

# Local Employment Dynamics:

## Dynamics:

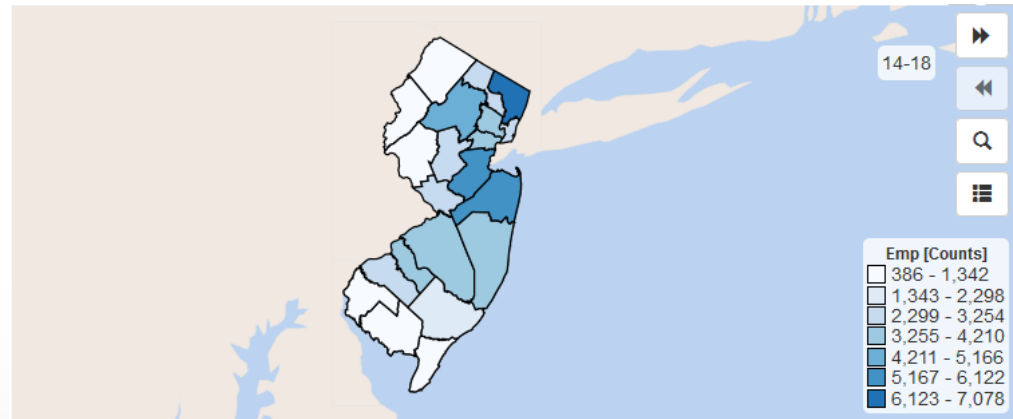
### Measuring Job-to-Job Flows



Earlene Dowell  
LEHD Program  
Center for Economic Studies  
U.S. Census Bureau

# Outline

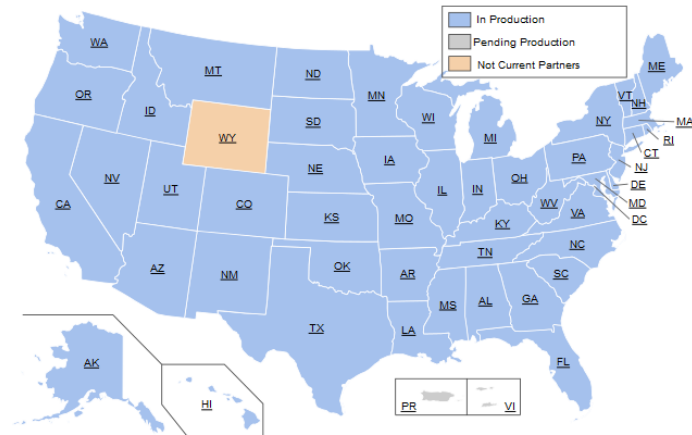
- What is the difference between LED and LEHD?
- LED Public-use Data and Web Tools
- Introduction to Job-to-Job Flows
- Live Demonstration



# Where Does the Data Come From?

- LED or Local Employment Dynamics Partnership
  - Begun in late 1990s with a few states
  - Currently producing data for Massachusetts with data as far back as 2010
  - Pending territories include Puerto Rico and Virgin Islands

State Partners

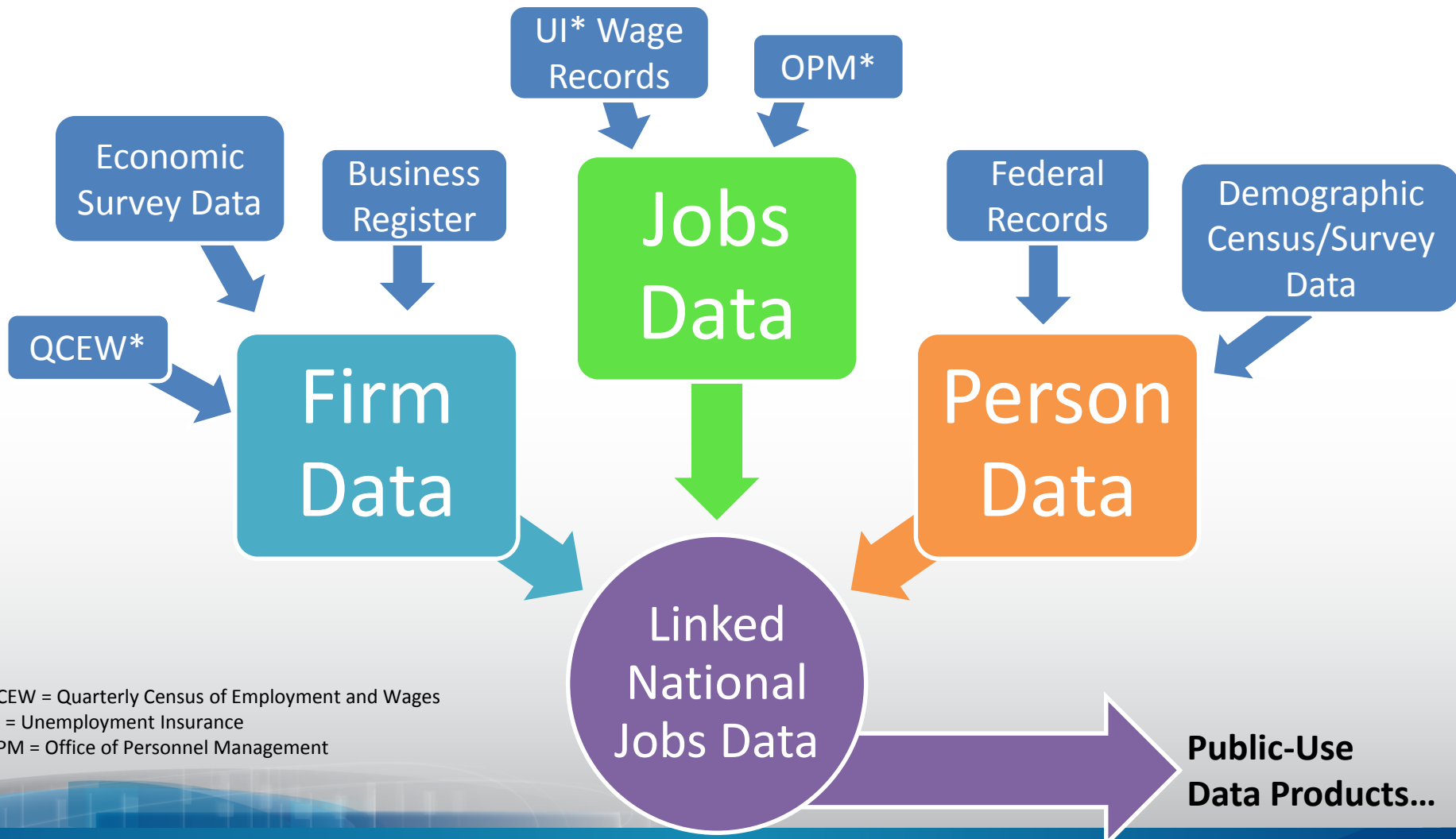


<a href="#">Alabama</a>	<a href="#">Illinois</a>	<a href="#">Montana</a>	<a href="#">Rhode Island</a>
<a href="#">Alaska</a>	<a href="#">Indiana</a>	<a href="#">Nebraska</a>	<a href="#">South Carolina</a>
<a href="#">Arizona</a>	<a href="#">Iowa</a>	<a href="#">Nevada</a>	<a href="#">South Dakota</a>
<a href="#">Arkansas</a>	<a href="#">Kansas</a>	<a href="#">New Hampshire</a>	<a href="#">Tennessee</a>
<a href="#">California</a>	<a href="#">Kentucky</a>	<a href="#">New Jersey</a>	<a href="#">Texas</a>
<a href="#">Colorado</a>	<a href="#">Louisiana</a>	<a href="#">New Mexico</a>	<a href="#">Utah</a>
<a href="#">Connecticut</a>	<a href="#">Maine</a>	<a href="#">New York</a>	<a href="#">Vermont</a>
<a href="#">District of Columbia</a>	<a href="#">Maryland</a>	<a href="#">North Carolina</a>	<a href="#">Virginia</a>
<a href="#">Delaware</a>	<a href="#">Massachusetts</a>	<a href="#">North Dakota</a>	<a href="#">Washington</a>
<a href="#">Florida</a>	<a href="#">Michigan</a>	<a href="#">Ohio</a>	<a href="#">West Virginia</a>
<a href="#">Georgia</a>	<a href="#">Minnesota</a>	<a href="#">Oklahoma</a>	<a href="#">Wisconsin</a>
<a href="#">Hawaii</a>	<a href="#">Mississippi</a>	<a href="#">Oregon</a>	<a href="#">Wyoming</a>
<a href="#">Idaho</a>	<a href="#">Missouri</a>	<a href="#">Pennsylvania</a>	<a href="#">Puerto Rico</a>
			<a href="#">Virgin Islands</a>

# 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

# 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: 1990-2014, start year varies by state, rolling end date

# LEHD: Longitudinal Employer-Household Dynamics Program

- Public data products
- Quarterly Workforce Indicators (QWI) - QWI Explorer, LED Extraction Tool, and National QWI (Coming in September)
- LEHD Origin Destination Employee Statistics (LODES) – OnTheMap and OnTheMap for Emergency Management
- Job-to-Job Flows

# LED Data Products

- **Quarterly Workforce Indicators (QWI)**
  - Employment, Job Creation, Job Destruction, Hires, Separations, Turnover, Earnings
  - By industry, county, and worker characteristics
- **LEHD Origin Destination Employment Statistics (LODES)**
  - Employment and Workplace-Residence Connections
  - Detailed geography + firm/worker characteristics
- **Job-to-Job Flows (J2J)**
  - Data on job transitions broken down by origin/destination industry and geography and worker characteristics
    - Flows between Jobs
    - Flows to/from Nonemployment
  - Beta data being released over coming months

# Choosing Among LED Data Products

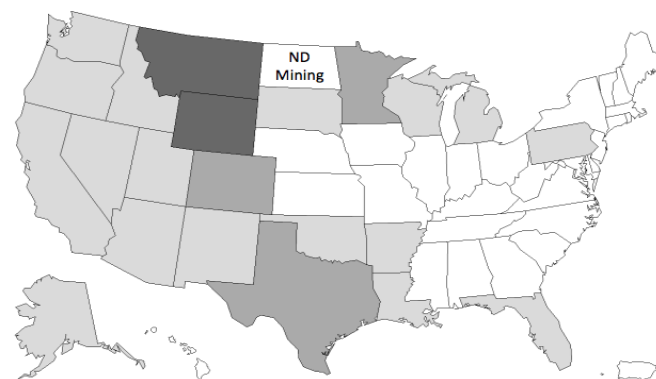
Data Product	Why Choose It?	Potential Drawbacks
QWI	You need employment, hires, separations, turnover, or earnings by detailed industry or person characteristics, quarterly time resolution, or a relatively short data lag	No geography below county; no residential information
LODES	You need employment for detailed or customized geography, residential patterns of the workforce, or relationship between worker employment and home locations	Annual time resolution; less detailed firm/person characteristics; significant data lag (temporary)
J2J	You need to understand transitions of workers among jobs	No worker characteristics by industry, no geography below Metro/Micro Areas*



