CBER Indexes for Nevada and Southern Nevada

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Stephen M. Miller, PhD, Director
Jinju Lee, Economic Analyst
Summary of CBER’s Nevada Indexes

**Coincident Index**

-0.2 %

<table>
<thead>
<tr>
<th>Taxable Sales</th>
<th>Gross Gaming Revenue</th>
<th>Nonfarm Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5% ↑</td>
<td>-4.4% ↓</td>
<td>0.2% ↑</td>
</tr>
</tbody>
</table>

2.5 %

<table>
<thead>
<tr>
<th>Taxable Sales</th>
<th>Gross Gaming Revenue</th>
<th>Nonfarm Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.4% ↑</td>
<td>2.7% ↑</td>
<td>2.3% ↑</td>
</tr>
</tbody>
</table>

**Leading Index**

-4.3 %

<table>
<thead>
<tr>
<th>Initial Claims</th>
<th>Moody’s Baa</th>
<th>Housing Permits</th>
<th>Commercial Permits</th>
<th>Airline Passengers</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8% ↑</td>
<td>0.6% ↑</td>
<td>-6.3% ↓</td>
<td>-49.7% ↓</td>
<td>-1.0% ↓</td>
<td>-5.2% ↓</td>
</tr>
</tbody>
</table>

-0.3 %

<table>
<thead>
<tr>
<th>Initial Claims</th>
<th>Moody’s Baa</th>
<th>Housing Permits</th>
<th>Commercial Permits</th>
<th>Airline Passengers</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.3% ↑</td>
<td>0.5% ↑</td>
<td>66.9% ↑</td>
<td>-20.8% ↓</td>
<td>7.1% ↑</td>
<td>-5.2% ↓</td>
</tr>
</tbody>
</table>
CBER’s Indexes of Nevada Economic Activity

The CBER Nevada coincident and leading indexes use the Department of Commerce index construction method. The CBER Nevada coincident index measures the ups and downs of the Nevada economy, while the CBER Nevada leading index provides an indication for the future direction of the coincident index. The coincident index provides the benchmark series that defines the business cycle or reference cycle in Nevada. The leading index then tracks the economy relative to that reference cycle. The coincident index peaked in February 2007 and then fell dramatically through June 2010. Prior to the Great Recession, identified by the benchmark Nevada coincident index, the Nevada leading index peaked in November 2005, 14 months before the Nevada coincident index peaked. Then the Nevada leading index troughed in May 2009, 13 months before the Nevada coincident index troughed. All series are seasonally adjusted (SA). A full description of the methodology used to construct the indexes can be found at: [http://cber.unlv.edu/publications/nvindices.pdf](http://cber.unlv.edu/publications/nvindices.pdf).

**Coincident Index Components**
- Nevada Taxable Sales
- Nevada Gross Gaming Revenue
- Nevada Nonfarm Employment

**Leading Index Components**
- Nevada Initial Claims for Unemployment (inverted)
- Moody’s Real Baa Bond Rate (inverted)
- Nevada Housing Permits
- Nevada Commercial Permits
- Nevada Airline Passengers
- Standard & Poor’s Stock Market Index
The CBER Nevada coincident index declined for the month but is up from last year in December 2015.

The CBER Nevada coincident index decreased 0.2 percent month-over-month but increased 2.5 percent year-over-year in December 2015. A large monthly loss in seasonally adjusted gaming revenue dragged the index down compared to last month. Two components of CBER’s Nevada coincident index—seasonally adjusted taxable sales and nonfarm employment—experienced gains, up by 0.5 and 0.2 percent, respectively, for the month. Gaming revenue decreased by 4.4 percent relative to a month earlier but climbed by 2.7 percent year-over-year.

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Latest Period</th>
<th>Month-Over-Month</th>
<th>Year-Over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Sales (SA)</td>
<td>Dec-15</td>
<td>4,431,113,625</td>
<td>0.5%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Gaming Revenue (SA)</td>
<td>Dec-15</td>
<td>929,739,865</td>
<td>-4.4%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Nonfarm Employment (SA)</td>
<td>Dec-15</td>
<td>1,269,426</td>
<td>0.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Overall Index Change</td>
<td>Dec-15</td>
<td>209.5</td>
<td>-0.2%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
After jumping higher in December 2015, the CBER Nevada leading index fell in January 2016 mainly due to a turbulent stock market and a large decrease in building permits. This results in both monthly and yearly decreases of 4.3 and 0.3 percent, respectively. Among the six components, Nevada passengers, the S&P 500 index, housing permits, and commercial permits experienced monthly losses in January 2016, decreasing by 1.0, 5.2, 6.3, and 49.7 percent, respectively. The remaining two components—Moody’s Baa grade corporate bond yield (inverted) and initial claims for unemployment (inverted)—increased by 0.6 and 2.8 percent, respectively, for the month. Commercial permits fell significantly both for the month and for the year and still remain low and volatile.

