

Getting Started with OnTheMap

Local Employment Dynamics

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

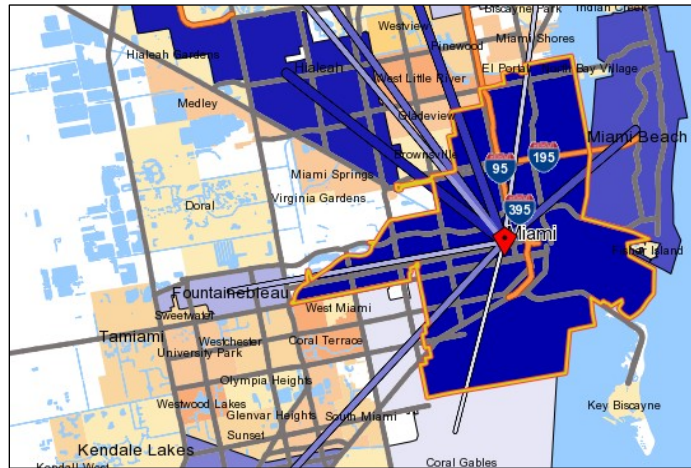
What is OnTheMap?

OnTheMap has been developed through a unique partnership between the U.S. Census Bureau and 50 partner states (plus the District of Columbia) through the Local Employment Dynamics (LED) partnership.

OnTheMap provides an easy-to-use online interface for creating, viewing, printing and downloading workforce related maps, demographic profiles, and reports. Additionally, **OnTheMap** is capable of answering scenario questions in workforce, transportation, and economic development such as:

- Where do young workers live who are employed in a specific geographic area?
- Where 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, monthly earnings, and industry-sector employment? How are these areas changing over time and among different demographics?
- What percentage of high-wage workers live and work within a city, versus those who commute to a nearby city?
- How many workers that earn more than \$3,333 a month 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 candidate 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 (QCEW data), while individual worker home locations are assigned by the U.S. Census Bureau using data from multiple Federal agencies. Age, earnings, and industry profiles are compiled 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 annual historical data for 2002 through 2017 for most participating states.



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.

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 a few settings and resubmitting the analysis.

What Type of Analysis? – **OnTheMap** allows users to produce several different types of analyses that provide a wide variety of output results. All analysis types have their own associated map overlays, charts, and reports.

1. [Area Profile Analysis](#) generates results showing the location and characteristics of workers living or working inside the selected study area.
2. [Area Comparison Analysis](#) generates results showing the count and characteristics of workers employed or living in locations contained by the selected study area. The "Areas to Compare:" dropdown determines the type of locations to be compared.
3. [Distance/Direction Analysis](#) generates results showing the distance and direction totals between residence and employment locations for workers employed or living in the selected study area.
4. [Destination Analysis](#) generates results showing the home or work destinations of workers employed or living in the selected study area. Select the geographic destination type (i.e. counties, cities, tracts) using the "Destination Type:" dropdown.
5. [Inflow/Outflow Analysis](#) generates results showing the count and characteristics of worker flows in to, out of, and within the selected study area.
6. [Paired Area Analysis](#) generates results showing the location and characteristics of workers that share the selected home and work areas.