# Job-to-Job Flows

- Types of questions that can be answered with this soon-to-be released application:
  - Where are North Dakota's oil boom workers coming from?
- Download data from [http://lehd.ces.census.gov/data/j2j\\_beta.html](http://lehd.ces.census.gov/data/j2j_beta.html)

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



# Where are all the teachers going? (Industry/Geography)



# First pull the industry sector level data

The screenshot shows the 'J2JOD Data Series' selector tool. It includes a description of the data, a list of available filters, a 'Download J2J data:' section with a selector tool, a list of files, and a 'J2J (Beta) Help' section. Red callout boxes with arrows point to specific elements: 'Select New Jersey' points to the State/Territory dropdown; 'Select the 'OD' file' points to the Type dropdown; 'Select 'CVS' format' points to the Format dropdown; and 'Grab the 'industry sector' file' points to the file link 'j2jod\_la\_d\_f\_gs\_ns\_oslp\_u.csv'.

**J2JOD Data Series:** These files contain **origin and destination job characteristics data** of job-to-job flows - specifically, job transitions that take place within the same quarter or in adjacent quarters. Data is available by

- Origin state/destination state (including within-state job-to-job flows)
- Origin state/destination state by worker demographics (sex by age, sex by education, race by age)
- Origin state/destination state by origin industry/destination industry
- Origin state/destination state by origin firm size/destination firm size
- Origin state/destination state by origin firm age/destination firm age

**Download J2J data:**

Use the selector tool below to choose and download files. Note: .xls format is available only for smaller files.

Version:  State/Territory:  Type:  Format:

[v4 1c-draft](#) | [Metadata for LA](#)

<a href="#">j2jod_la_all.csv</a>	18 Aug 2015 12:40	96 MB
<a href="#">j2jod_la_d_f_gs_n_oslp_u.csv</a>	18 Aug 2015 12:44	14 MB
<a href="#">j2jod_la_d_f_gs_ns_oslp_u.csv</a>	18 Aug 2015 12:44	14 MB
<a href="#">j2jod_la_d_fa_gs_n_oslp_u.csv</a>	18 Aug 2015 12:44	14 MB
<a href="#">j2jod_la_d_fs_gs_n_oslp_u.csv</a>	18 Aug 2015 12:44	14 MB
<a href="#">j2jod_la_rh_f_gs_n_oslp_u.csv</a>	18 Aug 2015 12:43	6 MB
<a href="#">j2jod_la_sa_f_gs_n_oslp_u.csv</a>	18 Aug 2015 12:43	9 MB
<a href="#">j2jod_la_se_f_gs_n_oslp_u.csv</a>	18 Aug 2015 12:44	7 MB

**Note about the data schema:** Full descriptions of all categorical variables, measure layouts, and more can be found in the data schema. For the latest version, choose the Version, State/Territory, Type and Format of the data series desired and push the "View Files" button in the selector tool above. A list of files should subsequently appear with two links centered above it. Click on the left link. Since the last release, the data schema has been updated from v4.1b-draft to v4.1c-draft.

**Note about data file names:** Data files have the following filename structure:

**J2J (Beta) Help**

Learn more about J2J (Beta) by choosing one of the links below.

- [Job-to-Job Flows: Quick Start Guide](#) (165 KB)

Keep geography, industry, year, quarter, geography\_orig, industry\_orig, EE, and AQHire. Delete all other columns.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	periodicity	seasonadj	geo_level	geography	ind_level	industry	ownercod	sex	agegrp	race	ethnicity	education	firmage	firmsize	year
2	Q	U	S		22	A	0	A00	0	A00	A0	A0	EO	0	0
3	Q	U	S		22	S	11	A00	0	A00	A0	A0	EO	0	0
4	Q	U	S		22	S	21	A00	0	A00	A0	A0	EO	0	0
5	Q	U	S		22	S	22	A00	0	A00	A0	A0	EO	0	0
6	Q	U	S		22	S	23	A00	0	A00	A0	A0	EO	0	0
7	Q	U	S		22	S	31-33	A00	0	A00	A0	A0	EO	0	0
8	Q	U	S		22	S	42	A00	0	A00	A0	A0	EO	0	0
9	Q	U	S		22	S	44-45	A00	0	A00	A0	A0	EO	0	0
10	Q	U	S		22	S	48-49	A00	0	A00	A0	A0	EO	0	0
11	Q	U	S		22	S	51	A00	0	A00	A0	A0	EO	0	0
12	Q	U	S		22	S	52	A00	0	A00	A0	A0	EO	0	0
13	Q	U	S		22	S	53	A00	0	A00	A0	A0	EO	0	0
14	Q	U	S		22	S	54	A00	0	A00	A0	A0	EO	0	0
15	Q	U	S		22	S	55	A00	0	A00	A0	A0	EO	0	0
16	Q	U	S		22	S	56	A00	0	A00	A0	A0	EO	0	0
17	Q	U	S		22	S	61	A00	0	A00	A0	A0	EO	0	0
18	Q	U	S		22	S	62	A00	0	A00	A0	A0	EO	0	0
19	Q	U	S		22	S	71	A00	0	A00	A0	A0	EO	0	0
20	Q	U	S		22	S	72	A00	0	A00	A0	A0	EO	0	0

Then filter geography\_orig to obtain the origin state of interest.

The screenshot shows a Microsoft Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K
1	geography	industry	year	quarter	geography_orig	industry_orig	EE	AQHire			
2	22	0	2002				0	49895	31864		
3	22	11	2002				0	237	183		
4	22	21	2002				0	1206	583		
5	22	22	2002				0	163	76		
6	22	23	2002				0	5013	2585		
7	22	31-33	2002				0	3497	2038		
8	22	42	2002				0	1738	881		
9	22	44-45	2002				0	8300	5948		
10	22	48-49	2002				0	2115	1252		
11	22	51	2002				0	851	495		
12	22	52	2002	4		0	0	1635	723		
13	22	53	2002	4		0	0	1175	631		
14	22	54	2002	4		0	0	1701	976		
15	22	55	2002	4		0	0	537	266		

The 'geography\_orig' column (E) has a filter applied, and the filter menu is open, showing a list of states with '21' selected. The filter menu options include: Sort Smallest to Largest, Sort Largest to Smallest, Sort by Color, Clear Filter From "geography\_orig", Filter by Color, and Number filters. The Number filters section shows a search box and a list of states from 11 to 21, with '21' checked.

Then filter industry\_orig to obtain the origin industry of interest.  
Repeat with industry for the destination industry of interest.

	A	B	C	D	E	F	G	H	I	J
1	geography	industry	year	quarter	geography_orig	industry_orig	EE	AQHire		
1966			2002	4	22	61	928	824		
1986			2002	4	22	61	3	3		
2006			2002	4	22	61	3	1		
2026			2002	4	22	61	3	3		
2046			2002	4	22	61	18	17		
2066			2002	4	22	61	34	29		
2086			2002	4	22	61	16	14		
2106			2002	4	22	61	125	110		
2126			2002	4	22	61	14	7		
2146			2002	4	22	61	17	11		
2166		0	2002	4	22	61	22	8		
2186		0	2002	4	22	61	12	7		
2206		0	2002	4	22	61	52	28		
2226		0	2002	4	22	61	6	6		



Then filter years to obtain the period of interest. (In the interest of time, let's choose only one quarter: 2015.1)

The screenshot shows a Microsoft Excel spreadsheet with the following data table:

	A	B	C	D	E	F	G	H	I	J
1	geography	industry	year	quarter	geography_orig	industry_orig	EE	AQHire		
2266				4	22	61	219	265		
3910				4	22	61	2	1		
3963				4	22	61	2	0		
4108				4	22	61	1			
4330				4	22	61	1	4		
4463				4	22	61	0	1		
4701	1			4	22	61	2	3		
4910	1			4	22	61	0	2		
5079	1			4	22	61	1	2		
5277	2			4	22	61	1	0		
8202	22	61	2002	4	22	61	188	213		
9492	24	61	2002	4	22	61	0	1		
9566	26	61	2002	4	22	61	0	0		
9719	29	61	2002	4	22	61	0	1		

Then sum EE and AQHire to get all Outflows for every state by year and quarter.

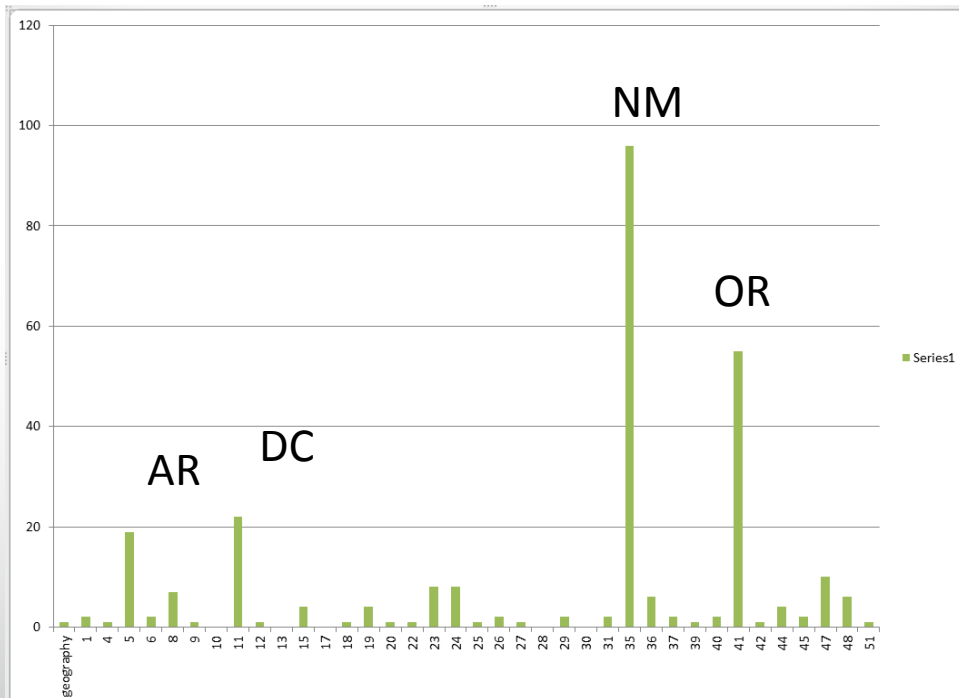
The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K
1	geography	industry	year	quarter	geography_orig	industry_orig	EE	AQHire	Outflows		
2	0	61	2005	1	22	61	399	263	=sum(G2:H2)		
3	1	61	2005	1	22	61	4	1			
4	4	61	2005	1	22	61	1	0			
5	5	61	2005	1	22	61	4	12			
6	6	61	2005	1	22	61	1	3			
7	8	61	2005	1	22	61	1	1			
8	9	61	2005	1	22	61	0	2			
9	12	61	2005	1	22	61	4	0			
10	13	61	2005	1	22	61	8	6			
11	17	61	2005	1	22	61	0	1			
12	18	61	2005	1	22	61	0	0			
13	19	61	2005	1	22	61	0	3			
14	21	61	2005	1	22	61	1	1			
15	22	61	2005	1	22	61	315	200			

