Picture This! Making QWI Results Mean Something to Legislative Leaders

Steve Barker
Program Manager
State Data Center
Quarterly Workforce Indicators

http://lehd.did.census.gov/led/index.html

- Comes from Local Employment Dynamics partnership
- Combines Census demographic information with Labor Market Information agencies
- Produces information not available before
- Includes 8 indicators
- Available for all states, excluding
  - Connecticut
  - Massachusetts
  - New Hampshire
  - Ohio (coming online)
• Click the “QWI Online” link circled in red

• When page refreshes, choose appropriate state

http://lehd.did.census.gov/led/index.html
QWI Online [NAICS]

LEHD State of Oklahoma County Reports - Quarterly Workforce Indicators
Select Criteria below: A new report will be created below as selections change.

- Year: 2007
- Geographic Group: County
- Sex: Male and Female
- Age Group: 14-88

A – Drill down options

B – County level data, including requested quarter and prior year’s data

C – State level data, including requested quarter and prior year’s data

D – Quick compilations of data

http://lehd.did.census.gov/led/datatools/qwiapp.html
Oklahoma’s QWI Options

- **Year** – Oklahoma goes back to 2000 (limited 1q2000 data)
- **Quarter** – Can find partial information as of 1q2008, full information available for prior quarters
- **Gender** – male, female, or both
- **Age** – 14-99; 14-18; 19-21; 22-24; 25-34; 35-44; 45-54; 55-64; 65-99
- **Geography** –
  - County (77 Counties)
  - Metro (21 Metropolitan and Micropolitan Statistical Areas, plus nonmetro/nonmicro area)
  - WIA – (12 Workforce Investment Areas)
- **Industry** – Can drill to the 4 digit NAICS level
For Those Who Want It All

- Cornell Institute for Social and Economic Research (CISER) provides full access to public use data files
- Users assumed to know and understand statistics
- VirtualRDC account is required to access Cornell site
- Contact VirtualRDC administrators and request information on how to access Census Bureau’s Quarterly Workforce Indicators dataset – virtualrdc@cornell.edu
- Cornell site makes data available in *.gz file format (Gunzip)
- SAS, Oracle, SQL Server or other database tool needed to view and manipulate data
Oklahoma was granted access to Cornell data

We downloaded information in bulk

We used database software to build *.xls files
Some QWI cautionary notes we kept in mind

• Definitions
  – Reported employment is as of beginning of the quarter

• Confidentiality
  – Where values are small, Census protects confidentiality
    • Reported figure may be distorted or “fuzzed”
      – Fuzz factor stays constant over time
    • Data may be suppressed if fewer than 3 individuals meet criteria

• Consistency
  – Data is “raked” at the county level to ensure consistency with BLS reported county level employment totals
About That Fuzz Factor

Cornell data includes columns with guidance on data adjustment:

-2 No employers operate in this category during this quarter

-1 Required historical or future wage record data are not available

0 No employment in this age, sex category

1 The value is not significantly affected by the disclosure protections

5 This value has been suppressed because it does not meet Census Bureau publication standards

9 The value has been significantly distorted to protect confidentiality
Oklahoma’s Results

- Report delivered to Governor and Legislature in June 2008
- Has been well received by
  - State and local officials
  - Educators
  - Researchers
  - Others seeking insight into Oklahoma’s workforce situation
What We Did

We focused on a few key points:
- Gender
- Age
- Industry at the 2 digit NAICS level
- Beginning of the quarter employment

We could just as easily have looked at:
- New hires
- Separations
- End of quarter employment
- Other criteria
Ah ha! The lame inspiration for this presentation’s cheesy title becomes clear!

US Bureau of Labor Statistics figures for employment and unemployment show the outlines of the overall picture.

QWI introduces new depth and clarity to important local employment characteristics.

