Getting Started with OnTheMap

Local Employment Dynamics — All About Jobs

Welcome to **OnTheMap,** an online mapping application that shows where people work and where workers live.

What is OnTheMap?

OnTheMap 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 47 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 young 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 and among different demographics?
- What percentage of high-income earners live and work within a certain city, versus those who commute to a rival city?
- How many high-wage 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** contains historical data for 2002, 2003, 2004, 2005, 2006, 2007, and 2008, for most participating states.

System Requirements

Any person can access **OnTheMap** using a standard Internet browser (Firefox version 2.0 or higher, Internet Explorer version 7.0 or higher, or Safari version 3 or higher) 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** 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 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.

- **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 settings in Step 1 of the Analysis tab.

  Area Profile Analysis or Shed Analysis? – OnTheMap 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. 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, depending on the Map Precision setting in Step 3 of the Analysis tab). 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. The overlay legends showing the values assigned to each dot and thermal layer appears in the Legends section of the Results 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 (Base Map 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 3 of the Analysis tab).
5. View the map overlays and report and export the resulting data in the desired report and/or overlay format.

- **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.

- **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 four 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 location (e.g., "Atlanta") in the entry box and then click on the correct option

from those presented. Click on the "Search All Names" box to see the types of places that are supported or to narrow the search to a specific geographic type.

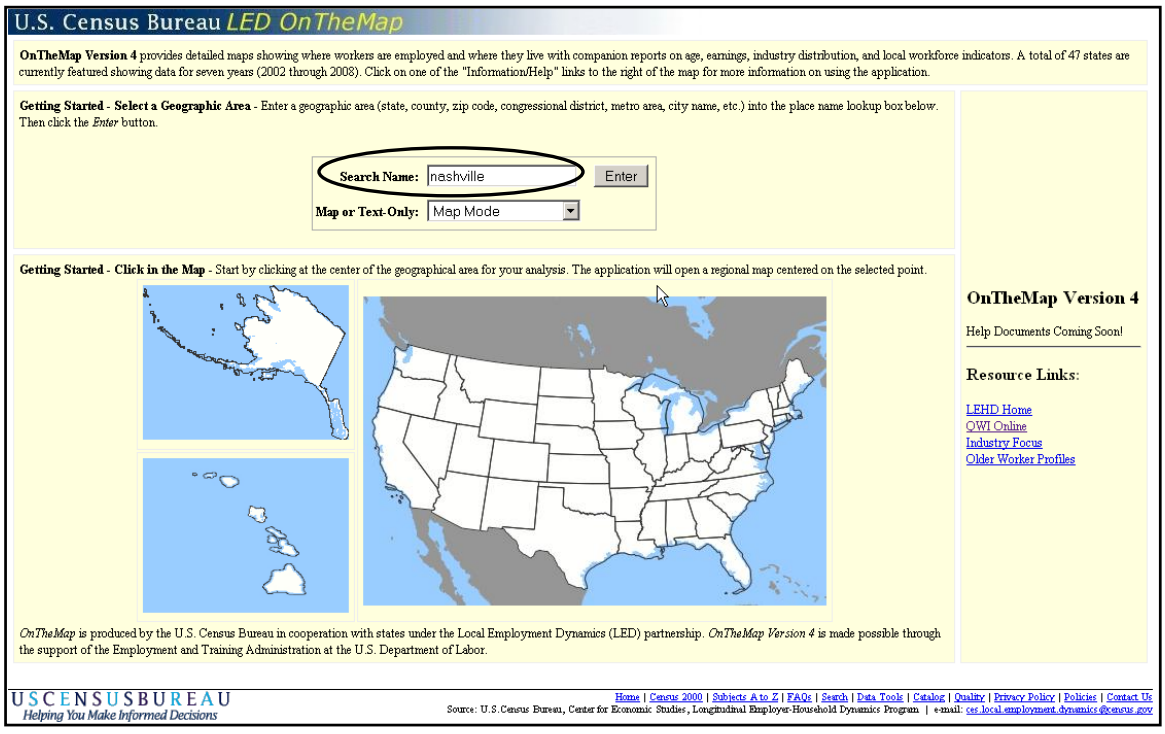
- Base Map – Users can customize their base map display by toggling layers on or off. Layer names that appear grayed-out are not available at the current zoom level.
- Analysis – This tab contains all of the settings and tools needed to produce workforce map overlays and reports. By working through the three 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 the three steps have been completed in the Analysis tab. Here, users are given overlay display controls, options to view/export report and overlay data, Legends for the points and thermals, and a summary of the analysis settings.

