OnTheMap: How To Create a Paired Area Analysis

Local Employment Dynamics — All About Jobs

<u>Purpose:</u> This document will demonstrate how to quickly create a Paired Area Analysis using Step 2a of the Analysis tab. In short, this limits the analysis to workers who share the selected the home AND work areas.

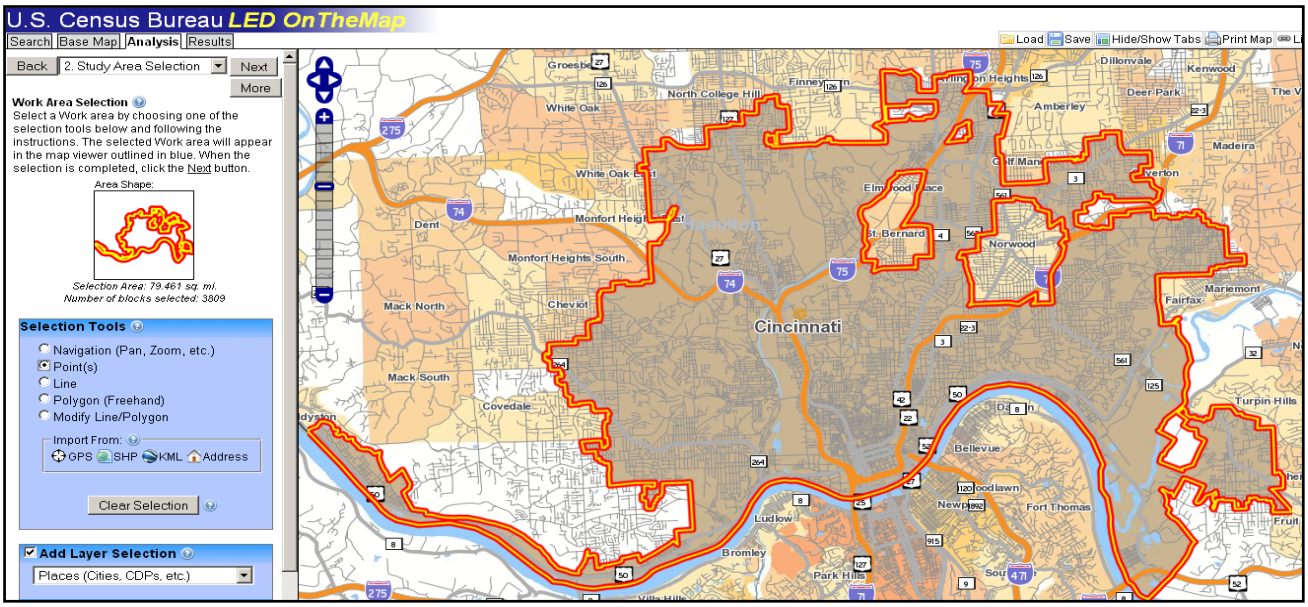
For a complete introduction to OnTheMap, as well as sample analyses, please go to the OnTheMap Information/Help Page.

<u>Sample Workforce Question:</u> How many workers* employed in Cincinnati, OH live across the Ohio River in Campbell or Kenton Counties, KY? What are the characteristics of these workers?

* Represented as primary jobs covered under the state unemployment insurance system.

