

How to Create High Resolution Maps

In the past, most ArcGIS map images were captured as screenshots. Unfortunately, the resolution of a screenshot is usually only 1MB – 3MB in size, therefore too small to use in large event graphics. Instead of using screenshots, we now use map exports from ArcMap or ArcGIS Pro to generate map images of sufficient size. The following will explain how to create a map image large enough for your event graphic.

Determine Dimensions

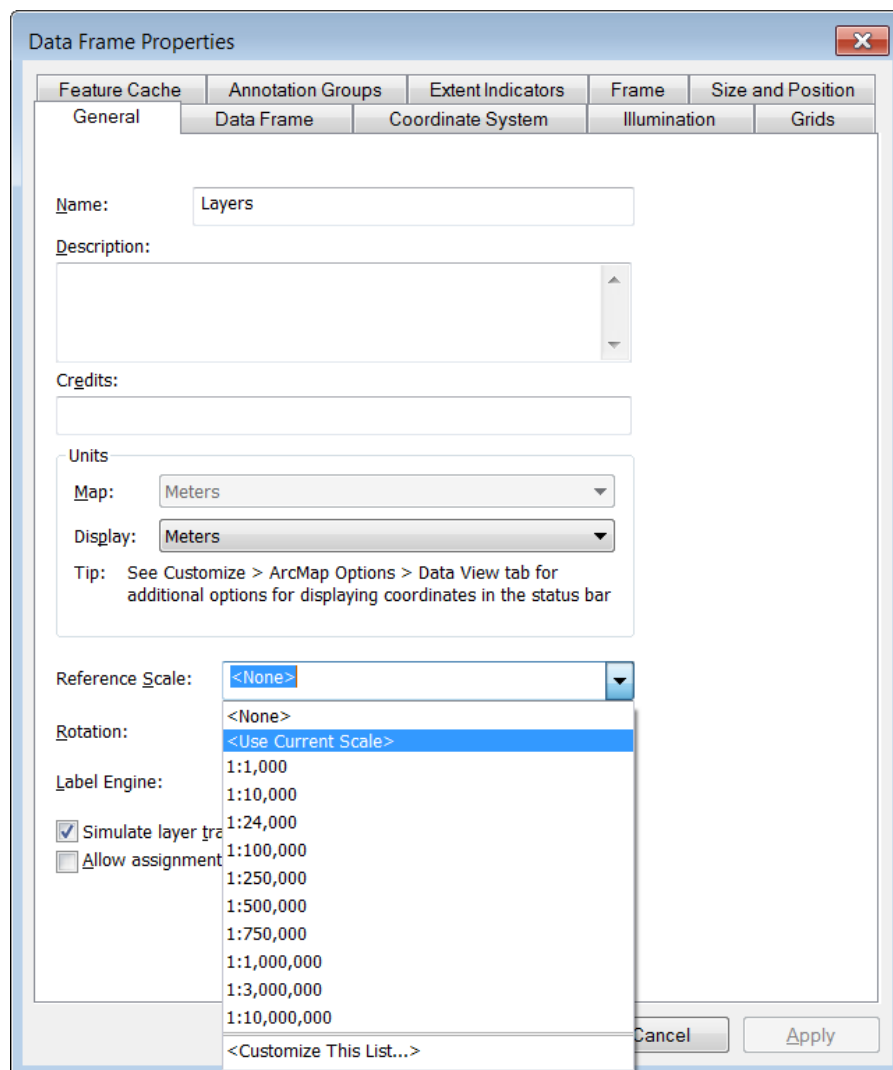
To determine the size of the map image, you must know the dimensions of your event graphic (in inches). You might not know exact dimension, but knowing your event graphic media will help.

- Single Pop-up or Meter Board - 40w X 90 roughly
- Double Pop-up – 120 x 96... is a good max limit – once past 144 (12ft) data drops out

Please allow 20-30 inches pan/crop space around your area of interest. Also, make sure any important features are towards the top/middle of your map extent.

Export Map Images in ArcMap

Once your map data is set and you are ready to export, set a reference scale under the General tab in **Data Frame Properties** so scale and symbols stay proportionate in the Layout view (this can be modified later).



Next, go to **Page and Print Setup...** under the File tab to adjust the Width and Height.

Page and Print Setup

Printer Setup

Name: \\redsvrps1\CL-C1060 Properties...

