

Local Employment Dynamics (LED)

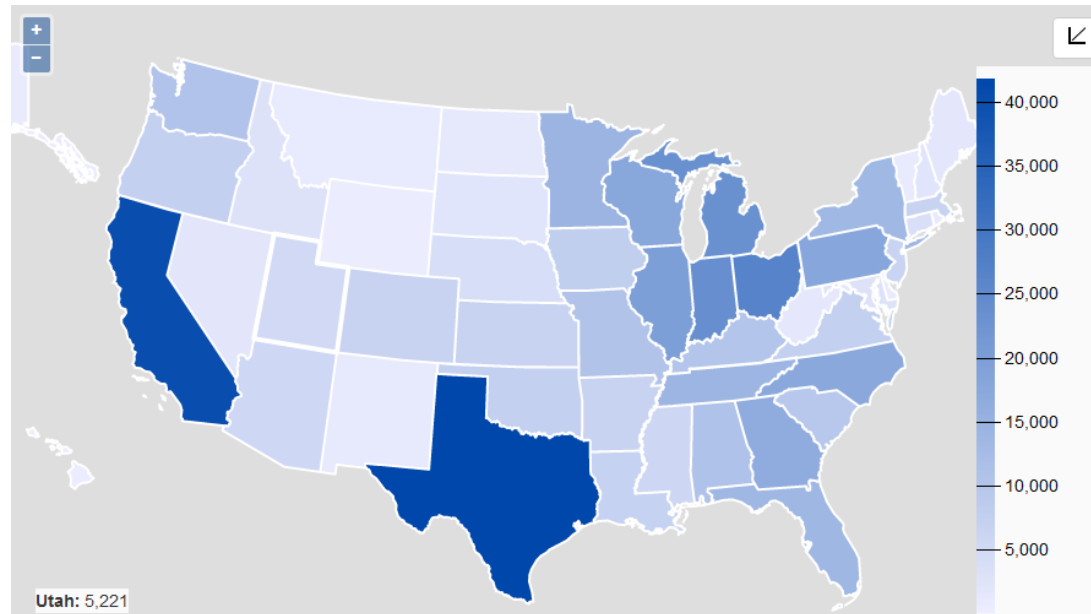
Measuring Job-to-Job Flows

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Outline

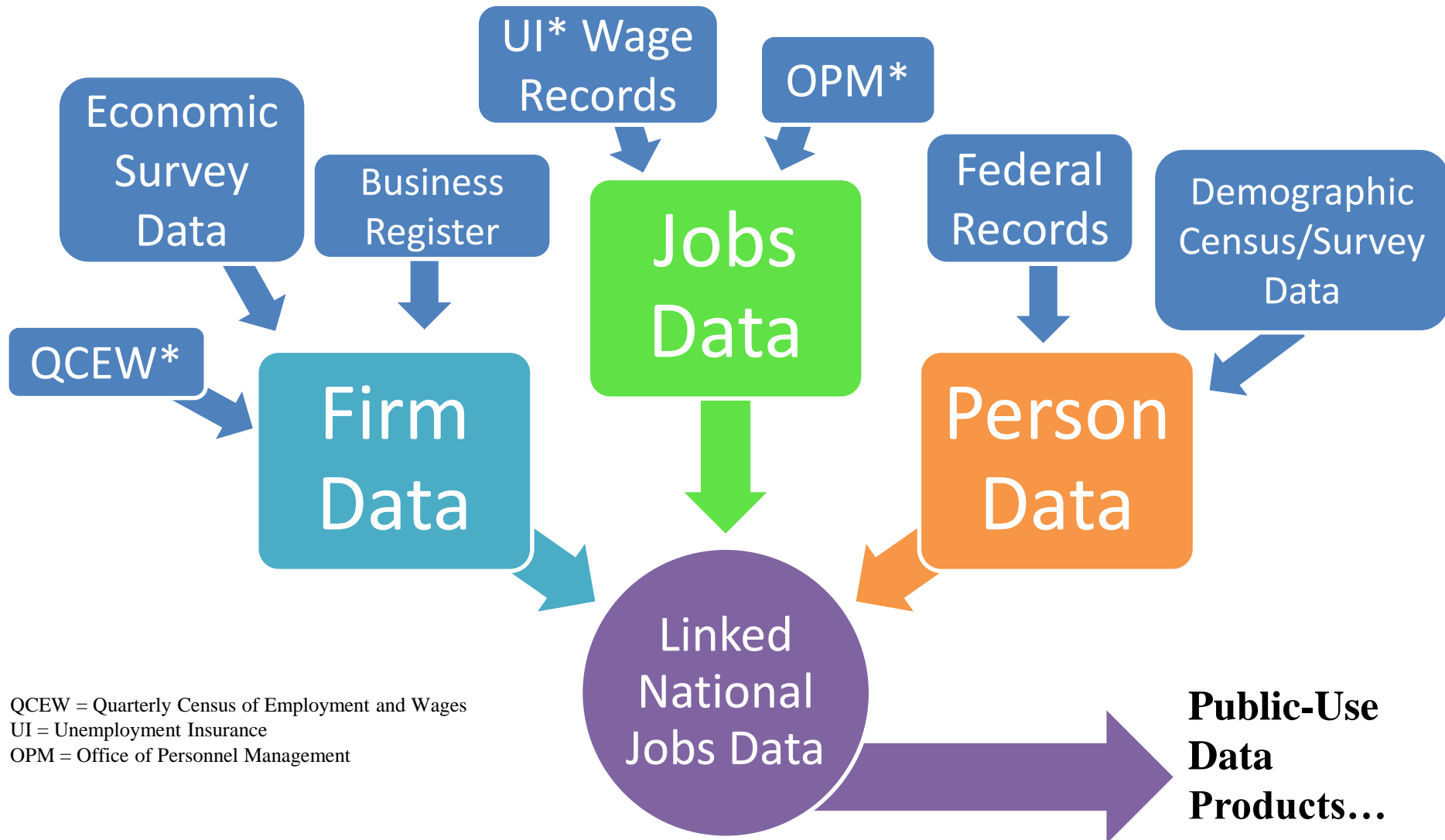
- What is LED?
- Job-to-Job Flows Data
- J2J Explorer Demonstration
- Coming Soon...
- Questions



