

Tutorial 4: Using The Search Data Tool

The Search Data tool enables you to search for features in a specific layer using spatial searches, textual searches, or a combination of the two.

Perform a Text Search

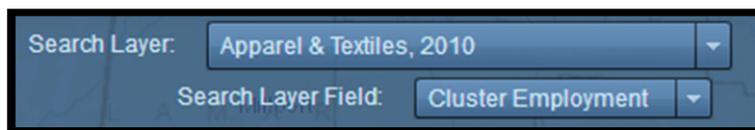
1. Open the "Search Data" tool by clicking on its icon in the top toolbar



2. Along the top of the tool, there are a row of tab icons. Click on the "Text Search" tab.



3. In the dropdown box to the right of "Search Layer", select the layer that you will search.
4. In the dropdown box to the right of "Search Layer Field", select the specific field that you will use to search the selected layer.



5. In the dropdown list on the right side of the tool, choose your selection method. The default is set to "Create a new selection". Once you have made a selection, however, you can also choose the "Add to current selection" or "Remove from current selection" options.



For most selected layer fields, a dropdown list now appears with a list of specific field values:

6. Click on a value.



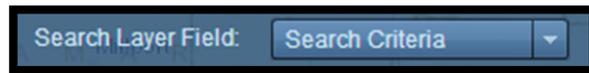
7. A table of results now appears displaying the location that corresponds to the value that you selected. To learn more about how this grid works, read the section of this tutorial entitled "The Results Table".
8. The results of your search also display in the results tab, which can be viewed by clicking on the "Results" tab at the top of the tool.



- a. Hover your pointer over a result to display the location it corresponds to on the map.
- b. Click on a result to zoom to the location it corresponds to on the map.

The field labeled "Search Criteria" works differently than other fields and allows you to search using your own custom range of values:

9. Click "Search Criteria" in the "Search Layer Field" dropdown list, if it is available.



10. Enter the field name that is shown in the example *exactly* as it is shown.
11. After the field name, enter a greater than, less than, or equal sign, followed by the value of your choosing.



For Example: The criteria shown above will generate a list of counties that have between 100 and 500 people employed in the Apparel & Textiles industry cluster.

12. When you are finished formatting your search, click the "Search" button at the bottom of the tool. Results for your search now appear.

Perform a Spatial Search (Using a Graphical Search Tool)

1. Click on the "Graphical Search" tab at the top of the tool.



2. In the dropdown box to the right of "Search Layer", select the layer that you wish to search.
3. Select a shape to draw onto the map from the row of available icons. Make sure that the shape you choose accurately reflects the shape of your region of interest.



Drawing a Point:

- a. Click on the shape icon labeled "Select by Point".
- b. Click on the county you would like to search. A dot appears on the map.
- c. Click on any additional counties you would like to include in your search.

Drawing a Line:

- a. Click on the shape icon labeled "Select by Line".
- b. Click the point on the map where you would like your line to begin.
- c. Keep clicking points along a path to extend your line.
- d. When your line is finished, double-click the last point to stop drawing.

Drawing a Rectangle:

- a. Click on the shape icon labeled "Select by Rectangle".
- b. Click the point on the map where you would like a corner of your rectangle to be located.
- c. Hold down your mouse and drag your pointer across the screen to produce a rectangle.
- d. When your rectangle is finished, release your mouse.

Drawing a Polygon:

- a. Click on the shape icon labeled "Select by Polygon".
- b. Click the point on the map where you would like your polygon to begin.

- c. Keep clicking points along your desired polygon edge to extend its border.
- d. When your polygon is finished, double-click the last point to stop drawing.
4. The box next to “enable multi-part graphics” is checked by default. This means you may draw more than one shape onto the map per search. To disable this ability, uncheck the box.
5. The box next to “Add search tolerance to point selection” is unchecked by default. This option is useful when searching a point feature using the “Select by Point” drawing tool. To activate this option, check the box.
6. The box next to “Include text query in selection criteria” is discussed in the section of this tutorial entitled “Perform a Spatial Text Search”.
7. The box next to “Buffer Graphic” is unchecked by default. This option expands your drawn shape by the distance you specify in the box to its right. To activate this option, check the box.
8. Click the “Search” button. Results for your search now appear.