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### Nevada Leading Index

The CBER Nevada leading index decreased in January 2016 relative to last month and last year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Index</th>
<th>Month-over-Month</th>
<th>Year-over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-15</td>
<td>97.7</td>
<td>-0.8%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Feb-15</td>
<td>99.8</td>
<td>2.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Mar-15</td>
<td>97.8</td>
<td>-2.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Apr-15</td>
<td>97.9</td>
<td>0.2%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>May-15</td>
<td>97.7</td>
<td>-0.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Jun-15</td>
<td>100.2</td>
<td>2.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Jul-15</td>
<td>96.4</td>
<td>-3.8%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Aug-15</td>
<td>97.1</td>
<td>0.7%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Sep-15</td>
<td>96.9</td>
<td>-0.2%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Oct-15</td>
<td>98.4</td>
<td>1.6%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Nov-15</td>
<td>98.0</td>
<td>-0.4%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Dec-15</td>
<td>101.8</td>
<td>3.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Jan-16</td>
<td>97.4</td>
<td>-4.3%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>
Summary of CBER’s Southern Nevada Indexes

- Coincident Index and Leading Index

**Coincident Index**

*Mo. to Mo.*

<table>
<thead>
<tr>
<th>Metric</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Sales</td>
<td>0.5% ↑</td>
</tr>
<tr>
<td>Gross Gaming Revenue</td>
<td>-5.4% ↓</td>
</tr>
<tr>
<td>Nonfarm Employment</td>
<td>0.03% ↑</td>
</tr>
</tbody>
</table>

*Yr. to Yr.*

<table>
<thead>
<tr>
<th>Metric</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Sales</td>
<td>5.6% ↑</td>
</tr>
<tr>
<td>Gross Gaming Revenue</td>
<td>2.9% ↑</td>
</tr>
<tr>
<td>Nonfarm Employment</td>
<td>2.4 % ↑</td>
</tr>
</tbody>
</table>

**Leading Index**

<table>
<thead>
<tr>
<th>Metric</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Claims</td>
<td>2.8% ↑</td>
</tr>
<tr>
<td>Moody’s Baa</td>
<td>0.6% ↑</td>
</tr>
<tr>
<td>Housing Permits</td>
<td>-4.1% ↓</td>
</tr>
<tr>
<td>Commercial Permits</td>
<td>-58.5% ↓</td>
</tr>
<tr>
<td>McCarran Passengers</td>
<td>-0.6% ↓</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>-5.2% ↓</td>
</tr>
</tbody>
</table>

*Mo. to Mo.*

<table>
<thead>
<tr>
<th>Metric</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Claims</td>
<td>11.3% ↑</td>
</tr>
<tr>
<td>Moody’s Baa</td>
<td>0.5% ↑</td>
</tr>
<tr>
<td>Housing Permits</td>
<td>77.2% ↑</td>
</tr>
<tr>
<td>Commercial Permits</td>
<td>-2.0% ↓</td>
</tr>
<tr>
<td>McCarran Passengers</td>
<td>7.3% ↑</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>-5.2% ↓</td>
</tr>
</tbody>
</table>

- Coincident Index: -0.3 %
- Leading Index: -0.6 %
Summary of CBER’s Southern Nevada Indexes
- Construction Index and Tourism Index

**Construction Index**

<table>
<thead>
<tr>
<th>Monthly Change</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Employment</td>
<td>2.2% ↑</td>
</tr>
<tr>
<td>Housing Permits</td>
<td>-4.1% ↓</td>
</tr>
<tr>
<td>Commercial Permits</td>
<td>-58.5% ↓</td>
</tr>
</tbody>
</table>

**Tourism Index**

<table>
<thead>
<tr>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCarran Passengers</td>
</tr>
<tr>
<td>Gross Gaming Revenue</td>
</tr>
<tr>
<td>LV Hotel/Motel Occupancy Rate</td>
</tr>
</tbody>
</table>
The CBER Southern Nevada coincident and leading indexes use the Department of Commerce index construction method. The coincident index measures the ups and downs of the Southern Nevada economy. The leading index provides a signal about the future direction of the coincident index. The coincident index peaked in February 2007 and then fell dramatically through June 2010. Prior to the Great Recession identified by the benchmark Southern Nevada coincident index, the Southern Nevada leading index peaked in September 2005, 16 months before the Southern Nevada coincident index peaked. Then the Southern Nevada leading index troughed in May 2009, 13 months before the Southern Nevada coincident indexed troughed. Finally, both the CBER Southern Nevada construction and tourism indexes also use the Department of Commerce index construction method. All series are SA.
The CBER Southern Nevada coincident index fell by 0.3 percent month-over-month but experienced a year-over-year increase of 2.6 percent in December 2015. The large monthly decrease in gaming revenue resulted in a loss in the index, although the other two components—taxable sales and nonfarm employment—experienced gains for the month. As seen in the table below, Las Vegas nonfarm employment and taxable sales rose by 0.03 and 0.5 percent, respectively, in December 2015. Gaming revenue decreased by 5.4 percent from the previous month. With new benchmark nonfarm employment revisions, the CBER Southern Nevada coincident index in December 2015 fully recovered from the Great Recession, exceeding its prior peak.