Status: Ready

Type: KONICA MINOLTA C1070/C1060PS

Where: CL_C1060

Comments: Konica C1060

Paper

Size: Letter

Source: Automatically Select

Orientation: ☒ Portrait ☐ Landscape

Map Page Size

☐ Use Printer Paper Settings

Page

Standard: Custom

Width: 120 Inches

Height: 96 Inches

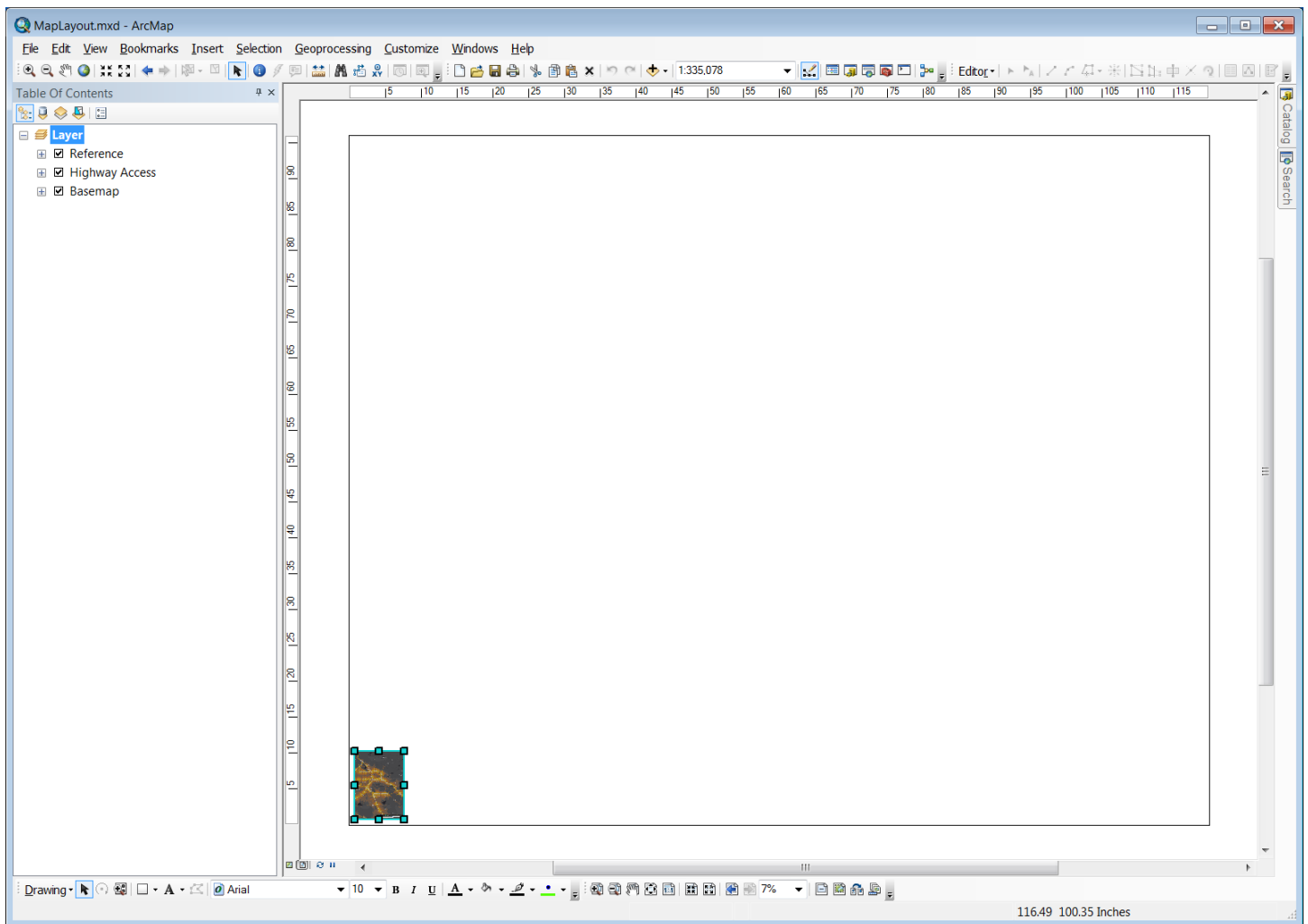
Orientation: ☒ Portrait ☐ Landscape

☐ Show Printer Margins on Layout ☐ Scale Map Elements proportionally to changes in Page Size