Perform a Spatial Text Search

Performing a Spatial Text Search allows you to create an attribute search for a specific area.

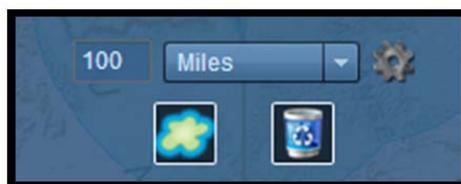
1. Using the skills learned in the “Perform a Text Search” portion of this tutorial, create a textual search.
2. Click on the “Graphical Search” tab at the top of the tool.
3. Check the box next to “Include text query in selection criteria”.
4. Using the skills learned in the “Perform a Spatial Search” portion of this tutorial, draw your area of interest onto the map.
5. Click “Search”.
6. The results that appear include only counties that meet the criteria of both the spatial and textual search.

The Spatial Search Tab

The Spatial Search Tab can only be used after a search is made. This tab allows you to add a buffer around your search results and create a search using the spatial area of a previous search result.

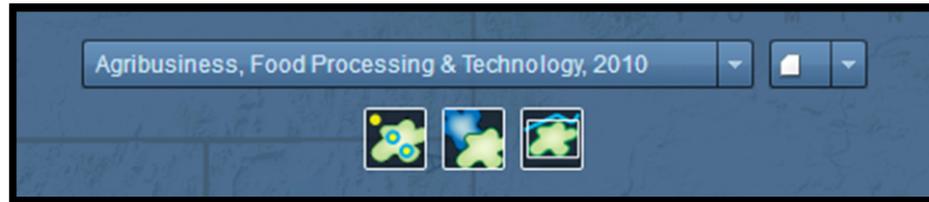
1. Perform a search using the skills learned in the previous sections of this tutorial
2. Click on the “Spatial Search” tab at the top of the tool.

Using the “Apply a search distance” section:



3. Enter a distance value into the box.
4. Choose a unit of measurement from the dropdown list
5. Click on the gear-shaped icon to the right of the dropdown list to customize what your search distance buffer will look like on the map.
6. Click on the “Apply buffer” icon. The buffer appears around your search results.
7. When you are finished using your buffer, erase it using the “Clear” icon.

Using the “Search entities of” section:



8. Choose a layer from the dropdown list that you would like to search using the spatial extent of your previous results.
9. In the dropdown list to the right of the layer list, choose your selection method. The default is set to “Create a new selection”. You can also choose to “Add to current selection” or “Remove from current selection”.
10. Hover your pointer over each of the three search icons located below the layer dropdown list to reveal its name.

The “entirely contained in” icon:

This search method generates a list of features for your chosen layer that are contained entirely within the region of your previous search results.

The “intersected by” icon:

This search method generates a list of features for your chosen layer that are partially or entirely within the region of your previous search results.

The “intersected by envelope of” icon:

This search method generates a list of features for your chosen layer that are partially or entirely within the “envelope” of your previous search results. The envelope can be thought of as a square region that completely contains the more specific region of your previous search results.

11. Click on one of the three search icons. The results of your search now appear.

The Results Table

After performing a search, your results are displayed in a table.

Cluster Employment	State	County
341.64	Texas	Palo Pinto
342.14	Kentucky	Mason
351.13	Iowa	Sioux
351.37	Oklahoma	Grady
354.23	Idaho	Idaho
354.58	Pennsylvania	Elk
354.9	Tennessee	Campbell
357.72	Alabama	Blount
358.46	Kansas	Crawford
362.32	Pennsylvania	Clinton
362.44	Tennessee	Henry

1. The table's title is the name of the layer that was searched.
2. The table's columns are the layer fields. Click on a field name to sort the table results by that field.
3. Hover your pointer over a row of data to display the location of the county it corresponds to on the map.
4. Click on a row of data to zoom to the location of the county it corresponds to on the map.
5. To export the results table, choose to either "Export to CSV..." or "Export to Txt..." at the bottom of the table. Then, click the "Export..." button.
6. When you are finished viewing the results table, click on the "X" in the upper right corner of the table to close it.
7. To reopen the table at any time, click on the tab labeled "Show Results in Grid" at the top of the tool.

