IOWA STATE UNIVERSITY
Extension and Outreach

GIS
Training and Services
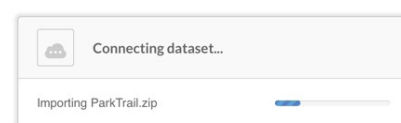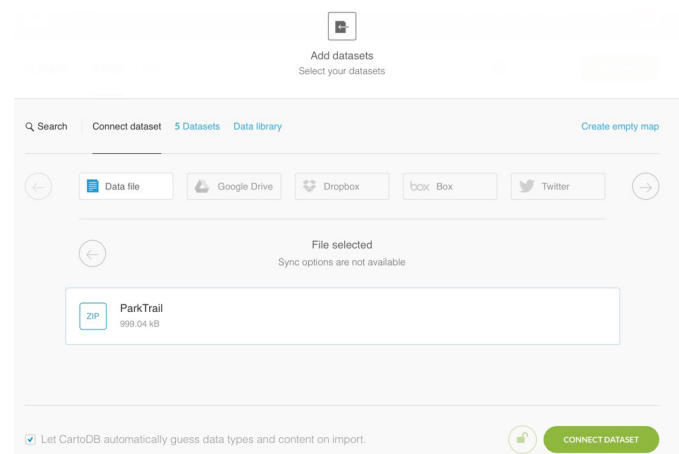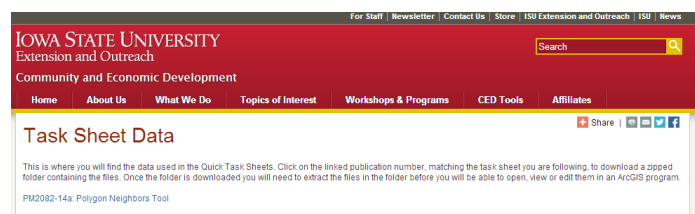Geospatial Technology
Training Program

Online Mapping with CartoDB

Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University Geospatial Technology Training Program short course series. The task sheets are designed to provide quick, easy instructions for performing mapping tasks.

CartoDB makes it easy to see and understand location data through their Online editor. In this tutorial you will use CartoDB to create a web map displaying shapefiles provided by the City of Des Moines showing parks and trails within the Des Moines metro area, and geocode addresses for the YMCA locations throughout the state. Once you complete the map in CartoDB it can be linked to directly with a URL, or embedded into a website.
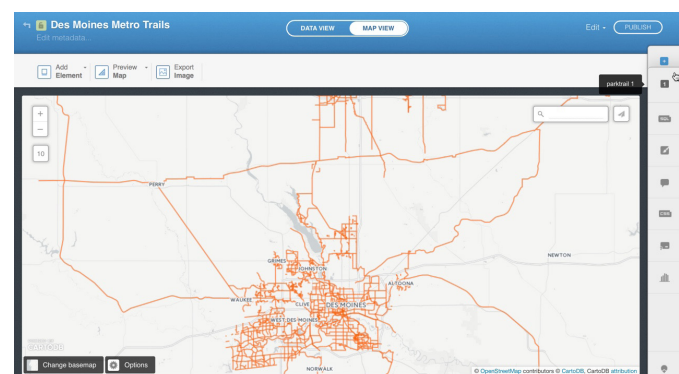
1. Download the Data and Login to CartoDB

a. To download the data used in this task sheet, navigate to www.extension.iastate.edu/communities/gis/quicktasksheets/data in a web browser. Click on the publication number that matches this task sheet. In this case, the publication number is **PM2082-15w**. The data for this task sheet originates from the City of Des Moines and can also be found at: https://maps.dmgov.org/extmapcenter/GetDSMData.aspx.

b. You will find two zipped folders containing shapefiles and one CSV file within the download: **ParksTrail.zip**, **Parks.zip**, and **YMCA_Locations.csv**. You will be uploading these files into the CartoDB map.

c. Navigate to https://cartodb.com and login, or sign up for a new account. You can easily login with your Google email account or set up a new account.