Data Driven Pages... OK Cancel

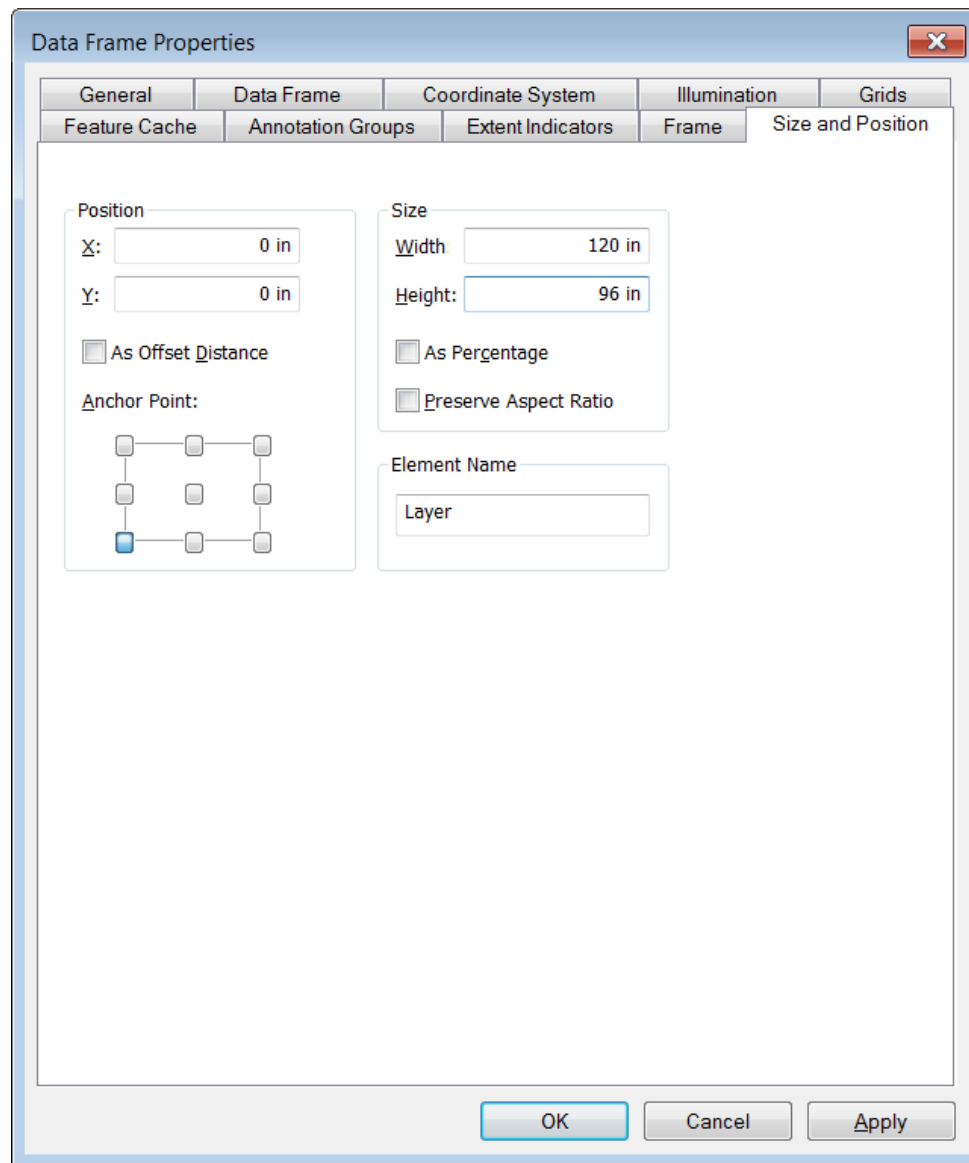
Printer Paper
Printer Margins
Map Page (Page Layout)
Sample Map Elements

Next, switch to Layout mode to view the map page.