What are LEHD and LED?

- LEHD (Longitudinal Employer-Household Dynamics)
 - The LEHD Program at the US Census Bureau has constructed unique linked employer-employee data for the United States.
 - It connects administrative records with census and survey data to produce *new* public-use data products as well as microdata for research.
- LED (Local Employment Dynamics) Partnership
 - LEHD accesses state data through the LED Partnership - a cooperative partnership with states and DC, PR, and USVI
 - State-provided data:
 - Unemployment Insurance (jobs/workers)
 - Quarterly Census of Employment and Wages (firms)
 - Other data available to the Census Bureau
 - Censuses, Surveys, and Tax Information

Admin. Records & LED Infrastructure



QCEW = Quarterly Census of Employment and Wages
UI = Unemployment Insurance
OPM = Office of Personnel Management

- Job data cover over 95% of private employment and most state, local, and federal jobs
- Data availability: 1990-2016, start year varies by state, rolling end date

Why Are LED Data Special?

- 100% Coverage of UI Covered Jobs
- Firm Characteristics crossed with Worker Characteristics
- Detailed Geography
- Data Currency
- Accessible via powerful and easy-to-use tools
- Flexible outputs: PDF reports, Excel tables, high-quality images, and shapefiles

Data Products

- Job-to-Job Flows (J2J) - Beta
 - Flows between jobs as well as into/out of nonemployment
 - 40 indicators by
 - Industry (NAICS 2-digit), Firm Age, Firm Size (Origin and Destination)
 - Worker Age, Race, Ethnicity, Sex, Education
 - State (Origin and Destination)
 - Longitudinal series starts in 1990 for some states
 - More detail and new indicators coming soon.
- Quarterly Workforce Indicators (QWI)
 - 32 indicators on employment, employment change and earnings
 - Same detail as J2J plus:
 - Industry (NAICS 3 and 4-digit)
 - County, CBSA, WIB Area
 - >150 Million job records processed each quarter
- LEHD Origin-Destination Emp. Statistics (LODES)
 - Connects a job/worker's employment and residential locations
 - Data at census block detail