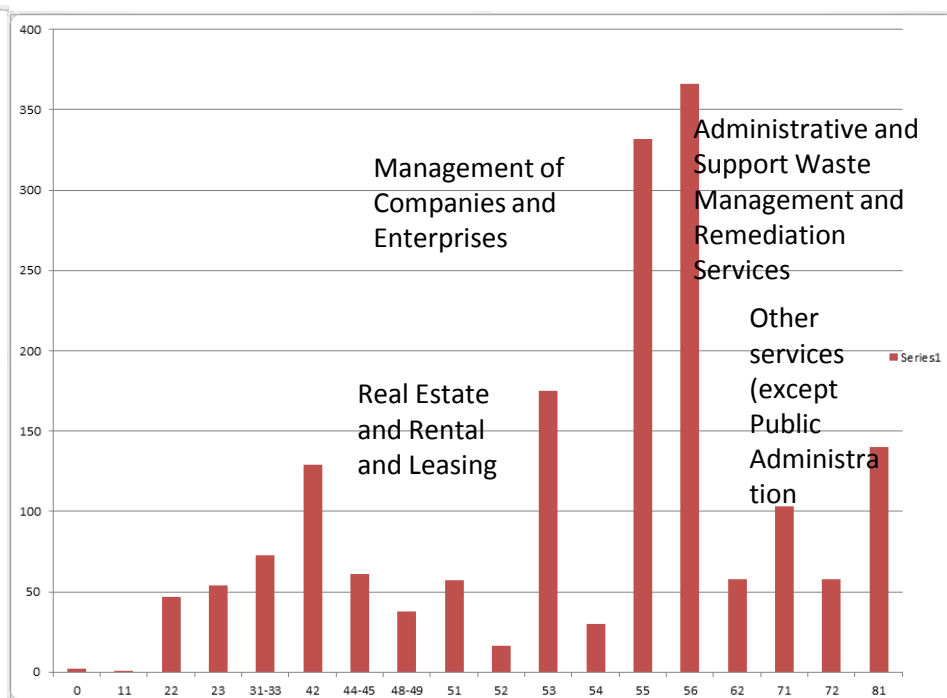


# Where are all the teachers going?

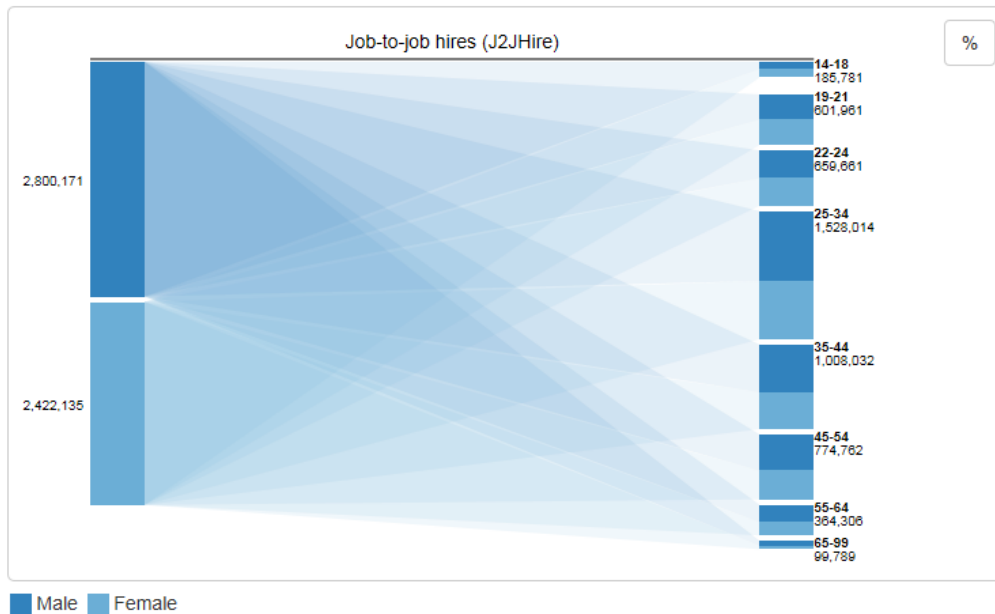
Geography in 2015 Quarter 1



Industry in 2015 Quarter 1



# Job to Job Flows



A bipartite chart of Job-to-job hires by Male and undefined and 8 Age Groups for average of 2011 Q1 - 2013 Q4

**Indicator**

Job-to-job separations (J2JSep)

Main jobs separations where the worker separated from their previous main job either during the same quarter or the previous quarter (sum of EE+AQSep, described below). These separations result from job-to-job moves with short-to-no nonemployment between jobs.

**Left Column**

Sex

Male, Female

**Right Column**

Age

14-18, 19-21, 22-24, 25-34, 35-44 and 3 Others

**Add Comparison Indicator**

None

**Filters**

**Time**

**Year/Quarter**

2010 Q4, 2011 Q1, 2011 Q2, 2011 Q3, 2011 Q4 and 7 Others

**Geography**

**State**

All

# LED Extraction Tool

LED Extraction Tool - Quarterly Workforce Indicators (QWI) [LEHD Home](#) [Help and Documentation](#)

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

**Geography Level**

Search:

- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas

**United States**  
States: 52

**Geography Type**

States

**Areas**

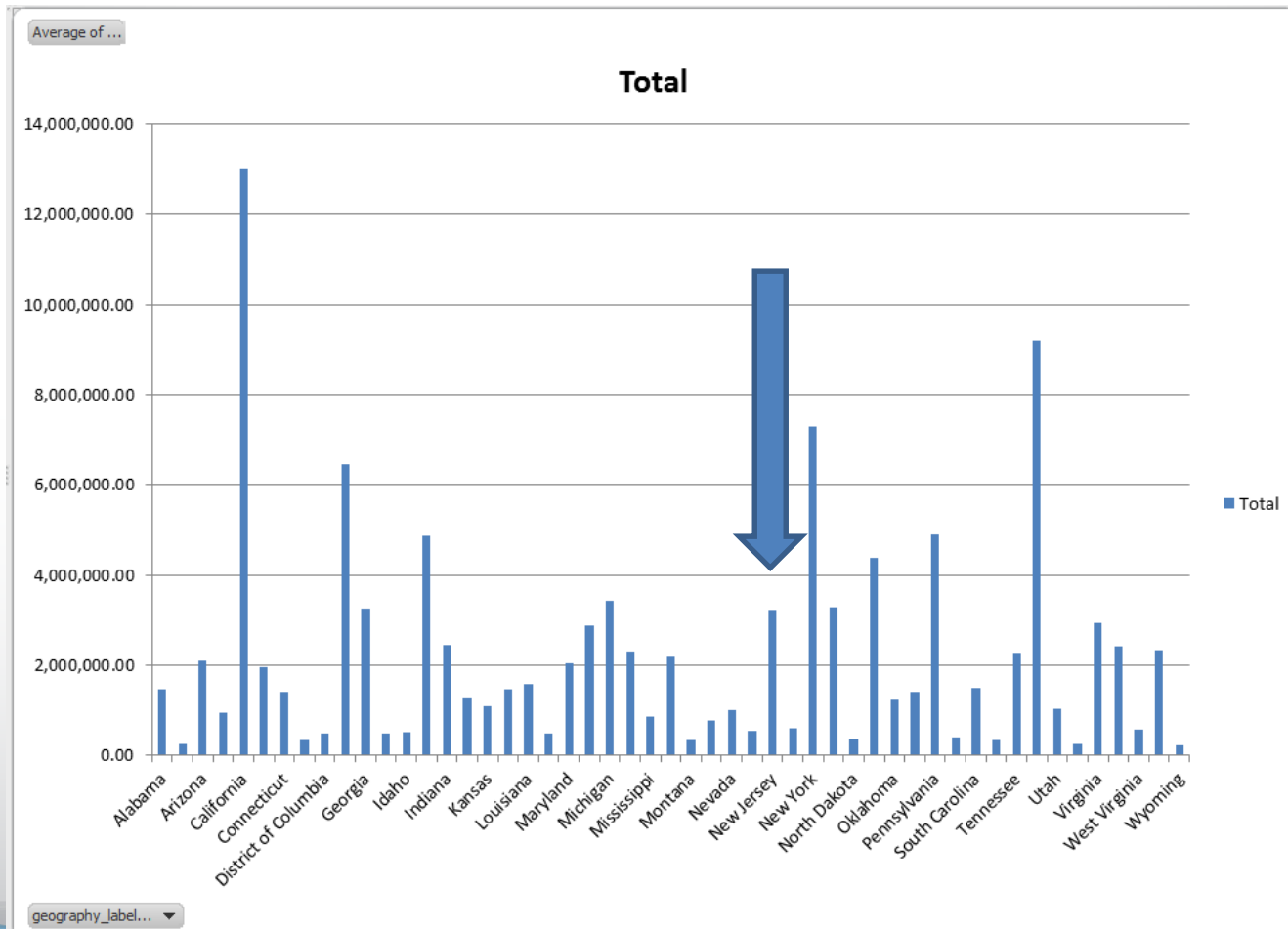
Search:

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

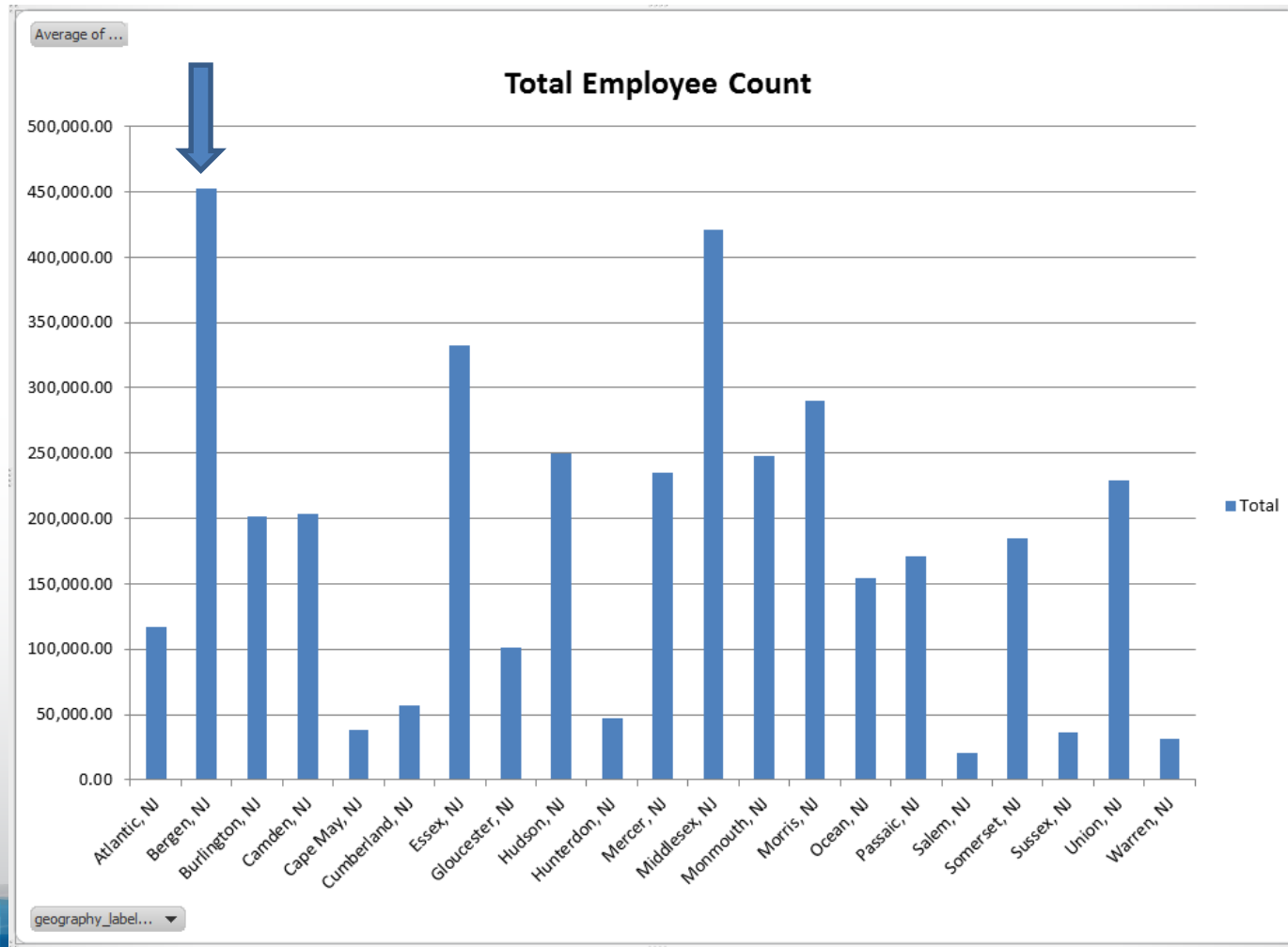
- 00 National (50 States + DC)
- 01 Alabama
- 02 Alaska
- 04 Arizona
- 05 Arkansas
- 06 California
- 08 Colorado
- 09 Connecticut
- 10 Delaware
- 11 District of Columbia
- 12 Florida
- 13 Georgia
- 15 Hawaii
- 16 Idaho
- 17 Illinois
- 18 Indiana
- 19 Iowa
- 20 Kansas
- 21 Kentucky
- 22 Louisiana
- 23 Maine
- 24 Maryland

[Load Settings](#) [Continue to Firm Characteristics](#)