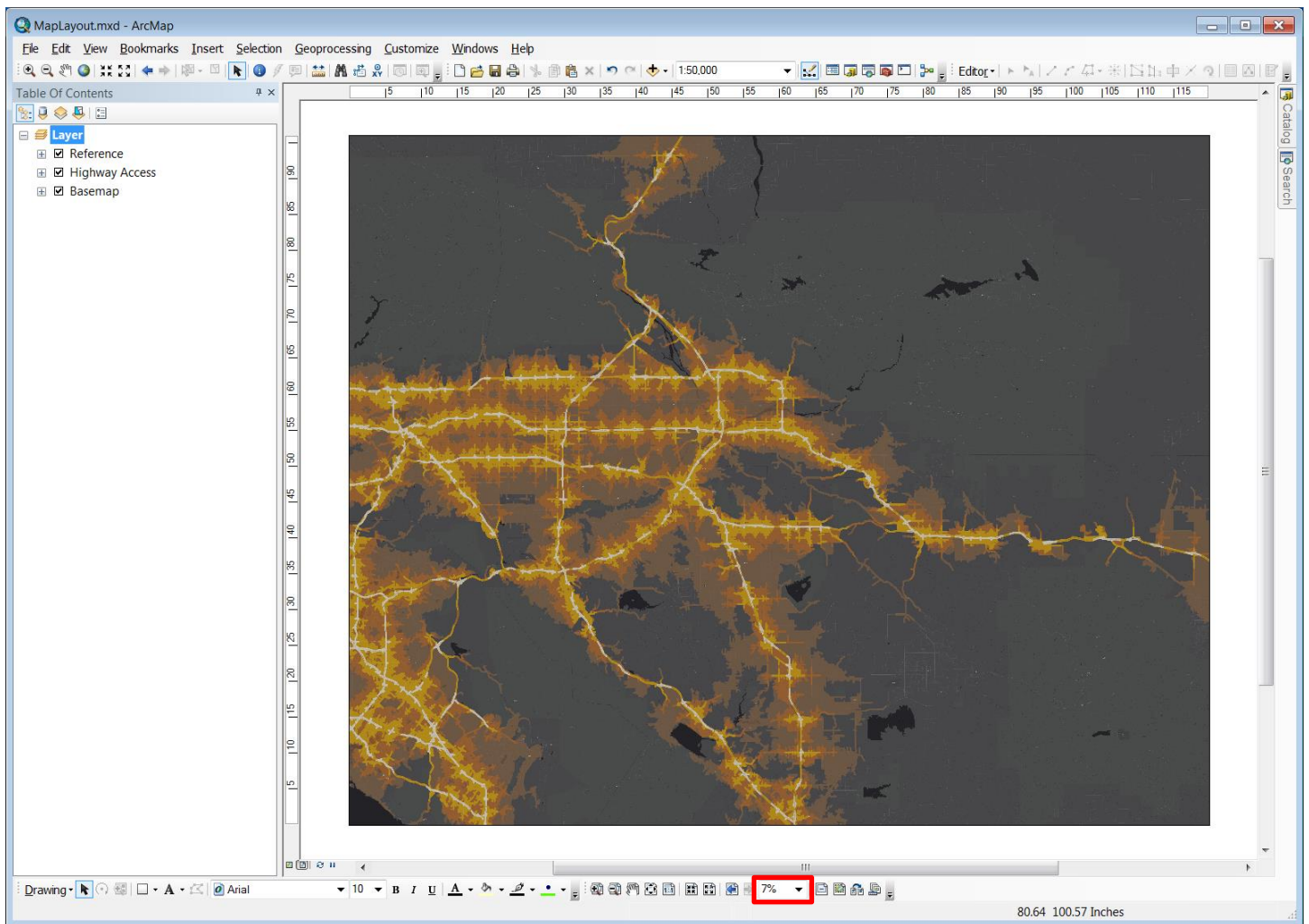


Click the map to re-open the **Data Frame Properties** window...

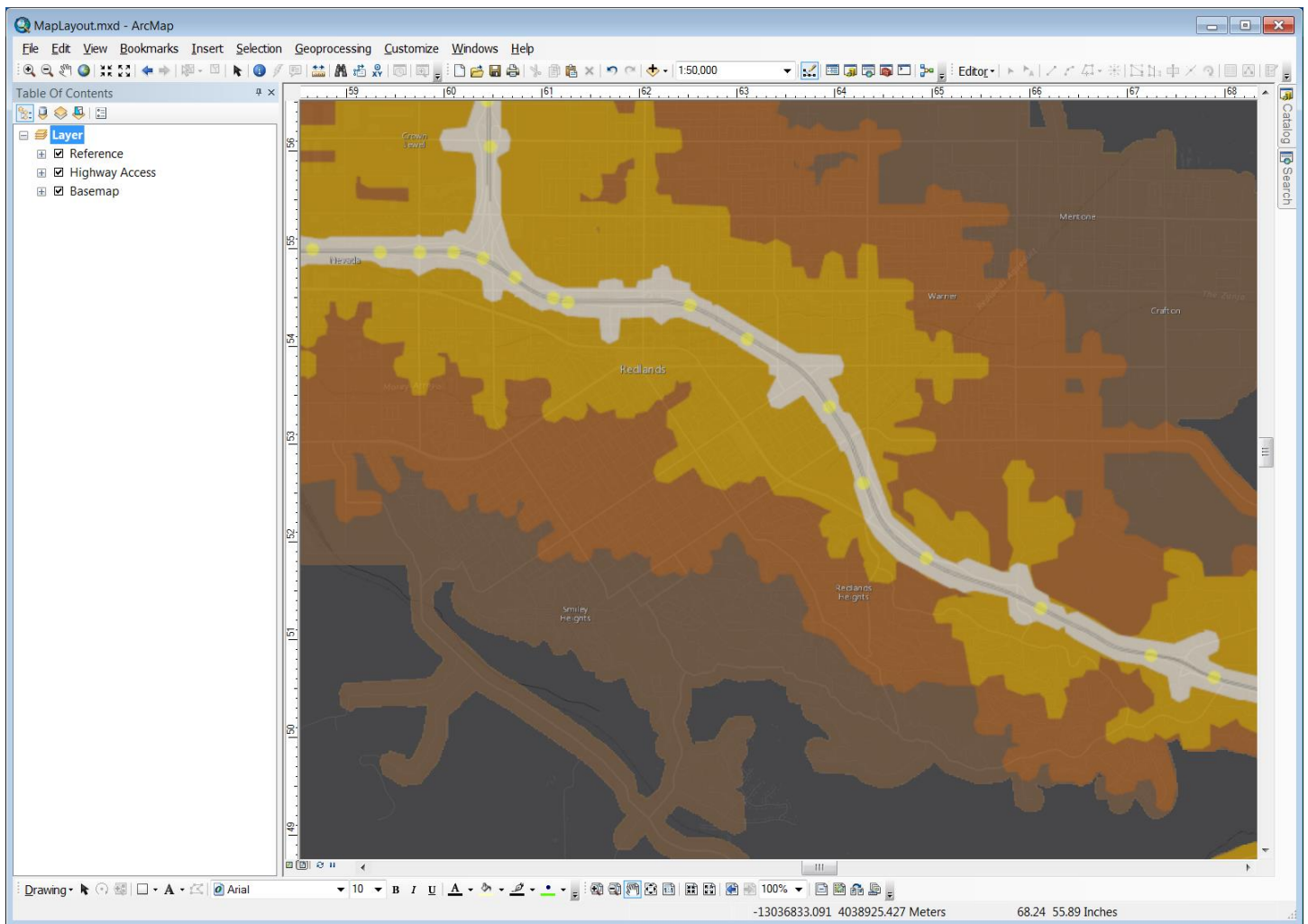
Then click the Size and Position tab and adjust the Width and Height to match your map page size...



