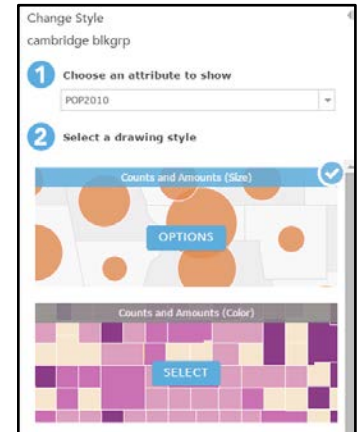


ArcGIS Online Analysis Tools Overview

The spatial analysis tools within ArcGIS Online empower any user to answer questions and make important decisions using more than a visual analysis. You can read more about it at (<https://doc.arcgis.com/en/arcgis-online/use-maps/perform-analysis.htm>)

1) Exploring SmartMapping using Cambridge population (*Mapping change in population from 2000 to 2010*).

- From the main toolbar click on “Search for Layers”
- On the find box input “Cambridge Block Group”, and click Add.
- Start to visualize the “Cambridge Block Group” layer with Smart Mapping.
- Visualization type: Count and Amounts (Color)
- Choose POP2010 as the attribute to visualize; then divided it by POP2000 (normalization).
- Choose theme (Extreme). Block Group major then 1 shows increase in population, Block Group minor then 1 shows decrease in population.



2) Cheery Tree host spot map and by block-group.

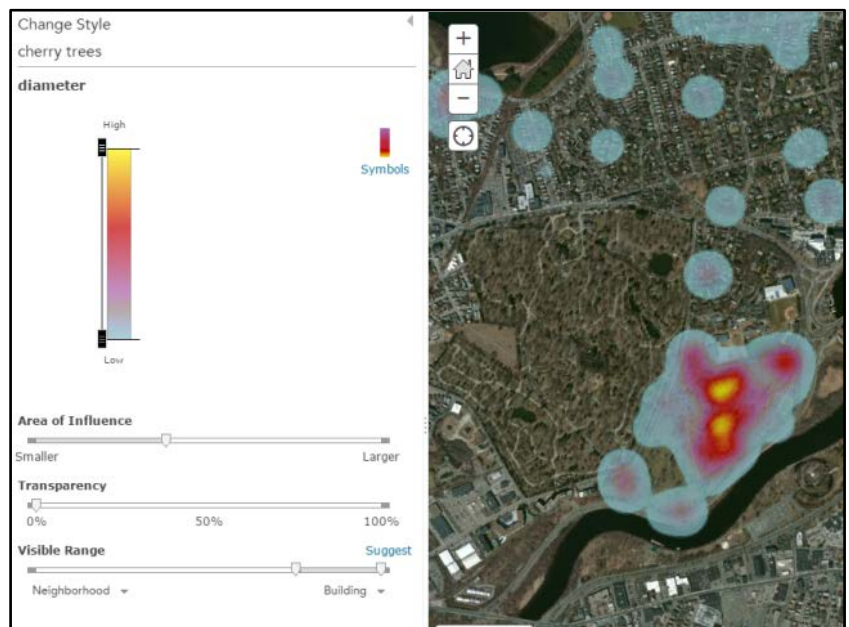
Data from Cambridge website

(http://www.cambridgema.gov/GIS/gisdatadictionary/DPW/DPW_StreetTrees.aspx)

From the main toolbar click on “Add Layer from File” and load the zipped shapefile

(\\seminar2017\data\agol_analysis\cherry_trees.zip). By default smart mapping display “Count and Amounts (Size)”, try to modify this option:

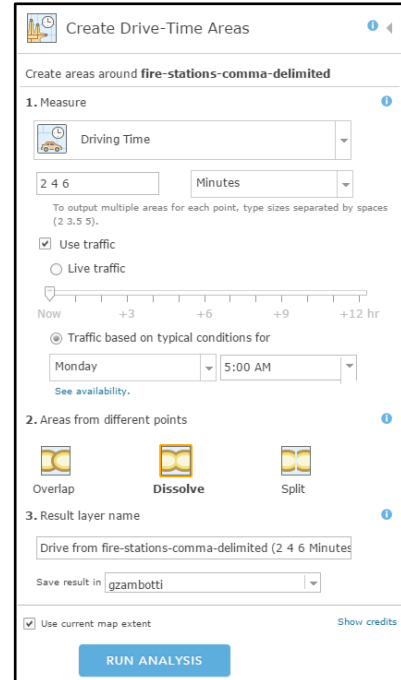
- Count and Amounts (Size) – Choose a different attribute (diameter), change color and visible range
- Heat Map (Area of Influence / Transparency)



3) Drive time for Cambridge Fire stations.

From the main toolbar click on “Add Layer from File” and load the csv file (fire-stations-comma-delimited.csv). Click import layer. Choose United States country for geocoding the CSV file, and then import layer. Change the visualization to “Location (Single symbol)”. Click on the layer properties, and choose: Perform Analysis >> Use Proximity >> Create Drive-Time Areas.

- Apply these settings to the tool:
- Measure: Drive Time
- Minutes: 2 4 6
- Use Traffic – Traffic based on typical conditions for Monday 5 PM
- Areas from different points - Dissolve
- Result Name
- Show Credit
- Run Analysis



4) Build Spyglas Web Application Map from map tiles.

Explore warp worldmap at

(<http://warp.worldmap.harvard.edu/>):

- Search for title Cambridge.
- Click on Cambridge 1970s.
- Click Export Tab, and click Tiles (Google/OSM scheme): Tiles base URL.
- Change z/x/y.png >>{level}/{col}/{row}.png

<http://warp.worldmap.harvard.edu/maps/tile/370/z/x/y.png>

In ArcGIS Online From the main toolbar click on “Add Layer from Web” >> A Tile Layer; copy and paste the URL below in the URL textbox. Enter a title and credits. Click Add Layer

<http://warp.worldmap.harvard.edu/maps/tile/370/{level}/{col}/{row}.png>

- Save the map.
- Share the map, and
- Make a Web Application and choose “Story Map Swipe and Spyglass”, and click Publish.
- Choose Spyglass
- Select the layer to appear within the spyglass (<http://arcg.is/1xglFGG>)

