A New Analysis Tool for QWIs: QWI Explorer

Unlocking the Powerful Labor-force Information of the Quarterly Workforce Indicators

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Why are QWIs Important?

- Indicators on Employment, Employment Change (Firm and Individual), and Earnings
- Detailed Firm Characteristics (geography, industry, age, size)
- Detailed Worker Demographics (sex, age, education, race, ethnicity)
- 3 Quarter lag, coverage varies by state
- Used by economic developers, urban planners, policy analysts, workforce researchers, and academics

<table>
<thead>
<tr>
<th>Year</th>
<th>14-18</th>
<th>19-21</th>
<th>22-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Q1</td>
<td>50,742</td>
<td>105,120</td>
<td>147,866</td>
<td>502,907</td>
<td>479,738</td>
<td>540,837</td>
<td>377,430</td>
</tr>
</tbody>
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LEHD’s QWI Dissemination Strategy

- Provide a wide variety of access points to the data to accommodate as many user needs as possible
- Advanced data users: Bulk download of raw QWIPU from http://lehd.ces.census.gov/pub/
- Intermediate data users: Extract the exact indicators and characteristics needed using the LED Extraction Tool
- Web tool users: Create your own table, chart, and map using the flexible user-interface of QWI Explorer
The LED Extraction Tool

- Raw data access point for data products created through the Local Employment Dynamics Partnership
- Quarterly Workforce Indicators (QWI) available in current version
- Streamlined interface allows users to select the exact columns and rows desired
- Raw data outputs (no maps, charts, or formatted tables)
What is QWI Explorer?

- New analysis tool for accessing the Quarterly Workforce Indicators (QWI) dataset
- Beta release makes all 32 indicators available in a pivot chart/table interface
- Compare, rank, and aggregate QWIs by time, geography, and firm and worker characteristics on the fly
- Companion application to the raw data outputs from the LED Extraction Tool
Why Build This Tool?

- Feedback from users!
- Make entire set of QWIs available (32 indicators for 50 partner states) in an intuitive analysis tool
- Allow users to fully explore the detailed interactions between workers and firms via interactive tables, charts, and maps
- Broaden the user base for QWIs by making these complex data more accessible
- Replace the QWI Online and Industry Focus applications with a more useful and more modern web tool
Application Design Goals

- Simple, clean, flat interface
- Display an interactive table that is linked to an interactive chart/map
- Allow users to build the exact data combinations/comparisons needed to analyze their workforce question
- Provide useful and beautiful exports
- Make contextual help and documentation readily available
Live Demo!
Under the Hood

- 7 TB database - 49 States plus DC (MA coming soon)
- Refreshed every quarter – Rolling production
- No downtime for users – States are loaded at midnight, check icon for states currently being loaded.
Recent and Upcoming Functionality Improvements

- Improved and Additional Exports (just released!)
- Thematic Maps
- Group by Indicator
- Social Media Sharing
- National QWIs
- Cross State Comparisons
Tentative Release Schedule

- 4/14/2014 – Beta release of QWI Explorer (bar chart only)
- 7/22/2014 – Code update (line charts and bug fixes)
- 9/8/2014 – Code update (improved exports and bug fixes)
- 12/2014 – Release version 1.0 (thematic mapping, sharing, share of total)
- 4/2015 – Release version 1.1 (add National QWIs, state comparisons, group by Indicator)
Thank You!

- Please submit feedback to CES.QWI.Feedback@census.gov