o Walkthrough Example

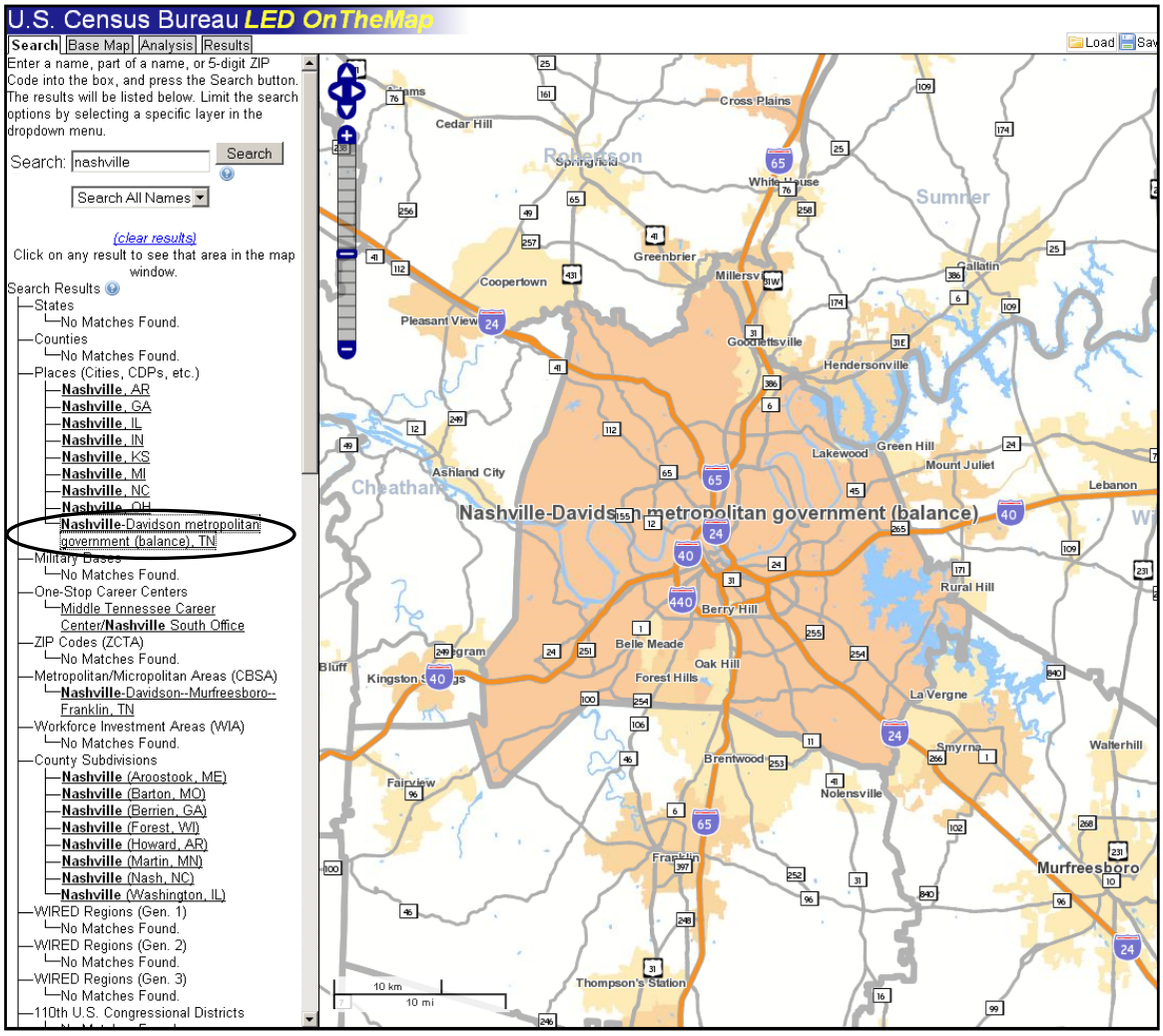
OnTheMap offers fast access to labor market information. With just a few keystrokes, users can zoom to a particular location, define a specific study area and analysis options, and produce a map and set of reports specific to that area. The following example shows the steps to create a Labor Shed map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

Labor Shed Map and Report – Nashville, Tennessee (Davidson County)

1. Upon entering the **OnTheMap** website, type "Nashville" in the *Search Name* entry box and press Enter. (Note that you can also click on the map to jump to a regional-level map.)