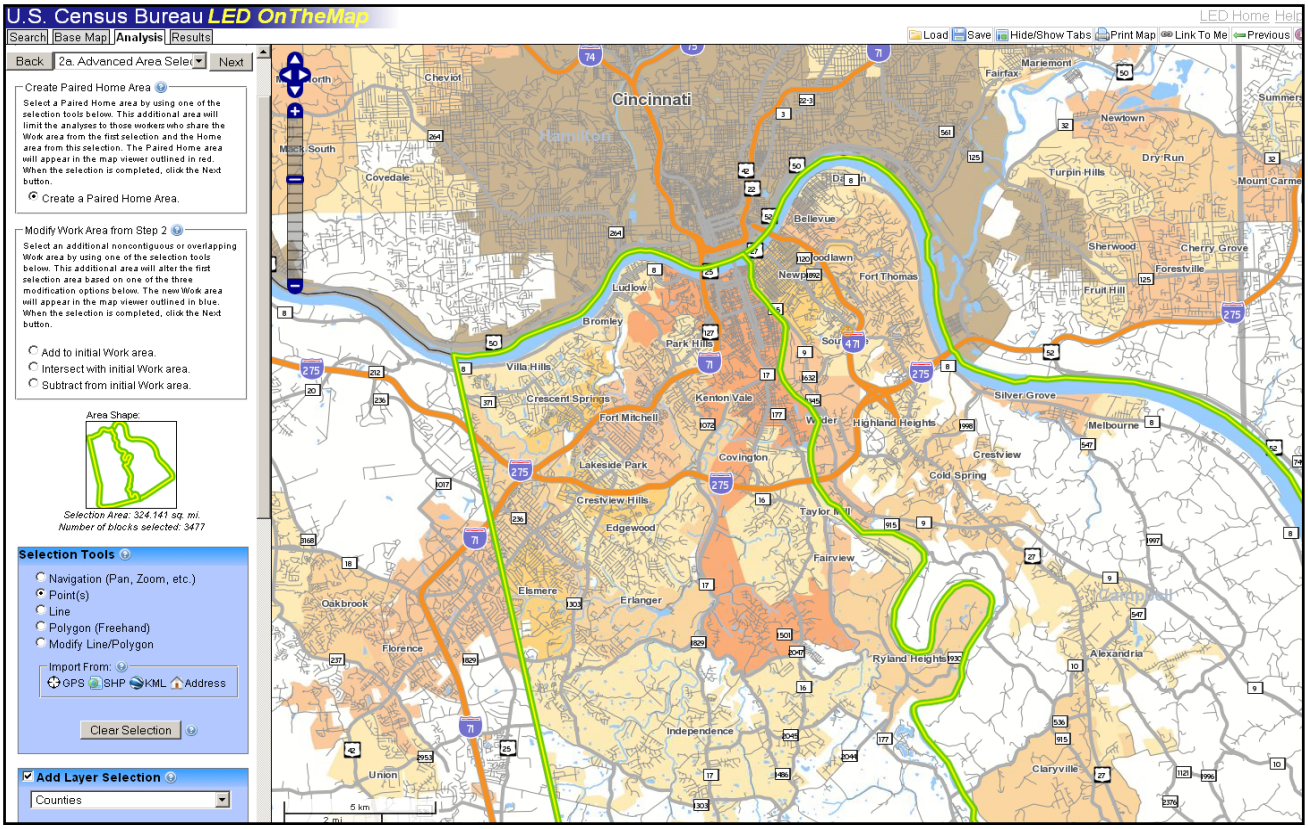
1. **Locate Cincinnati, OH using OnTheMap**
   a. Go to ***Quick Links*** at http://lehd.did.census.gov and choose ***OnTheMap Version 4***.
   b. Enter ***Cincinnati*** in the Search Name text box and click ***Enter***.
   c. Select ***Cincinnati, OH*** under the Places (Cities, CDPs, etc.) heading in the control panel on the left.

2. **Select *Cincinnati, OH* as the Work Area**
   a. After the map showing Cincinnati appears, click on the ***Analysis*** tab from the top of the control panel on the left.
   b. At Step 1, select ***Workplace Area***, ***2008*** under Year(s)**,** ***Primary Jobs***, and ***All Workers*** from the Data Settings step. Click ***Next*** near the top of the control panel to proceed to the next step.
   c. At Step 2, because Cincinnati, OH was clicked while in the ***Search*** tab, the city is pre-selected as the area of analysis and will be highlighted in red in the map viewer. And because ***Workplace Area*** was selected in Step 1, Cincinnati will be treated as a Work area in this



analysis. Click ***More*** near the top of the control panel to access ***Step 2a: Advanced Area Selection*** (the selection outline will disappear).