2. Create New Map and add Shapefiles

a. Once you've logged in, click **New Map**. In the next window select **Connect dataset**. Select **Data file** and browse to **ParkTrail.zip** downloaded in **step 1a** and click **Connect Dataset**.

b. When the import is complete you will see a map of the Des Moines area with orange lines representing trails. *Note: you may have to navigate to Your Maps to see the map.*

c. Select the **wizards** icon on the menu bar on the right side of the map. Select **Category** as the mapping symbology. Select **status** as the column used to define the symbology categories. There are four categories, symbolize them in the following way: **Existing: green**, **Planned: blue**, **Proposed: yellow**, and **null: black**.

d. Before closing the **map layer wizard** window click **Add layer** found in the menu.

e. In the **Add a new layer** window, select **Connect dataset**, make sure **Data file** is selected and browse to **Park.zip** downloaded in **step 1a** and click **Add Layer**.

f. Select the **wizards** icon on the menu bar on the right side of the map. Under the **Parks** layer select **Simple** as the mapping symbology and choose the color green as the **Polygon Fill** color and transparency to **0.7**.
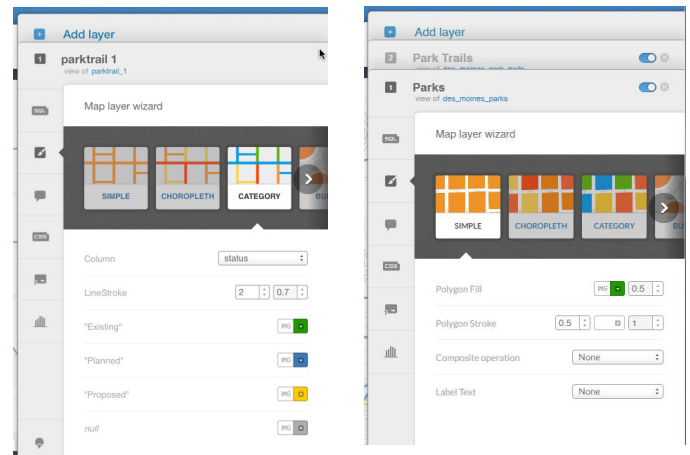
3. Geocode Addresses

a. Before closing the **map layer wizard** window click **Add layer** shown above the layer name.

b. In the **Add a new layer** window, select **Connect dataset**, make sure **Data file** is selected and browse to **YMCA_Locations.csv** downloaded in **step 1a** and click **Add Layer**.

c. Back in the map view, you will *not* see the point locations for the **ymca_locations** layer yet because it first needs to be georeferenced. Click **Edit** in the top right corner and select **Georeference layer**.

d. In the **Georeference your dataset** window, select **Street Addresses**. For the first question select the **address** field. Click the **plus sign** to the right of question one and select the **city** field. Select **state** for question 3 and for question 4 type in **United States**. Click **Continue**.

e. When the geocoding is complete you should have 45 new point features added to the map. Try out the different symbology type options for points. Turn on the name and phone number fields in the infowindow. *Note: you should only see 10 points within the Des Moines metro.*

4. Publish and Share Map

a. Click on **Edit metadata**, under the map name at the top left side of the map. Change the map name, add a description and tags. Click **Save**.

b. When you map is finalized and includes all necessary metadata, click **Publish**. You will have the option to share the map through a link, embed the map on a website or blog, or add your map to an application. View my map at: https://bahanson.cartodb.com/viz/7296ca90-c396-11e5-a63a-0ef24382571b/public_map.
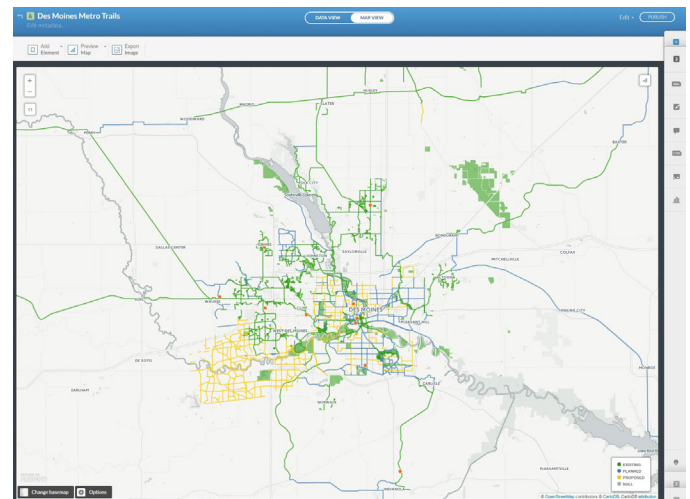
Contact:

Bailey Hanson bahanson@iastate.edu, 515-520-1436 or Associate Professor Christopher J. Seeger, ASLA, GISP cjseeger@iastate.edu, 515-509-0651 for more information about the Geospatial Technology Program. This task sheet and more are available at www.extension.iastate.edu/communities/gis