Longitudinal Employer-Household Dynamics
# Job Related Data Tools

New York State Data Users Conference
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The Local Employment Dynamics (LED) state-federal partnership

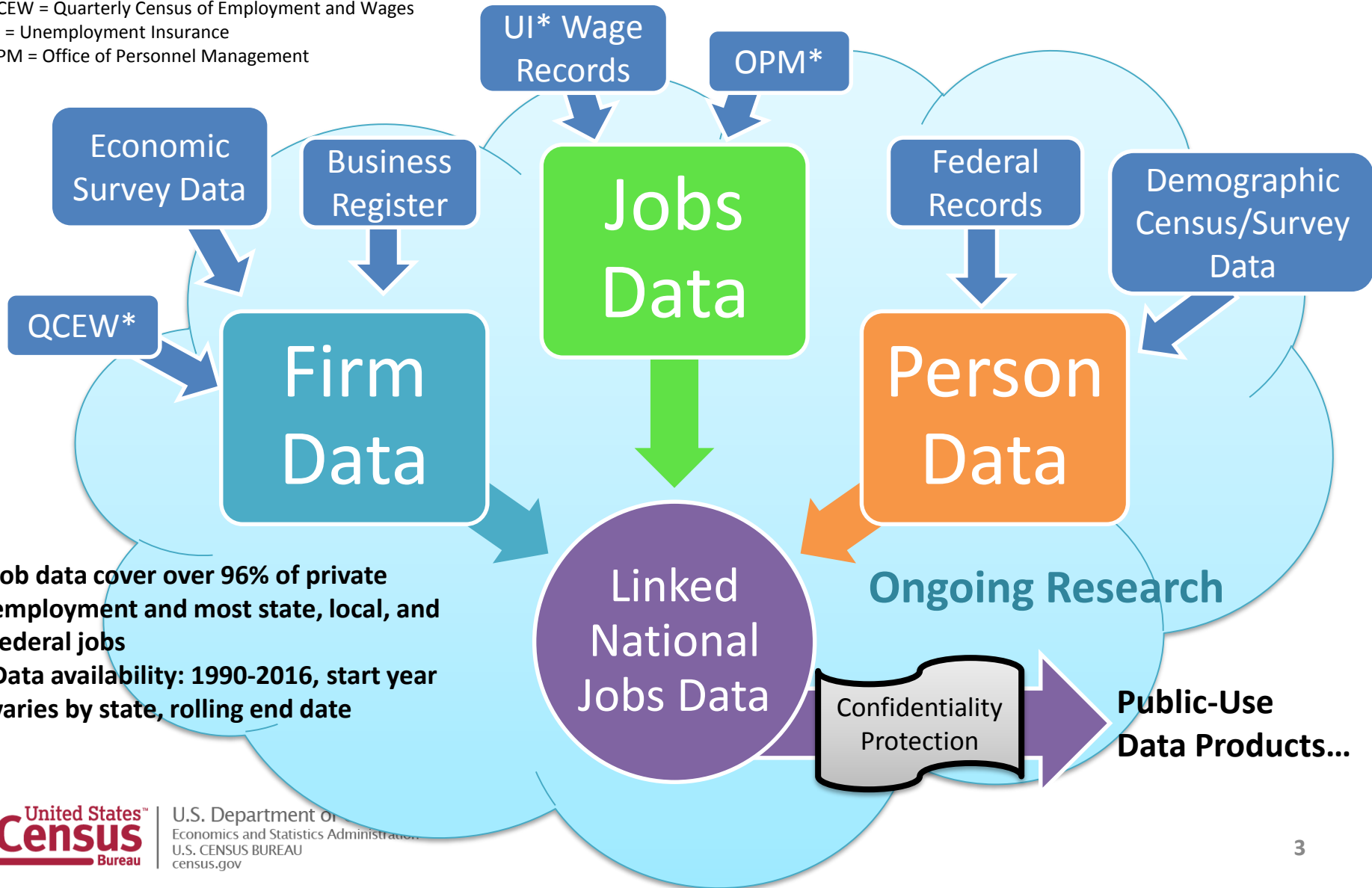An innovative partnership to combine already collected administrative and survey data
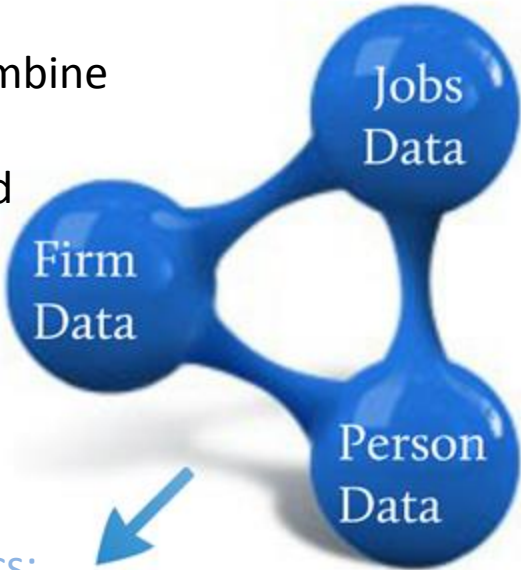
The LEHD microdata

..linking it together to provide new information about the U.S. economy at very low cost

Public use statistics:
Quarterly Workforce Indicators
LODES/OnTheMap
Job-to-Job Flows

LEHD Data Infrastructure

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

UI* Wage Records

OPM*

Economic Survey Data

Business Register

Jobs Data

Federal Records

Demographic Census/Survey Data

QCEW*

Firm Data

Person Data

Linked National Jobs Data

Ongoing Research

Confidentiality Protection

Public-Use Data Products...

- **Job data cover over 96% of private employment and most state, local, and federal jobs**
- **Data availability: 1990-2016, start year varies by state, rolling end date**

