

eCon Planning Suite

e-Tutorial: Analyzing State Data: Multi-County Reports and Data Analysis

Hello and welcome to the eCon Planning Suite online tutorials. This is one in a series of video tutorials demonstrating the functionality and components of the eCon Planning Suite.

This tutorial provides instructions on using CPD maps tools that may be especially useful to state grantees as they assess needs and plan their CPD programs. At the end of this tutorial, you will be able to:

- create multi-county reports that help evaluate regional needs, and
- use the Data Toolkit to compare different geographies to assess relative needs and conditions

First, open CPD Maps and search for a grantee using the grantee search box. In this example, we will select the non-entitlement area of Iowa. To view county lines, you can use the light grey canvas base map. We will use the reports widget to create a data profile for a region of the state. In the reports widget, select “County” from the target geographic jurisdiction level dropdown menu.

Then, leaving the default choice at “New Area,” use one of the drawing tools to select the desired counties for the report. The different drawing tools are explained in more detail in the Reports Section of the CPD Maps Desk Guide.

In this example, we will use the box tool to select the set of counties in the northeast. Name the target area give the dataset area a name and click <Next>.

The next step allows you to add a reference geography to compare the target area’s data to in the report. In this example, we will compare the region to the entire state. Select State and click <next>. It is better to use the entire state for a reference comparison than the non-entitlement area because this will include variables for medians and averages that cannot be calculated strictly for the non-entitlement or other custom areas.

Choose the type of data to include in the table. Once selected, click <Finish> to download the report. Make sure your pop up blocker is turned off to download the report. The excel-based report shows data for the Target and the Reference geographies in parallel columns on the right side of the spreadsheet. Each type of data—“Demographic,” “Housing Needs,” “Housing Supply,” “Economic Context,” and “Special Needs” are displayed on separate tabs.

Use the report to create a snapshot of basic conditions for different regions and to compare them to other geographies such as other regions or the state. To further identify differences between various regions of the State—as well as to interpret the significance of these differences—you can use the Data Toolkit.

The data toolkit can help inform the Method of Distribution by allowing state grantees to compare housing and community development data from different geographies--such as regions, counties or Units of General Local Governments.

In our example, we'll continue to use the Iowa State HOME program and assume that Iowa is interested in looking at conditions in two hypothetical planning regions and the State as a whole. To get started, click on <Data Toolkit>.

Geography selections works the same as it did in the <Reports> widget. Create the first region in the north-central part of the state by selecting County and using one of the selection tools. When finished selecting counties, the tool will list the selected counties on the screen. Name the region and click <Add>.

Click on <Add Another > and repeat the process for a different area. In this case, the South Central part of the state, being certain that the default "New Area" has been chosen. Name the region and click "<Add>. To add the state, Click <Add Another>. In the dropdown box for target Geographic Level select <State> and use the draw point tool to select the state. Once selected, click <Add>.

The list of geographies shows 3 areas: "North Central," "South Central," and "for Iowa State." You can repeat this process to add up to 14 geographies. When finished creating and adding areas, select a toolkit type—either "Economic Development" or "Housing." This will compare the geographies using either housing or economic indicators. For this example, we'll select "Economic Development." Click <Finish>.

The Excel screen opens to the "Control Panel." This screen is used to set up the default selections on the toolkit. For "Target Jurisdiction," you can select any of the regions you identified when setting up the toolkit; this geography will be the basis for comparison with other geographies loaded into the toolkit and with the nation as a whole. Click on the dropdown arrow to see the regions that you created; let's select "North Central Iowa." To see other comparisons, you can change this setting later.

The lower section of the control panel contains "Advanced Controls" which allow users to change the defaults used by the tool in analyzing data. For most cases, the default values will be appropriate. Following spreadsheets in the toolkit show various comparisons among the geographies loaded into the toolkit.

Click on the tab labeled "Stage 1 Issue Identification>" to go to the first stage of the toolkit.

Let's take a moment to get oriented to the Stage 1 screen. The worksheet has several data columns, including a column "North Central Iowa" which we just chose as our target area in the control panel and a default column for the "NATION." In the opening view, the NATION column is grey, indicating that the Nation is the basis for the comparison with North Central. The "Result" column, to the left, reports the results of comparison of various regions' data elements with data for the NATION as a whole. In this case, for example, the data indicate that percentage of the population with educational attainment of "a Bachelor's degree or more in the North Central region is "Much Lower" than the nation as a whole; in addition the data value for the region, 17.11%, is shaded purple. In the upper right area of the screen is a "Key" which explains the color-coding. This example illustrates the approach used throughout the toolkit.

The two remaining columns are available to list data for other geographies. Click the column header to open the dropdown menu. Click the arrow and scroll up to make all your selected geographies appear. Use one column for Iowa and one column for South Central Iowa.

To compare North Central Iowa with one of the other geographies you identified, click the cell that contains "NATION" as the "Reference." A dropdown arrow will appear. Click on the arrow and click on <For Iowa State>. Immediately, the Iowa column is in grey, and the "Results" and color-coding are adjusted to compare the north central region with the state.

These data will indicate to state officials that educational attainment levels in the North Central region are somewhat higher than in the State as a whole. Note also that, as with the reports function, some data, such as median household income do not return data for aggregations of counties (here in the toolkit, the result is zero rather than N/A.) As a result, users should remember to disregard results that are "Much lower" or "Much higher" when compared to a zero result.

Stage 2, Issue Characterization, provides additional information to help policy makers analyze housing and economic conditions in their State. Use observations from Stage 1 to select issues to further explore in Stage 2. In this example, we will further analyze the higher levels of unemployment. In Stage 2, we see that unemployment is much higher for the 18-24 year old high school graduate category in north central Iowa than in the state as a whole.

Stage 3, Issue Location, provides suggestions for setting parameters in the Map Query function of CPD Maps for variables described elsewhere in the toolkit. Continuing our analysis of unemployment data, we will return to CPD Maps to identify counties with higher rates of unemployment for persons 24 years old and under. As a baseline for the map query, we will use the parameter from Stage 3.

Return to CPD Maps, select the Map Query widget and select the Grantee Jurisdiction as the area to query. This will limit results to only being in Iowa. Second, select County as the geographic type. This will query data at the county level. Click Next.

From the list, select % age 16-24 unemployed and click Next. Enter the baseline parameter from the Data Toolkit in the Map Query widget. If this produces more or less counties that meet the query than you desire, you can manually adjust the query parameters. When complete, click Finish to display the query results. The map now highlights all counties in green that meet the query parameters. More information on the Data Toolkit is available in the CPD Maps Desk Guide.

Thank you for participating in the online tutorial on state data reports and analysis. For additional tutorials and resources, please go to the OneCPD Resource Library.