IOWA STATE UNIVERSITY
Extension and Outreach

ArcGIS Editor for OpenStreetMap (10.5.x)

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

The ArcGIS Editor for OpenStreetMap (OSM) allows you to use ArcGIS tools for working with OpenStreetMap data. This is a desktop toolset for ArcGIS 10.2 that allows you to load data from OpenStreetMap, use the familiar editing environment of ArcGIS Desktop to create, modify, and create network analysis. You can also update data and post back the edit changes to OSM to make them available to all OSM users. This task sheet will cover downloading the ArcGIS Editor for OSM and loading data from OSM to save in a geodatabase.
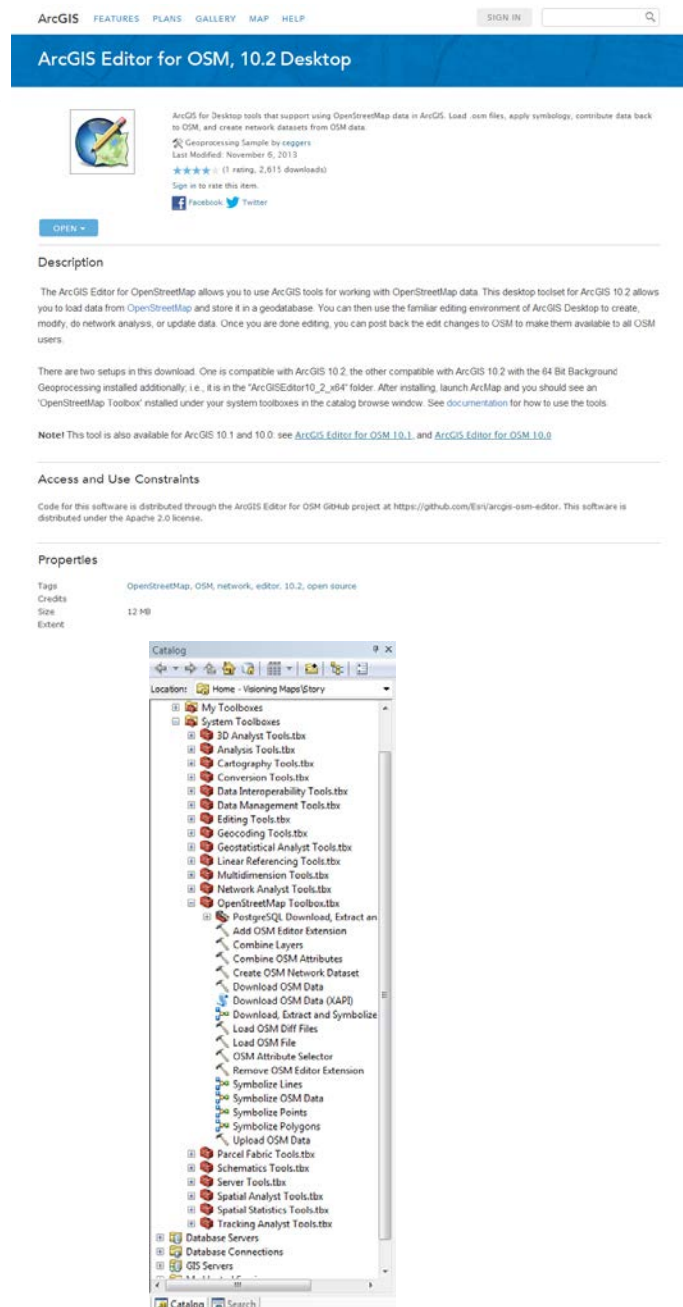
1. Download ArcGIS Editor for OpenStreetMap

a. To download the tool, navigate to www.arcgis.com/home/item.html?id=4533407decd94428817a228cb36964cf in a web browser. Click on the **OPEN** button and select **Download**. After the download is complete, open the zipped folder and navigate to the setup application that matches the version of ArcGIS installed on your machine. Follow the steps in the install wizard until the install is complete. Click **Finish**.

2. Open ArcGIS and View the Toolset

a. Once the download is complete, open a blank ArcMap document. Click **Start** > **All Programs** > **ArcGIS** > **ArcMap**.

b. Open Catalog within the ArcMap document. Click on **Windows** in the menu bar and select **Catalog**. Keeping Catalog open, expand the **Toolboxes** folder, then expand the **System Toolboxes** folder. You should now see a toolbox named **OpenStreetMap Toolbox.tbx**.

c. Expand the **OpenStreetMap Toolbox** and view the available tools.