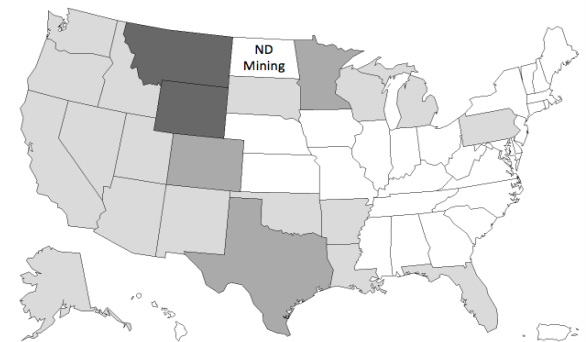
Dissemination Tools/Applications

- J2J Explorer (Beta)
 - Dashboard-style analysis tool for Job-to-Job Flows
- OnTheMap
 - Map-based analysis tool for LODES
- OnTheMap for Emergency Management
 - Integrates live feeds of emergency/disaster areas
- QWI Explorer
 - Dashboard-style analysis tool for QWI
- LED Extraction Tool
 - Provides precise extracts of data (QWI only for now)

What is a Job-to-Job Flow?

- Job-to-Job Flows is a beta release of new national statistics on job mobility in the U.S.
- With this data, users can learn more about workers entering and exiting nonemployment as well as those moving from one job to another.
- It therefore fills an important gap that other available data sources do not currently cover.
- Types of questions that can be answered:
 - How does growth/decline in construction jobs impact the ability of low-wage workers to move to better jobs?
 - Where are North Dakota's oil boom workers coming from?

Where are the out-of-state workers coming from?
Net economic migration into ND mining sector: 2008-2012