3. **Select *Campbell* and *Kenton Counties* as the Home Area in Step 2a of the Analysis tab**
   a. In ***Step 2a***, change the radio button setting from ***Skip this Step*** to ***Create Paired Home Area***. Activate the ***Point(s)*** Selection Tool and then click on the dropdown box in the ***Add Layer Selection*** option and change the layer type from "Places (Cities, CDPs, etc.)" to "Counties" (you may need to scroll down in the control panel to see the various selection options). The ***Add Layer Selection*** checkbox will automatically activate when the layer type is changed.
   b. In order to see county lines and labels, navigate to the ***Base Map*** tab and turn off (uncheck) the layer and label checkboxes for Places (Fill), Places (Outline), Interstates, Major Highways, and Local Roads. Navigate back to ***Step 2a*** in the ***Analysis*** tab. Using your mouse, left-click once in the map viewer inside the boundary of ***Kenton County*** and once inside the boundary of ***Campbell County***. If desired, Places and roads may be added back to the base map using the Base Map tab. **Note:** All subsequent screenshots depict OnTheMap with Places and roads active in the base map.
   c. The selected county boundaries will be highlighted in green, and will appear as outlines in the Area Shape box in the control panel. Click ***Next*** to continue.
   d. At Step 3, called ***Map Overlay/Report***, select ***Paired Labor Shed Analysis***. Near the top of the control panel, click ***Go!*** to generate the map overlay and report.

