		Date: 01/03/2017
DCHC MPO **GIS/Database/Web**		**Date Last Updated: 01 /03/2017**
		User Manual Number: 3

Objective: Describe how to use/access data through DCHC MPO ArcGIS Open Data site

Data: All data accessible through the ArcGIS Open Data site

Comment: This manual documents how to use DCHC MPO ArcGIS Open Data portal

DCHC MPO System Access/Use Manual: ArcGIS Open Data

Table of Contents

Introduction: What is ArcGIS Open Data?

DCHC MPO ArcGIS Open Data is a platform to provide the public with open access to DCHC MPO geospatial data. It was configured as a website with DCHC MPO look and feel and public shared data were specified through Open Data groups. DCHC MPO partners and public can use the open data site to search by topic or location, download data in multiple formats, and view data on an interactive map and in a table, filter, explore/analyze, chart, and share with others as needed.

1. Accessing Data
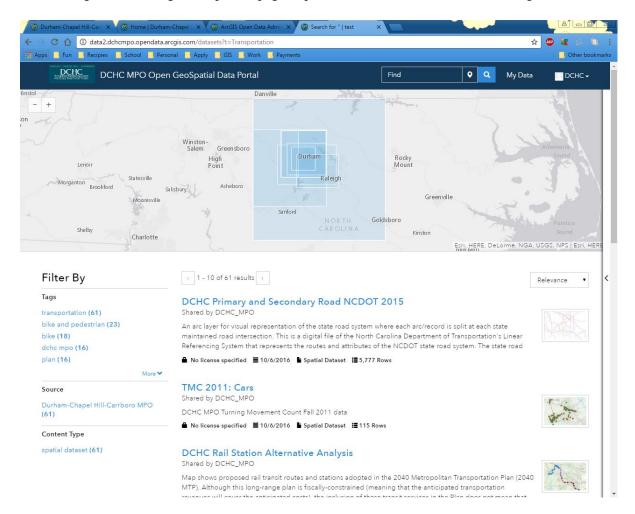
A. Site Access

DCHC MPO open data site is accessible at: http://data.dchcmpo.opendata.arcgis.com/.

B. Data Access

Data on this site is sorted by category and can be found by clicking on the category icons above. Additionally, data can be searched by keyword in the Search function above the map. Another way to find datasets is to search within the preview map by finding a specific location on the map, or zooming into an area of interest and seeing all the available data for that area. The search results update as you navigate the map. Data can be located using the bounding boxes of the data layers in the map that appears after the search. A location search can be made through search button with magnifier symbol at the left bottom side of the map next to the zoom in/out buttons.

After the initial search and finding a dataset, similar datasets can be found too. There are two ways to do this: through related data or with tags.

- Related data—The Related data section of the profile page lists similar datasets. Click one of the names to access the related data.
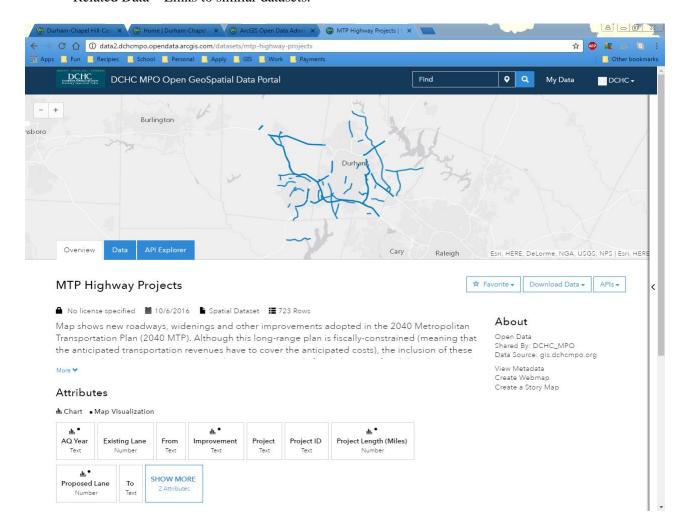- Tags—Click a tag in the profile page to perform a new search based on that tag.

C. Viewing Details

The Open Data site provides information about each dataset in two locations. Basic information is provided in the search results, and more detailed information is available on the dataset profile page.