# National QWI

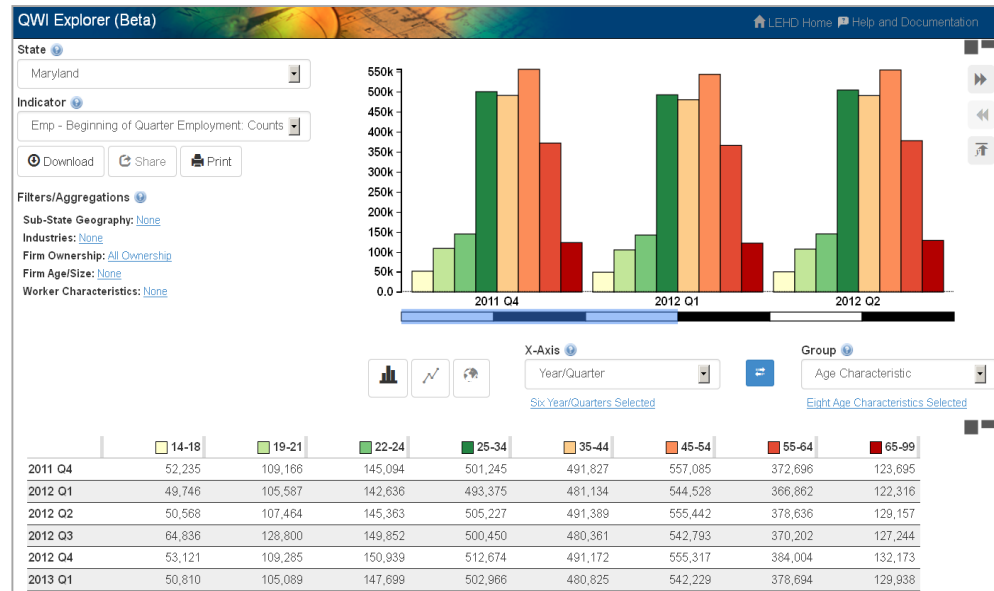


# Employment Count by Counties



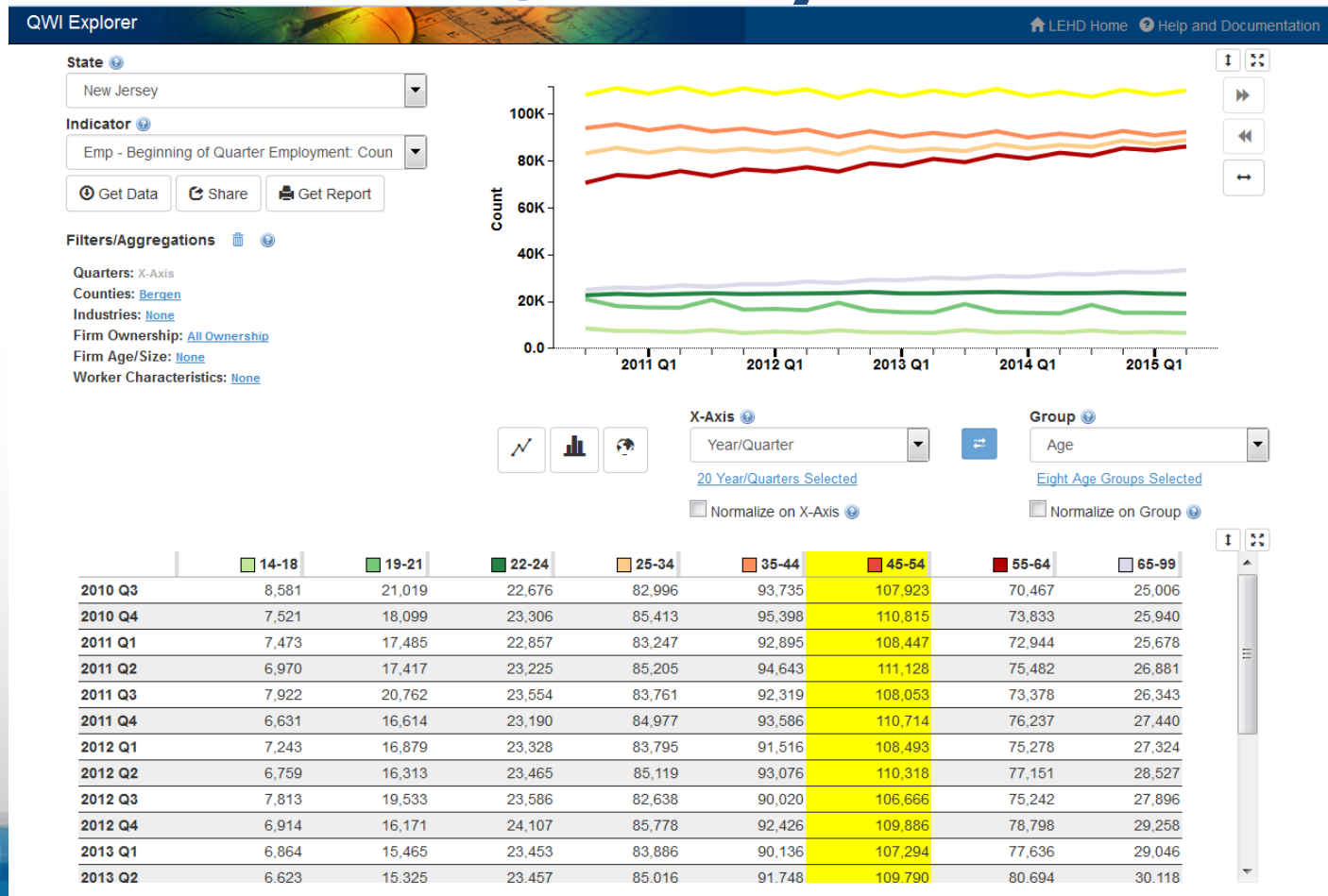
# QWI Explorer

- ✓ 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

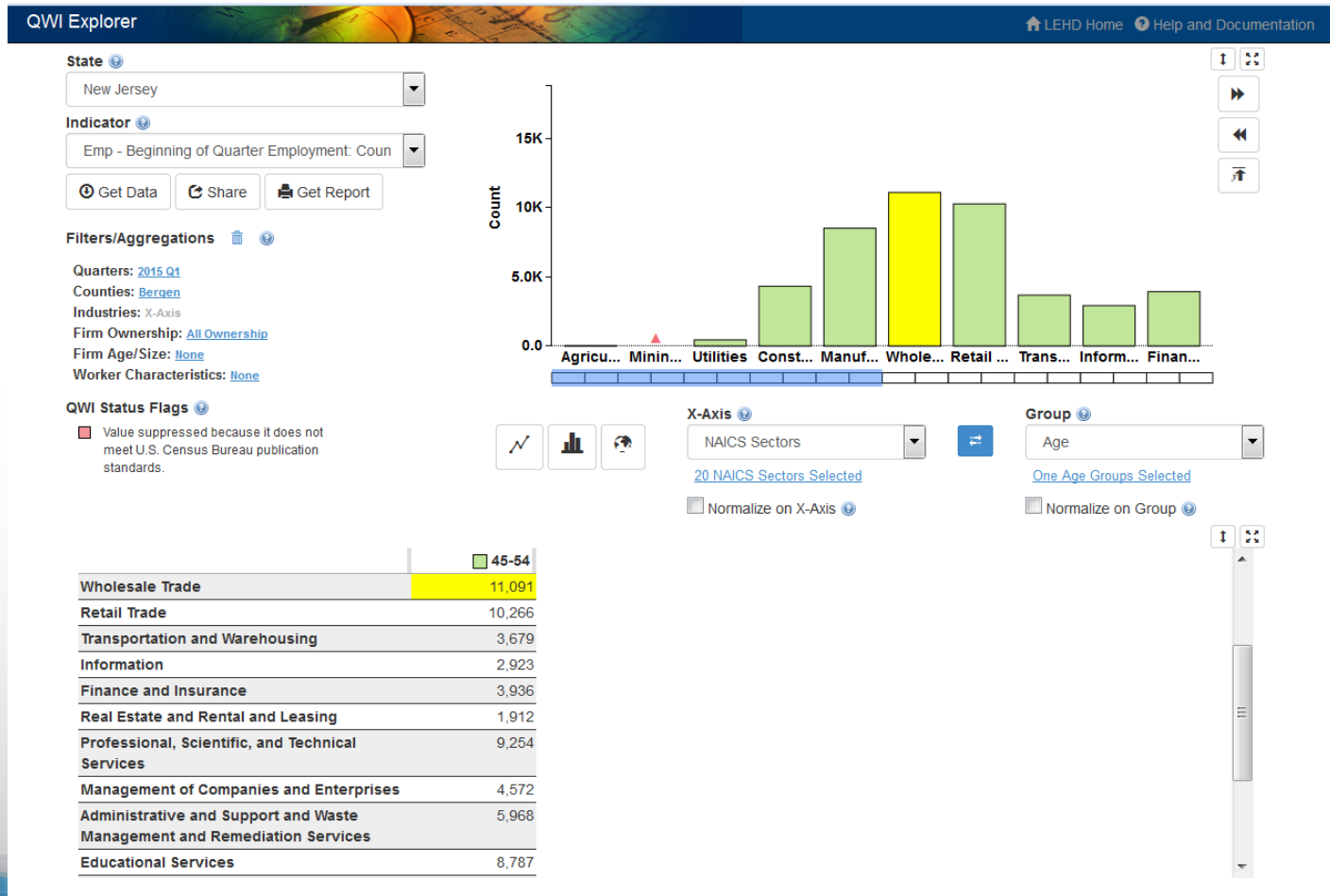


- ✓ Analyze/report by firm characteristics: NAICS classification (sector, 3, 4), firm age, and firm size
- ✓ Quarterly data very current (9-12 months old)
- ✓ National and 50 states available (plus DC)

