

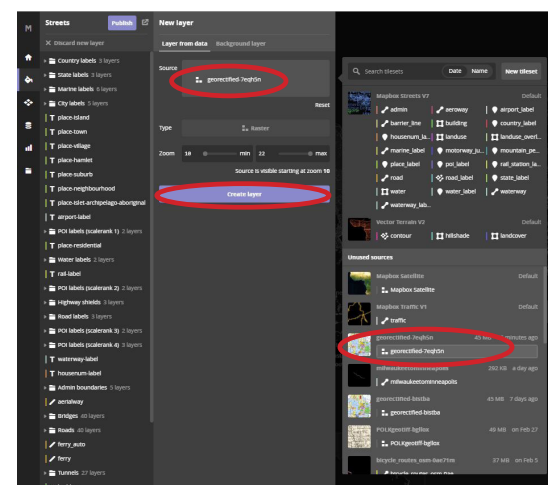
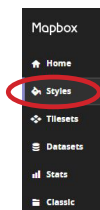
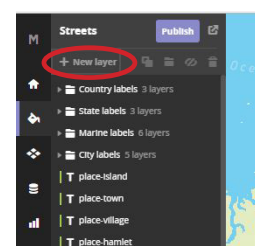
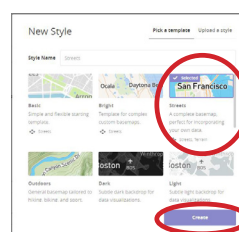
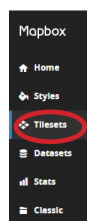
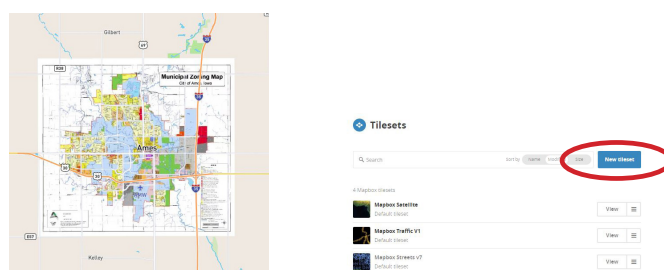
Adding Raster Data to Mapbox Studio

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.

Mapbox is a versatile mapping platform that allows users to build maps and apps. This task sheet will focus on Mapbox Studio, an interface for styling custom basemaps. This task sheet will build upon skills developed in a previous task sheet, *Custom Basemaps with Mapbox Studio*. This task sheet will guide you in adding a raster dataset to your basemap in Mapbox Studio. We will build a basemap that depicts how local businesses relate to municipal zoning in Ames, Iowa.

1. Getting Started

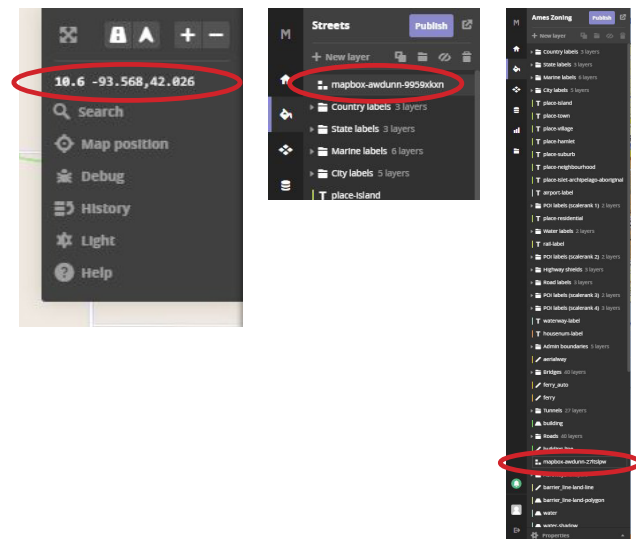
- To download the raster file used in this task sheet, go to <http://issueogtp.github.io/GISTaskSheets/Images/AmesZoningMap.tif>. The raster file is a geo-referenced TIFF image file (GeoTIFF) of an Ames, Iowa zoning map.
- To learn how to create your own GeoTIFFs from static pdf or jpeg maps, refer to a previous task sheet *Georectifying Maps with Map Warper* **PM2082-17b** which uses the MapWarper.net web tool.
- Now that you have the data, navigate to <https://www.mapbox.com/studio/> in a web browser. If you do not already have a username, go ahead and sign up for a Mapbox account here.
- Once you have logged in or created an account, click on **Tilesets** on the left-hand panel.
- Next, click **New tileset** and **Select a file** to upload the GeoTIFF of Ames Zoning (**AmesZoningMap.tif**). Once you locate the file, click **upload** to create a new tileset.
- Now that the raster data is uploaded as a tileset in your mapbox account, we can add it to a map!