From the search results list, each dataset contains a summary of information about the dataset including who shared the dataset and when, when it was last updated, the number of attributes and rows in the dataset, and the first few lines of the dataset description. The overview page can be accessed; the dataset can be added to list of favorites. The following detailed information about the data can be access by clicking the dataset name:
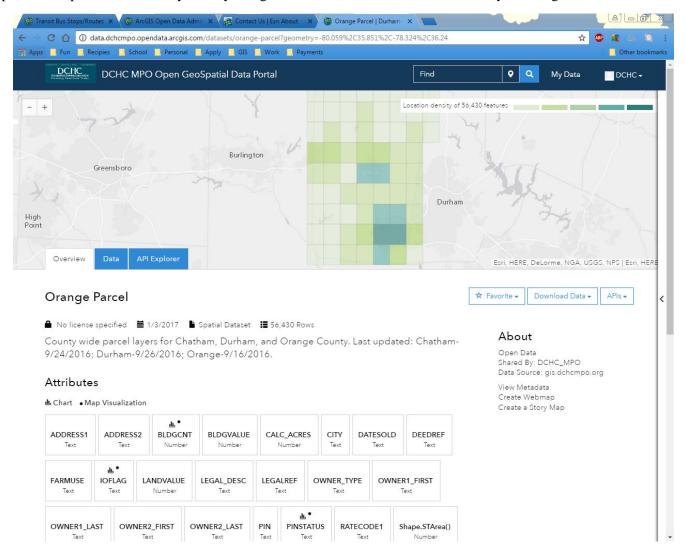
- Overview—Click the Overview tab to see the dataset description and dataset attributes.
- Data—Click the Data tab to see a spreadsheet of information about the data.
- API Explorer—Click the API Explorer tab to create a JSON
- Download Dataset—Download the data as a spreadsheet (CSV), KML, shapefile (ZIP), or API. Using the API option, you can copy the JSON.
- About—Information about who created the data, the source of the data, metadata, and options to create a Webmap or Story Map.
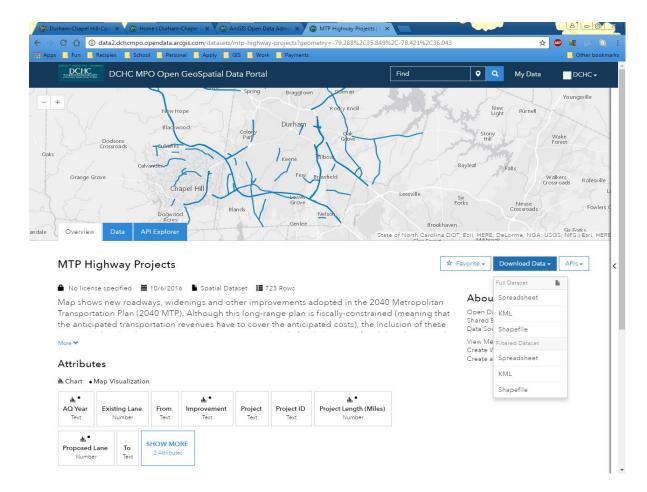- Related Data—Links to similar datasets.

D. Using a Preview Map

To zoom, use the + and - buttons in the top left corner of the preview map or double click. To pan, use the mouse or the arrow keys on the keyboard. On the dataset profile page, the features of the dataset are displayed on the preview map. Click any feature, and a pop-up provides details about that feature.

For polygon layers containing large amounts of records (ex: parcels or building footprints), data in the preview map is summarized by density in a grid. Individual records can be viewed by zooming in.

2. Downloading Data

Once the data has been found, the format for download can be specified as a spreadsheet (CSV), KML, shapefile, or Geodatabase (if the dataset is a hosted feature layer), and access the API (GeoJSON or GeoService).

To download the data

1. Above the About section, click the Download Data icon.
2. Click one of the download options to begin the download.
3. The API option gives you two links to copy: GeoJSON and GeoServices.

   GeoJSON is a specification of JavaScript object notation (JSON) that allows geographic objects to be transferred between servers and clients. This specification can be consumed by a variety of clients that can use the GeoJSON specification.

   The GeoServices link allows clients to communicate with data through theGeoServices REST specification. This specification of JSON is standard output by ArcGIS and can be used in a wide array of open applications built using Esri's SDKs and APIs.

