

National QWI

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

Lars Vilhuber
Economist
LEHD Program

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

	14-18	19-21	22-24	25-34	35-44	45-54	55-64
2013 Q1	50,742	105,120	147,866	502,907	479,738	540,837	377,430

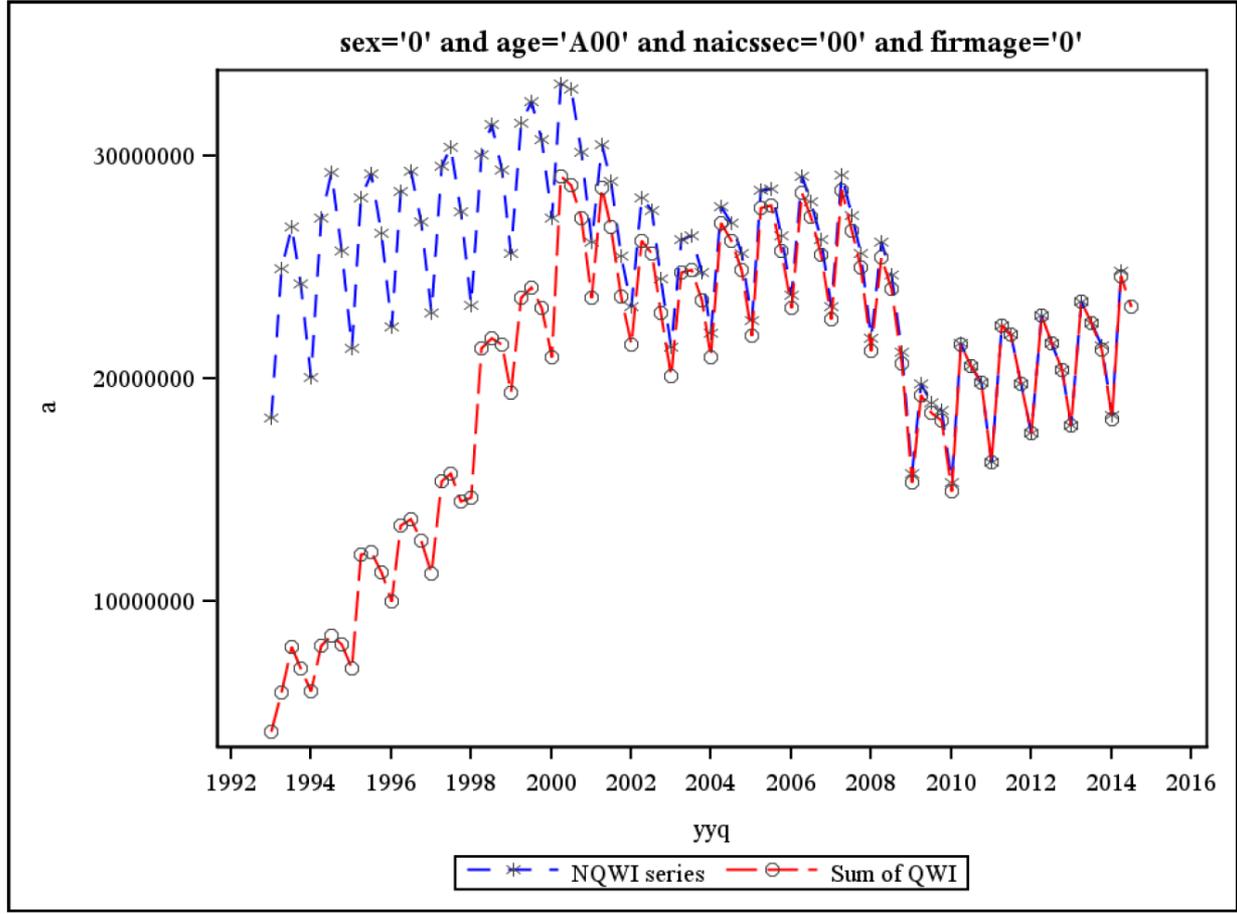
National QWI

- National QWI are derived from existing public-use state-level QWI
- Using multiple imputation models that account for missing data, the methodology generates a consistent estimate of the national series, including measures of its uncertainty.
- Provided in *levels* and *rates*

National QWI

- Methodology robust to
 - Historical absence of data
 - Temporary absence of most current data
- Preferable to simply adding up available state-level data

Sum of QWI vs. National QWI



Beta Releases in 2015

- Private sector only
- Since R2015Q1: NAICS Sectors
 - Sex by age
 - Sex by education
- New in R2015Q3:
 - Firm-age
 - Firm-size