Data Products

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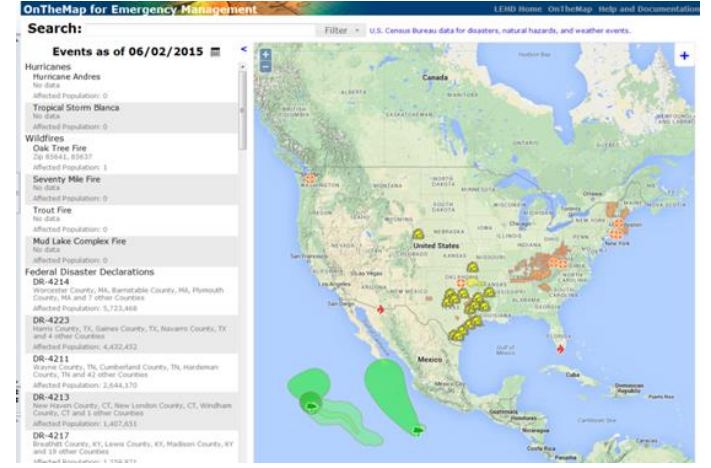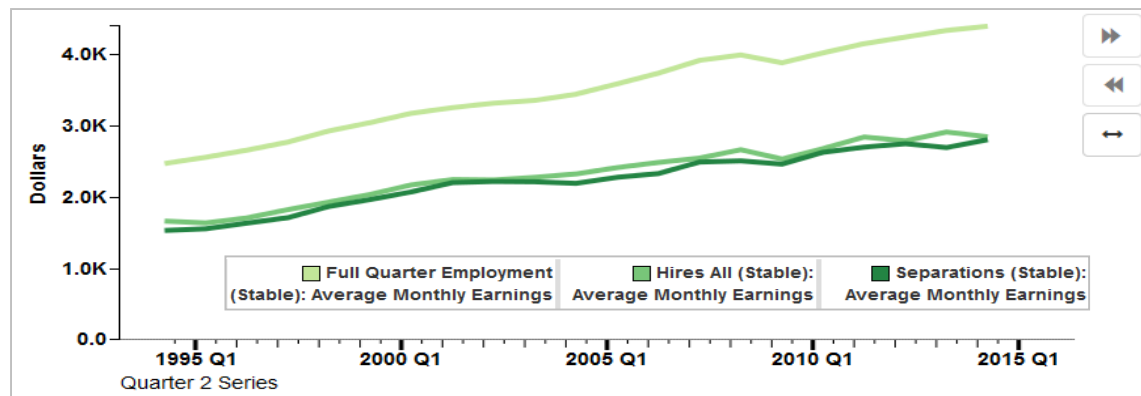
Data Tools

J2J Explorer
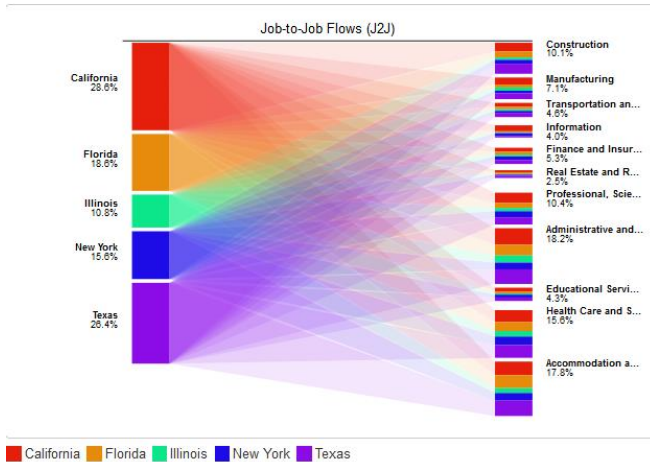
QWI Explorer
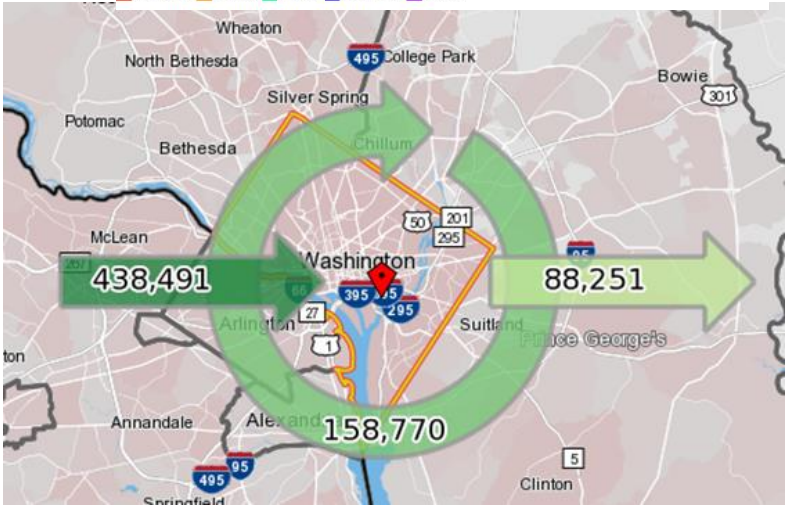
OnTheMap

OnTheMap for Emergency Management

Why are LED Data Tools Important?

- Accessibility

- "Explorability"

- Provide context

- Visualizations lead to insight

- Promote/market the data

- Provide "value-add" for our state partners

LODES/OnTheMap

- LODES: Origin-Destination data on jobs
  - 130m jobs, annual release
  - Geography
    - Home & Work Census Blocks (11m)
  - Firm Characteristics
    - Ownership (3), NAICS Sector (20), Firm Age (5), Firm Size (5)
  - Person/Job Characteristics
    - Age (3), Earnings (3), Race (6), Ethnicity (2), Sex (2), Education (4)
  - Distributed through map-based, analytical tool: OnTheMap

http://onthemap.ces.census.gov/

Zillow and LODES

Gene Balk / FYI Guy

Is the 'Amazon effect' on rising rents in North Seattle real?

Originally published April 1, 2016 at 6:00 am | Updated April 2, 2016 at 2:30 pm
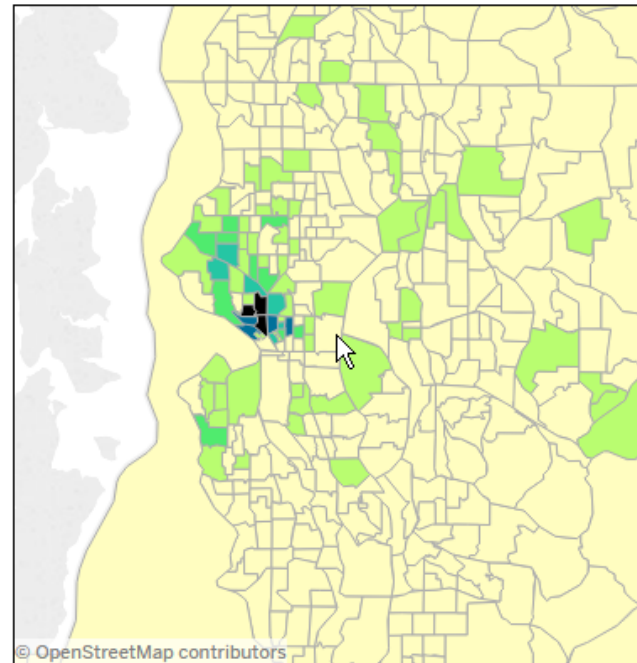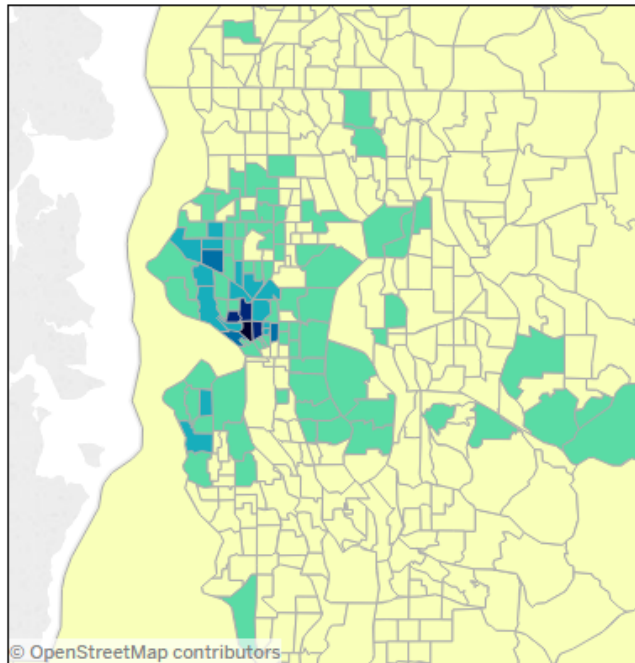
Workers Living and Working in Seattle

South Lake Union and nearby areas have both the greatest density and the largest growth in residents who work in South Lake Union.