Downloads made by the user can be tracked (download progress and download history) in My Data. Datasets that have been favorited can also be tracked using My Data. To open this panel either click the My Data icon at the top of the page beside the search bar or click on the left facing arrow beside the APIs icon. The My Data panel can be opened on any page of the Open Data site.

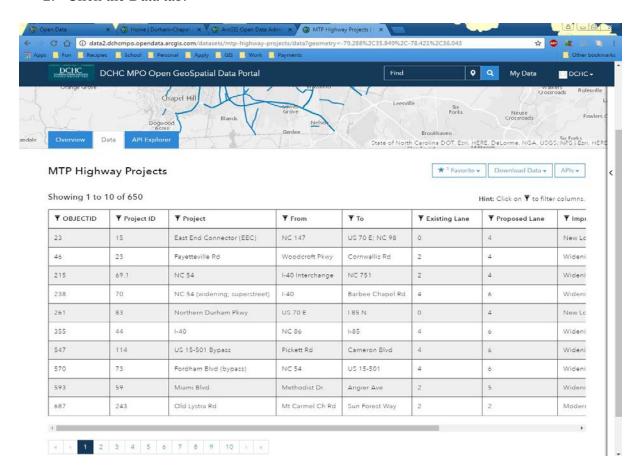1. Clicking on one of the downloadable formats will automatically start the download.

2. Opening the My Data panel shows the status, type, and time of the download.
3. Can continue browsing the site, and download more data. All downloads by the user will continue and will be tracked in My Data
4. Download history expires after 48 hours.

3. Explore Data

The dataset table provides access to the spreadsheet portion of a dataset: the features (rows) and their attributes (columns). There are several functions that can be used in the dataset table to explore and filter the data.

To get to the dataset table, follow these steps:

1. Click a dataset from the search results.
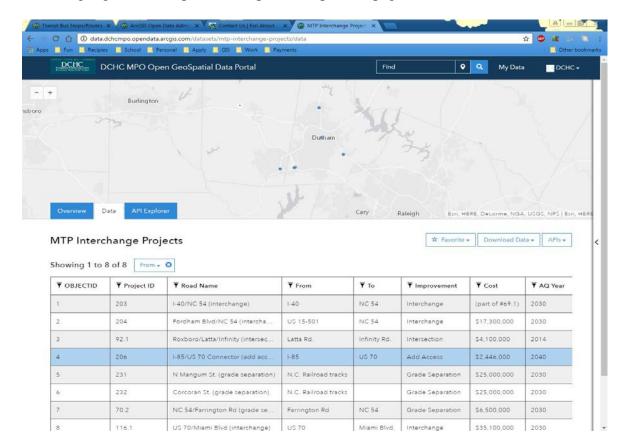2. Click the Data tab.

Sort the dataset table

Each column or attribute can be sorted by clicking the column head. Text is sorted alphabetically, and numbers are sorted by value. Click once, and the column is sorted from A–Z or 1–10. Click again, and it's sorted from Z–A or 10–1.

Highlight a feature in the preview map

Each row in the dataset table represents a feature in the map. Hover over any row, and that feature is highlighted in the preview map at the top of the page.

Filter data

Using the dataset table, data can be filtered to show only the desired features and filtered dataset can be downloaded. You can filter by location on the map or by attribute.

Filter by map extent

Filtering by Map Extent is automatically enabled and cannot be disabled. When filtering the data on the map view, use the +/- buttons on the map to zoom in/out. Click and drag the map to pan. As you adjust the map, the dataset table changes to reflect the features that are within the desired area of the map.
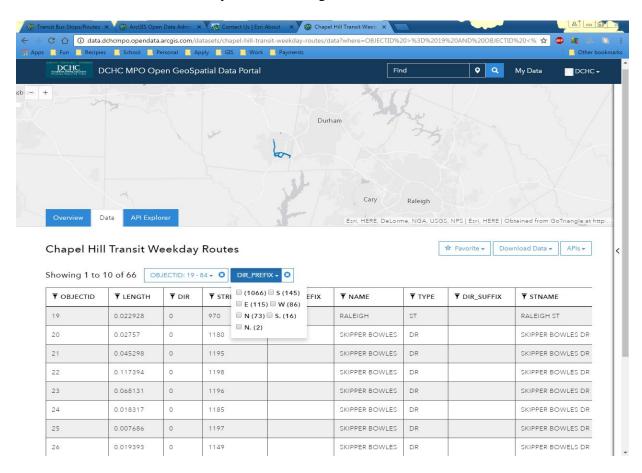
Filter by attribute

1. From the dataset profile, click the Data tab.
2. Click the filter symbol beside the column you would like to filter.
3. Filter the data.