Forthcoming Beta Releases

- Update to R2015Q4 (imminent)
- All ownership
- NAICS subsectors (NAICS3)
- Race by ethnicity tabulations

Other enhancements

- Seasonal adjustment
 - Question: which of the **584,988,768** (+ national) series should be adjusted?
 - Manual revision not feasible
 - Starting with National QWI
 - Developing robust common policy on release of large groups of seasonally adjusted data

Other enhancements

- Towards a machine-readable schema
 - CSV-based
 - Provides same information as the previous document
 - Machine-readable in Excel, SAS, R

lehd.ces.census.gov/data/schema/latest/

Updates on QWI Dissemination

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

Heath Hayward
Geographer
LEHD Program

How to get the QWI

LEHD's Data Dissemination Strategy

Provide a wide variety of access points to the data to accommodate as many user needs as possible:

- Web tool users: Create your own table, chart, and map using the flexible user-interface of [QWI Explorer](#)
- Intermediate data users: Extract the exact indicators and characteristics needed using the [LED Extraction Tool](#)

LEHD's Data Dissemination Strategy

For advanced users:

- Access single raw QWIPU files from <http://lehd.ces.census.gov/data/#qwi>
- Bulk download of raw QWIPU from <http://lehd.ces.census.gov/pub/>
- Integration into the Census API (Beta release):
<http://beta.dataweb.rm.census.gov/data/timeseries/qwi.html>

What's New

What's New in the LED Extraction Tool

- National QWI
 - All Private Jobs Only
 - NAICS 3, Race/Ethnicity coming soon
- Cross-State Queries
 - All State totals in one table

LED Extraction Tool - Quarterly Workforce Indicators (QWI)

1. Geography 2. Firm Characteristics 3. Worker Characteristics 4. Indicators 5. Quarters 6. Summary and Export

Geography Level

Search:

United States
States: 52

Geography Type

States

Areas

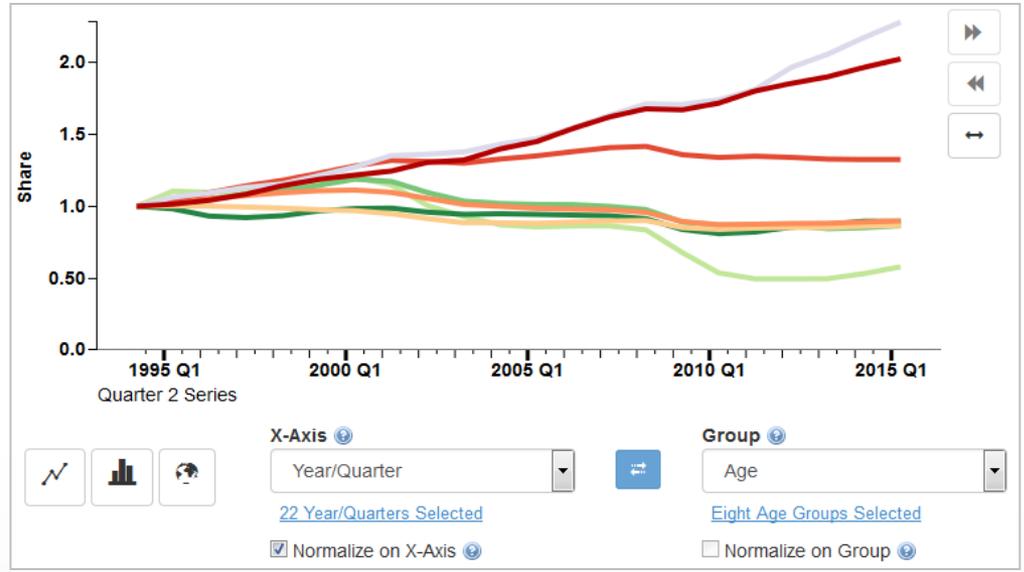
Search:

[Check All](#) | [Check None](#) | [Invert Selection](#)

- 00 National (50 States + DC)
- 01 Alabama
- 02 Alaska
- 04 Arizona
- 05 Arkansas
- 06 California
- 08 Colorado
- 09 Connecticut
- 10 Delaware
- 11 District of Columbia
- 12 Florida
- 13 Georgia
- 15 Hawaii
- 16 Idaho

