OnTheMap Version 3

Getting Started with OnTheMap Version 3

Local Employment Dynamics | **All About Jobs**

Welcome to **OnTheMap Version 3,** an online mapping application – available at <http://lehd.did.census.gov/> – that shows where workers are employed and where they live.

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What is OnTheMap Version 3?

OnTheMap Version 3 has been developed through a unique partnership between the U.S. Census Bureau and partner states through the Local Employment Dynamics (LED) partnership. **OnTheMap** currently provides data covering 45 partner states. Funding support is provided by the Employment and Training Administration (ETA) of the U.S. Department of Labor.

OnTheMap provides an easy-to-use online interface for creating, viewing, printing and downloading workforce related maps, demographic profiles, and reports. Use **OnTheMap** for answers to these and other workforce, transportation, and economic development questions:

- Where do workers live who are employed in a particular geographic area?
- What are the workplace destinations for workers living in a particular community or neighborhood?
- How do specific employment areas compare in terms of worker origin patterns, worker ages, annual earnings, and industry-sector employment? How are these areas changing over time?
- How many jobs are located within five, ten, and twenty miles of a planned employment training center or transit stop?
- How many workers live along a transit corridor and work downtown or in some other area along the same corridor?
- How many potential customers/employees live or work near a potential site location?

The employment data used in this application are derived from payroll tax (unemployment insurance) payment records maintained by each state. The states assign

employer locations, while individual worker home locations are assigned by the Census Bureau using data from multiple Federal agencies. Age, earnings, and industry profiles are compiled by the Census Bureau using each state's records along with other supplemental Census Bureau source data. Final compilations and confidentiality modeling is performed by the Census Bureau.   **OnTheMap Version 3** contains historical data for 2002, 2003, 2004, 2005, and 2006, for most participating states.

System Requirements

Any person can access **OnTheMap** using a standard Internet browser and a personal computer capable of viewing information on the Internet. Make sure the most current versions of the browser and operating system software have been loaded. Users will need to enable "Pop-Up Windows" in your browser settings in order to generate the workforce maps and reports.

The application produces detailed maps and reports. Performance and map quality can differ greatly depending on computers and monitors. Users will achieve the best performance using a computer equipped with at least 1GB of RAM, a high performance graphics card, and a monitor capable of displaying higher resolution graphics. A screen resolution of at least 1280 by 1024 pixels is strongly recommended.

Network-based users will typically have no problems with this application. **OnTheMap Version 3** uses no permanent cookies and requires no plug-in applets that could potentially be rejected by a network's security settings.

For users with impaired vision or having difficulty viewing the maps, a text-only version of the application is available through the OnTheMap entry page. The Text-Only tool provides a variety of reports that can be generated without using the interactive map viewer.

Getting Started

OnTheMap Version 3 is intended for both novice and experienced computer users. The online mapping tools used in this application are consistent with those used by other leading Internet mapping sites. Map overlays and reports can be produced with just a few keystrokes.

o **Fundamental Concepts**

Home Area or Workplace Area? – Maps can be produced that display where workers live or where workers are employed, and also where workers are living or working within a selected area. You can reorient a map by simply changing setting in Step 1 of the Analysis tab.

Area Profile Analysis or Shed Analysis? – OnTheMap Version 3 allows users to produce two different types of analyses: "Area Profiles" or "Commute/Labor Sheds". An Area Profile Analysis produces a map showing the location and distribution of workers living or working inside the selected study area (Note: OnTheMap Versions 1 and 2 produced only Travel Shed maps). A Commute/Labor Shed Analysis produces a map showing where workers are employed who live in the selection area (called a "Commute Shed") or where workers live who are employed in the selection area (called a "Labor Shed"). Both analysis types have their own associated reports.

An Area Profile report provides a demographic profile (age, earnings, and industry) of workers in the selected area, as well as Quarterly Workforce Indicators (QWI) if the selection area is a workplace. A Shed report shows the home locations (if a Workplace Area was selected) or work locations (if a Home/Residence Area was selected) of workers aggregated in up to three reference geographies (e.g. cities, counties, ZIP codes, states).