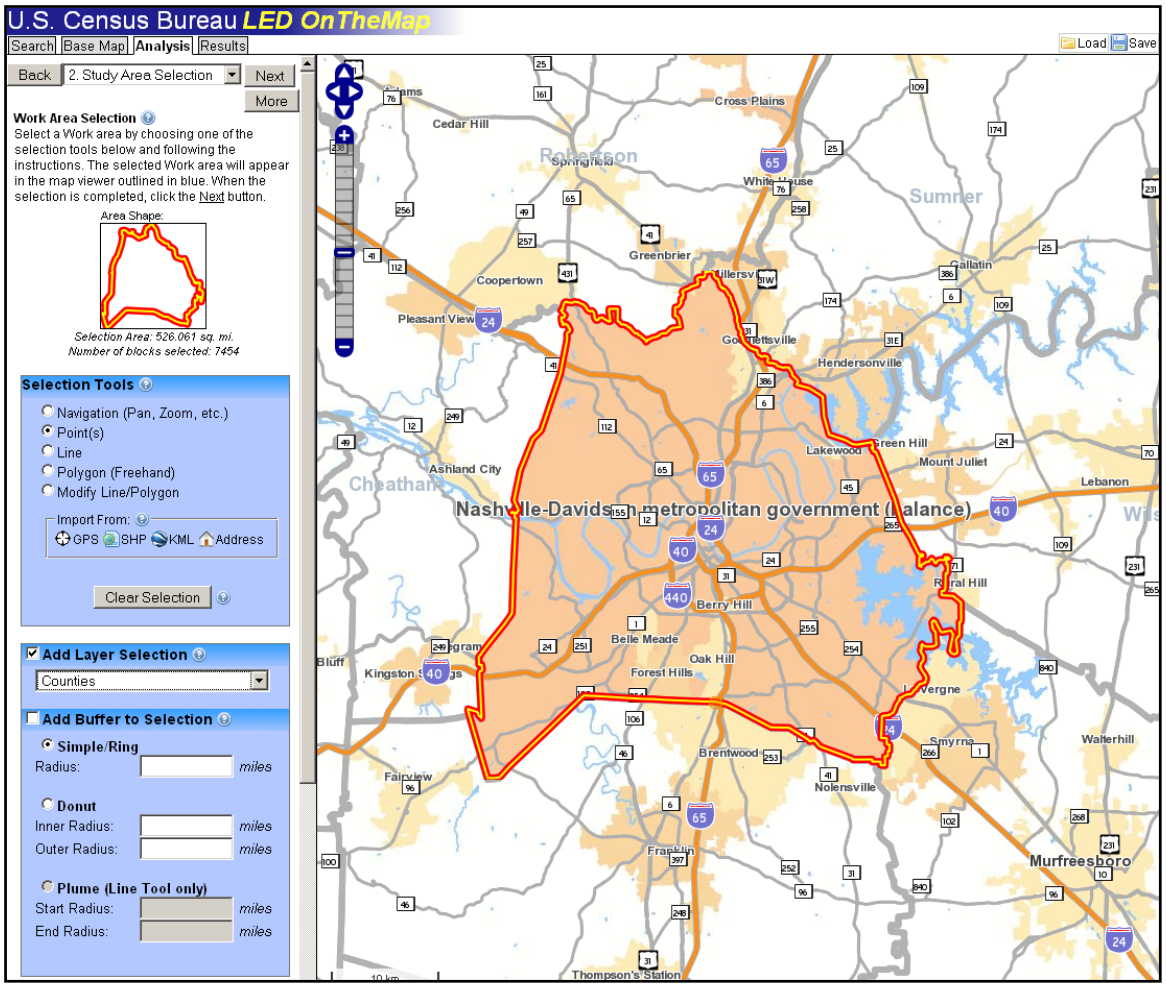


2. The name results appear in the **Search** tab in the control panel to the left, with the map viewer appearing in the center of the screen. Click on "Nashville-Davidson metropolitan government (balance), TN" in the Places (Cities, CDPs, etc.) grouping to zoom to a map of Nashville.



3. Click on the **Analysis** tab at the top of the control panel. Step 1 of the **Analysis** tab displays a set of data settings. Accept the default *Live or Work* option (Workplace Area), the default *Year* (2008), the default *Job Type* (Primary Jobs), and the default *Labor Market Segment* (All Workers). Then click "Next" to continue to the next step.