Set Position (X/Y) to 0 for both.

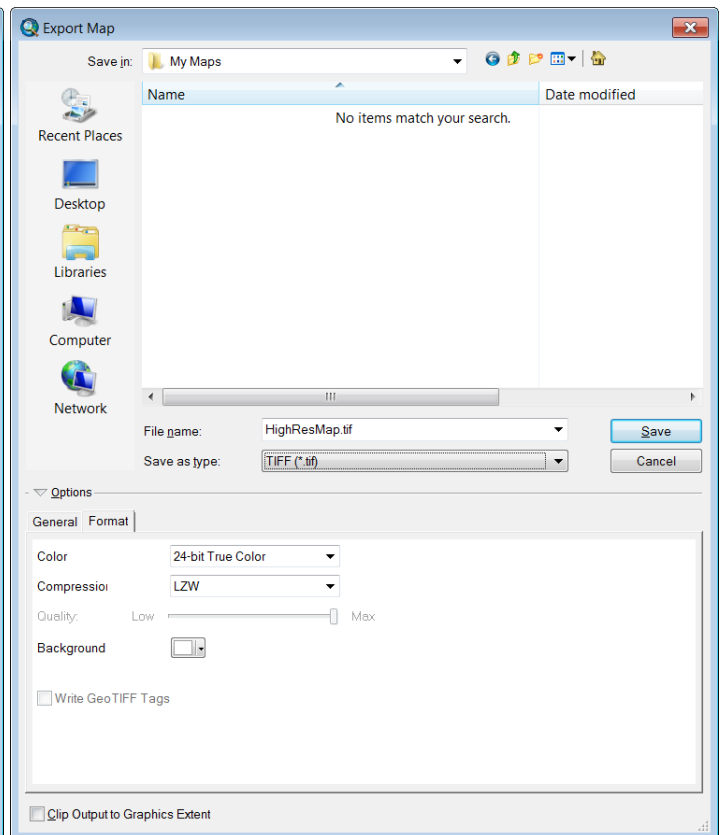
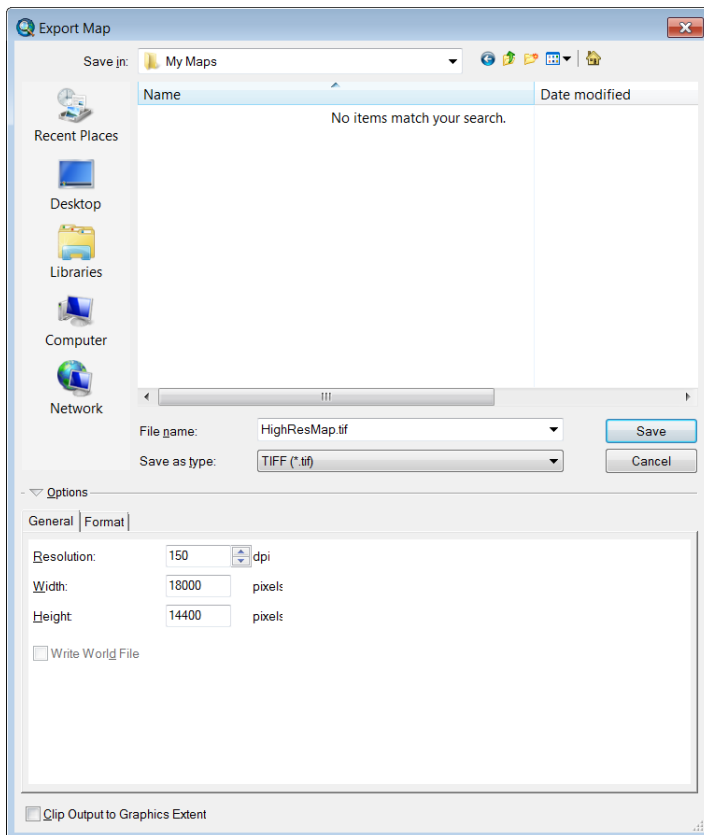


Check the map and print quality at 100% scale from the layout tool bar.



Make sure that data/symbols and imagery does not pixelate and text is readable at 100% and at proportionate scale to the data view. Zoom out and/or pan using your data tools or adjust the reference scale as needed. If everything looks good click your full extent button on the layout toolbar.

Go to **Export Map...** under File tab, to export map image.