Depending on the column field type and size of the dataset, you have the option to filter by either entering in a range of numbers or the values that you want to see.
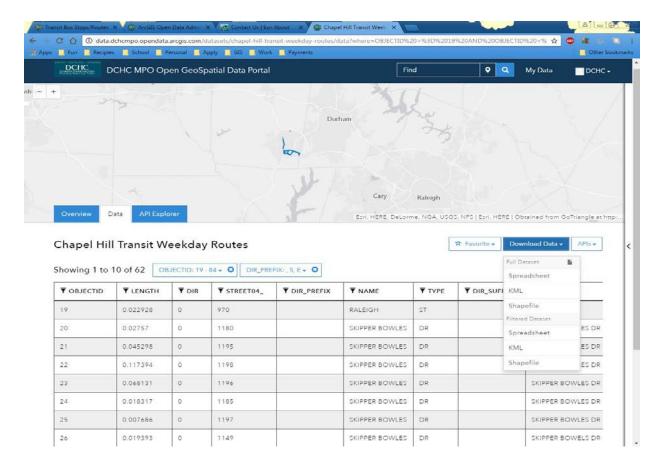
As you filter, the preview map reflects the changes.

4. Multiple filters can be added by clicking another column header and typing your next query.
5. To remove a filter, click the X symbol on the right side of the text box.

Download filtered datasets

Once the dataset is filtered, you can download a version of the data with only the attributes from the filter. To do this, click the Download Data box above the table and choose one of the options under filtered dataset.
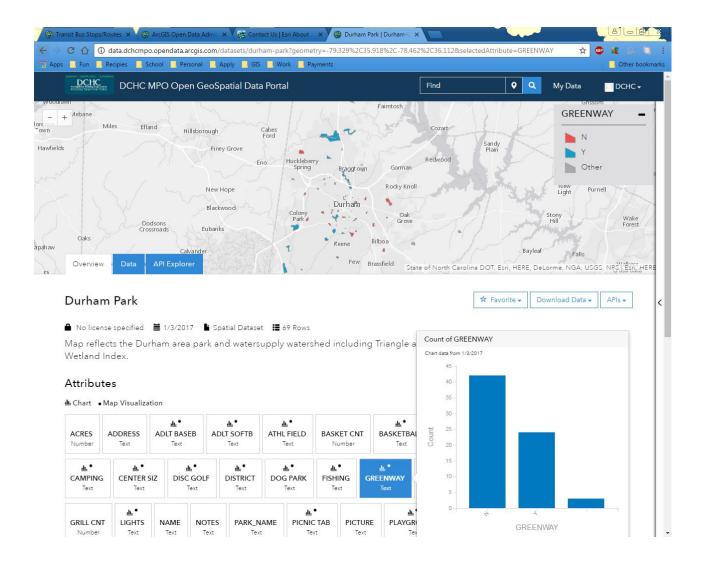
4. Visualizing Data

Open Data charts allow you to generate a graphical representation of data in a dataset in two different ways: a bar chart and map visualization.

To generate a visual representation of the data, follow these steps:

1. Click a dataset from the search results.
2. In the Overview tab scroll down to the Attributes.
3. Attributes that are capable of being visualized will have either the Chart symbol or the Map Visualization symbol above its name.
4. For attributes that are able to display both, clicking on the attribute will show both a bar chart and a change in symbology to the map preview above to reflect that attribute.
5. To remove the visualizations click on the attribute box again.

5. Notes on Using the Site

Some data may be slower to load on the map due to its size and content. It is not necessary to wait for the data to load on the map before viewing the table or details of the data.

Use the download button on each category, search results, or layer page to select the download format required. When using the "Download Dataset" button on a specific layer page, please wait for the download to complete before leaving the page to ensure all data is zipped and downloaded successfully.

All data on this site will be downloadable in WGS 84 geographic coordinate system.