# What age group is the highest employment count in Bergen County?

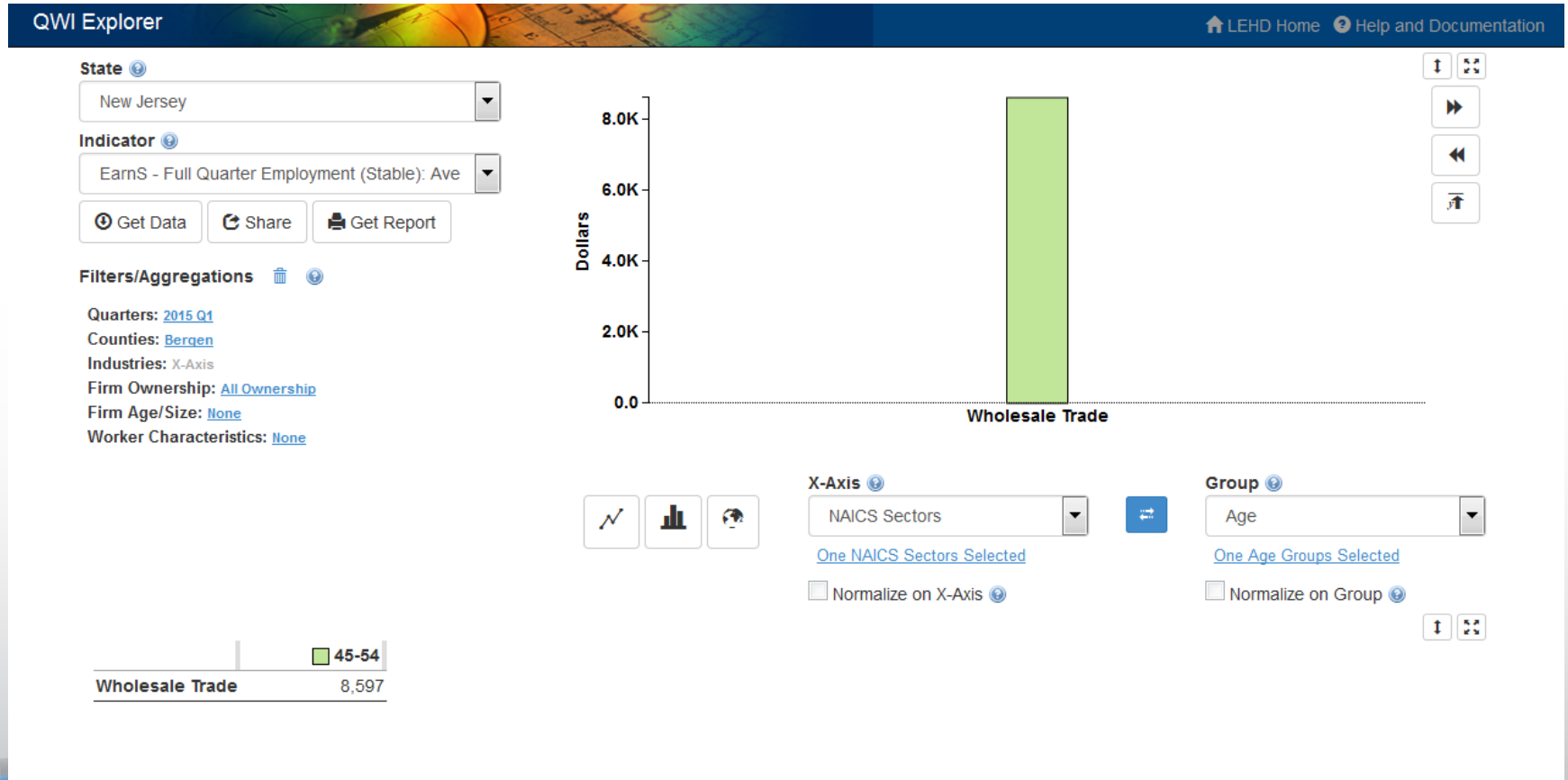


# What industry are they working in?

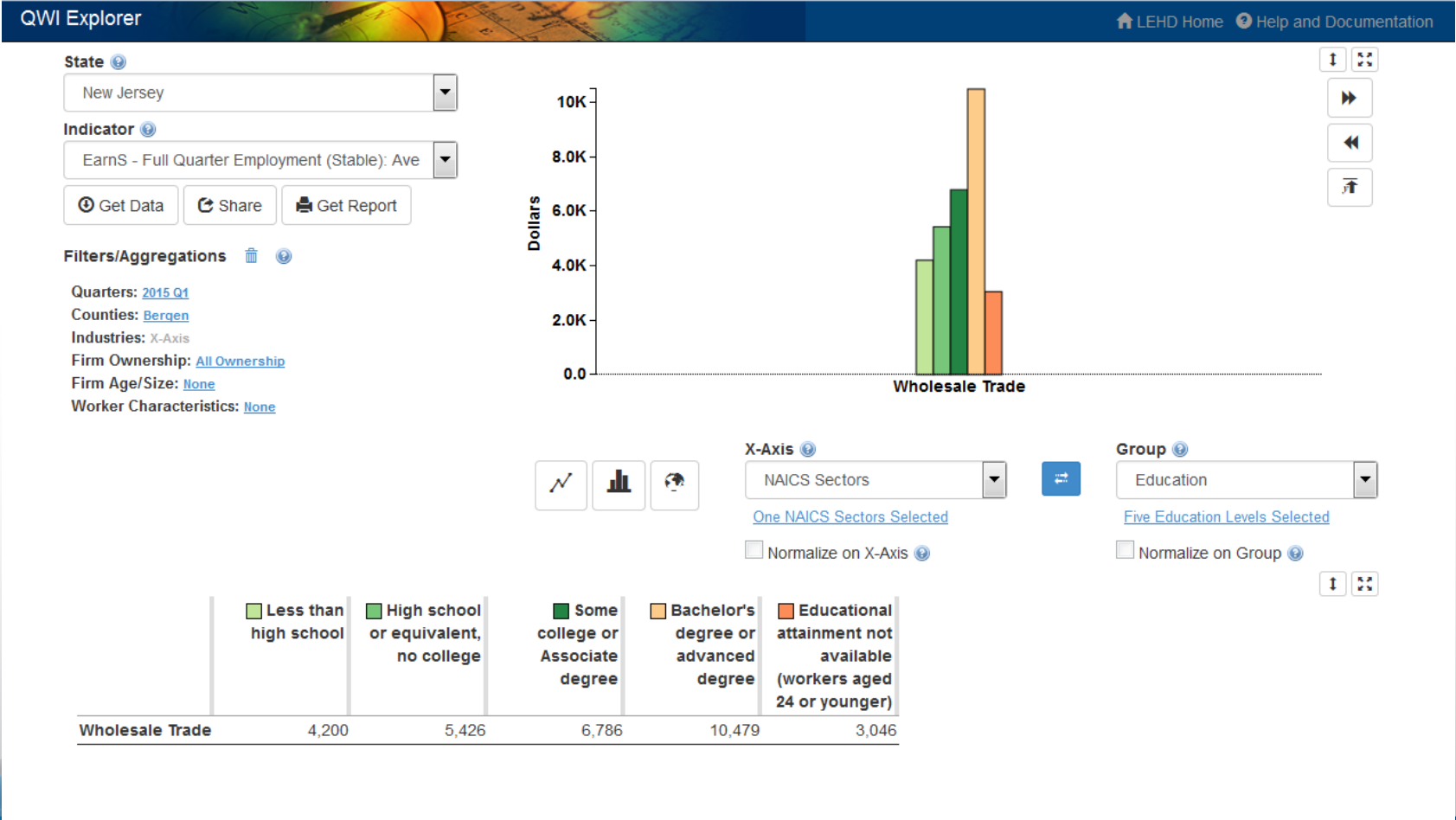




# What are their earnings?



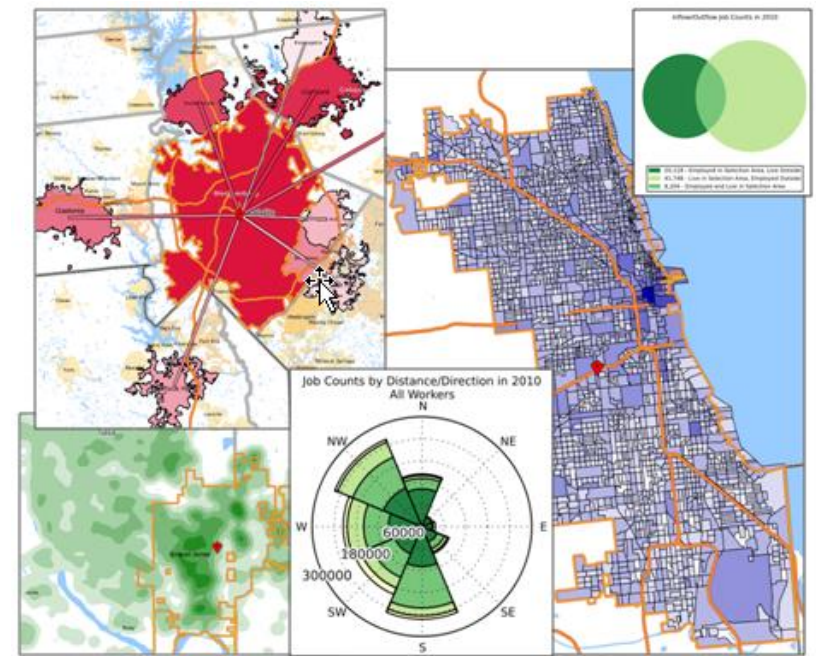
# Earnings by Education Level



# OnTheMap

Recognized by United Nations as a major U.S. statistical innovation

- ✓ Where do workers live?
- ✓ Where do residents work?
- ✓ What are the commuter flows of a particular area?
- ✓ Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex
- ✓ Analyze/report by firm characteristics: NAICS Sector, firm age, and firm size



- ✓ 2002-2014 annual data
- ✓ 50 states available (plus DC)
- ✓ User-selected areas
- ✓ Based on Census Blocks
- ✓ Disclosure protection
- ✓ Flexible Inputs/Outputs

# Getting Started

OnTheMap
LEHD Home Help and Documentation Reload Text-Only

Start | Base Map | Selection
Save | Load | Feedback | Previous Extent | Hide Tabs

▼ Welcome to OnTheMap!

Start an analysis by using one of the tools below (Search, Import Geography, or Load .OTM file). Hover over the Help icons located throughout the application to see Help tips for using specific functionality. Sections in the control panel can be collapsed or opened by clicking the section title.

[2014 Data Now Available \(03/03/2016\)](#)

▼ Search

Search All Names

- States
  - No results found.
- Counties
  - Bergen County, NJ**
- Places (Cities, CDPs, etc.)
  - Bergen city, ND**
  - Bergen village, NY**
- ZIP Codes (ZCTA)
  - No results found.
- Metropolitan/Micropolitan Areas (CBSA)
  - No results found.
- Workforce Investment Areas (WIA)
  - 02 **Bergen WIB**
- County Subdivisions
  - Palisades Park borough (**Bergen, NJ**)
  - Fairview borough (**Bergen, NJ**)
  - Garfield city (**Bergen, NJ**)
  - Haworth borough (**Bergen, NJ**)
  - River Vale township (**Bergen, NJ**)
  - North Arlington borough (**Bergen, NJ**)
  - Hillsdale borough (**Bergen, NJ**)
  - Wyckoff township (**Bergen, NJ**)
  - Rochelle Park township (**Bergen, NJ**)
  - Maywood borough (**Bergen, NJ**)
  - Paramus borough (**Bergen, NJ**)
  - Allendale borough (**Bergen, NJ**)

**Bergen County, NJ**  
*from Counties*  
 Selection Area: 246.674 Sq. Mi  
 Census Blocks: 13,380

[Perform Analysis on Selection Area](#)

[Change Selection Area](#)  
[Add Advanced Selection](#)

[Privacy Policy](#) | [2010 Census](#) | [Data Tools](#) | [Information Quality](#) | [Product Catalog](#) | [Contact Us](#) | [Home](#)  
 Source: U.S.Census Bureau, Center for Economic Studies | e-mail: [CES.OnTheMap.Feedback@census.gov](mailto:CES.OnTheMap.Feedback@census.gov)



# Analysis Settings

## Analysis Settings

### Area Profile Analysis in 2014 by Primary Jobs

#### Home/Work Area

Determines whether the selection area is analyzed on where workers live ("Home") or where workers are employed ("Work").

- Home  
 Work

#### Analysis Type

Determines the type of results that will be generated for the selected area.

##### Area Profile

Labor Market Segment:

All Workers

##### Area Comparison

Areas to Compare:

Places (Cities, CDPs, etc.)

Labor Market Segment:

All Workers

##### Distance/Direction

##### Destination

Destination Type:

Places (Cities, CDPs, etc.)

##### Inflow/Outflow

Note: Home/Work choice does not affect results

#### Year

Determines the year(s) of data that will be processed in the analysis.

- 2014  
 2013  
 2012  
 2011  
 2010  
 2009  
 2008  
 2007  
 2006  
 2005  
 2004  
 2003  
 2002

#### Job Type

Determines the scope of jobs that will be processed in the analysis.

- All Jobs  
 Primary Jobs  
 All Private Jobs  
 Private Primary Jobs

**Analysis Settings**

Area Profile Analysis in 2014 by Primary Jobs

**Home/Work Area** Determines whether the selection area is analyzed on where workers live ("Home") or where workers are employed ("Work").

**Analysis Type** Determines the type of results that will be generated for the selected area.

**Year** Determines the year(s) of data that will be processed in the analysis.

**Job Type** Determines the scope of jobs that will be processed in the analysis.

The **Area Profile Analysis** generates results showing the location and characteristics of workers living or working in the selection area.

The **Area Comparison Analysis** generates results showing the count and characteristics of workers employed or living in locations contained by the selection area. The "Areas to Compare:" dropdown determines the type of locations to be compared.

The **Distance/Direction Analysis** generates results showing the distance and direction totals between residence and employment locations for workers employed or living in the selection area.

The **Destination Analysis** generates results showing the home or work destinations of workers employed or living in the selection area. Select the geographic destination type using the "Destination Type:" dropdown.

The **Inflow/Outflow Analysis** generates results showing the count and characteristics of worker flows in to, out of, and within the selection area.

Segment: s

Compare: Places (Cities, CDPs, etc.)

Destination Type: Places (Cities, CDPs, etc.)

Note: Home/Work choice does not affect results

Cancel Go!

# Area Profile

**OnTheMap**
LEHD Home Help and Documentation Reload Text-Only

Start Base Map Selection Results

Save Load Feedback Previous Extent Hide Tabs

Hide Chart/Report

### Work Area Profile Analysis

*enter your own subtitle*

▼ Display Settings

Characteristic Filter Total

Year 2014

▼ Map Controls

Color Key

Thermal Overlay

Point Overlay

Selection Outline

Identify Zoom to Selection

Clear Overlays Animate Overlays

▼ Report/Map Outputs

Detailed Report

Export Geography

Print Chart/Map

▼ Legends

- 5 - 1,038 Jobs/Sq.Mile
- 1,039 - 4,139 Jobs/Sq.Mile
- 4,140 - 9,308 Jobs/Sq.Mile
- 9,309 - 16,543 Jobs/Sq.Mile
- 16,544 - 25,847 Jobs/Sq.Mile

- 1 - 11 Jobs
- 12 - 172 Jobs
- 173 - 867 Jobs

[Change Settings](#)

Click a Characteristic link in the Summary Report to see more detail.