2. Create an Output File Geodatabase

a. Open ArcCatalog, click **Start** > **All Programs** > **ArcGIS** > **ArcCatalog**.

b. Browse to an appropriate location or folder and right-click. Select **New** > **File Geodatabase** and give it a meaningful name. *Note: this is where you will save your OSM data.*

4. Download OSM Data

a. In the blank ArcMap document select the **Download OSM Data** tool.

b. Make sure the **OpenStreetMaps base download URL** is set to **http://www.openstreetmap.org**.

c. In the **Extent of data download** drop-down select **As Specified Below**. In this example, use the following coordinates to download data for the area surrounding Jack Trice Stadium. Top: **42.01711**, Left: **-93.64106**, Right: **-93.63122** and Bottom: **42.01069**.

d. Select the folder icon for the **Target feature dataset** box and browse to the location of your new file geodatabase. Double-click on the file geodatabase and type **osmData** in the name field. Click **Save**.

e. Once all the parameters are filled out in the **Download OSM Data** tool window click **OK**. *Note: it may take several minutes for the download to be completed and added to the ArcMap document.*
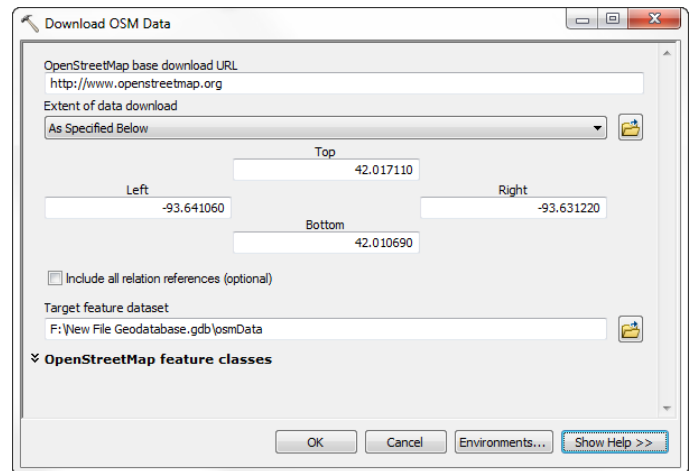
5. Explore and Symbolize OSM Data

a. The data downloaded from OpenStreetMap comes in the form of a group layer named **osmData**. The group layer contains three shapefile types: point, line and polygon. View the attribute table of each layer to identify what the feature is representing. Right click on the **osmData_osm_pt** layer and select **Open Attribute Table**. For example, a feature in the point layer could be representing a traffic signal, playground or even artwork. Open the attribute tables for the two other shapefile types to better understand what the features are representing.

b. To give the OSM data visualization more meaning, use the **Symbolize OSM Data** tool in the **OpenStreetMap Toolbox**. In the **Symbolize OSM Data** window, identify the location of each input layer and click **OK**.
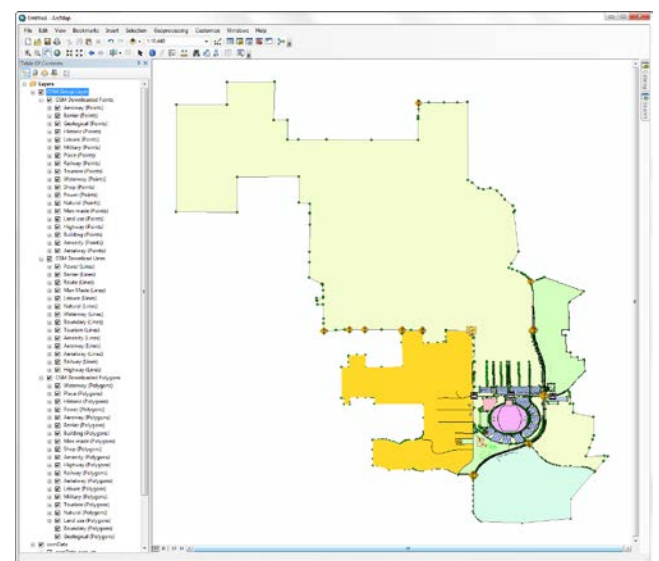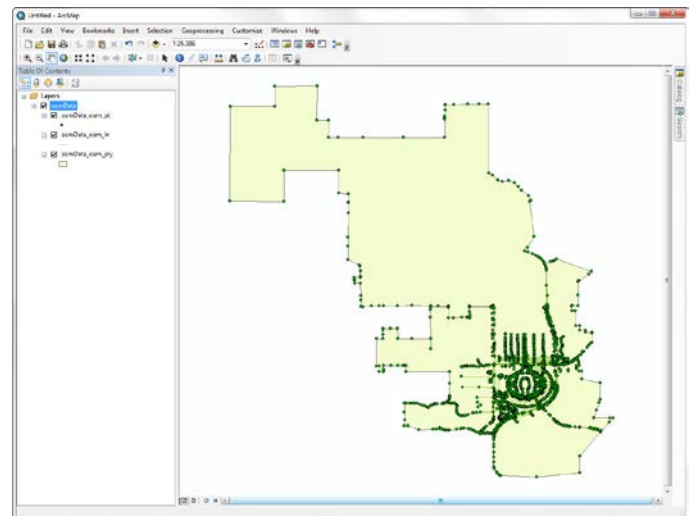
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Bailey Hanson bahanson@iastate.edu, 515-520-1436 or Professor Christopher J. Seeger, ASLA, GISP cjseeger@iastate.edu, 515-509-0651 for more information about the Geospatial Technology Program. This task sheet and more are available at www.extension.iastate.edu/communities/gis