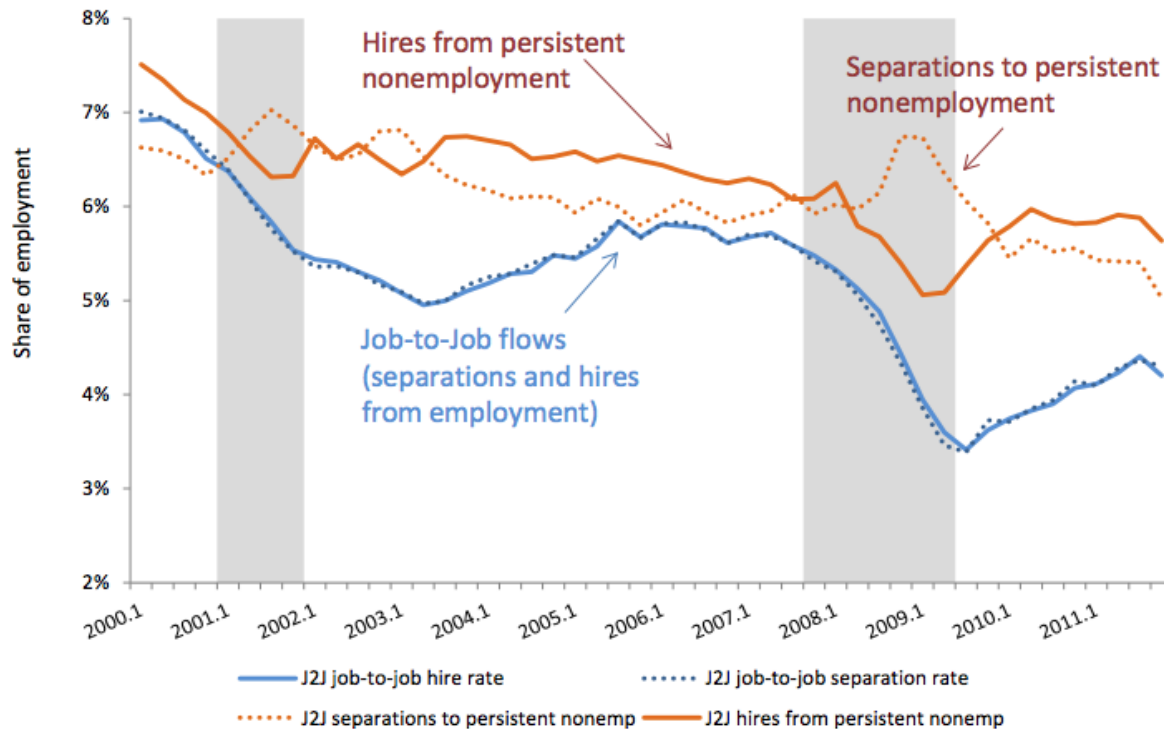


North Dakota Mining, Net Out-of-State Hires: 2008-2012

0-99	100-499
500-999	1000+

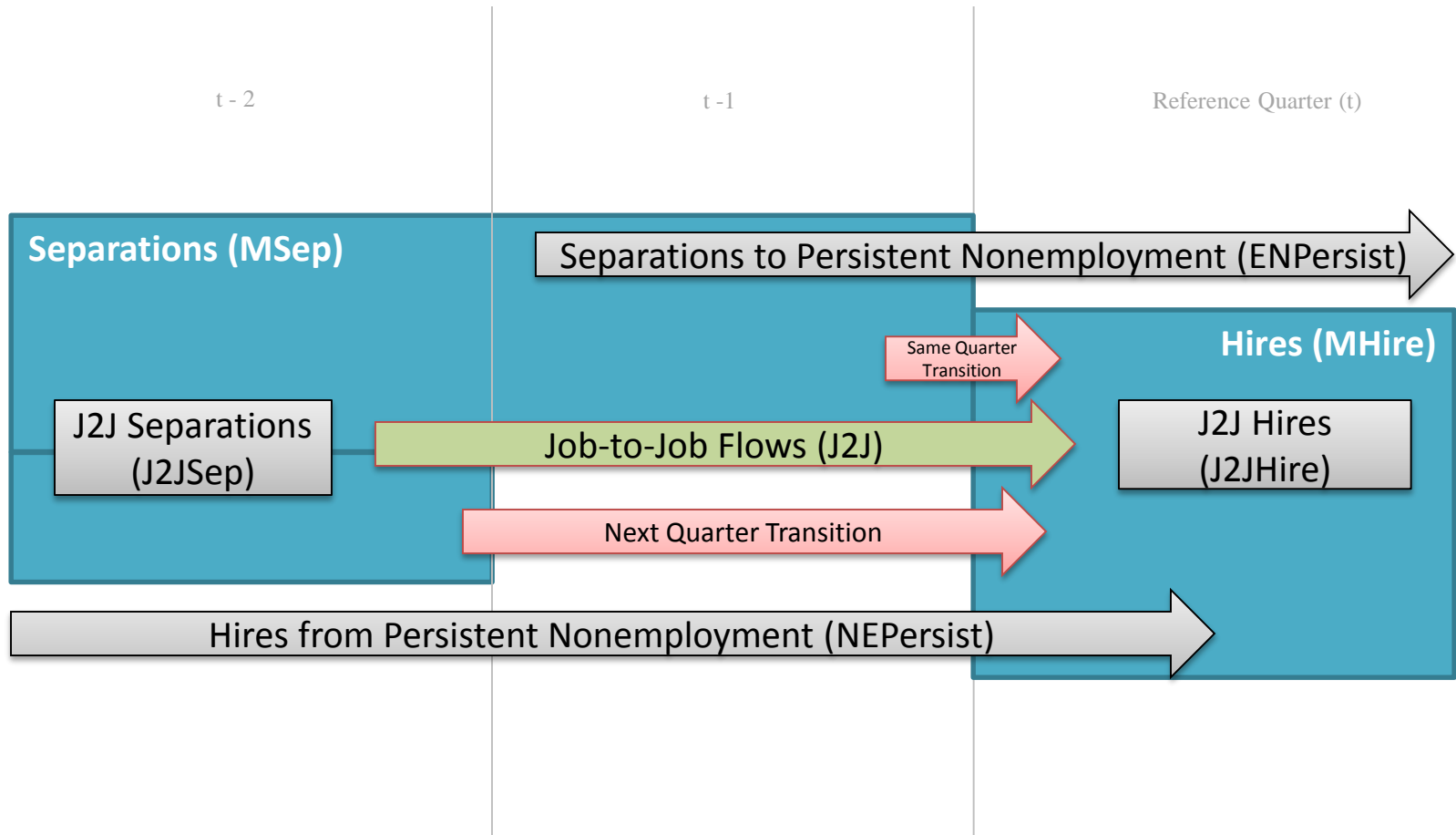
Job-to-Job flows

National Job-to-Job (J2J) flows series:



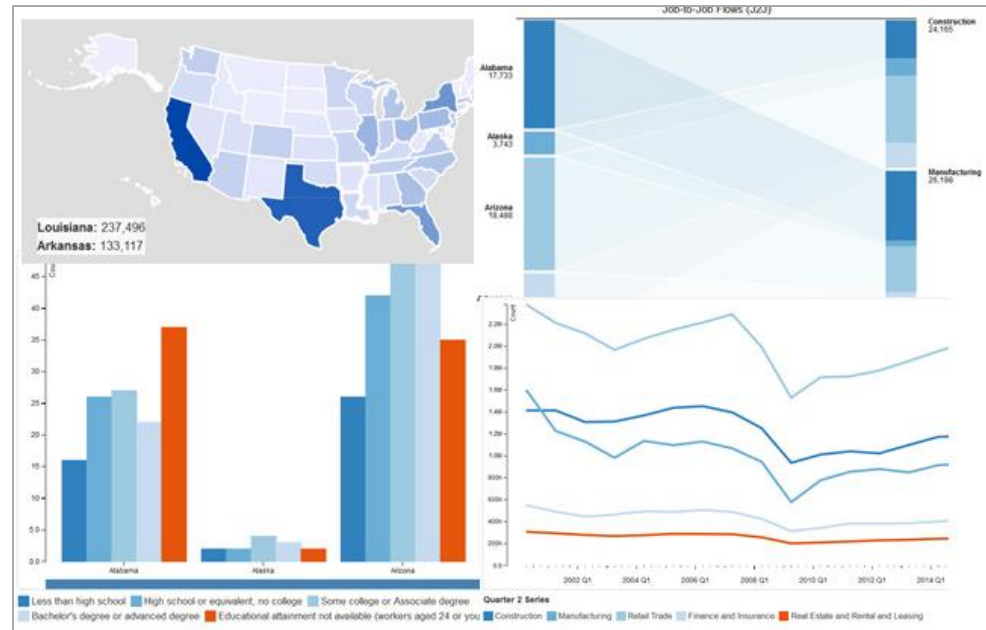
Note: Shaded regions indicate NBER recession quarters. All data are seasonally adjusted. These J2J tabulations do not include planned adjustments to the J2J series to account for partially-missing geography early in the time series.

Job Flow Indicators



J2J Explorer

- ✓ 40 Measures of Worker Reallocation
- ✓ Six Visualization Modules with a flexible dashboard interface
- ✓ Export reports to Excel or CSV
- ✓ Trace worker movements through industries, geographic labor markets, and to/from employment
- ✓ Analyze/report by origin and destination geographies: national and state-level tabulations



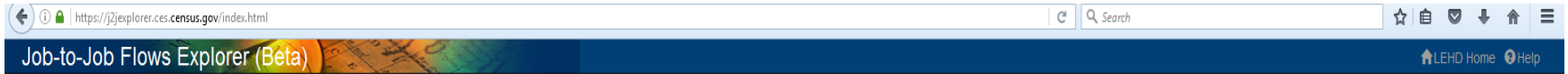
- ✓ Analyze/report by origin and destination firm characteristics: NAICS Sector, firm age, and firm size
- ✓ Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex
- ✓ Data updated every quarter

Live Demo!

Where are Louisiana's teachers going?

- After Hurricane Katrina, there were concerns that evacuees who were teachers weren't coming back to Louisiana
 - That they found jobs and stayed put
- In this example, we look at the J2J data to answer the question
 - How many teachers are leaving Louisiana for other jobs, both in education or in another industry?


Starting with the Guided Entry





Guided Entry

1. Start Here

Frame your question by selecting from the three dropdowns below; then click one of the blue links on the right to go to your customized results.

 Separations from

 Louisiana

 Educational Services

2. Then Choose an Analysis

Analysis of Job-to-Job Flows

From (Origin Job)	To (Destination Job)
<input checked="" type="checkbox"/> Louisiana	Which States?
<input checked="" type="checkbox"/> Educational Services	Which Industries?