Age

Earnings

Industry Sector

Race

View as Bar Chart

---

**Total Primary Jobs**

	2014	
	Count	Share
Total Primary Jobs	413,413	100.0%

---

**Worker Age**

	2014	
	Count	Share
Age 29 or younger	80,341	19.4%
Age 30 to 54	225,971	54.7%
Age 55 or older	107,101	25.9%

---

**Earnings**

	2014	
	Count	Share
\$1,250 per month or less	74,372	18.0%
\$1,251 to \$3,333 per month	123,985	30.0%
More than \$3,333 per month	215,056	52.0%

NAICS Industry Sector

# Home Area Comparison

**OnTheMap**
LEHD Home Help and Documentation [Reload Text-Only](#)

Start Base Map Selection Results

Save Load Feedback Previous Extent Hide Tabs

Hide Chart/Report

## Home Area Comparison

### Analysis by Census Tracts

*enter your own subtitle*

▼ Display Settings

Characteristic Filter ✎ Total

Number of Results ⬇ All

Sort Chart/Report by ⬇ Total

Year ⬇ 2014

▼ Map Controls

Color Key ■

Thematic Overlay

Selection Outline

Identify 🔍 Zoom to Selection

Clear Overlays 🗑 Animate Overlays

▼ Report/Map Outputs

Detailed Report 📄

Export Geography 📁

Print Chart/Map 🖨

▼ Legends

- 2,458 - 3,914 Jobs
- 1,574 - 2,457 Jobs
- 1,088 - 1,573 Jobs
- 857 - 1,087 Jobs
- 772 - 856 Jobs

[Change Settings](#)

#### Job Counts by Census Tracts in 2014

#### Job Counts by Census Tracts in 2014 - Primary Jobs

	Total
<b>All Census Tracts</b>	<b>414,206</b>
<a href="#">600 (Bergen, NJ)</a>	3,914
<a href="#">482 (Bergen, NJ)</a>	3,750
<a href="#">521 (Bergen, NJ)</a>	3,713
<a href="#">103 (Bergen, NJ)</a>	3,706
<a href="#">80 (Bergen, NJ)</a>	3,693
<a href="#">351 (Bergen, NJ)</a>	3,619
<a href="#">546 (Bergen, NJ)</a>	3,585
<a href="#">340 (Bergen, NJ)</a>	3,497
<a href="#">541 (Bergen, NJ)</a>	3,490
<a href="#">372.02 (Bergen, NJ)</a>	3,471
<a href="#">421 (Bergen, NJ)</a>	3,434
<a href="#">140 (Bergen, NJ)</a>	3,393
<a href="#">175 (Bergen, NJ)</a>	3,361
<a href="#">304 (Bergen, NJ)</a>	3,323
<a href="#">451 (Bergen, NJ)</a>	3,293



# Distance/Direction

OnTheMap

LEHD Home Help and Documentation Reload Text-Only

**Distance/Direction Analysis**  
*Work to Home*

▼ Display Settings

Labor Market Segment Filter: All Workers

Year: 2014

▼ Map Controls

Color Key ■

Thermal Overlay

Point Overlay

Selection Outline

Identify  Zoom to Selection

Clear Overlays  Animate Overlays

▼ Report/Map Outputs

[Detailed Report](#)

[Export Geography](#)

[Print Chart/Map](#)

▼ Legends

- 5 - 203 Jobs/Sq.Mile
- 204 - 799 Jobs/Sq.Mile
- 800 - 1,792 Jobs/Sq.Mile
- 1,793 - 3,183 Jobs/Sq.Mile
- 3,184 - 4,971 Jobs/Sq.Mile

- 1 - 4 Jobs
- 5 - 25 Jobs

Change Settings

Job Counts by Distance/Direction in 2014  
All Workers

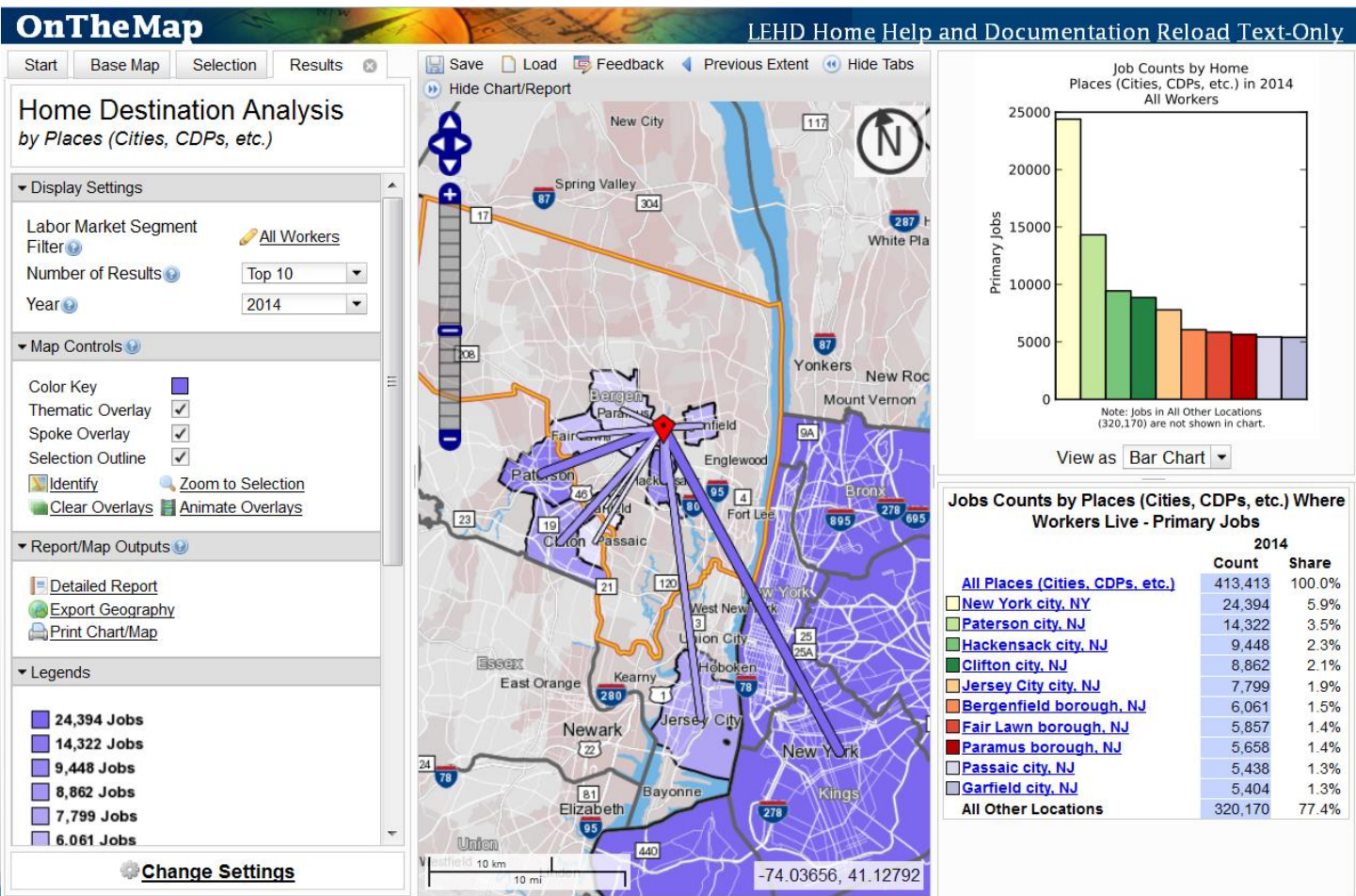
View as Radar Chart

**Jobs by Distance - Work Census Block to Home Census Block**

	2014	
	Count	Share
<b>Total Primary Jobs</b>	413,413	100.0%
<span style="color: #008000;">■</span> <b>Less than 10 miles</b>	235,535	57.0%
<span style="color: #90ee90;">■</span> <b>10 to 24 miles</b>	103,963	25.1%
<span style="color: #90ee90;">■</span> <b>25 to 50 miles</b>	43,539	10.5%
<span style="color: #ffff00;">■</span> <b>Greater than 50 miles</b>	30,376	7.3%



# Destination



# Inflow/Outflow

**OnTheMap**
LEHD Home Help and Documentation Reload Text-Only

Start Base Map Selection Results

Save Load Feedback Previous Extent Hide Tabs

Hide Chart/Report

## Inflow/Outflow Analysis

*enter your own subtitle*

**Display Settings**

Labor Market Segment Filter All Workers

Year 2014

**Map Controls**

Color Key

Flow Overlay

Selection Outline

Identify Zoom to Selection

Clear Overlays Animate Overlays

**Report/Map Outputs**

Detailed Report

Export Geography

Print Chart/Map

**Legends**

**Note:** Overlay arrows do not indicate directionality of worker flow between home and employment locations.

- Employed and Live in Selection Area
- Employed in Selection Area, Live Outside
- Live in Selection Area, Employed Outside
- Live in Selection Area, Employed Outside
- Analysis Selection

[Change Settings](#)

### Inflow/Outflow Job Counts in 2014

	240,937 - Employed in Selection Area, Live Outside
	241,730 - Live in Selection Area, Employed Outside
	172,476 - Employed and Live in Selection Area

### Inflow/Outflow Job Counts (Primary Jobs)

2014		
	Count	Share
<a href="#">Employed in the Selection Area</a>	413,413	100.0%
<a href="#">Employed in the Selection Area but Living Outside</a>	240,937	58.3%
<a href="#">Employed and Living in the Selection Area</a>	172,476	41.7%
<a href="#">Living in the Selection Area</a>	414,206	100.0%
<a href="#">Living in the Selection Area but Employed Outside</a>	241,730	58.4%
<a href="#">Living and Employed in the Selection Area</a>	172,476	41.6%

[Reset Highlighting](#)



# OnTheMap for Emergency Management



Hurricanes, Floods,  
Winter Storms



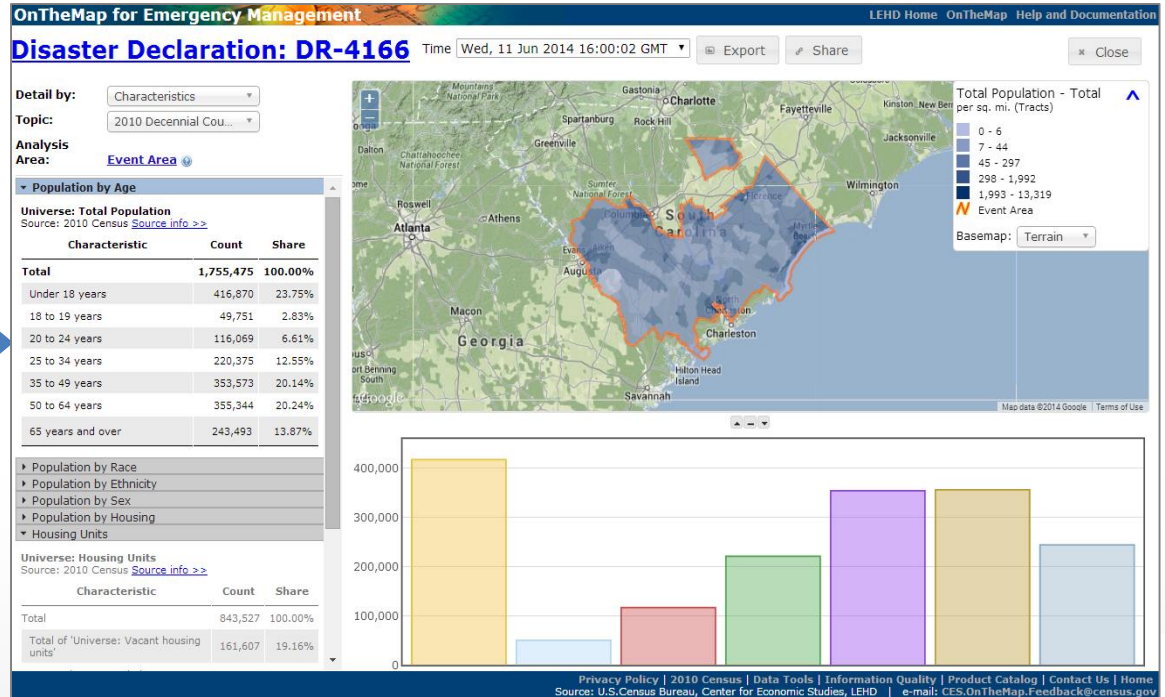
Disaster Areas



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



Search:

Filter

U.S. Census Bureau data for disasters, natural hazards, and weather events.

