Summary
The Southern California Leading Economic Indicator increased by 1.22% in the fourth quarter of 2021 compared to the third quarter of 2021. The increase in the Southern California Leading Indicator suggests an increase in economic activity in the Southern California region in the next three to six months. The U.S. leading economic indicator increased in the fourth quarter of 2021 and implies an increase in economic activity for the U.S. economy in the next three to six months (Figure 1).

U.S. economic activity, often measured by real GDP growth, is expected to increase in the next three to six months, given the increase in the U.S. leading indicator. The increase in the SC Leading Indicator suggests an increase in economic activity in Southern California (Figure 2).
Southern California Indicator and Economic Activity

In the absence of up-to-date gross state product data for Southern California, our index is used to analyze trends in total civilian employment. The indicator has been found to be a good predictor of regional economic trends. In general, changes in the index take place prior to changes in regional economic activity. For example, during the recessions of the early 1990s, 2001, and late 2007-2008, as well as the pandemic, the Southern California leading indicator decreased significantly (see Figure 3).

For the last two years the Southern California Leading indicator usually changed one to two quarters before SC employment changes (Figure 4). The SC indicator currently projects an increase in Southern California economic activity in the next three to six months.

Changes in the WCEAF Leading Indicator and its Components

The Southern California Leading Indicator increased from a value of 115.18 in the third quarter of 2021 to a value of 116.59 in the fourth quarter of 2021. The 1.22% increase in the fourth quarter of 2021 suggests an increase in economic activity in the Southern California region in the next 3 to 6 months. Civilian employment in Southern California, which is notoriously erratic, subject to measurement errors and continually revised, showed an increase in the fourth quarter of 2021 of 1.35%.

For the quarterly data, three of the seven components had a positive impact on the Southern California leading indicator. The positive impacts were from a rise in the Standard & Poor’s 500 stock index, fall in regional unemployment, and increase in regional nonfarm employment. The negative impacts on the Southern California leading indicator were from a fall in the money supply adjusted for inflation, change in the interest rate spread, decline in regional building permits, and decrease in the Pacific region consumer confidence index.
Table 1
Leading Economic Indicators and Total SC Civilian Employment

<table>
<thead>
<tr>
<th>Variable</th>
<th>2020.4</th>
<th>2021.1</th>
<th>2021.2</th>
<th>2021.3</th>
<th>2021.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC Indicator</td>
<td>109.61</td>
<td>111.95</td>
<td>114.25</td>
<td>115.18</td>
<td>116.59</td>
</tr>
<tr>
<td>% Change</td>
<td>2.53</td>
<td>2.13</td>
<td>2.06</td>
<td>0.81</td>
<td>1.22</td>
</tr>
<tr>
<td>US Indicator</td>
<td>109.00</td>
<td>110.60</td>
<td>114.13</td>
<td>117.07</td>
<td>119.15</td>
</tr>
<tr>
<td>% Change</td>
<td>2.51</td>
<td>1.47</td>
<td>3.19</td>
<td>2.57</td>
<td>1.78</td>
</tr>
<tr>
<td>Civilian Employment</td>
<td>8,049,379</td>
<td>8,233,323</td>
<td>8,414,011</td>
<td>8,496,413</td>
<td>8,611,341</td>
</tr>
<tr>
<td>% Change</td>
<td>4.16</td>
<td>2.29</td>
<td>2.19</td>
<td>0.98</td>
<td>1.35</td>
</tr>
</tbody>
</table>

Economic Conditions
For the U.S. economy, real gross domestic product increased at an annualized growth rate of 6.9% during the fourth quarter of 2021, following the 2.3% increase in the third quarter of 2021. U.S. inflation, measured by the consumer price index, increased in January 2022 by 0.6% compared to February 2022. For California, the seasonally adjusted unemployment rate for December 2021 of 6.5%, which is lower compared to the 7.0% of November 2022, is higher than the U.S. unemployment rate of 3.9% in December 2021. Payroll employment in California registered a net gain September compared to the previous month. There were jobs gains in nine of the ten categories of manufacturing; trade transportation, and utilities; professional and business service; educational and health services; financial activities; and construction; information; leisure and hospitality; government; and other services. Mining and logging remained unchanged.

Technical Notes
The WCEAF Southern California Leading Economic Indicator includes Los Angeles County, Orange County, San Bernardino County, Riverside County, Ventura County, and Imperial County. The index consists of both national and regional data. The national variables used are interest rates, Standard & Poor 500 stock index and real money supply. Nonfarm employment, the unemployment rate, building permits, and the Pacific region consumer confidence index make up the regional data. The employment and unemployment data are from the new North American Industry Classification System (NAICS).

The CEAF Southern California Leading Indicator provides information about future economic activity in Southern California and is not a prediction of the level of employment. Interpreting changes in a leading economic indicator requires analyzing the size and duration of changes in the direction of the index. As stated by the Conference Board, three consecutive downward movements in the leading index do not necessarily signal a recession. The Southern California leading economic indicator was initially constructed in May 2000 and is revised each quarter using the most recent and often revised data available. Historical labor data include the recent updates. The Conference Board data includes the 2016 benchmark revisions. The SC Leading Indicator (2016=100), following the procedure of the U.S. indicator, has been revised and equals 100 in the year 2016.

Woods Center for Economic Analysis and Forecasting (WCEAF)

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