Points and Thermals – Home and work locations are displayed in map overlays consisting of "Points" (round dots) or "Thermals" (shaded contours – similar to those used in weather maps). Points show where workers are clustered on the map with each dot representing a specific home or work location. The larger the dot, the more workers there are that live or work at that aggregation (e.g. Census Block, Census Tract, or County). Thermals show the density of workers measured in terms of workers per square mile. One or both of the overlays (points/thermals) can be viewed in the base map at the same time. A map legend showing the values assigned to each dot and thermal layer appears in the Map Key tab when an overlay is activated.

Creating Maps and Reports – Users follow a five-step process in producing any map and report:

1. Choose the geographic layers you wish to have visible on your map (Layers tab).
2. Select from the available data options in Step 1 of the Analysis tab (e.g. Live or Work, Years, Job Type, and Labor Market Segment).
3. Define a geographic study area using the available tools in Step 2 of the Analysis tab.
4. Select between an Area Profile Analysis and a Shed Analysis, and then click Go! to generate the analysis (Step 4 of the Analysis tab).
5. View the map overlays and report and export the resulting information in the desired report format.

o **Map Navigation**

In the OnTheMap entry page, the application displays the map viewer used to display the base map and point and thermal overlays. The map viewer provides a number of tools for navigating within the map view.

Panning – Users can move laterally across the map by clicking on the map and dragging the map in the direction you wish to move.

Zooming in or out – There are several different ways to change the map scale (i.e., move in or pull back from the map). The Zoom Ladder tool is displayed in the upper left portion of the map viewer. Move in closer to the map by clicking on the "+" button or by clicking on the ladder-like panel in the direction of the "+" button. Move away from the map by clicking on the "-" button or by clicking on the ladder-like panel in the direction of the "-" button.

o **The Control Panel**

The Control Panel appears to the left of the map viewer and contains all of the settings, legends and tools for interacting with the map. There are five control tabs at the top of the panel.

- **Search** – Use this tab to jump to a specific location on the map. Enter the name of a place (e.g., "Atlanta") in the entry box and then click on the correct option from those presented. Click on the "All Place Names" box to see the types of places that are supported or to narrow the search to a specific place name category.

- **Map Key** – This tab provides a map scale, north arrow, map layer key, and the overlay legends.

- **Layers** – Users can customize their base map display by toggling layers on or off. Layer names that appear grayed-out are not available at the current zoom level.

- **Analysis** – This tab contains all of the settings and tools needed to produce workforce map overlays and reports. By working through the four successive steps, users can choose the data settings (or accept the defaults), select a study area, and define the map/report output.

- **Results** – This tab becomes active after all four steps have been completed in the Analysis tab. Here, users are given map display options, a summary of the analysis settings, and optional formats for downloading custom maps and reports.

o **Walkthrough Example**

OnTheMap offers fast access to labor market information. With just a few keystrokes, users can zoom to a particular location, define a specific study area and analysis options, and produce a map and set of reports specific to that area. The following example shows the steps to create a Labor Shed map overlay and report.