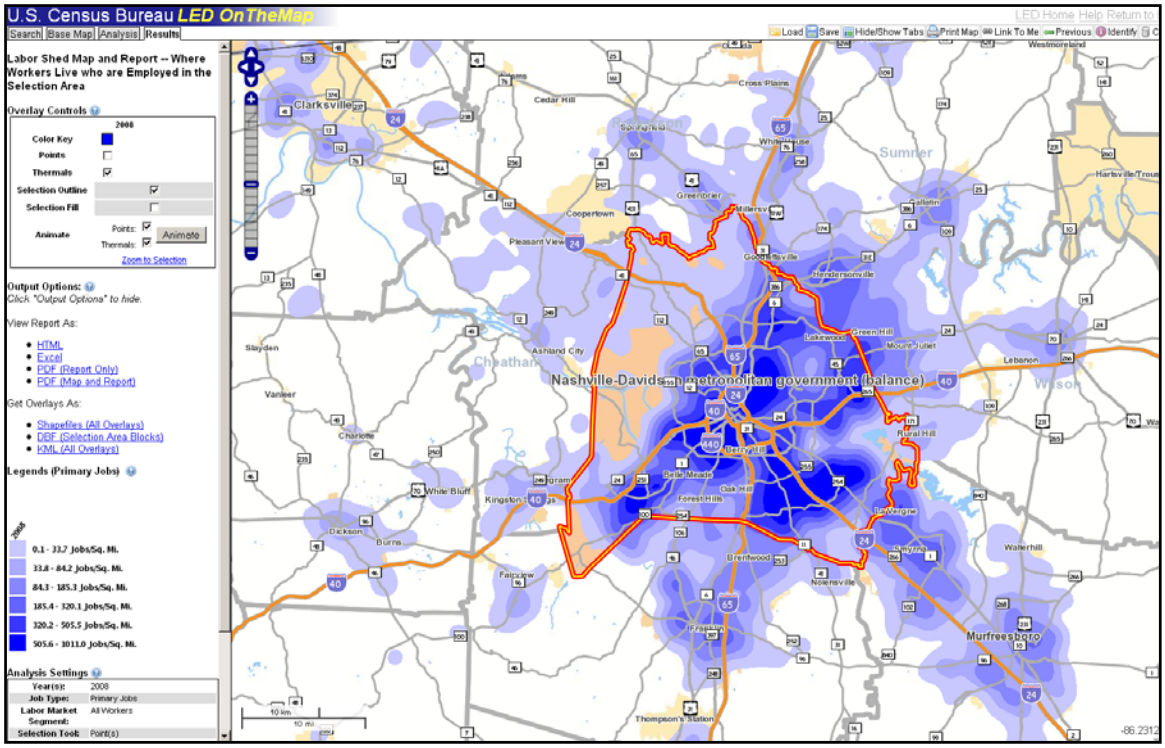
4. The Study Area Selection step offers a variety of tools for defining a geographic study area. Because the city of Nashville was chosen in the Search tab, the city is already selected (outlined in red) as the area for analysis. Click on the dropdown box in the *Add Layer Selection* option, and change the layer type from "Places (Cities, CDPs, etc.)" to "Counties." The red outline will change from the city of Nashville to the county containing Nashville (Davidson county). Click "Next " to continue.



5. 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.

6. When the application finishes processing, point and thermal overlays appear on top of the base map showing where workers live who are employed in Davidson county (called Labor Shed map overlays). 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 Davidson County. In the control panel, the **Results** tab offers an analysis title, Overlay Controls, Output Options, Legends, and Report Settings.

7. Using the Overlay Controls at the top of the **Results** tab, turn off the *Points* overlay by clicking the appropriate checkbox under "2008." The thermal overlay that remains clearly shows the variable density of residence locations in and around the Nashville metro area. The legend indicates that the darkest residential areas have the highest concentration of workers employed in Davidson county – between 505 and 1011 workers per square mile for 2008. 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 corner of the map viewer).



8. 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. The default geographic areas shown in the report (called Rollups) are Places (Cities, CDPs, etc.). Counties, and States. Other Rollup options are available in Step 3 of the **Analysis** tab.

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

Total Primary Jobs	2008	
	Count	Share
Total Primary Jobs	436,265	100.0%

Jobs in Places (Cities, CDPs, etc.) Where Workers Live	2008	
	Count	Share
Nashville-Davidson metropolitan government (balance), TN	192,008	44.0%
Hendersonville city, TN	11,427	2.6%
Franklin city, TN	9,846	2.3%
Murfreesboro city, TN	9,728	2.2%
Memphis city, TN	7,832	1.8%
Smyrna town, TN	7,190	1.6%
La Vergne city, TN	7,096	1.6%
Brentwood city, TN	6,404	1.5%
Clarksville city, TN	5,329	1.2%
Mount Juliet city, TN	4,795	1.1%
All Other Locations	174,610	40.0%