Enter File Name and Save as Type: TIFF **(Do not use JPG or PNG)*

Under the General Tab:

Set Resolution 150 dpi - RECOMMENDED for large map exports

300 dpi or higher for small graphics – web, brochures, etc. (under 40 inches)

Under the Format Tab:

Set Compression: LZW

Verify pixels are under 25000 – there could be data loss if higher.

Click Save to Export

Export Map Images in ArcGIS Pro

Once your map data is set and you are ready to export, set a reference scale in the **Map Properties** so scale and symbols stay proportionate in the Layout view (this can be adjusted at any time).

Map Properties: 2016 Traffic Counts in the United States

General
Extent
Metadata
Elevation Surface
Coordinate Systems
Transformation
Illumination
Labels

Name2016 Traffic Counts in the United States

Map unitsMeter

Display unitsDecimal Degrees

Reference scale1:30,000

Rotation0

Color modelRGB

Background color

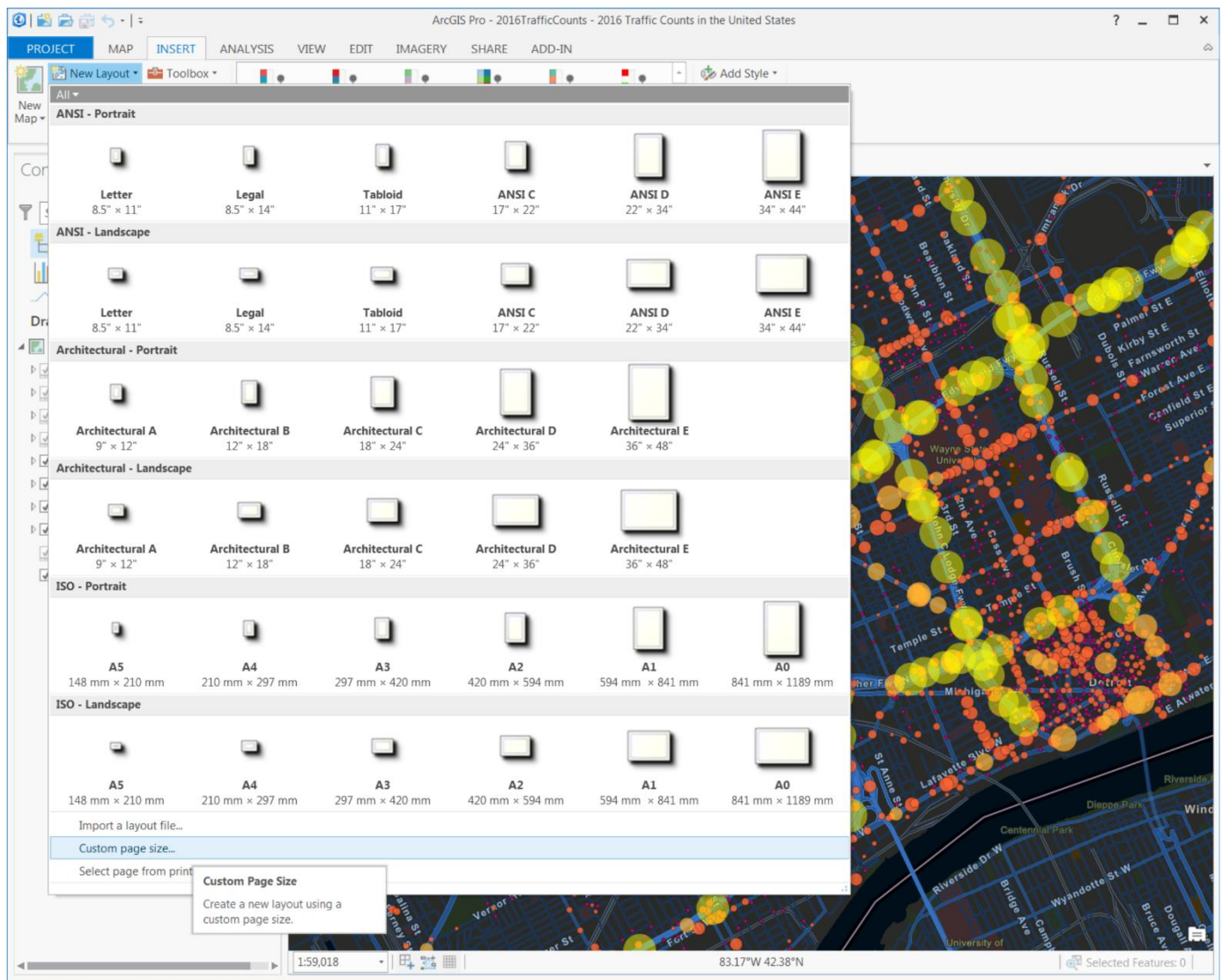
☐ Draw up to and including the maximum scale in scale ranges