Distribution of SLU workers across census tract of residence, 2015

Average annual change in number of SLU workers by residence census tract, 2011-2015
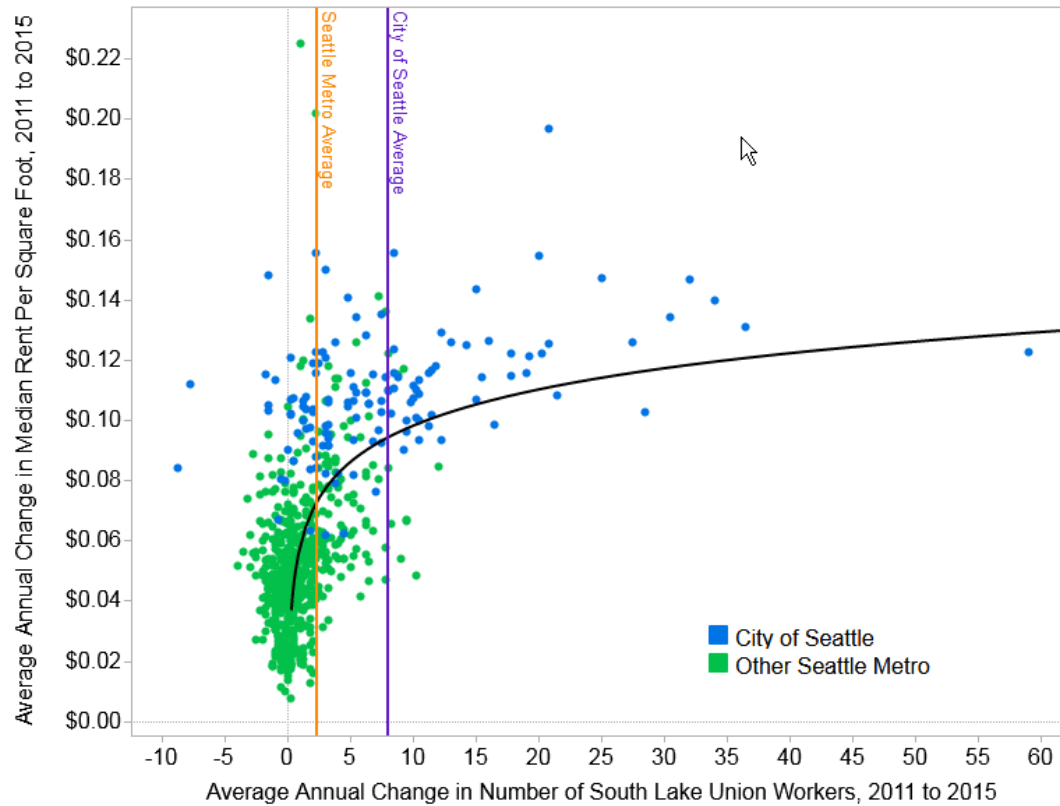

0.0% — 1.5%

0 — 40

Zillow

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United States Census Bureau

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Economics and Statistics Administration
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census.gov
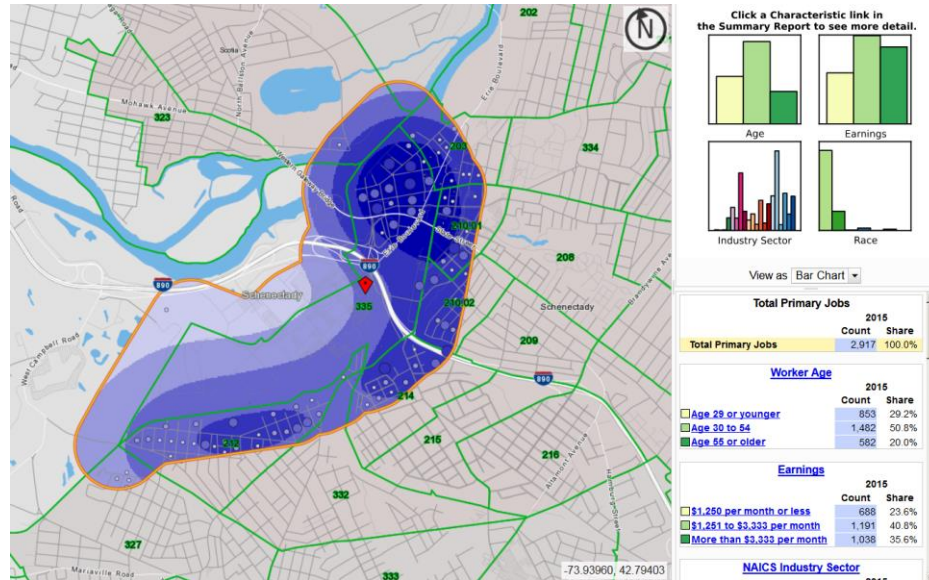
9

Greatest Rent Increase

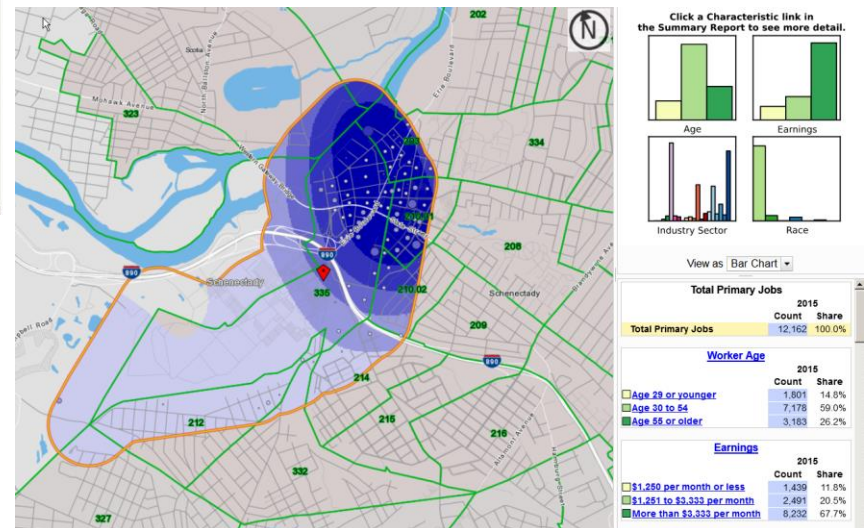Areas with the greatest growth in South Lake Union workers saw greatest rent increases.

Source: U.S. Census Bureau, Longitudinal Household Employer Dynamics, Origin-Destination Employment Statistics, 2011 and 2015; Zillow Rent Index, Census Tract, December 2011 and December 2015.