2. Adding the Raster Tileset to a Basemap

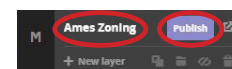
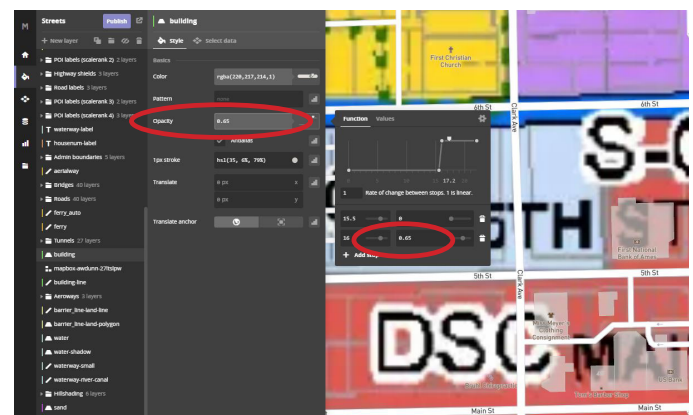
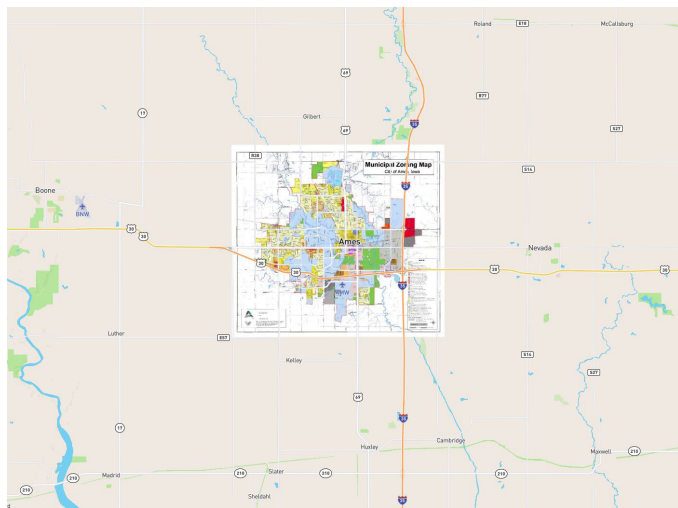
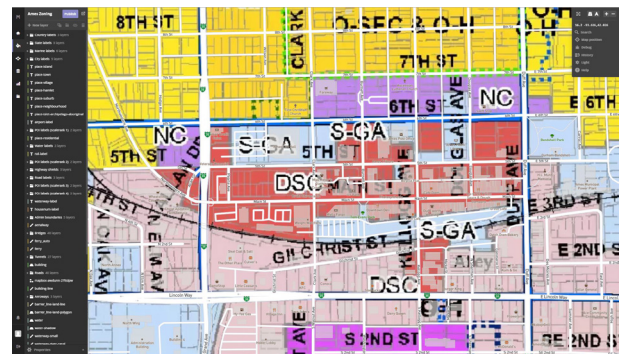
- Use the left-hand panel to select **Styles**. For this map we will create a new style. In the **New style** dialog box, select the **Streets** template and click **Create**.
- Now that you are looking at your basemap, click **New Layer**. This will create a layer from the image.

- c. Click on the box next to **Source** to select the tileset from which the new layer will be created. Locate the Ames Zoning Map tileset you uploaded in a previous step and select it. Leave the **zoom** settings as they are (min 10, max 22). Click **Create layer**.
- d. As you zoom towards Ames, Iowa, you should see the raster layer appear once the zoom level is greater than 10. *Hint: the box in the top right-hand corner will always display the zoom level and the coordinates at the center of the map.*



3. Integrating Raster Tileset with OSM Data

- a. Now that the Ames Zoning Map is a layer in the map, we will move it down in the drawing order, so that the other layers in the map will be visible. To do this, simply click and drag the layer down so that it is below the **building**, **building-line**, and **Roads** layers.
- b. Now, as you zoom (> zoom level 16) towards the commercial districts of Ames, you will notice the building footprints, names of businesses, and how they relate to zoning districts. To make this even more clear, let's adjust the **opacity** of the buildings layer to be **.65**.
- c. Now that the map is complete, make sure to change the name to something like **Ames Zoning**, before clicking the **Publish** button. Once the map is published, you can share it or use it in web mapping applications.



Contact:

Austin Dunn, MLA/MCRP Candidate; Bailey Hanson GIS Specialist, bahanson@iastate.edu, 515-520-1436; 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

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to Ross Wilburn, Diversity Officer, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, wilburn@iastate.edu.