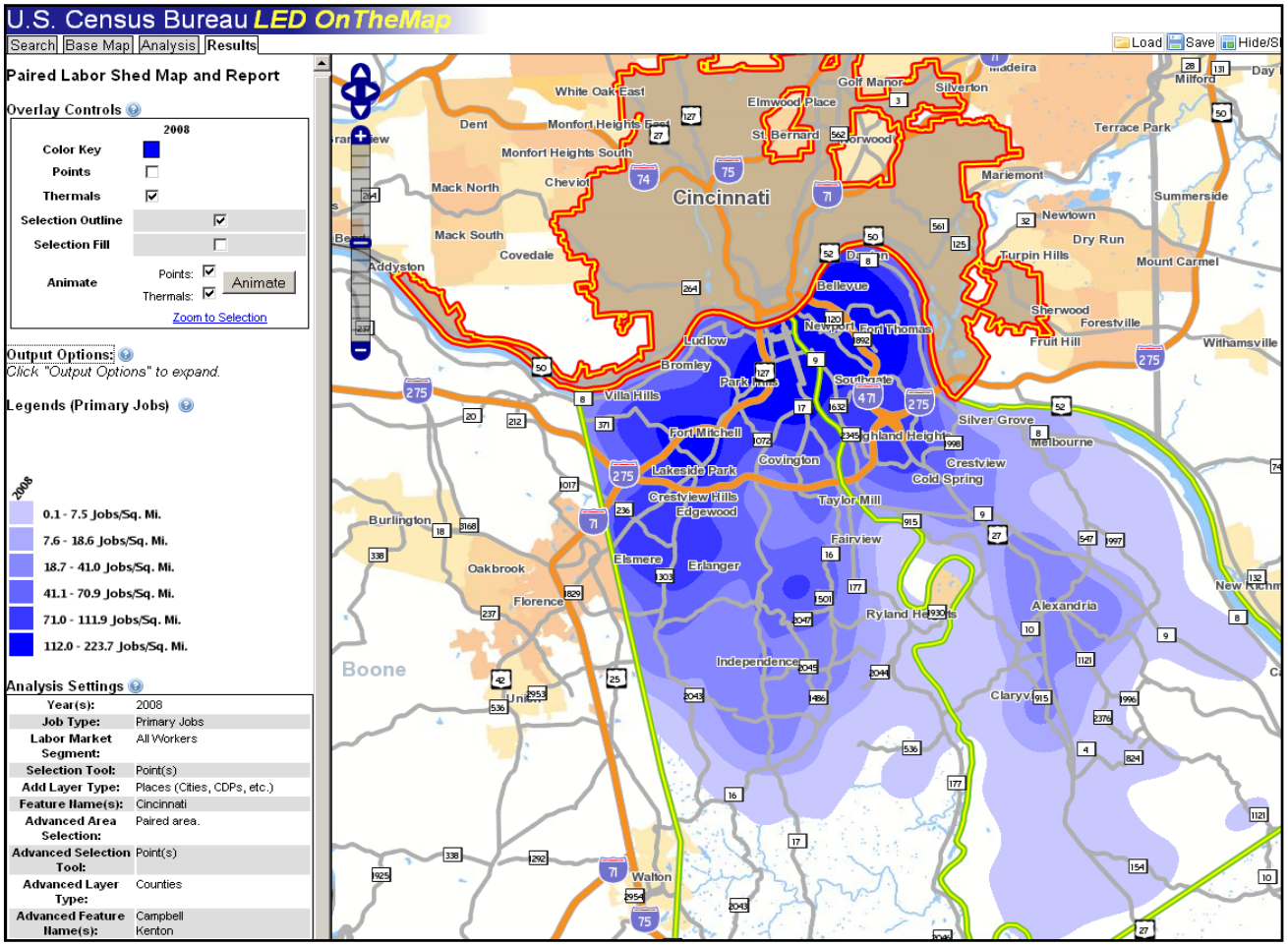


4. **Interpreting the Paired Labor Shed Analysis results**
   a. The ***Results*** tab will become active when the application finishes processing. Click ***Zoom to Selection*** at the bottom of the Overlay Controls box to see all of the selected home and work areas. Map overlays of points and thermals will appear showing home locations within Kenton

and Campbell Counties. Turn off the points overlay by clicking the checkbox next to ***Points*** in the Overlay Controls.

b. As expected, the density of residents is highest near Cincinnati, with approximately 112 to 224 workers per square mile living in areas covered by the darkest blue thermal. Few Cincinnati workers live near the southern borders of Kenton and Campbell Counties.

c. In the middle of the control panel (with the ***Results*** tab active) click on the **HTML** report output option to see the count of workers that live in the selected counties and work in Cincinnati, OH. In 2008, almost 18,000 workers share the selected paired home and work areas, although only 8.4% of all Cincinnati workers reside in the two selected counties in Kentucky.



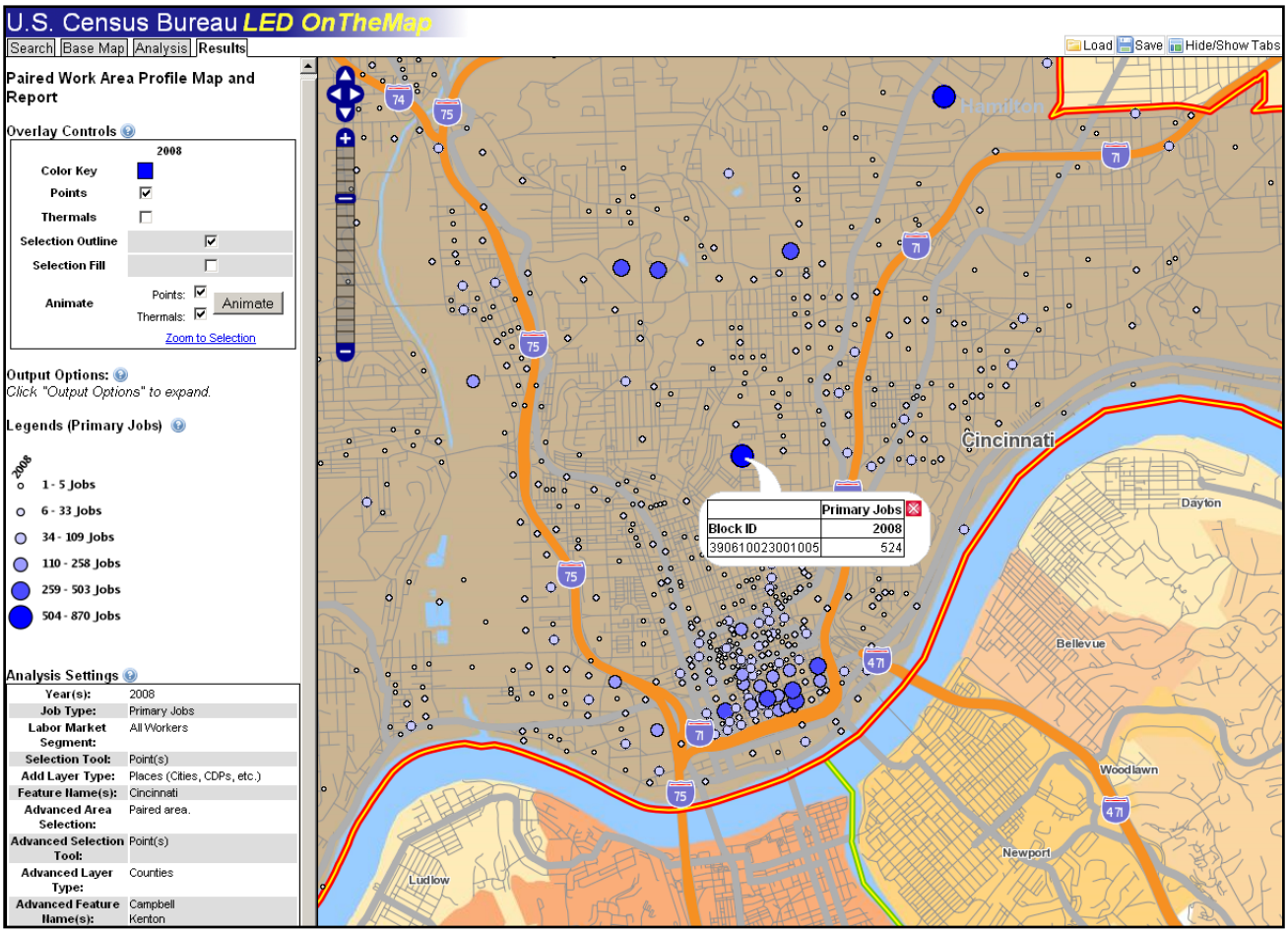
In the map above, the blue thermals represent the density of home locations in the selected counties of workers employed in Cincinnati in 2008.