Jobs in Counties Where Workers Live	2008	
	Count	Share
Davidson County, TN	199,953	45.8%
Rutherford County, TN	35,593	8.2%
Williamson County, TN	27,784	6.4%
Sumner County, TN	27,719	6.4%
Wilson County, TN	20,110	4.6%
Robertson County, TN	11,673	2.7%
Shelby County, TN	11,488	2.6%
Cheatham County, TN	10,076	2.3%
Montgomery County, TN	7,778	1.8%
Knox County, TN	6,675	1.5%
All Other Locations	77,416	17.7%

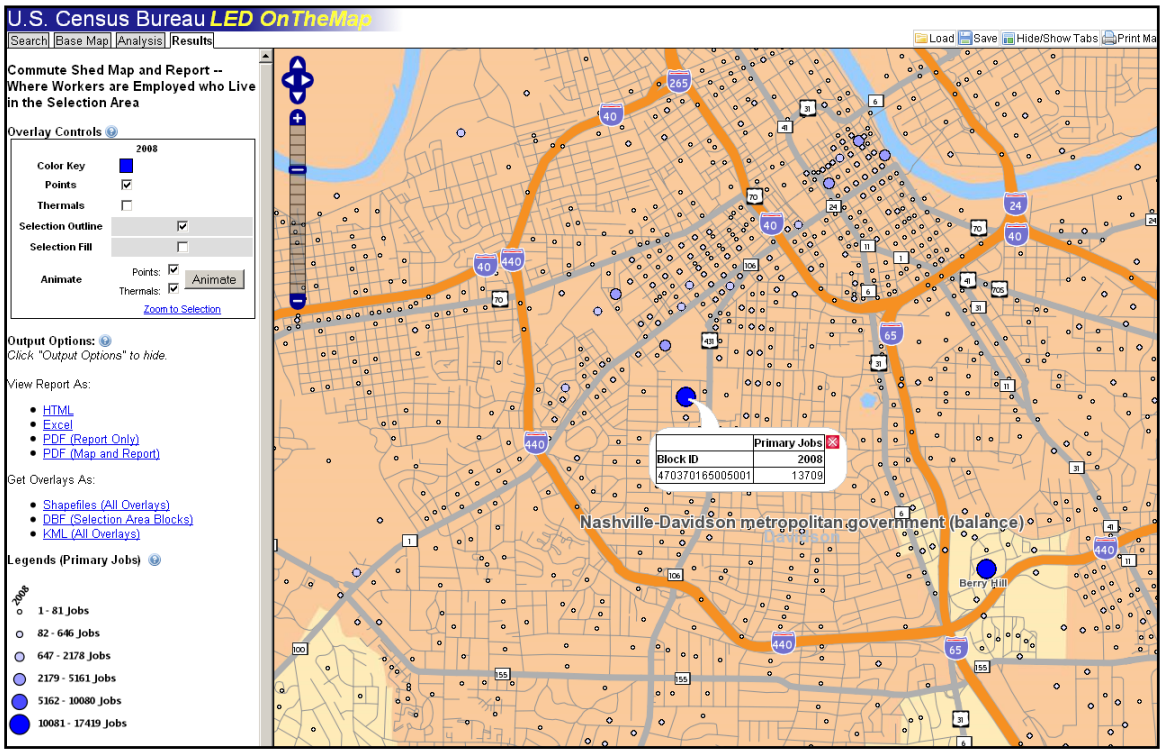
Jobs in States Where Workers Live	2008	
	Count	Share
Tennessee	425,609	97.6%
Kentucky	3,185	0.7%
Mississippi	1,565	0.4%
Georgia	1,522	0.3%
Alabama	1,200	0.3%
All Other Locations	3,184	0.7%

Report Settings	
Year(s):	2008
Job Type:	Primary Jobs
Labor Market Segment:	All Workers
Selection Tool:	Point(s)
Add Layer Type:	Counties
Feature Name(s):	Davidson
Map Precision:	Blocks
Selected Block Count:	7454
Query ID:	126055970532528
Report Generation Date:	Version 4.0 generated on 12/11/2009 14:29

Data Sources

US Census Bureau, LED OnTheMap Origin-Destination Database (Beginning of Quarter Employment, 2nd Quarter 2008, 2007, 2006, 2005, 2004, 2003, and 2002)

9. Now go back to the **Analysis** tab to try 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 two steps to produce a Davidson Commute Shed analysis. The map shown below displays employment locations in downtown Nashville of workers living Davidson County in 2008. The Identify tool (Identify), located above the map viewer, is used to get details about individual points in the overlay. Click the tool, and then click an individual point to get the Census block's ID and count of jobs. In order to view the companion report, click on one of the Output Options for reports located in the middle of the Results tab.



o **Troubleshooting**

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

http://lehd.did.census.gov/led/datatools/onthemap4.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/WhatsNewinOnTheMap4.pdf