☐ Allow assignment of unique numeric IDs for sharing web layers

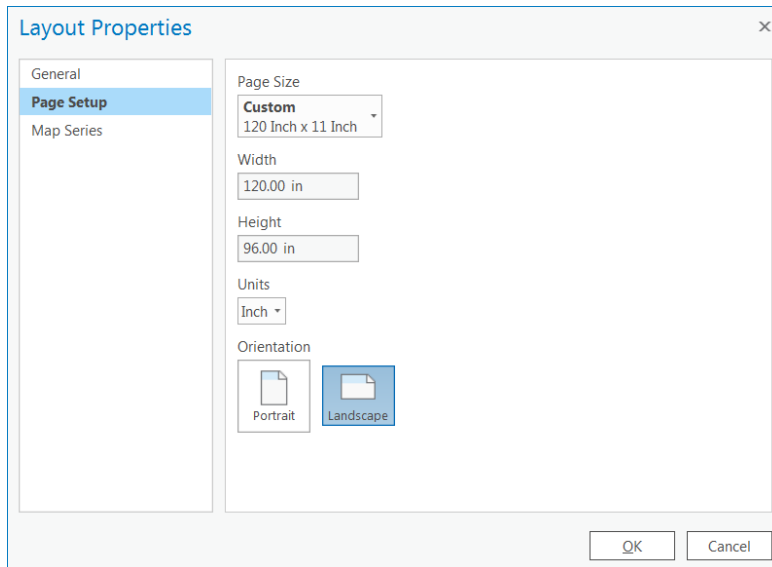
OK

Cancel

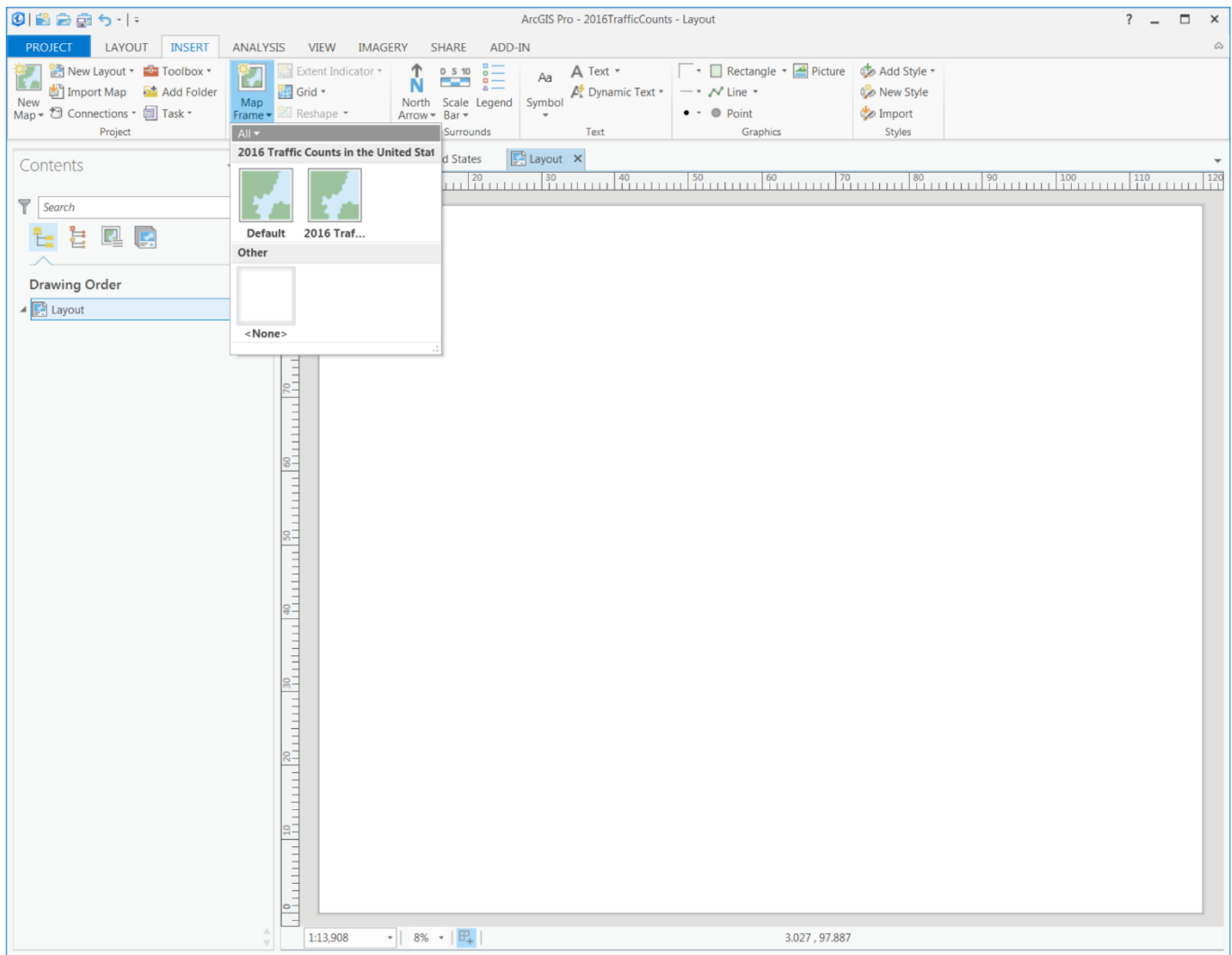
Click Custom page size... within New Layout pulldown under the INSERT tab.