Schenectady By Census Tract

Home 2015

Work 2015

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

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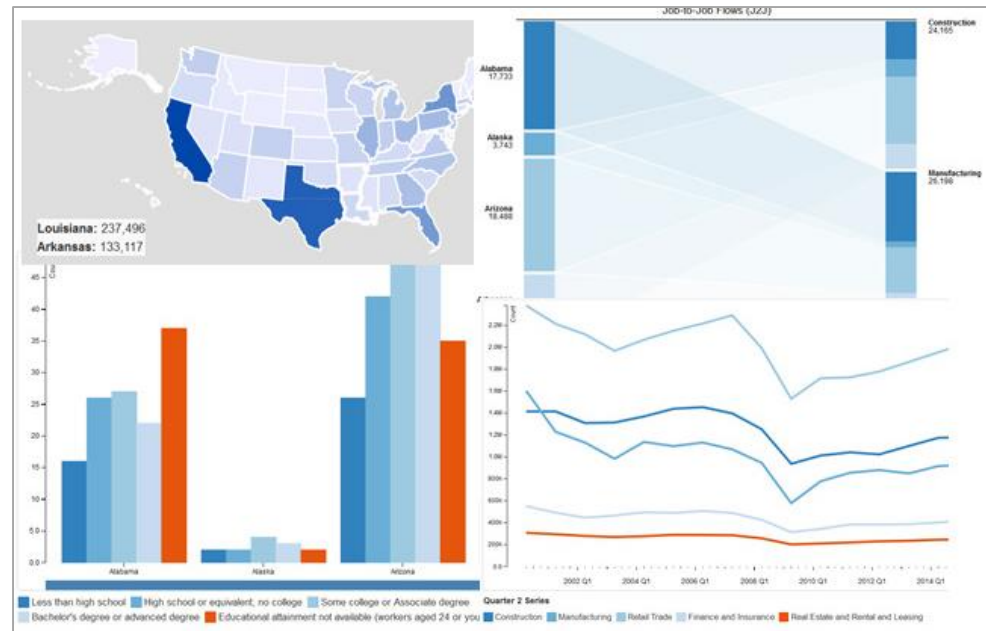
- ✓ Analyze/report by origin and destination firm characteristics:
  NAICS Sector, firm age, and firm size
- ✓ Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex
- ✓ Data updated every quarter

Zillow, Amazon, and J2J

Most Popular

Half of Homes Have Regained Peak Values, But the Recovery Is Uneven (June 2018 Market Report)

The 9-to-5 Compromise: What We Save by Moving 15 Minutes Farther From Work

They Don't Build Them Like They Used to: The New Construction Shortage

Price Cuts Becoming More Common, Especially at the High End

Amazon Effect: Nashville and Denver Likely to See Biggest Rent Hikes If Chosen for HQ2

By Aaron Terrazas on Apr. 25, 2018

- If Amazon workers start arriving one year from now, Nashville could see the pace of rent appreciation more than double from what Zillow expects without Amazon HQ2.
- Denver and Los Angeles would also see a meaningful bump to rent growth from the estimated 50,000 workers Amazon plans to hire.

Hires to New York in Retail Trade
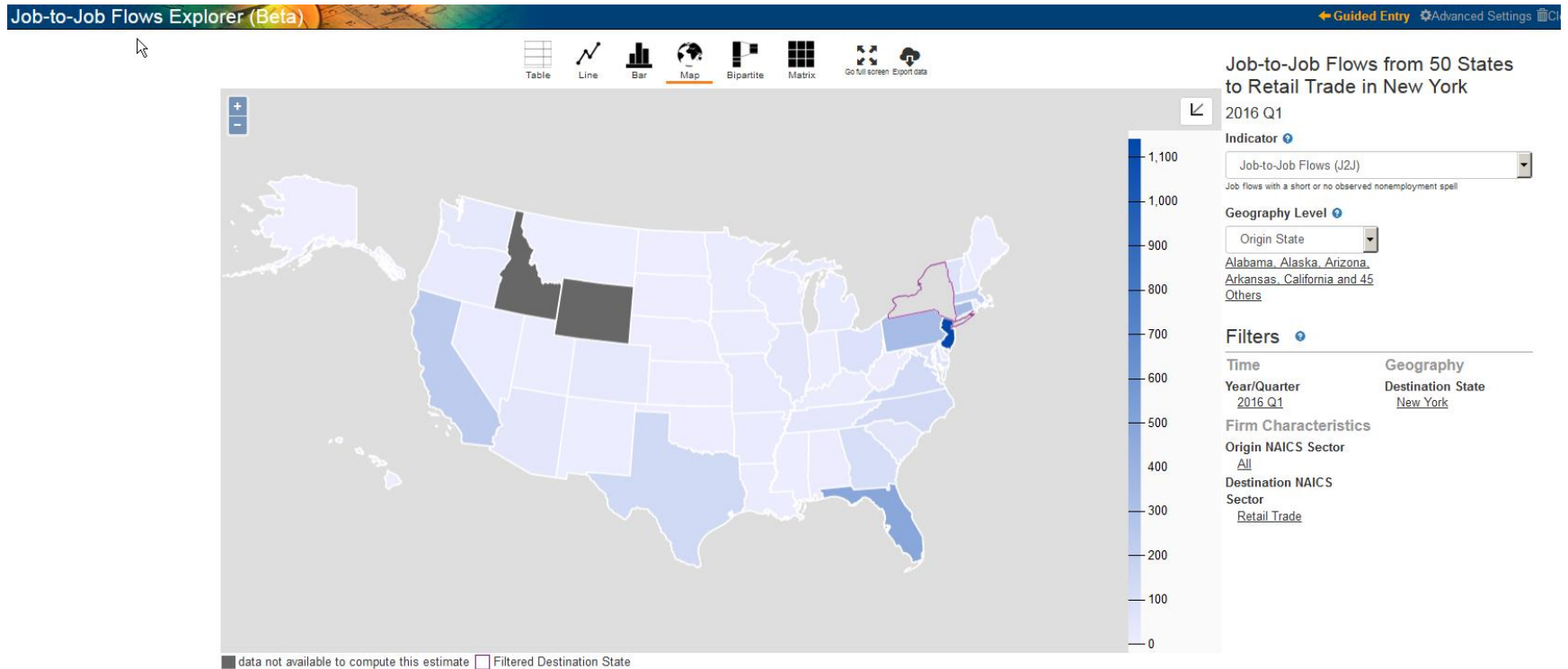
Top 5 States
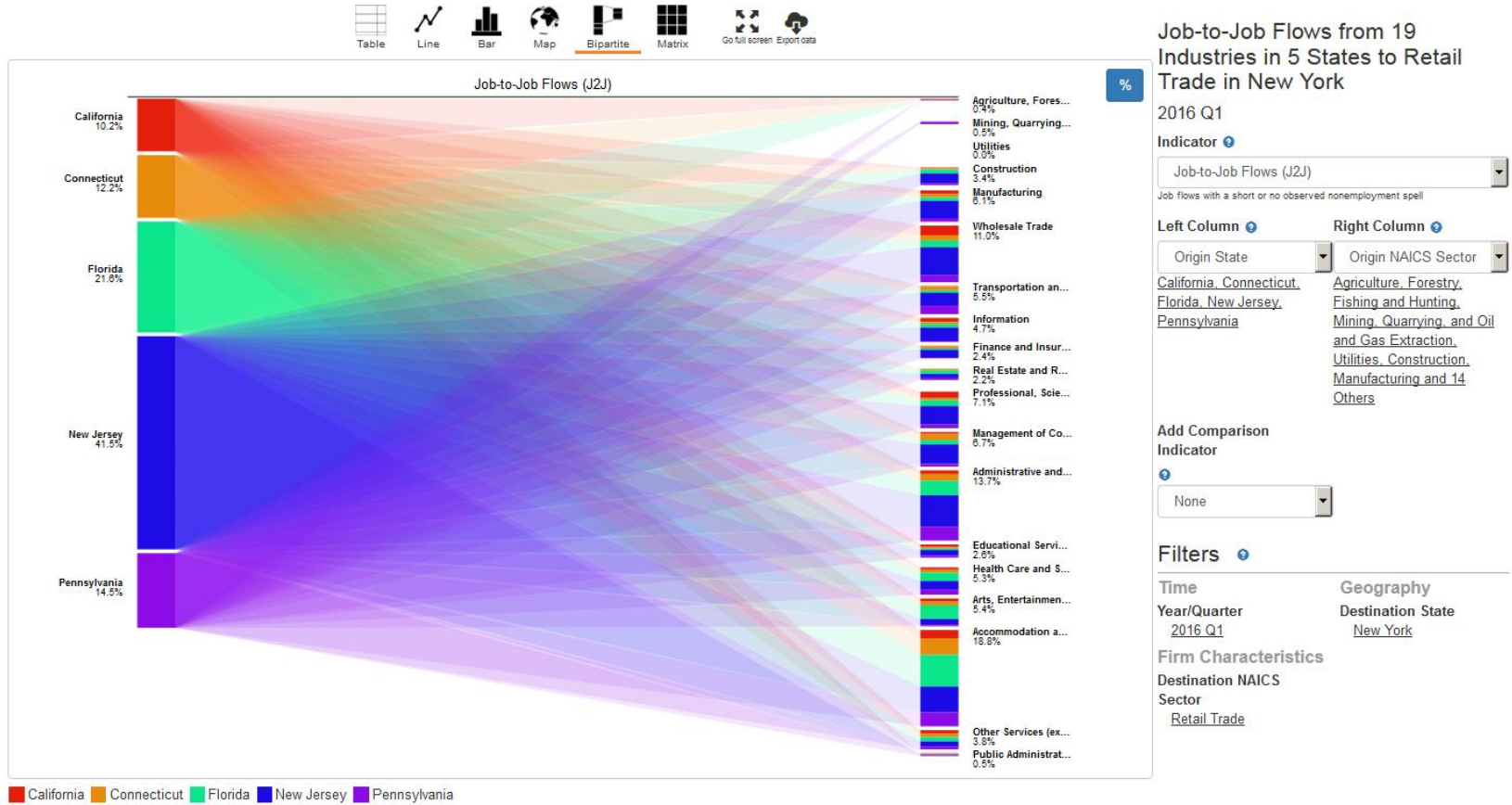
Starting with the Guided Entry