### Events as of 06/13/2016

#### Federal Disaster Declarations

DR-4223

Edwards County, TX, Duval County, TX, Harris County, TX and 110 other Counties

Affected Population: 17,594,564

DR-4245

Harris County, TX, Brazoria County, TX, Hidalgo County, TX and 19 other Counties

Affected Population: 8,035,628

DR-4214

Worcester County, MA, Barnstable County, MA, Plymouth County, MA and 7 other Counties

Affected Population: 5,723,468

DR-4261

Worcester County, MD, Baltimore County, MD, Frederick County, MD and 16 other Counties

Affected Population: 5,472,798

DR-4269

Harris County, TX, Montgomery County, TX, Coryell County, TX and 3 other Counties

Affected Population: 5,350,442

DR-4267

Westmoreland County, PA, Bedford County, PA, York County, PA and 8 other Counties

Affected Population: 4,784,674

EM-3374

Texas County, MO, Shannon County, MO, Franklin County, MO and 72 other Counties

Affected Population: 4,294,769

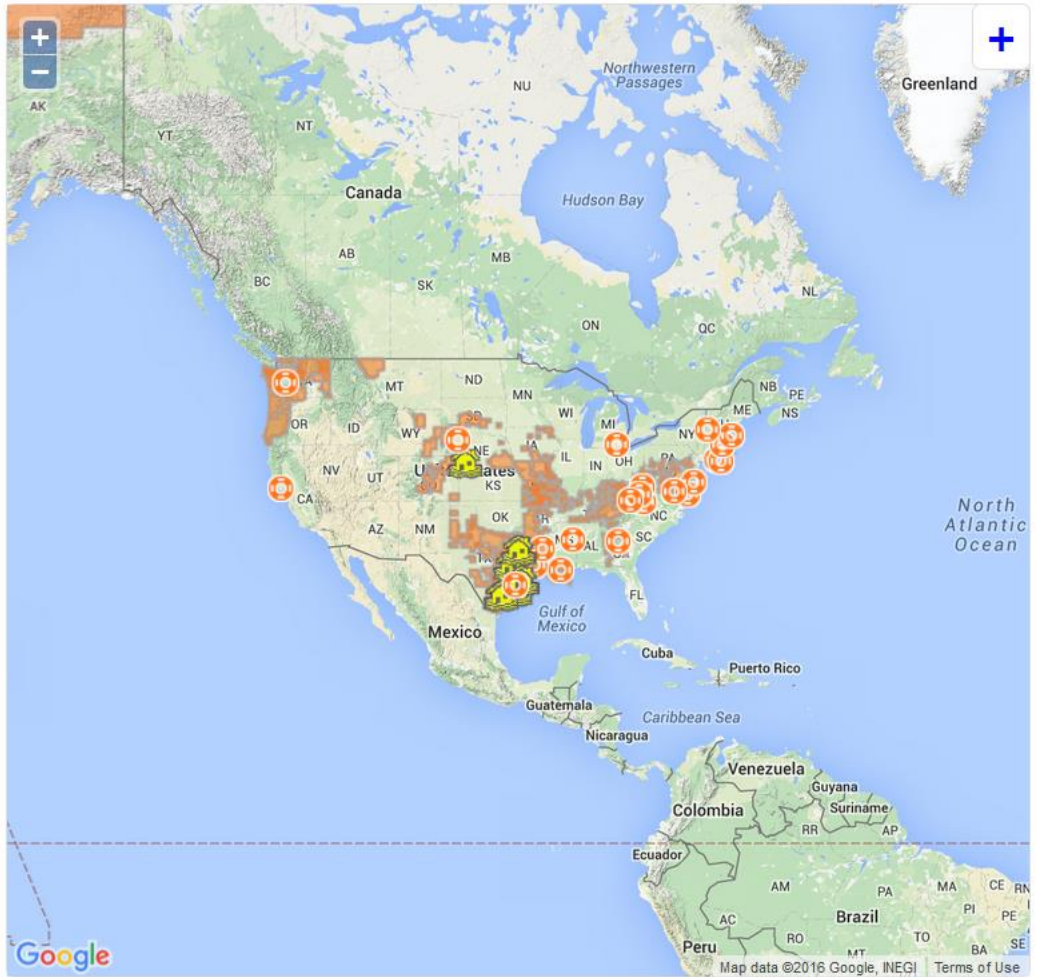
DR-4255

Texas, New Mexico

Affected Population: 3,682,423

DR-4250

Texas County, MO, Shannon County, MO, Franklin County, MO and 72 other Counties



# Hurricane Sandy

## Hurricane Sandy

Close

Event Class Wind History 34kn (Cumulative Swath) Time Tue, 30 Oct 2012 02:49:58 GMT Export

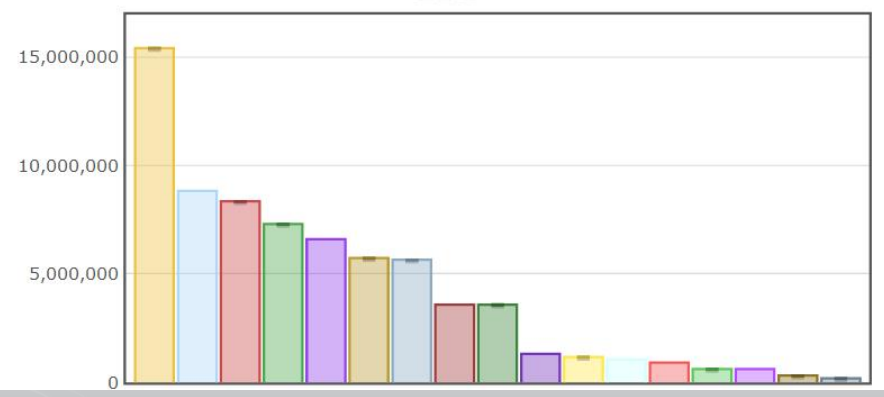
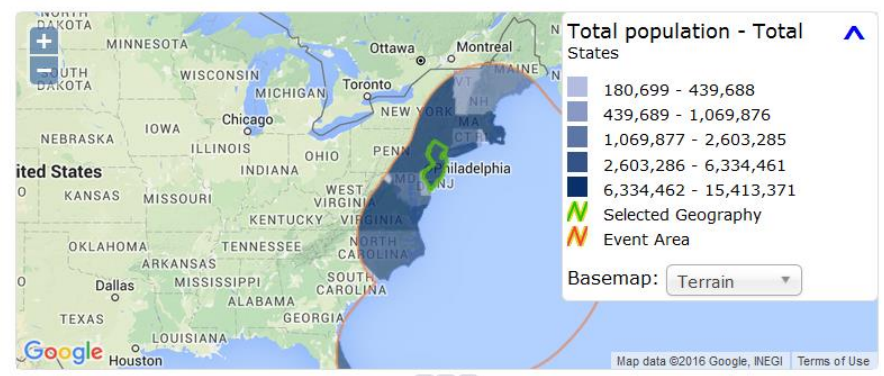
Share Geography

Variable:  
[Source: American Community Survey, 2009-2013. - Race - Total](#)

+ Select Areas Clear Highlighted Geography

States	Total Population	Event Area
New York <sup>1</sup>	15,413,371	2,838
<b>New Jersey</b>	<b>8,832,406</b>	<b>0</b>
Pennsylvania <sup>1</sup>	8,348,500	2,352
Virginia <sup>1</sup>	7,299,166	1,786
Massachusetts	6,605,058	0
Maryland <sup>1</sup>	5,727,216	2,218
North Carolina <sup>1</sup>	5,656,395	2,709
Connecticut	3,583,561	0
Florida <sup>1</sup>	3,579,019	10,796
New Hampshire	1,319,171	0
Maine <sup>1</sup>	1,173,369	1,654
Rhode Island	1,051,695	0
Delaware	908,446	0

<sup>1</sup> - This tabulation contains a derived estimate and margin of error.





# Web Addresses for Tools

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

# Takeaways

- 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

# Useful Links

## ■ QWI Explorer

- Video Walkthrough:  
[http://lehd.ces.census.gov/applications/help/qwi\\_explorer.html#!video\\_walkthrough](http://lehd.ces.census.gov/applications/help/qwi_explorer.html#!video_walkthrough)
- Example Scenarios:  
[http://lehd.ces.census.gov/applications/help/qwi\\_explorer.html#!example\\_scenarios](http://lehd.ces.census.gov/applications/help/qwi_explorer.html#!example_scenarios)

## ■ OnTheMap

- Getting Started:  
<http://lehd.ces.census.gov/doc/help/onthemap/GettingStartedwithOnTheMap.pdf>
- Analysis Guides:  
[http://lehd.ces.census.gov/applications/help/onthemap.html#!analysis\\_guides](http://lehd.ces.census.gov/applications/help/onthemap.html#!analysis_guides)
- Other Tutorials:  
[http://lehd.ces.census.gov/applications/help/onthemap.html#!more\\_tutorials](http://lehd.ces.census.gov/applications/help/onthemap.html#!more_tutorials)



# *Thank You!*

- Local Employment Dynamics
  - <http://www.lehd.ces.census.gov>
- Questions and Feedback
  - [CES.OnTheMap.Feedback@census.gov](mailto:CES.OnTheMap.Feedback@census.gov)
  - [CES.QWI.Feedback@census.gov](mailto:CES.QWI.Feedback@census.gov)
  - [CES.Local.Employment.Dynamics@census.gov](mailto:CES.Local.Employment.Dynamics@census.gov)