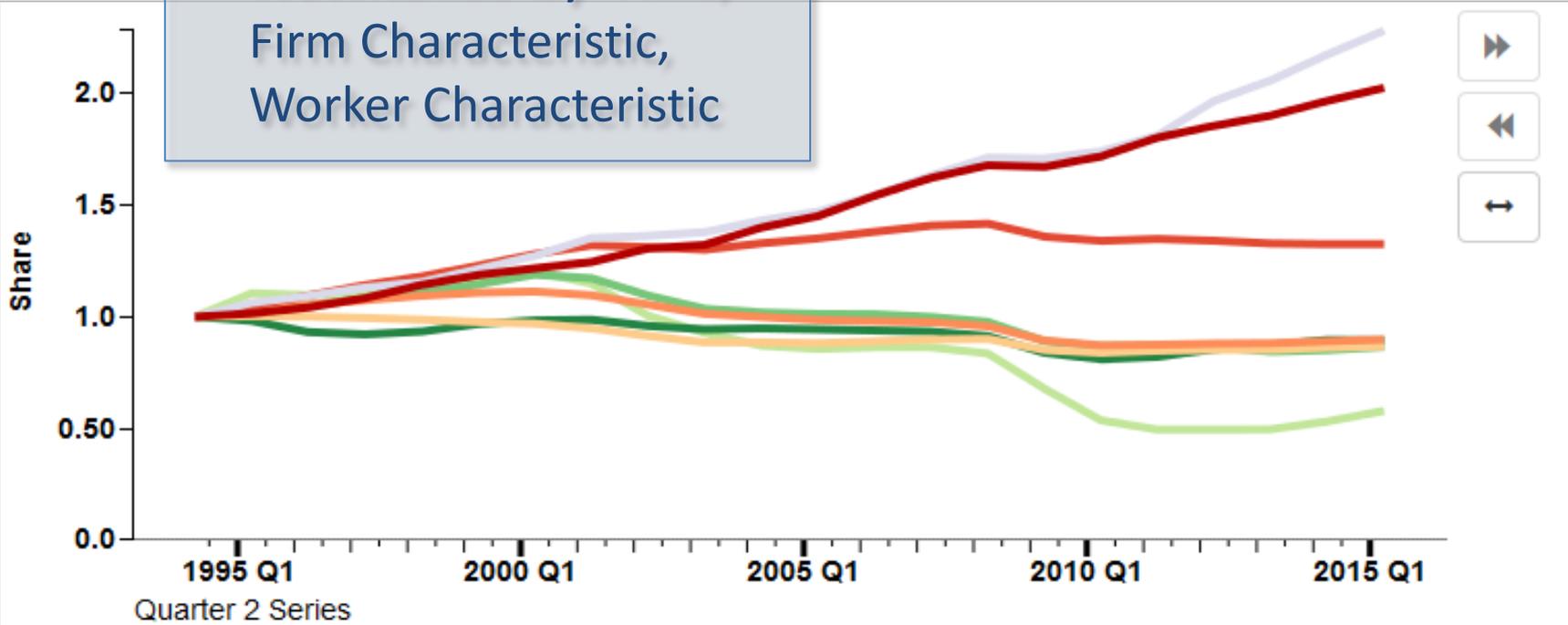
What's New in QWI Explorer

- Improved Bar Charts
- Data Normalization
- Group by Indicator



QWI Explorer: Data Normalization

- Normalize by Time, Firm Characteristic, Worker Characteristic



X-Axis ⓘ
Year/Quarter

[22 Year/Quarters Selected](#)