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.

👤 [Hires to ▾]

🌐 [New York ▾]

💼 [Retail Trade ▾]

2. Then Choose an Analysis

Analysis of Job-to-Job Flows ❓

From (Origin Job)

↪ Which States?

↪ Which Industries?

➡️

To (Destination Job)

✔ New York

✔ Retail Trade

Analysis of Hires Over Time ❓

↪ Are hires to jobs in New York Retail Trade coming from 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?

Go Live!

- https://lehd.ces.census.gov/
- https://j2jexplorer.ces.census.gov/

QWI Explorer

✓ 32 Quarterly Workforce Indicators

✓ Flexible Pivot Table and Map/Chart interface

✓ Data on detailed interactions between firms and workers include employment, employment change (individual and firm), and earnings

✓ Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex
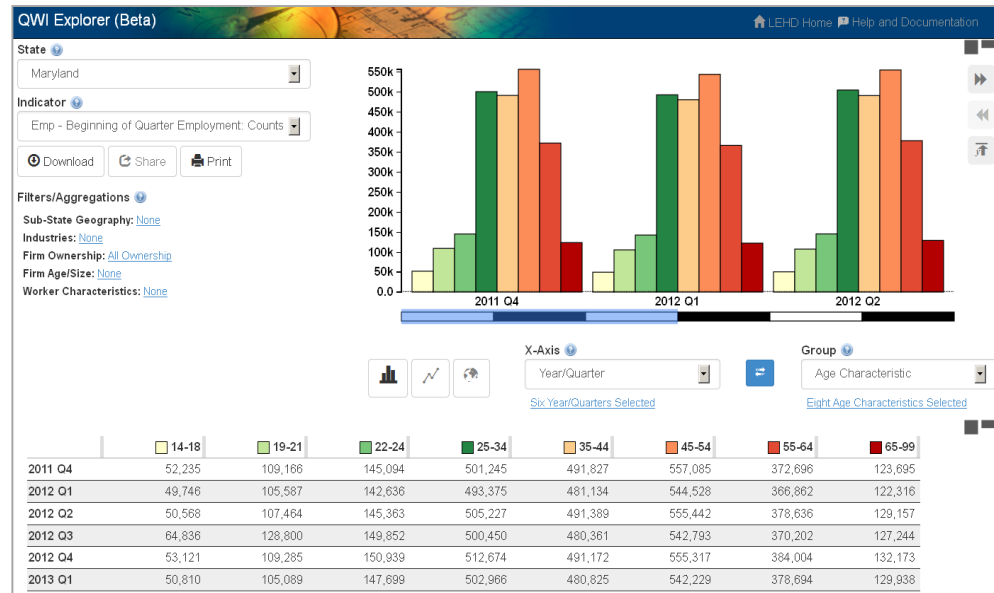
✓ Analyze/report by firm characteristics: NAICS classification (sector, 3, 4), firm age, and firm size

✓ Quarterly data very current (9-12 months old)

✓ National and 50 states available (plus DC)

Diversity in Greater Minnesota

Table 3: Health Care and Social Assistance Jobs by Race or Origin, 1995-2014						
	Twin Cities			Greater Minnesota		
	Jobs, 1995	Jobs, 2014	Change from 1995-2014	Jobs, 1995	Jobs, 2014	Change from1995-2014
All Races	139,870	242,620	73.5%	131,509	212,581	61.6%
White Alone	125,153	183,386	46.5%	128,388	199,429	55.3%
Black or African American	9,244	37,164	30 0%	528	4,933	834.3%
American Indian or Alaska Native	1,033	1,732	67.7%	823	2,264	175.1%
Asian or Other Pacific. Islander	3,250	16,081	394.8%	1,100	3,887	253.4%
Two or More Races	1,189	4,256	257.9%	668	2,068	209.6%
Hispanic or Latino	2,482	8,753	252.7%	1,281	5,080	296.6%