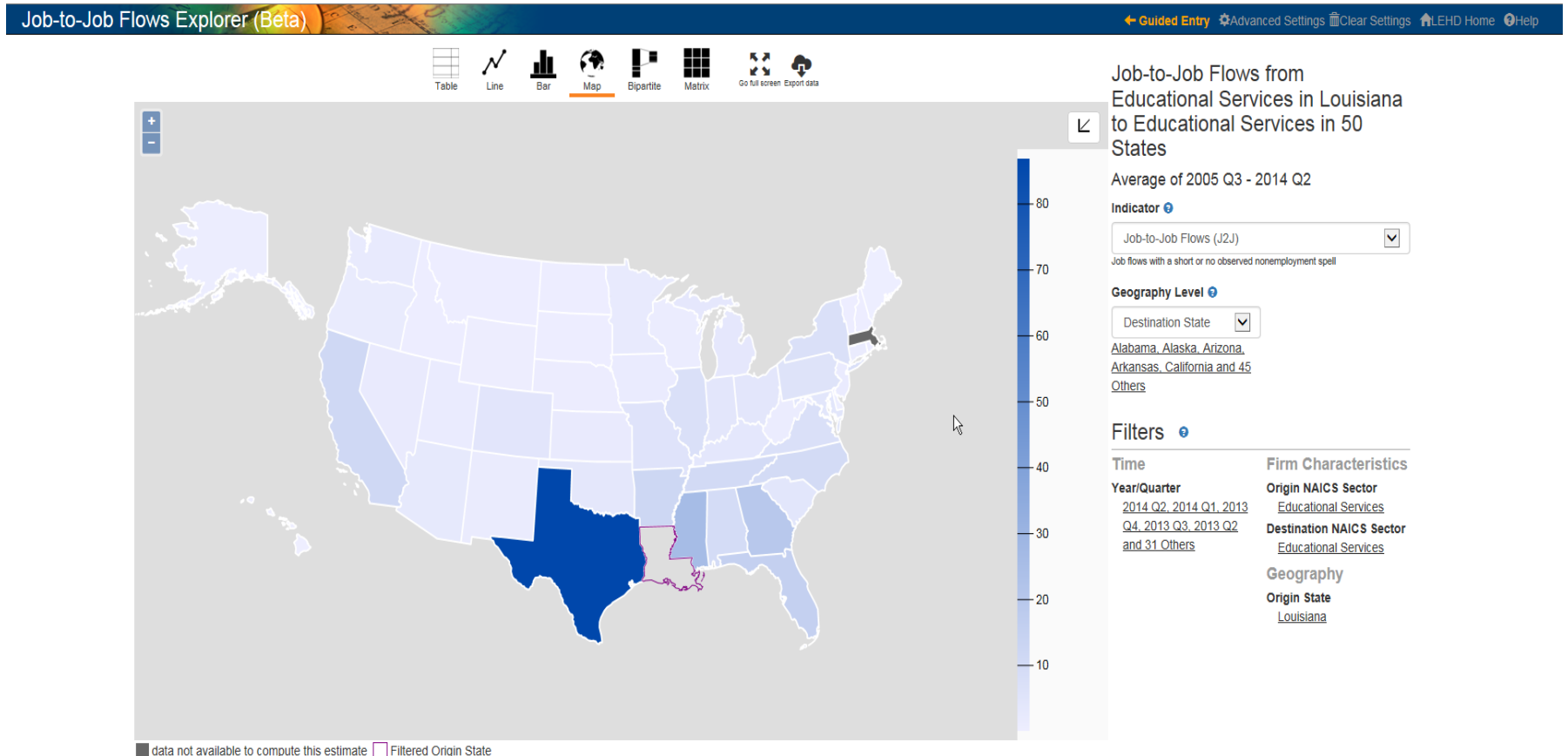
Analysis of Separations Over Time

[Are separations from jobs in Louisiana Educational Services leading to nonemployment or another job?](#)

Not sure? Try one of these recommended options:

- [Which age groups are driving worker reallocation out of New England states?](#)
- [Are workers without a college degree in North Dakota more likely to be hired from another job or from persistent nonemployment?](#)
- [What states and firm ages are workers in California start-ups hired from?](#)
- [Which industries have the highest connectivity in terms of national job flows?](#)