## Labor Shed Map and Report – Nashville, Tennessee

1. Upon entering the OnTheMap Version 3 website, type "Nashville" in the place name entry box and press Enter. (Note that you can also click on the map to jump to a regional-level map.)
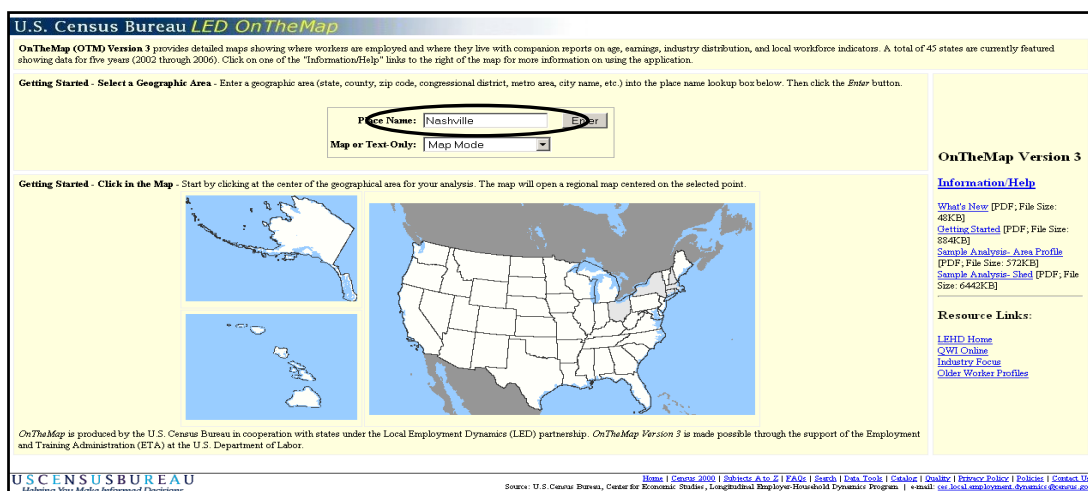
2. The map viewer is displayed with the place name options shown in the control panel at the left. Click on "Nashville-Davidson (balance), TN" in the Cities grouping to zoom to a map of Nashville.
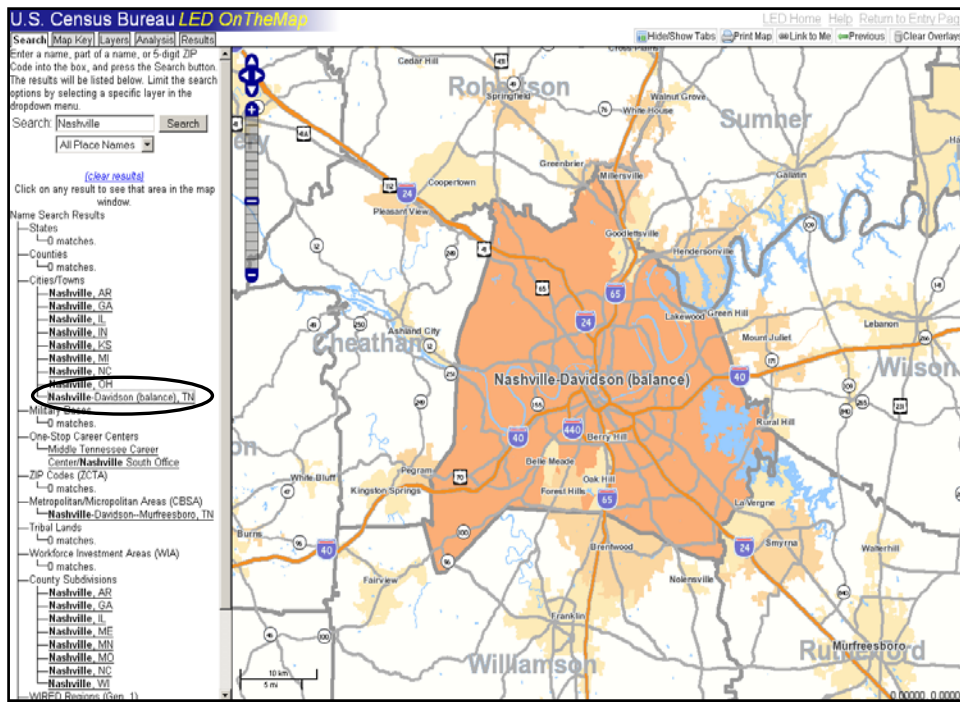
3. Click on the Analysis tab at the top of the control panel. A form is displayed with data settings. Accept the default *Live or Work* option (Workplace Area), the default *Year* (2006), the default *Job Type* (Primary Jobs), and the default *Labor Market Segment* (All Workers). Then click "Next" to continue to the next step.

