Local Employment Dynamics Data

Tracking the economy through boom, bust and recovery
Why Use LED Data?

1. Available for smaller regions.
2. Employment indicators important.
3. Greater understanding of economy.
4. Demographics of employment.
5. Time series data.
6. Data extraction tool makes it easy.
7. Inform private-sector decisions.

8. Efficiently allocate public resources.
Types of LED Research

- Earnings by Education, Industry and Gender
- Trends in Specific Industry (Health care/Social Services)
- Hires and Stable-Hire Earnings
- Using Tableau to Analyze LED Data
Where in the world is . . . ?

Central Workforce Investment Area

Southwest Workforce Investment Area
Earnings

Education, Industry, Gender
As expected, additional educational attainment results in higher earnings.

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
In Central Utah, earnings are more compressed than statewide.

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
Earnings by Education

Southwest Utah Average Monthly Wage by Worker Education*

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
# Utah

## Bachelor's-Degree-or-Higher Wage Premium compared to Wages of Workers with Other Educational Levels*

### 2006-2010 Average

<table>
<thead>
<tr>
<th>Industry</th>
<th>Bachelor's Degree Wage Premium--High School Graduate</th>
<th>Bachelor's Degree Wage Premium--Some College/Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries</td>
<td>81%</td>
<td>124%</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Educational Services</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Administrative/Support/Waste</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>Mngnt/Remediation Services</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Public Administration</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

*Workers 25 and older only.

Source: U.S. Census Bureau; Local Employment Dynamics program.

In these industries, a college education really pays.
Central Utah
Bachelor's-Degree-or-Higher Wage Premium compared to Wages of Workers with Other Educational Levels*
2006-2010 Average

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
Southwest Utah
Bachelor's-Degree-or-Higher Wage Premium compared to Wages of Workers with Other Educational Levels*
2006-2010 Average

In Southwest Utah, education results in only a small premium in the construction industry.

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
Utah County-Level Bachelor's-Degree-or-Higher Wage Premium compared to Wages of Workers with High School Education* 2006-2010 Average

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
In Central Utah, men with a high-school education earn more than women with a bachelor’s degree.

*Workers 25 and older only. 
Source: U.S. Census Bureau; Local Employment Dynamics program.
In Southwest Utah, men with a high-school education earn only slightly more than women with a bachelor’s degree.
Central Utah Degreed Female Average Monthly Wage as a Percentage of Degreed Male Average Monthly Wage* 2006-2010

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
In Southwest Utah, the public sector offers the best wage parity for men and women with a bachelor’s degree or higher.

Southwest Utah Degreed Female Average Monthly Wage as a Percentage of Degreed Male Average Monthly Wage* 2006-2010

*Workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
Specific Industry

Educational Levels
Central Area Health Care/Social Assistance Share of Employment by Educational Level*

In Central Utah, the share of employment by educational category has remained fairly stable.

* Workers 25 and older.
Source: U.S. Census Bureau; Local Employment Dynamics.
Southwest Health Care/Social Assistance Employment by Educational Level*

In Southwest Utah, the share of employment with a bachelor’s degree or higher has declined.

* Workers 25 and older.
Source: U.S. Census Bureau; Local Employment Dynamics.
Examining Hires

Boom to Bust to Recovery
Hires—Boom to Recession to Recovery

Utah Share of New Hires* with a Bachelor’s Degree or Higher

- **Recession as Determined by the National Bureau of Economic Research.**
- **Decreasing share as the economy expands.**
- **Smaller share of hires as the economy heats up.**
- **Share of hires increases during recession and recovery.**

* Four-quarter moving average; individuals 25 years and older only.
Source: U.S. Census Bureau, Local Employment Dynamics.
Hires—Boom to Recession to Recovery

Share of New Hires* with a Bachelor’s Degree or Higher Four Quarters Ending March 31, 2011

- Salt Lake
- Summit
- Davis
- State
- Utah
- Cache
- Rich
- Weber
- Morgan
- Wasatch
- Sanpete
- Kane
- Washington
- Iron
- Box Elder
- Tooele
- Juab
- Daggett
- San Juan
- Grand
- Carbon
- Millard
- Garfield
- Wayne
- Emery
- Uintah
- Duchesne
- Beaver
- Sevier
- Piute

2000 – 2010 Trend

- Little or No Trend
- Decreasing Share
- Increasing Share
- Business Cycle
Hires—Boom to Recession to Recovery

During the area’s worst hiring quarter, 1,200 workers found new jobs, more than 5 percent of total employment.

Source: U.S. Census Bureau; Local Employment Dynamics
During the area’s worst hiring quarter, 5,000 workers found new employment, more than 7 percent of total employment.
Central Utah Share of Stable Hires by Age Group

Source: U.S. Census Bureau; Local Employment Dynamics
## Hires—Boom to Recession to Recovery

### Southwest Utah Share of Stable Hires by Age Group

<table>
<thead>
<tr>
<th>Year</th>
<th>18 and under</th>
<th>19-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>13%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2002</td>
<td>14%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2003</td>
<td>14%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2004</td>
<td>13%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2005</td>
<td>13%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2006</td>
<td>13%</td>
<td>28%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2007</td>
<td>13%</td>
<td>27%</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2008</td>
<td>13%</td>
<td>26%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2009</td>
<td>12%</td>
<td>26%</td>
<td>25%</td>
<td>26%</td>
<td>26%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2010</td>
<td>11%</td>
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<td>26%</td>
<td>26%</td>
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<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2011</td>
<td>10%</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>2012</td>
<td>9%</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
<td>26%</td>
<td>6%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau; Local Employment Dynamics

Share of older workers hires increased.
Central Utah Stable Hires by Educational Attainment*

* Workers 25 years and older.
Source: U.S. Census Bureau; Local Employment Dynamics
**Southwest Utah Stable Hires by Educational Attainment**

*Workers 25 years and older. Source: U.S. Census Bureau; Local Employment Dynamics*
Central Utah Stable Hire Average Monthly Earnings

Source: U.S. Census Bureau; Local Employment Dynamics
Southwest Utah Stable Hire Average Monthly Earnings

Source: U.S. Census Bureau; Local Employment Dynamics
Central Utah Average Monthly Stable Hire Wages by Educational Attainment*

* Four-quarter moving average; workers 25 and older only.
Source: U.S. Census Bureau; Local Employment Dynamics program.
Southwest Utah Average Monthly Stable Hire Wages by Educational Attainment*

* Four-quarter moving average; workers 25 and older only.

Source: U.S. Census Bureau; Local Employment Dynamics program.
We’ve just scratched the surface . . .

- Separations
- Comparison of separations and new hires
- Ratios of all hires to stable hires
- Turnover rates
- Firm age
- Firm size
- Race/ethnicity
So much data, so little time

A suggestion for easy data analysis...
Tableau Software

1. Perfect fit for LED time series.

2. Easy to drill-down to any detail.

3. Free Tableau Public product.

4. www.tableausoftware.com/public

NOT AN AD!
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