Through familiarity with the QWI tool, it becomes possible to paint a more complete picture.
A Picture is Worth 1000 Words

- We created 3 graphs and 1 table for each age category, showing:
  - Simple average annual employment by age group as value and percent of total
  - Simple average annual employment within that age group by gender
  - Year over year growth rates within simple average by gender
  - Table of top five industries by percentage of jobs held, by gender, within that age group

- We supplemented statewide data with similar analysis at the county level
What follows is a sampling of the findings included in Oklahoma’s analysis of QWI data.

This is representative of only part of the analysis possible using the QWIOnline tool.
Oklahoma’s Findings

- Average annual jobholder count grew from 1.39 million to 1.45 million.
- Analysis at county level showed growth was not evenly distributed.
Oklahoma’s Findings

- Oklahoma experienced net gains in jobs held by population aged 55 and over.

- Analysis by gender showed gain was more pronounced among women in that age group.
Between 2000 and 2006 the number of Oklahoma jobholders aged 35 to 44 dropped from one in four, moving closer to one in five.
Between 2000 and 2005, workers aged 55 to 64 had either the first or second fastest year over year growth rate among all age groups.
### Oklahoma’s Findings

**TOP FIVE INDUSTRIES BY PERCENTAGE OF JOBS HELD**  
**OKLAHOMA JOBHOLDERS - AGED 45 TO 54 BY GENDER**  
**BASED ON 2006 ANNUAL AVERAGE EMPLOYMENT**

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Both Genders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Services</td>
<td>Educational Services</td>
<td>Educational Services</td>
</tr>
<tr>
<td>(7.4%)</td>
<td>(18.3%)</td>
<td>(13.0%)</td>
</tr>
<tr>
<td>Administrative &amp; Support Services</td>
<td>Hospitals</td>
<td>Administrative &amp; Support Services</td>
</tr>
<tr>
<td>(6.5%)</td>
<td>(7.9%)</td>
<td>(5.9%)</td>
</tr>
<tr>
<td>Professional, Scientific, &amp; Technical Services</td>
<td>Ambulatory Health Care Services</td>
<td>Hospitals</td>
</tr>
<tr>
<td>(4.5%)</td>
<td>(7.5%)</td>
<td>(5.0%)</td>
</tr>
<tr>
<td>Specialty Trade Contractors</td>
<td>Administrative &amp; Support Services</td>
<td>Ambulatory Health Care Services</td>
</tr>
<tr>
<td>(4.3%)</td>
<td>(5.3%)</td>
<td>(4.7%)</td>
</tr>
<tr>
<td>Machinery Manufacturing</td>
<td>Professional, Scientific, &amp; Technical Services</td>
<td>Professional, Scientific, &amp; Technical Services</td>
</tr>
<tr>
<td>(3.9%)</td>
<td>(4.6%)</td>
<td>(4.6%)</td>
</tr>
</tbody>
</table>

- Educational Services was the top employer for all jobholders over the age of 45
- At least one in six working females between the ages of 45 and 54 were employed in the Educational Services industry
To Access Our Full Report

- Go to link at bottom of this slide
- Scroll down the page to “Biennial State of the State Report”
- Click on “2008 Demographic State of the State”
- You’re there!

http://www.okcommerce.gov/ocdc
The good …

• QWI gives workforce insight that wasn’t previously available
• Extremely valuable information for Economic Development and Business Recruitment efforts
• Works great if you have a specific industry, age group, or geographic area of focus
...the bad...

- Can be cumbersome if you want large volume insight while browsing, but improvements are in development
- Large blocks of data by different geographies can be difficult to gather without access to Cornell site
- Data is not occupational specific
…and the unknown.

- What happens when QWI results are cross compared against other tools?
  - Bureau of Labor Statistics occupational specific data?
  - Census Bureau’s Equal Employment Opportunity data?
  - Third party fee based services?
  - Other suggestions?

- Census is sure to welcome comments as users become more familiar with this tool.
Steve Barker
State Data Center Program Manager
steven_barker@okcommerce.gov
(405) 815-5182