4. The Study Area Selection step offers a variety of tools for defining a geographic study area. Click on the blue Layer tool bar and select "Cities/Towns" in the drop down box. Now, left-click once inside the Nashville city boundary using your mouse. Nashville is selected when a blue outline of the city boundary is shown in the map viewer and Area Shape box in the Control Panel. Click "Next" to continue.
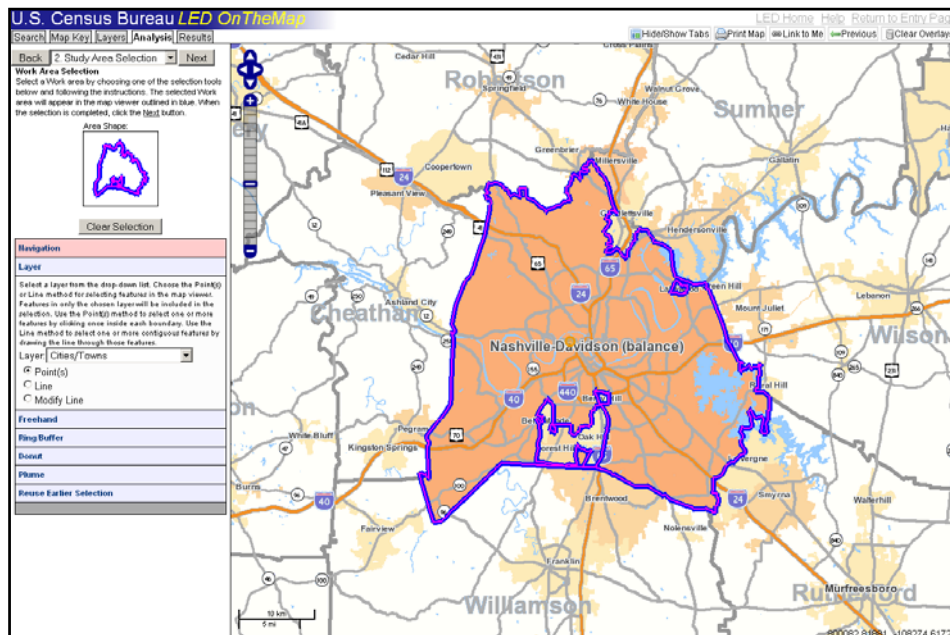
5. The Advanced Area Selection step offers additional selection options that permit users to create a Paired Area to limit the "destinations" (whether work or home) of the first selection area, or modify the existing selection area. Click "Next" to keep the default option (Skip this Step).

6. In the Map Overlay/Report step, select the "Labor Shed Analysis" option and accept the default report Rollup categories and Map Precision. Click "Go!" to generate the map overlays and report.
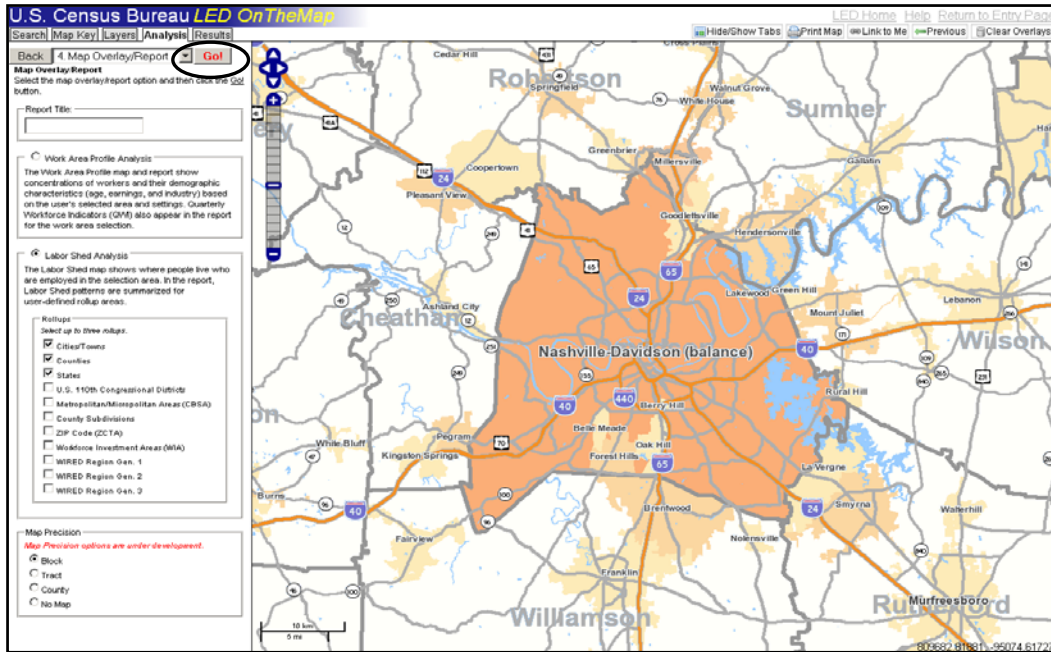
7. When the application finishes processing, the base map will have point and thermal overlays showing where workers live who are employed in the City of Nashville (called a Labor Shed map overlay). The map includes both a Census block-level point overlay showing where worker's residences are clustered and a thermal overlay showing concentrations of residential areas of workers employed in Nashville. The Results tab is now active, and offers multiple display options for the overlay map. Turn off the "Points" overlay by click on the box under 2006 to more clearly show labor force density in and around Nashville. Feel free to zoom in to particular areas of interest in order to get a closer look (using the Scale Ladder tool in the top left of the map viewer). A summary of the analysis settings used to create the overlay map is also provided at the bottom of the Results tab.

