What is the National Activity Index?
The index is a weighted average of 85 indicators of national economic activity drawn from four broad categories of data: 1) production and income; 2) employment, unemployment, and hours; 3) personal consumption and housing; and 4) sales, orders, and inventories. A zero value for the index indicates that the national economy is expanding at its historical trend rate of growth; negative values indicate below-average growth; and positive values indicate above-average growth.

Why are there three index values?
Each month, we provide a monthly index, its three-month moving average, and a diffusion index. Month-to-month movements can be volatile, so the monthly index’s three-month moving average, the CFNAI-MA3, provides a more consistent picture of national economic growth. The CFNAI Diffusion Index captures the degree to which a change in the monthly index is spread out among its 85 indicators, averaged over a three-month period.

What do the numbers mean?
When the CFNAI-MA3 value moves below −0.70 following a period of economic expansion, there is an increasing likelihood that a recession has begun. Conversely, when the CFNAI-MA3 value moves above −0.70 following a period of economic contraction, there is an increasing likelihood that a recession has ended.

When the CFNAI-MA3 value moves above +0.70 more than two years into an economic expansion, there is an increasing likelihood that a period of sustained increasing inflation has begun.

The Chicago Fed National Activity Index (CFNAI) moved up to −0.22 in December from −0.36 in November. Two of the four broad categories of indicators that make up the index increased from November, but three of the four categories made negative contributions to the index in December.

The index’s three-month moving average, CFNAI-MA3, decreased to −0.24 in December from −0.19 in November. December’s CFNAI-MA3 suggests that growth in national economic activity was somewhat below its historical trend. The economic growth reflected in this level of the CFNAI-MA3 suggests subdued inflationary pressure from economic activity over the coming year.

The CFNAI Diffusion Index, which is also a three-month moving average, ticked up to −0.12 in December from −0.13 in November. Thirty-five of the 85 individual indicators made positive contributions to the CFNAI in December, while 50 made negative contributions. Fifty-one indicators improved from November to December, while 32 indicators deteriorated and two were unchanged. Of the indicators that improved, 26 made negative contributions.
The contribution from production-related indicators to the CFNAI increased to –0.26 in December from –0.40 in November. Industrial production decreased by 0.4 percent in December after declining by 0.9 percent in November. Moreover, manufacturing production decreased by 0.1 percent in December after decreasing by the same percentage in the previous month. The sales, orders, and inventories category made a contribution of –0.02 to the CFNAI in December, up slightly from –0.03 in November.

The contribution from employment-related indicators to the CFNAI was unchanged at +0.12 in December. Nonfarm payrolls rose by 292,000 in December after increasing by 252,000 in November, and the unemployment rate remained at 5.0 percent in December.

The contribution of the personal consumption and housing category to the CFNAI edged down to –0.07 in December from –0.05 in November. Housing starts decreased to 1,149,000 annualized units in December from 1,179,000 in November. In addition, housing permits moved down to 1,232,000 annualized units in December from 1,282,000 in the previous month.

The CFNAI was constructed using data available as of January 20, 2016. At that time, December data for 49 of the 85 indicators had been published. For all missing data, estimates were used in constructing the index. The November monthly index value was revised to –0.36 from an initial estimate of –0.30. Revisions to the monthly index value can be attributed to two main factors: revisions in previously published data and differences between the estimates of previously unavailable data and subsequently published data. The revision to the November monthly index value was due primarily to the former.