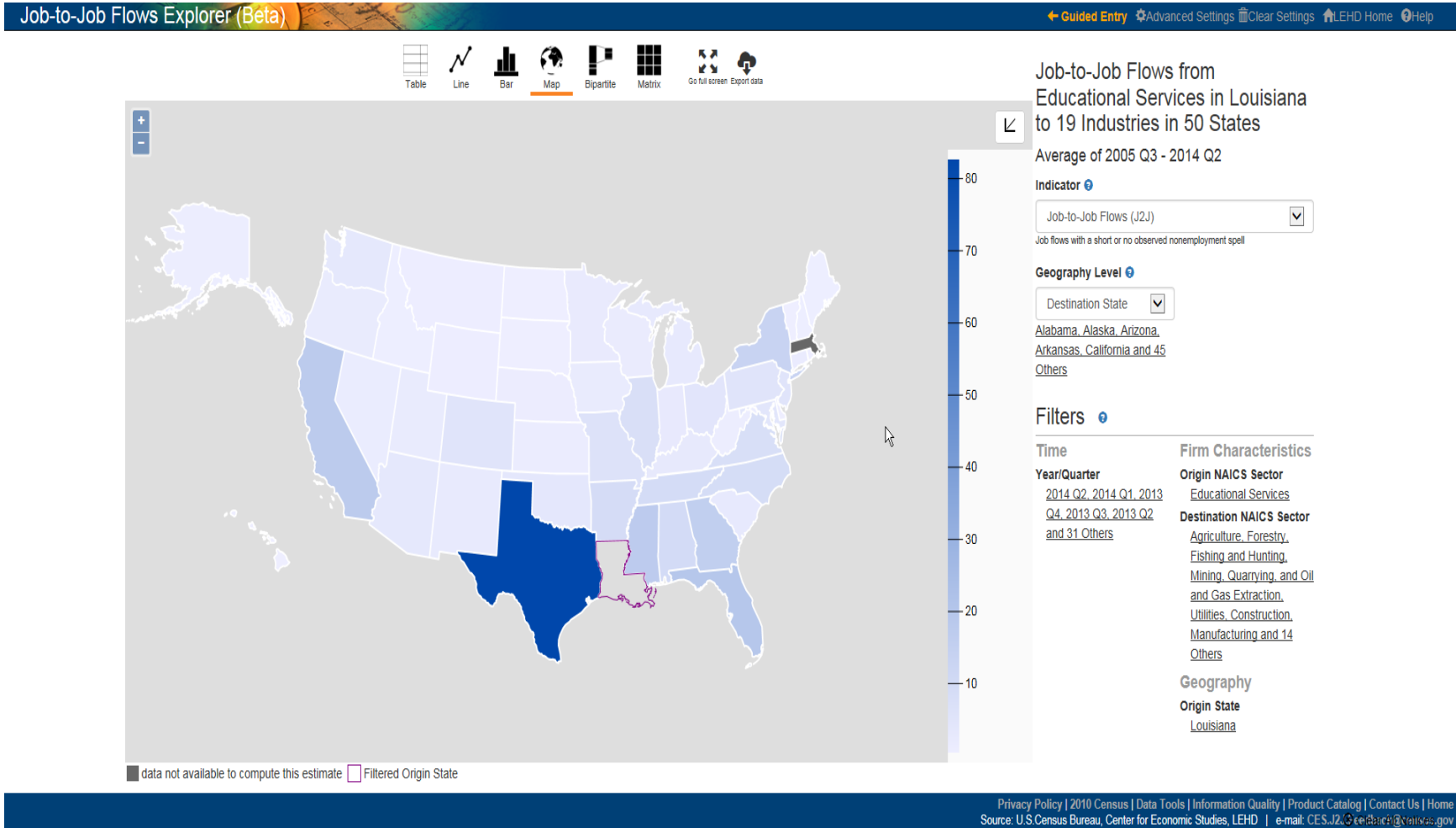
Louisiana education workers leaving to take education jobs out-of-state: 2005.3-2014.2



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 Source: U.S. Census Bureau, Center for Economic Studies, LEHD | e-mail: CES.J2J@ceis.bls.gov