8. Click on the Map Key tab for help in interpreting the thermal overlay. The legend shows that the darkest residential areas have the highest concentration of workers employed in the City of Nashville – between 525 and 1051 workers per square mile for 2006.
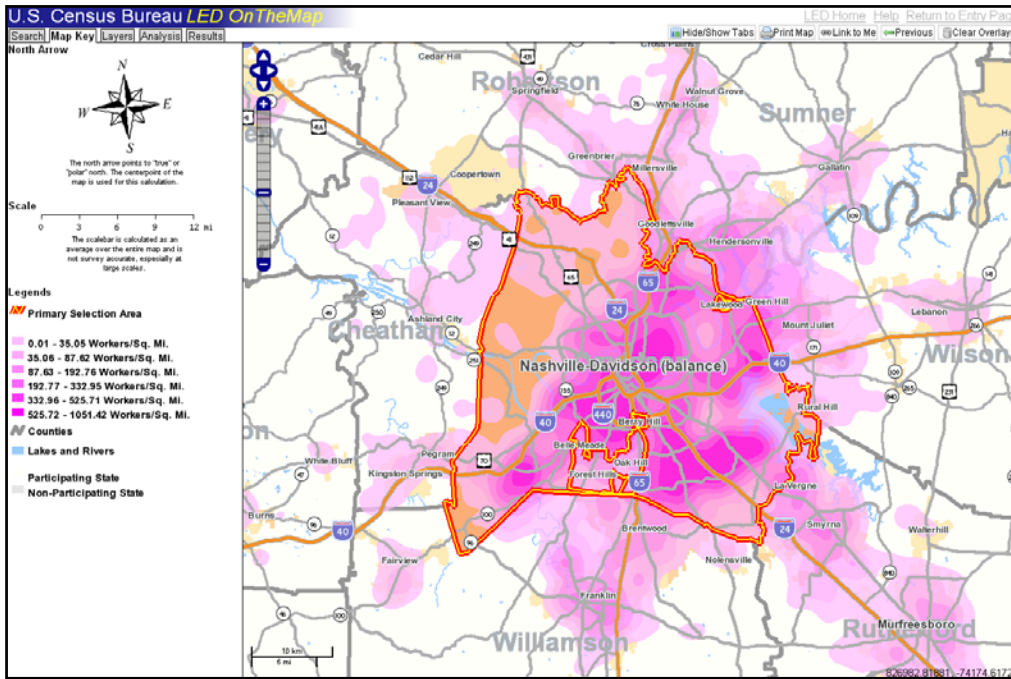
9. Go back to the Results tab, and click on the HTML report output option link in the middle of the Control Panel. A tabular report will appear showing worker counts associated with the mapped labor shed.

Labor Shed Report -- Where Workers Live that are Employed in the Selection Area

Jobs Total	2006	
	Count	Share
Jobs Total	426,794	100.0%

Job counts in Cities/Towns Where Workers Live	2006	
	Count	Share
Nashville-Davidson (balance), Tennessee	194,094	45.5%
Hendersonville, Tennessee	11,128	2.6%
Franklin, Tennessee	10,200	2.4%
Murfreesboro, Tennessee	8,584	2.0%
Memphis, Tennessee	7,854	1.8%
Brentwood, Tennessee	6,763	1.6%
Clarksville, Tennessee	6,594	1.5%
Smyrna, Tennessee	6,110	1.4%
Mount Juliet, Tennessee	5,508	1.3%
La Vergne, Tennessee	5,413	1.3%
All Other Locations	164,546	38.6%

Job counts in Counties Where Workers Live	2006	
	Count	Share
Davidson Co., Tennessee	202,119	47.4%
Rutherford Co., Tennessee	29,309	6.9%
Williamson Co., Tennessee	28,765	6.7%
Sumner Co., Tennessee	26,397	6.2%
Wilson Co., Tennessee	21,145	5.0%
Robertson Co., Tennessee	10,897	2.6%
Shelby Co., Tennessee	10,692	2.5%
Cheatham Co., Tennessee	10,083	2.4%
Montgomery Co., Tennessee	8,565	2.0%
Dickson Co., Tennessee	6,396	1.5%
All Other Locations	72,426	17.0%