5. Generate a Paired Worker Area Profile Analysis using the same settings

a. Click on the ***Analysis*** tab and navigate to ***Step 3: Map Overlay/Report***. Select ***Paired Work Area Profile Analysis*** and click ***Go!*** to generate the map overlay and report for the work side of the paired area selection.

b. When the application finishes processing, pan the map and use the ***Zoom Ladder*** tool (top left corner of the map viewer) to zoom in on central Cincinnati. Turn off the ***Thermals*** overlay by unchecking the box in Overlay Controls.

c. The central business district of Cincinnati, just north of I-71 and the Ohio River, is the area with the highest density of points. To see more details about each point, click the ***Identify*** tool (top right corner of the map viewer) once, then click the point to see a popup box showing the Block ID and count of jobs.



In the map above, the blue points represent work locations in central Cincinnati in 2008. Each point represents one Census Block that employs workers who share the selected home and work areas. The Identify Tool is used to show that Census Block '390610023001005'employs 524 workers who reside in Kenton or Campbell Counties.

d. In the middle of the control panel (with the ***Results*** tab active) click on the **Excel** report output option to see the Paired Work Area Profile report. This report displays characteristics of workers that live in the selected counties and work in Cincinnati, OH, broken out by three age, three earnings, and three industry groupings.

Paired Work Area Profile Report		
Total Primary Jobs		
	2008	
	Count	**Share**
Total Primary Jobs	17,894	100.0%

Jobs by Worker Age		
	2008	
	Count	Share
Age 30 or younger	3,589	20.1%
Age 31 to 54	11,283	63.1%
Age 55 or older	3,022	16.9%
Jobs by Earnings Paid		
	2008	
	Count	Share
$1,250 per month or less	1,898	10.6%
$1,251 to $3,333 per month	6,140	34.3%
More than $3,333 per month	9,856	55.1%
Jobs by Industry Type		
	2008	
	Count	Share
Goods Producing	2,323	13.0%
Trade, Transportation, and Utilities	2,054	11.5%
All Other Services	13,517	75.5%

In the spreadsheet above, the characteristics of the 17,894 workers who share the selected paired areas are provided. More than 55% of these workers are in the high-earnings segment, and more than three quarters are employed in the 'All Other Services' industry grouping. See the Industry Class definition in the OnTheMap glossary for details on the NAICS sectors grouped into the three industry labor market segments.

6. Further Analysis

a. Use the information gleaned from these analyses to further hone your analysis question. For example, rerun the same analysis with the 'All Other Services' labor market segment selected (Step 1 of the ***Analysis*** tab). Compare the resulting map and report to see results showing workers who share the selected home and work areas AND work in a services oriented industry.

b. Additionally, users could run an 'All Other Services' segment ***Work Area Profile Analysis*** on Kenton and Campbell Counties to see finer grain industry detail on residents of these counties employed in a services oriented industry.