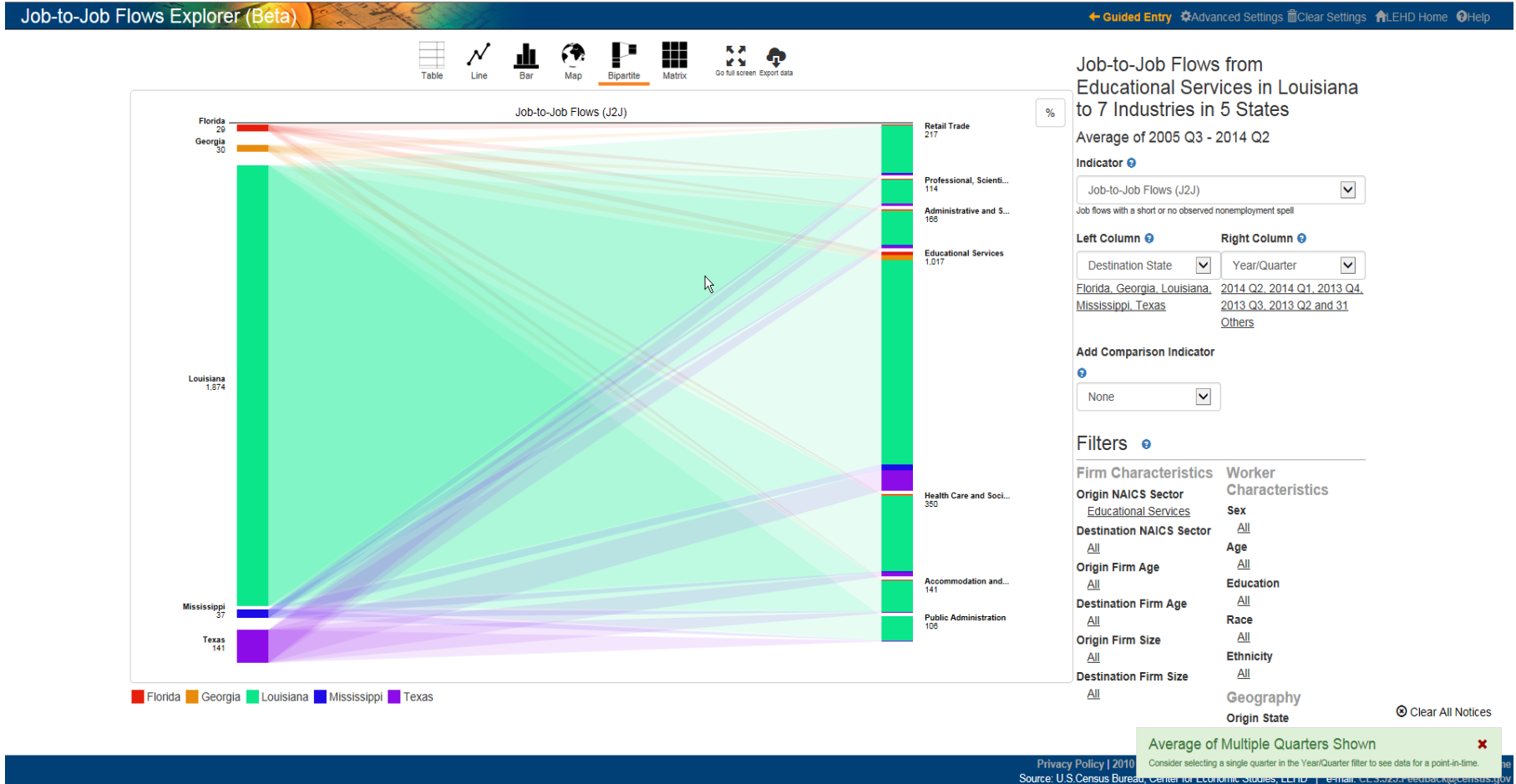
Average of Multiple Quarters Shown ✖
 Consider selecting a single quarter in the Year/Quarter filter to see data for a point-in-time.

Louisiana education workers leaving to take *non-education* jobs out-of-state: 2005.3-2014.2



Average of Multiple Quarters Shown ✖
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Job-to-Job Flows from Educational Services in Louisiana to 7 industries in 5 states



Coming Soon...

- More Data Detail:
 - Metropolitan Areas (and non-metro state remainders)
 - Earnings Indicators (i.e. Did a job transition lead to greater earnings?)
 - Crossing Industry and Worker Characteristics (i.e. Did female manufacturing hires come from other jobs or from a period of nonemployment?)
 - NAICS 3-digit Subsectors
- More Application Functionality:
 - Improved transitions between visualizations
 - More/Better Exports
 - Normalization/Share of Total
 - J2J Module in LED Extraction Tool

Takeaways

- J2J data fills a critical gap in local/regional economy's understanding of flows between jobs and periods of nonemployment
- The LED Partnership provides unique workforce information and analysis tools at a relatively low cost
- LED data products (QWI, LODES, J2J) can give insight into **local** and regional economies and labor markets
- LED's web tools provide free, 24/7 access to a basic analytical platform for the data

Web Addresses for Public Data Tools

- J2J Explorer
 - <https://j2jexplorer.ces.census.gov/>
- QWI Explorer
 - <https://qwiexplorer.ces.census.gov/>
- OnTheMap
 - <https://onthemap.ces.census.gov/>
- OnTheMap for Emergency Management
 - <https://onthemap.ces.census.gov/em.html>
- LED Extraction Tool
 - <https://ledextract.ces.census.gov/>

Useful Links

- **J2J Explorer**
 - [Help Pages](#)
 - [Analysis Guides](#)
 - [FAQs](#)
- **Raw J2J Data**
 - [Data Homepage](#)
 - [J2J QuickStart Guide](#)
 - [J2J Indicator Relatedness Diagram](#)
 - [Current Data Schema](#)
 - [HTTP Data Access](#)

Contacts

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