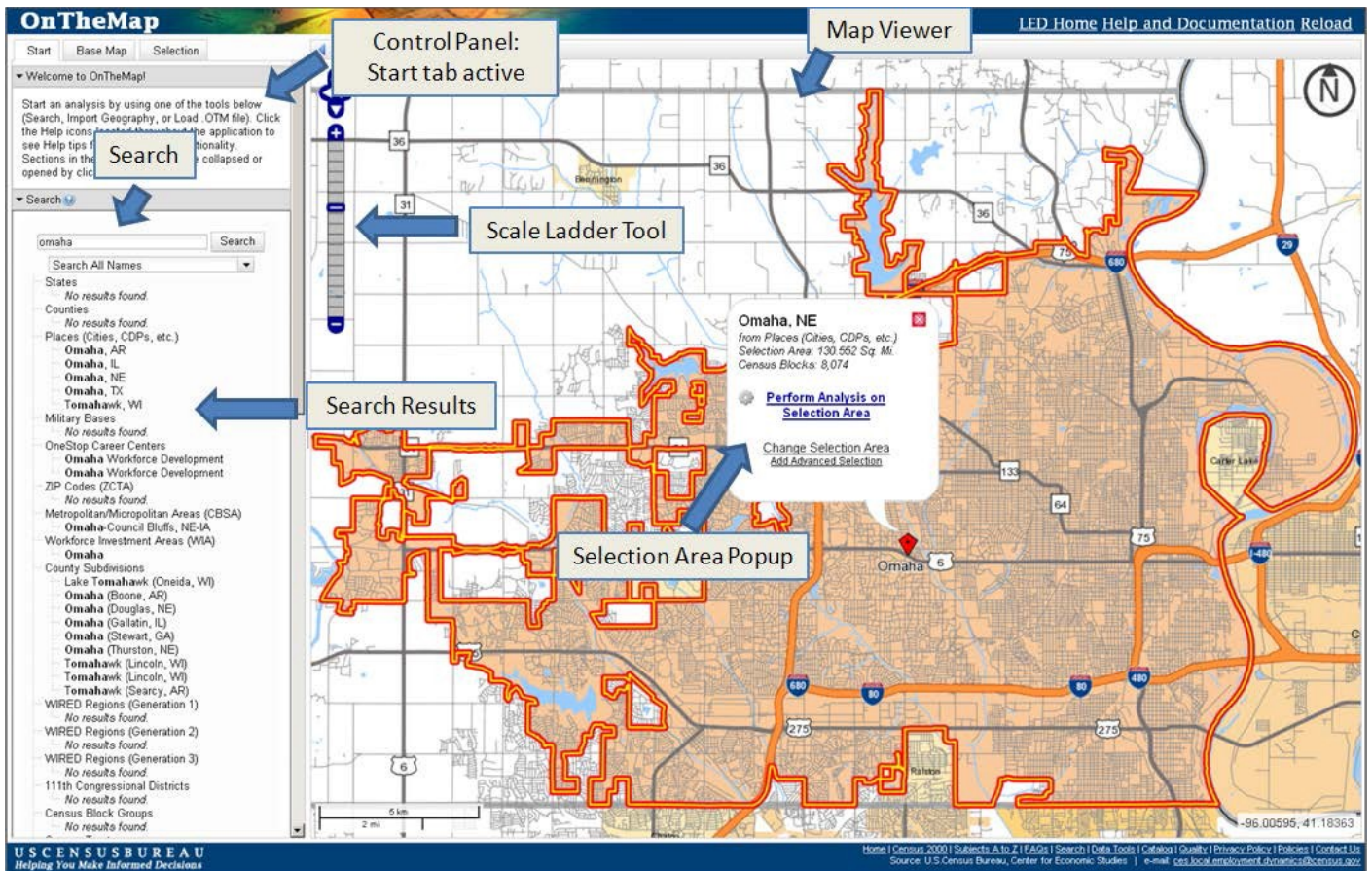
Map Overlays – Home and work locations are displayed in map overlays consisting of Point Overlays (round dots), Thermal Overlays (shaded contours – similar to those used in weather maps), Thematic Overlays (shaded geographic areas), Spoke Overlays (commute lines), or Flow Overlays (worker flow arrows). 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 census block. Thermals show the density of workers measured in terms of workers per square mile. The Thematic Overlays display counts of workers employed or living in geographic features from the selected destination or comparison layer type. Spokes appear in the Destination Analysis results, and represent commuting from the selection area to each of the destination areas. Lastly, the Flow Overlay represents the flow of workers entering, leaving, or staying within the selection area to work.

Detailed Reports – Each analysis type provides a detailed report in HTML, PDF, or Excel spreadsheet formats. The Area Profile and Area Comparison Analysis reports contain information on workers employed or living in the area of analysis, regardless of where these workers commute to/from. The other analysis types provide information on the home/work connection of each job living or working in the area of analysis. To access the full report for each analysis, click the “Detailed Report” link in the Report/Map Outputs section of the Results tab.

Creating Maps and Reports – Users follow a three-step process in producing map and report results for an area of interest:

1. Search for and choose a geographic area using Search tool in the Start tab. Click “Perform Analysis on Selection Area” in the resulting popup window.
2. Select from the available data options in the Analysis Settings popup. Choose whether the selection area is a Home or Work area and select the desired Analysis Type (users can also choose to analyze a set of Years and a particular Job Type). Click **Go!** to generate the analysis.
3. View the map overlays, chart, and report and export the resulting data in the desired report and/or map overlay format.