Source: U.S. Census Bureau, LEHD, Quarterly Workforce Indicators
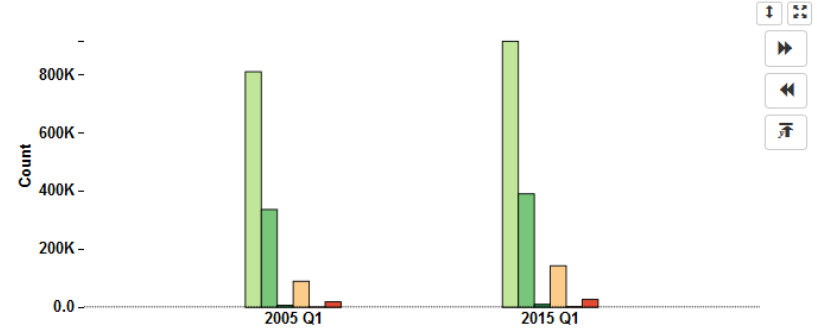
Healthcare by Race

OnTheMap for Emergency Management
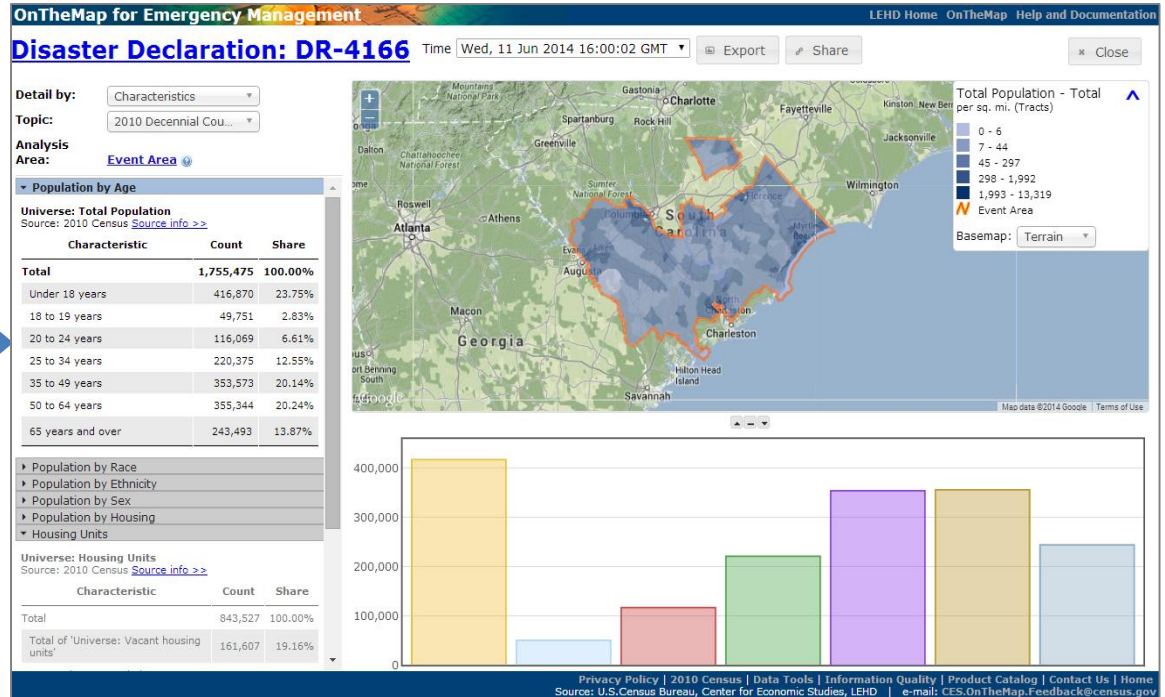
Hurricanes, Floods, Winter Storms

Disaster Areas

Wildfires

Demographic & Economic Data

New Public Data Service for Emergency Preparedness & Response

- Comprehensive Reports
- Real-time Data Updates
- Easy-to-use & Interoperable
- Historical Event Archive
- Flexible Analyses & Visualizations

Hurricane Florence

What's New in LEHD's Applications

- National QWI and cross-state queries in QWI Explorer and LED Extraction Tool

- Local Storage in QWI Explorer
  - Customize your preferences – choose to remove conflict popups, set default settings, etc.

- 2015 data in OnTheMap (with 2016 TIGER geographies)