Normalize on X-Axis ⓘ



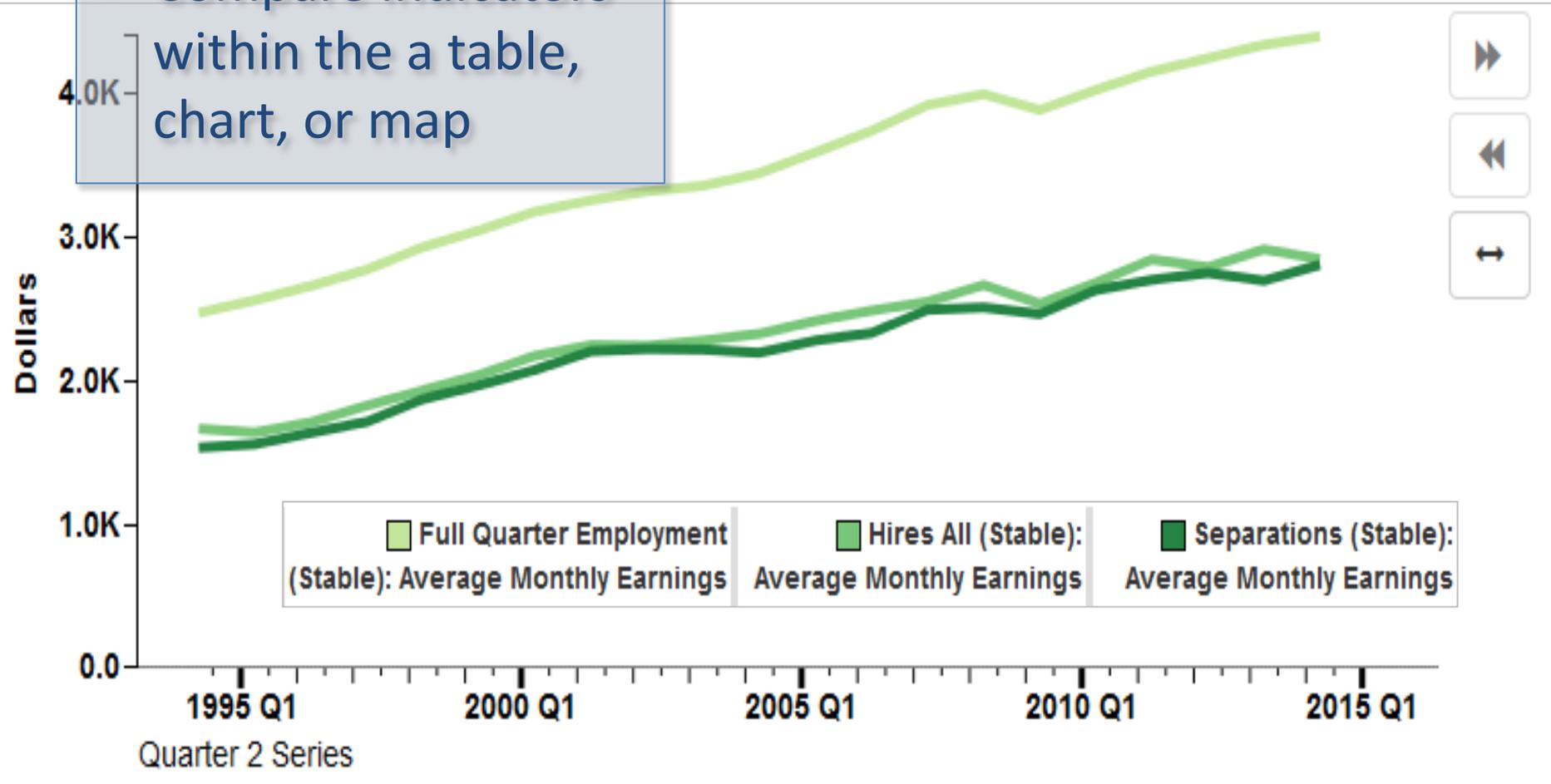
Group ⓘ
Age

[Eight Age Groups Selected](#)

Normalize on Group ⓘ

What's New in QWI Explorer

■ Compare indicators within the a table, chart, or map



Beta Release of QWI data in Census API

- The Census API allows developers to design web/mobile apps that provide users with quick and easy access to an increasing pool of publicly available datasets – now included the Quarterly Workforce Indicators (QWI).
- Still some bugs to resolve (wildcarding not working), full release in 2-3 months
- For more information on the Census API:
<http://www.census.gov/developers/>

Beta Release of QWI data in Census API

■ Examples

- State by Race/Ethnicity:

<http://beta.dataweb.rm.census.gov/data/timeseries/qwi/rh?get=race,Emp,year,quarter&for=state:01&time=2015-Q1>

- County by Sex/Age:

<http://beta.dataweb.rm.census.gov/data/timeseries/qwi/sa?get=Emp,year,agegrp,quarter&for=county:195&in=state:02&time=2015-Q1>

- Metro/Micro Area by Sex/Education:

<http://beta.dataweb.rm.census.gov/data/timeseries/qwi/sa?get=Emp,year,agegrp,quarter&for=metropolitan+statistical+area/micropolitan+statistical+area:19060&in=state:24&time=2015-Q1>

Outlook

Coming Soon

- National QWI and cross-state queries in QWI Explorer
- Local Storage in QWI Explorer
 - Customize your preferences – choose to remove conflict popups, set default settings, etc.
- Sub-state queries across states in the LED Extraction Tool

Thank You!

- Questions? Patrick.Hayward@census.gov
- Please submit feedback to CES.QWI.Feedback@census.gov