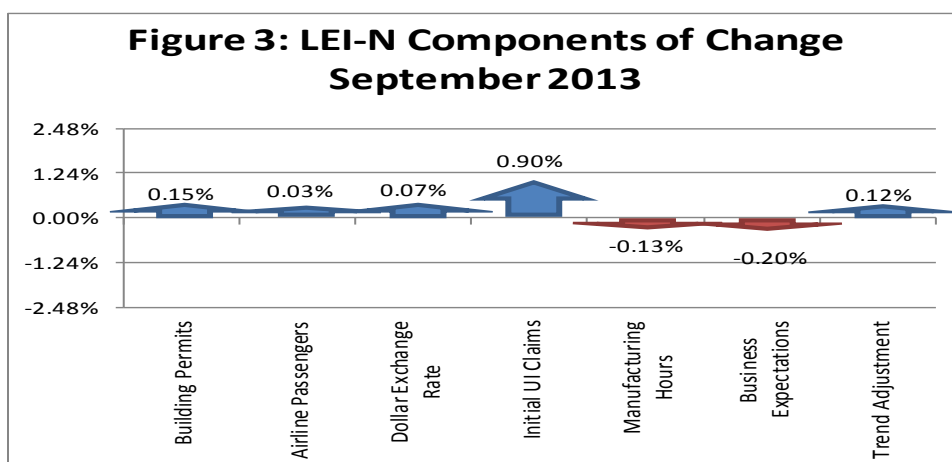


Figure 3 shows the components of change in the Leading Economic Indicator – Nebraska during September 2013. The change in the overall LEI – N is the weighted average of changes in each component (see page 3). Data in Figure 3 indicates that most of the increase in the LEI-N during September was due to improved data about initial unemployment claims. In particular, initial unemployment claims dropped substantially in Nebraska during September. This decline followed a national trend. There were mixed signals regarding economic growth among the other components of the leading indicator. Building permits improved on a seasonally adjusted basis as did airline passenger counts. Growth in airline passenger counts suggests improved confidence among leisure travelers and enhanced business activity. The value of the U.S. dollar also fell during September, which is a positive for Nebraska’s export-oriented businesses. At the same time, manufacturing hours and business expectations fell during September. In terms of business expectations, respondents to the *Survey of Nebraska Business* projected a slight decrease in sales in their businesses over the next six months. Note that the trend adjustment component pictured in Figure 3 is discussed on page 3.



## Weights and Component Shares

Table 1 shows the weights that were used to aggregate the individual components into the LEI-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 smaller standard deviations, 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 that regularly has large movements.

<b>Table 1: Component Weights for LEI-N</b>			
<b>Leading Economic Indicator - Nebraska</b>			
<b>Variable</b>	<b>Standard Deviation</b>	<b>Inverse STD</b>	<b>Weight (Inverse STD Standardize)</b>
SF Housing Permits	14.0300	0.0713	0.0327
Airline Passengers	3.5789	0.2794	0.1281
Exchange Rate	1.2187	0.8206	0.3761
Initial UI Claims	10.1704	0.0983	0.0451
Manufacturing Hours	1.4824	0.6746	0.3092
Survey Business Expectations	4.2084	0.2376	0.1089

Tables 2 and 3 show the calculation for the change in the LEI-N between August and September of 2013. Weights (from Table 1) are multiplied by the change to calculate the contribution of each component. Contributions are converted to percentage terms and summed. Note that in Table 2 a trend adjustment factor is utilized in calculating LEI-N. The U.S. Leading Economic Indicator also has a trend adjacent factor.

<b>Table 2: Component Contributions to the Change in Leading Economic Indicator</b>						
<b>Leading Economic Indicator - Nebraska</b>						
Component Index Value (May 2007=100)						
Component	Current	Previous	Difference	Weight	Contribution	Percentage Contribution (Relative to Previous LEI-N)
SF Building Permits	76.77	71.74	5.03	0.03	0.16	0.15%
Airline Passengers	89.90	89.68	0.22	0.13	0.03	0.03%
U.S. Dollar Exchange Rate (Inverse)	102.61	102.42	0.19	0.38	0.07	0.07%
Initial Unemployment Insurance Claims (Inverse)	96.77	75.40	21.37	0.05	0.96	0.90%
Manufacturing Hours	92.32	92.77	-0.45	0.31	-0.14	-0.13%
Survey Business Expectations <sup>1</sup>	48.04		-1.96	0.11	-0.21	-0.20%
Trend Adjustment					0.13	0.12%
Total (weighted average)	107.58	106.57			1.01	0.95%

<sup>1</sup> Survey results are a diffusion Index, which is always compared to 50