○ **OnTheMap Interface**



○ **The Control Panel**

The Control Panel appears to the left of the map viewer and contains the settings, legends, and tools for interacting with the map. There are three control tabs at the top of the panel, which includes Start, Base Map, and Selection, along with the Results tab appearing with a completed analysis and the Advanced tab available if needed.

- **Start** – Use this tab as the starting point for new analyses. Type in a geographic area’s name (or an address) into the Search and then click on one of the results to jump to a specific location on the map and select that area for analysis. 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. Alternatively, use the Import Geography section to import a shapefile, KML file, or GPS coordinates as the selection area. Lastly, users can start an OnTheMap session by loading a “.otm” settings file. This settings file will load the analysis settings and selection area.
- **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.
- **Selection** – This tab contains all of the settings and tools needed to select an area of interest for analysis. Users interested in analyzing areas returned from the search results in the Start tab can ignore this tab. Selection areas can be created using the available selection tools or imported from shapefile, KML file, or GPS coordinates. Previously created shapes are saved at the bottom of the selection tab, and are available for reuse by clicking “Reuse Selection.”
- **Advanced** – This optional tab contains all of the settings and tools needed to select an additional selection area for analysis. An advanced selection area can be used to run a Paired Area Analysis or to modify the 1st selection area. To access the Advanced tab, click “Confirm and Add Advanced Selection” while in the Selection tab. Create an advanced selection area by using the available selection tools or importing geography from a shapefile, KML file, or GPS coordinates. Previously created shapes are saved at the bottom of the selection tab, and are available for reuse by clicking “Reuse Selection.”
- **Results** – This tab becomes active after the user clicks **Go!** in the Analysis Settings popup. Here, users are given a results title, some dropdowns and map controls, options to view/export report and map overlay data, Legends for the map overlays, and a summary of the analysis settings. Click “Change Settings” at the bottom of the Results tab to display the Analysis Settings popup and resubmit a new analysis.

○ **Popup Windows**

Selection Area Popup – The Selection Area popup appears in the map viewer anchored to the selected study area. The popup displays information about the selected study area and offers users the choice of performing an analysis or changing the selection area. Clicking a search result in the Start tab, confirming a selection in the Selection tab, or clicking an existing selection marker (red diamond) displays this popup.

Analysis Settings Popup – The Analysis Settings popup is the control center for generating analysis results. Users choose from the following parameters: whether the

selection area should be analyzed as a home or work area, analysis type, years of data, and job type. Users click **Go!** in the bottom right corner to generate the results. Clicking “Perform Analysis on Selection Area” in the Selection Area popup or clicking “Change Settings” at the bottom of the Results tab will display the popup.

Detailed Report Popup – The Detailed Report popup displays the full set of data for each analysis type, and provides links to export the report to HTML, PDF, or Excel. Clicking the “Detailed Report” link in the Report/Map Outputs section of the Results tab displays this popup.

Export Geography Popup – The Export Geography popup provides links to export the map overlays to shapefile or KML file. A CSV file containing the list of census blocks contained in the selection area is also available. Clicking the “Export Geography” link in the Report/Map Outputs section of the Results tab displays this popup.

Import Geography Popups – Three Import Geography popups allow users to import their desired area of analysis from shapefile, KML, or GPS coordinate formats. Each import dialog provides instructions on how to select features from imported data. Imported features can then be used with the selection tools in the Selection tab as desired. Clicking the “Import from KML/SHP/GPS” link in the Import Geography section of the Start, Selection, or Advanced tabs displays one of these popups.

- **Map Navigation**

OnTheMap provides the map viewer to display the base map and map overlays of a completed analysis. The map viewer provides a number of tools for navigating within the map view.

Search – Use the Search tool in the Start tab to quickly navigate between geographic features of interest in the map viewer.

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

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.

Previous Extent – Click this button above the map viewer to return the map viewer to the previous extent (i.e. previous zoom level and pan location).

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 their 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 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 **OnTheMap** is available at: onthemap.ces.census.gov/tot. The **Text-Only** tool provides a variety of reports that can be generated without using the interactive map viewer.

- **Troubleshooting**

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

lehd.ces.census.gov/applications/help/onthemap.html

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

lehd.ces.census.gov/doc/help/onthemap/WhatsNewinOnTheMap.pdf