New Data and Tools Released

- New LODES data release

  - 2015 data

- Job-to-Job Flows v2.0

  - New metro-area tabulations

  - New earnings variables

  - More detailed cross-tabulations

- J2J Explorer

  - New tool to analyze Job-to-Job Flows data

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census.gov

Outflows from Albany-Schenectady-Troy

Inflows to Albany-Schenectady-Troy

Outflows from Albany-Schenectady-Troy

Change in Earnings
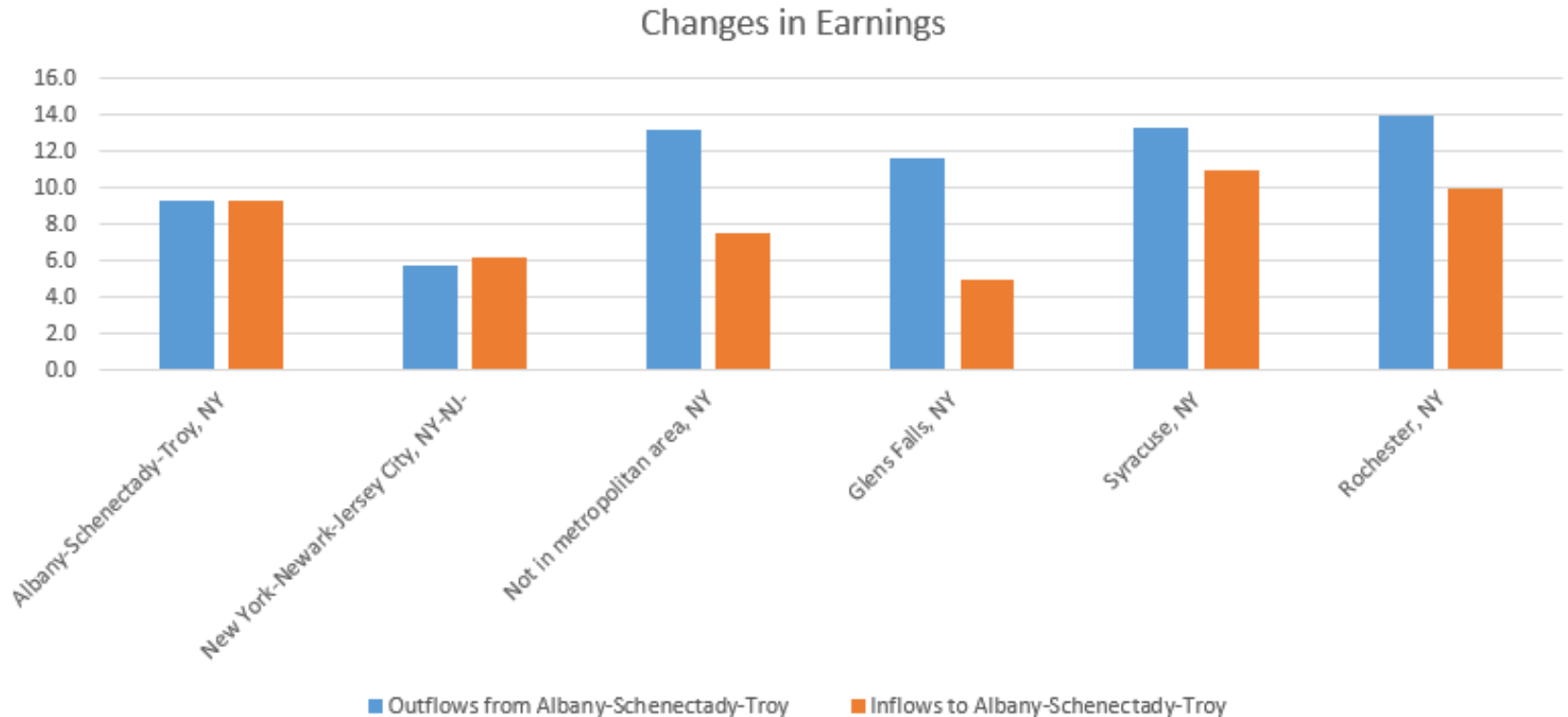
Changes in Earnings

Legend: Outflows from Albany-Schenectady-Troy (blue), Inflows to Albany-Schenectady-Troy (orange)

Categories: Albany-Schenectady-Troy, NY; New York-Newark-Jersey City, NY-NJ-; Not in metropolitan area, NY; Glens Falls, NY; Syracuse, NY; Rochester, NY
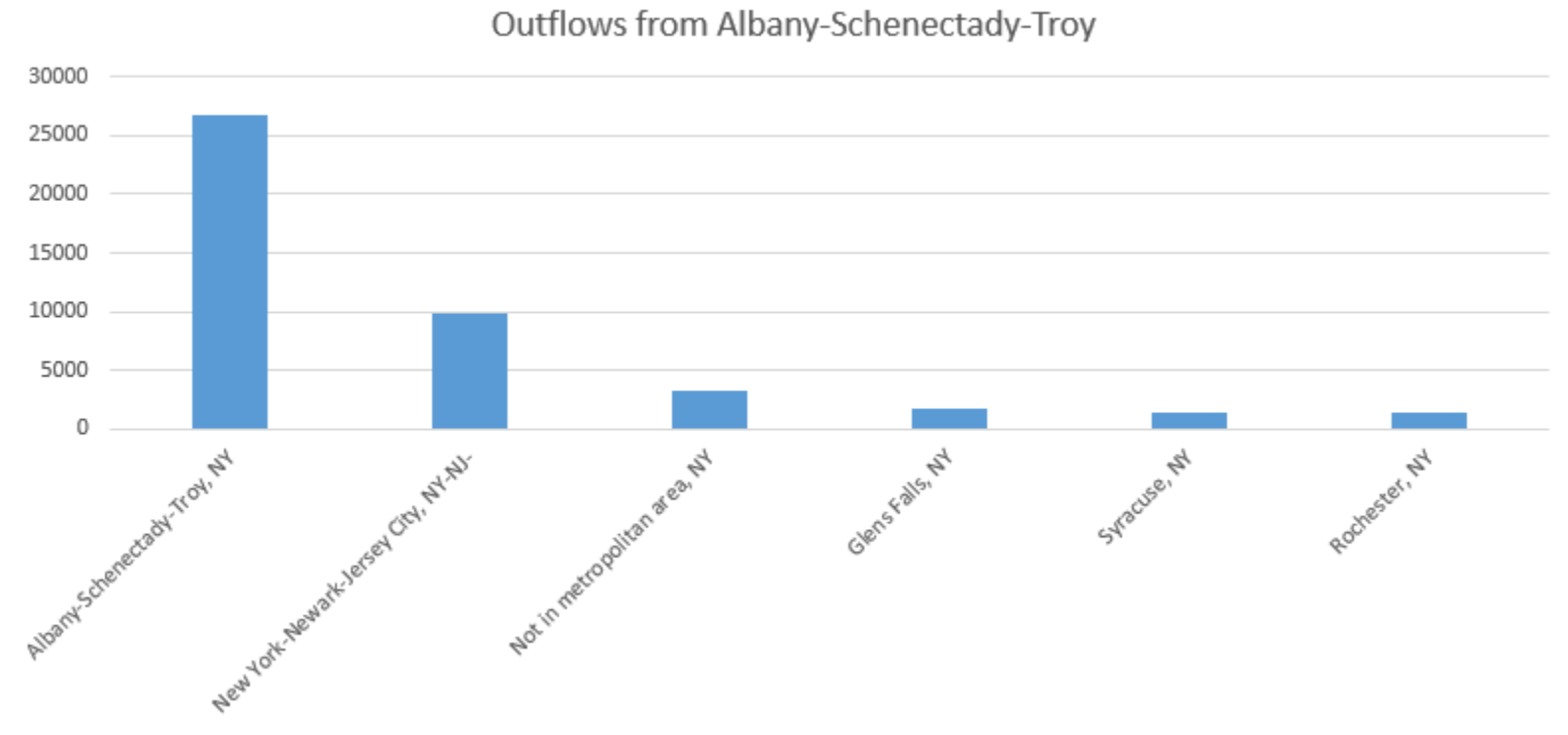
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PSEO – Post Secondary Employment Outcomes
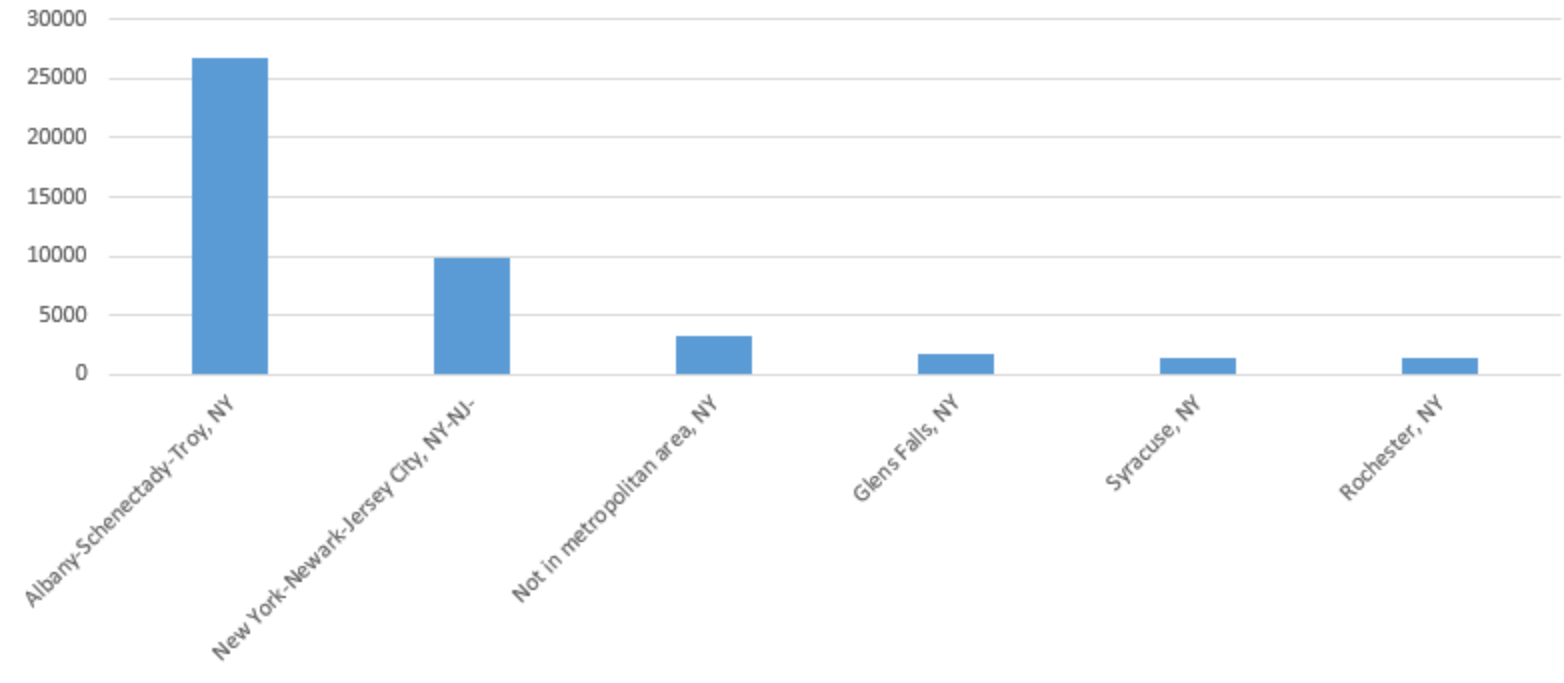