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Latest Period</th>
<th>Month-over-Month</th>
<th>Year-over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxable Sales (SA)</td>
<td>Dec-15</td>
<td>3,299,584,575</td>
<td>0.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Gaming Revenue (SA)</td>
<td>Dec-15</td>
<td>800,480,699</td>
<td>-5.4%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Nonfarm Employment (SA)</td>
<td>Dec-15</td>
<td>925,011</td>
<td>0.03%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Overall Index Change</td>
<td>Dec-15</td>
<td>245.1</td>
<td>-0.3%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>
The CBER Southern Nevada leading index decreased for the month but increased from last year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Index</th>
<th>Month-over-Month</th>
<th>Year-over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-15</td>
<td>103.0</td>
<td>-0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Feb-15</td>
<td>103.7</td>
<td>0.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Mar-15</td>
<td>102.7</td>
<td>-1.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Apr-15</td>
<td>103.3</td>
<td>0.6%</td>
<td>0.3%</td>
</tr>
<tr>
<td>May-15</td>
<td>103.5</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Jun-15</td>
<td>103.2</td>
<td>-0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Jul-15</td>
<td>103.7</td>
<td>0.5%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Aug-15</td>
<td>103.4</td>
<td>-0.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Sep-15</td>
<td>103.1</td>
<td>-0.3%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Oct-15</td>
<td>103.8</td>
<td>0.7%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Nov-15</td>
<td>104.0</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Dec-15</td>
<td>104.6</td>
<td>0.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Jan-16</td>
<td>104.0</td>
<td>-0.6%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

The CBER Southern Nevada leading index fell by 0.6 percent on a month-over-month basis, but rose by 0.9 percent from its level from last year. Among the six components, total McCarran passengers, housing permits, the S&P 500 index, and commercial permits decreased by 0.6, 4.1, 5.2, and 58.5 percent, respectively, from December to January. The remaining two components—Moody’s BAA grade corporate bond yield (inverted) and initial claims for unemployment (inverted)—increased by 0.6 and 2.8 percent, respectively, for the month. Commercial permits experienced a significant loss and still remain low and volatile.
Southern Nevada Construction Index

The CBER Southern Nevada construction index experienced a monthly loss, but it is up from a year earlier.

The CBER Nevada construction index decreased by 0.8 percent month-over-month but gained 2.8 percent on a year-over-year basis. Housing permits and commercial permits decreased significantly by 4.1 and 58.5 percent, respectively, compared to December 2015, while a gain in construction employment partly offset these losses. Seasonally adjusted construction employment increased by 2.2 percent from a month earlier. Commercial permits still remain low and volatile.

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Latest Period</th>
<th>Month-over-Month</th>
<th>Year-over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Employment (SA)</td>
<td>Jan-16</td>
<td>54,484</td>
<td>2.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Housing Permits (SA)</td>
<td>Jan-16</td>
<td>993</td>
<td>-4.1%</td>
<td>77.2%</td>
</tr>
<tr>
<td>Commercial Permits (SA)</td>
<td>Jan-16</td>
<td>22</td>
<td>-58.5%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Overall Index Change</td>
<td>Jan-16</td>
<td>107.9</td>
<td>-0.8%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>
The CBER Southern Nevada tourism index experienced a slight increase, up by 0.04 percent from December to January. Gaming revenue and Las Vegas hotel/motel occupancy rates rose by 0.2 and 0.6 percent, respectively, for the month. A 0.6 percent decrease in McCarran passengers, however, partly offset the positive monthly movement in the tourism index from the other two components. The CBER Southern Nevada tourism index was the only index that experienced a monthly gain among the six indexes this month.

### Southern Nevada Tourism Index

The CBER Southern Nevada tourism index climbed in January 2016 relative to last month and last year.

<table>
<thead>
<tr>
<th>Series</th>
<th>Date</th>
<th>Latest Period</th>
<th>Month-over-Month</th>
<th>Year-over-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCarran Passengers (SA)</td>
<td>Jan-16</td>
<td>3,910,421</td>
<td>-0.6%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Gaming Revenue (SA)</td>
<td>Jan-16</td>
<td>801,751,676</td>
<td>0.2%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>LV Hotel/Motel Occupancy Rate (SA)</td>
<td>Jan-16</td>
<td>0.893</td>
<td>0.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Overall Index Change</td>
<td>Jan-16</td>
<td>124.7</td>
<td>0.04%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
Sources

Nevada Indexes:

• Nevada Department of Taxation
• Nevada Gaming Control Board
• Nevada Department of Employment, Training and Rehabilitation
• U.S. Bureau of Labor Statistics
• Various Permitting Agencies
• Yahoo Finance
• Board of Governors of the Federal Reserve System
• Reno-Tahoe International Airport
• McCarran International Airport
• CBER, UNLV

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• Nevada Gaming Control Board
• Nevada Department of Employment, Training and Rehabilitation
• U.S. Bureau of Labor Statistics
• Various Permitting Agencies
• Yahoo Finance
• Board of Governors of the Federal Reserve System
• McCarran International Airport
• Las Vegas Convention and Visitors Authority
• CBER, UNLV