Job counts in States Where Workers Live	2006	
	Count	Share
Tennessee	419,527	98.3%
Kentucky	2,877	0.7%
Mississippi	944	0.2%
Georgia	920	0.2%
Alabama	700	0.2%
All Other Locations	1,826	0.4%

Report Settings	
Report Year(s):	2006
Job Type:	Jobs
Labor Market Segment:	All Workers
Primary Selection Layer:	Cities/Towns
Primary Selection Features:	Nashville-Davidson (balance)
Advanced Area Selection:	Ignored.
Map Shows:	Blocks
Query ID:	122054357127558

10. Now go back through the Analysis tab again trying different map and report settings.   For example, change the *Live or Work* setting (in Step 1) to "Home/Residential Area" and accept the current settings in the other three steps to produce a Nashville Commute Shed analysis. This map overlays show where workers that live in Nashville are employed. Display the points showing employment locations in 2006. Zoom in closer to see the employment detail in downtown Nashville. In order to view the companion report, click on one of the Report Output Options located in the middle of the Results tab.
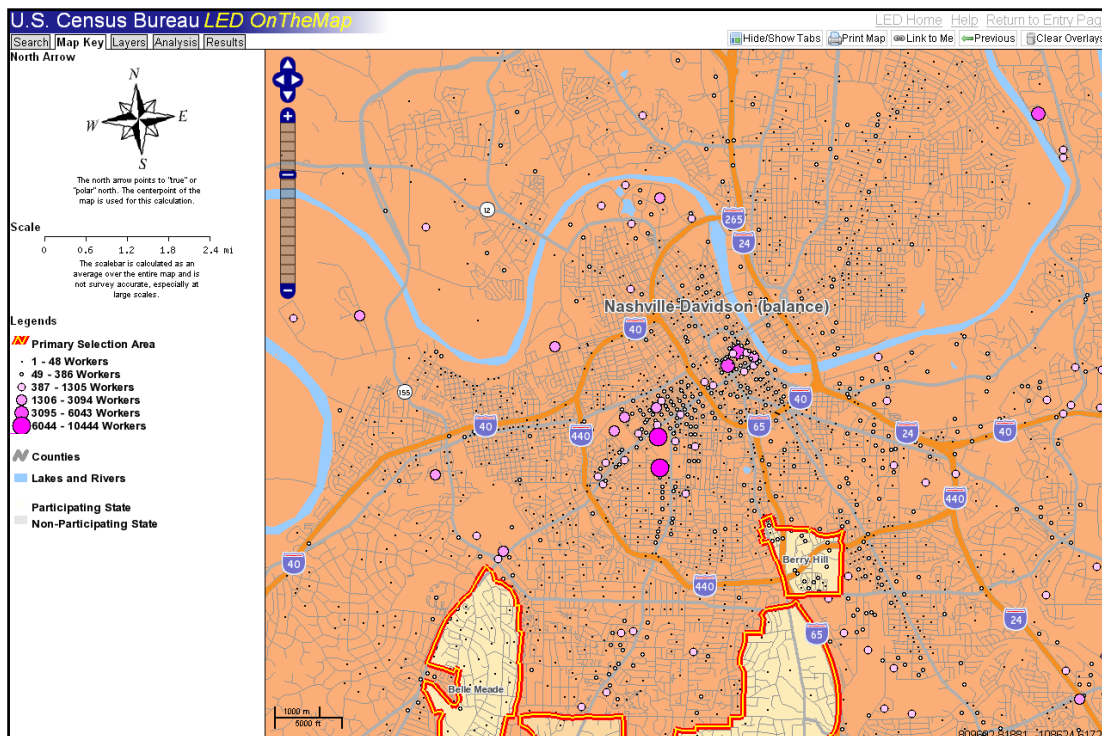
o **Troubleshooting**

For more information on the OnTheMap Version 3 application, please browse through the additional documentation located at:

http://lehd.did.census.gov/led/datatools/onthemap3.html

For more information on the features new to OnTheMap since the last version, please check out the "Whats New" document located at:

http://lehd.did.census.gov/led/datatools/doc/WhatsNewinOnTheMap3.pdf