Median Earnings　　　　　　　　　　　　　　　　　　　seekut.utsystem.edu

Chemical Engineering: $89,893 / $103,146 / $123,591
Mechanical Engineering: $75,529 / $90,363 / $114,938
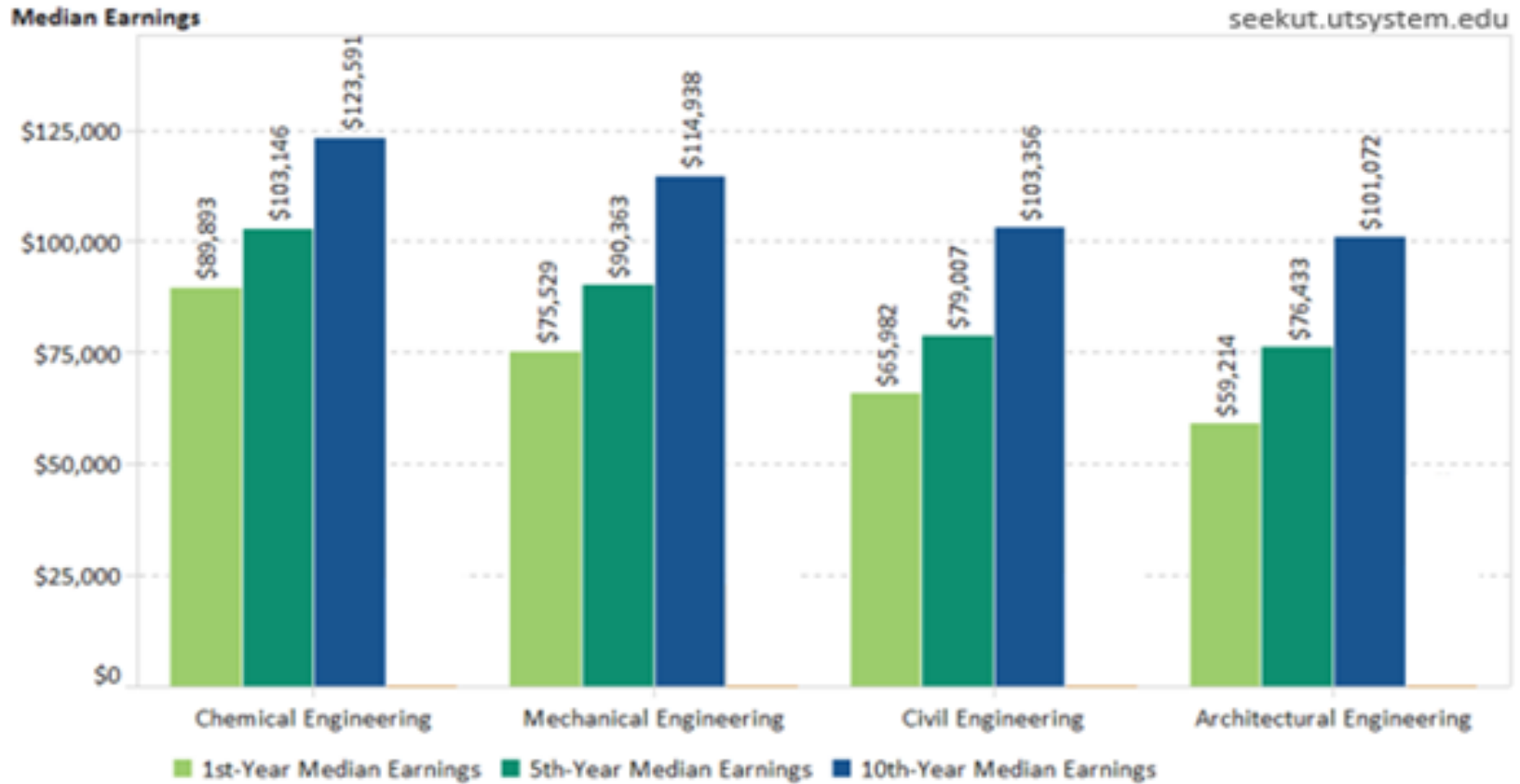Civil Engineering: $65,982 / $79,007 / $103,356
Architectural Engineering: $59,214 / $76,433 / $101,072

■ 1st-Year Median Earnings ■ 5th-Year Median Earnings ■ 10th-Year Median Earnings

Work Cited

- Suggested Citations:
  - OnTheMap Application
    - U.S. Census Bureau. 2016. OnTheMap Application. Longitudinal-Employer Household Dynamics Program. http://onthemap.ces.census.gov/
  - LODES Data
    - U.S. Census Bureau. 2016. LODES Data. Longitudinal-Employer Household Dynamics Program. http://lehd.ces.census.gov/data/lodes/

Useful Links

- **J2J Explorer**
  - [Analysis Guides](#)
  - [FAQs](#)

Contacts

- LEHD
  - lehd.ces.census.gov
  - CES.J2J.Feedback@census.gov
- Data/Applications
  - lehd.ces.census.gov/data
  - lehd.ces.census.gov/applications