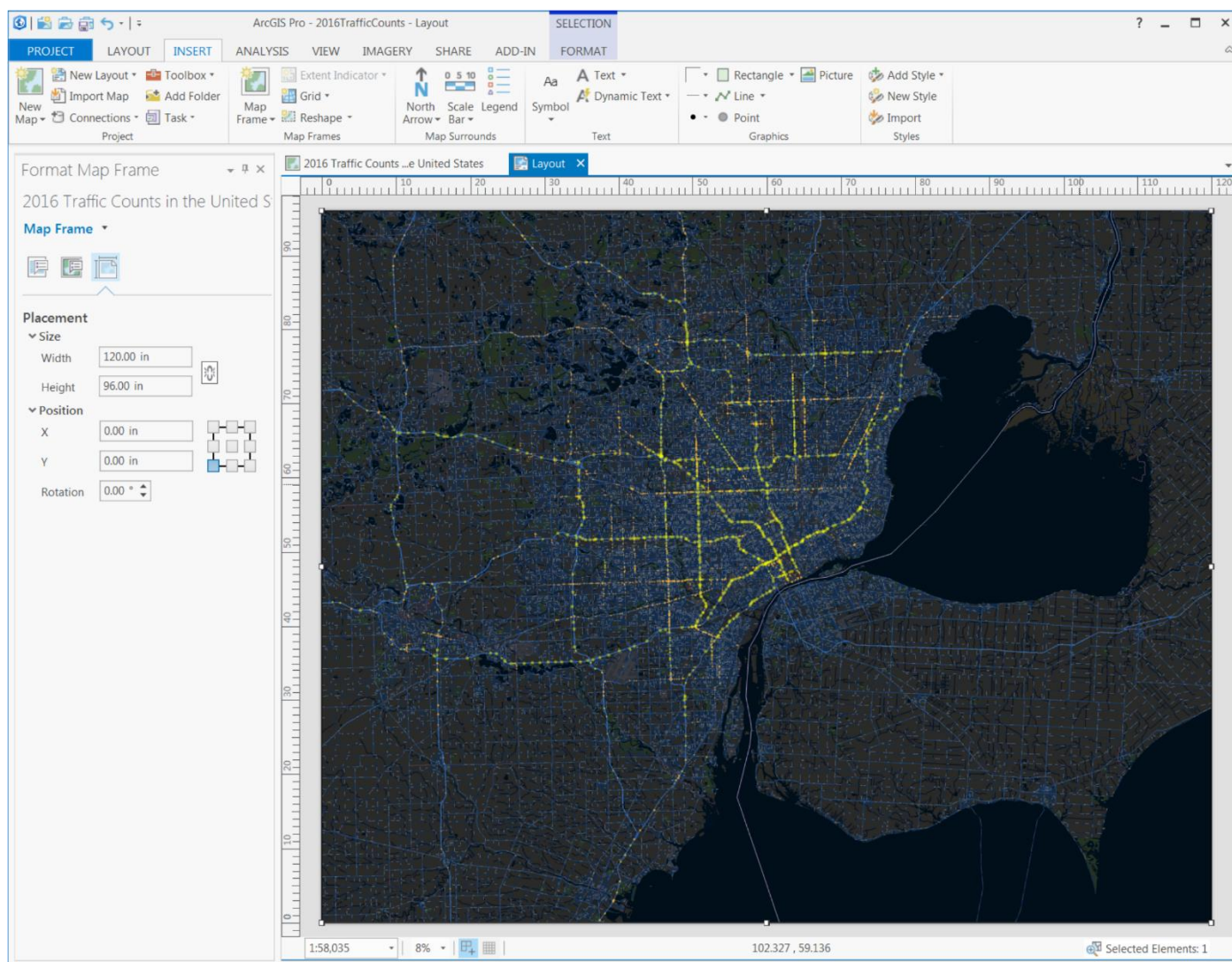
Adjust map Width and Height under Page Setup in the **Layer Properties...**



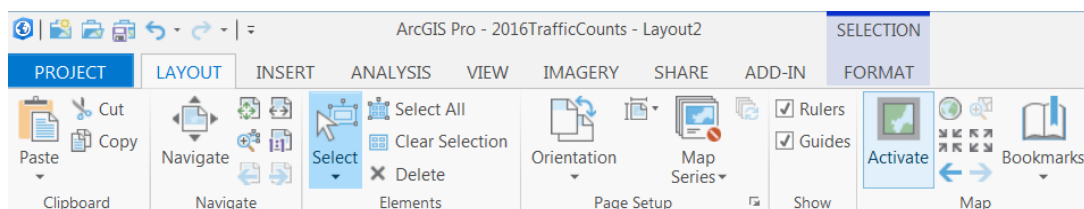
Under INSERT, click on the data to create the Map Frame pulldown



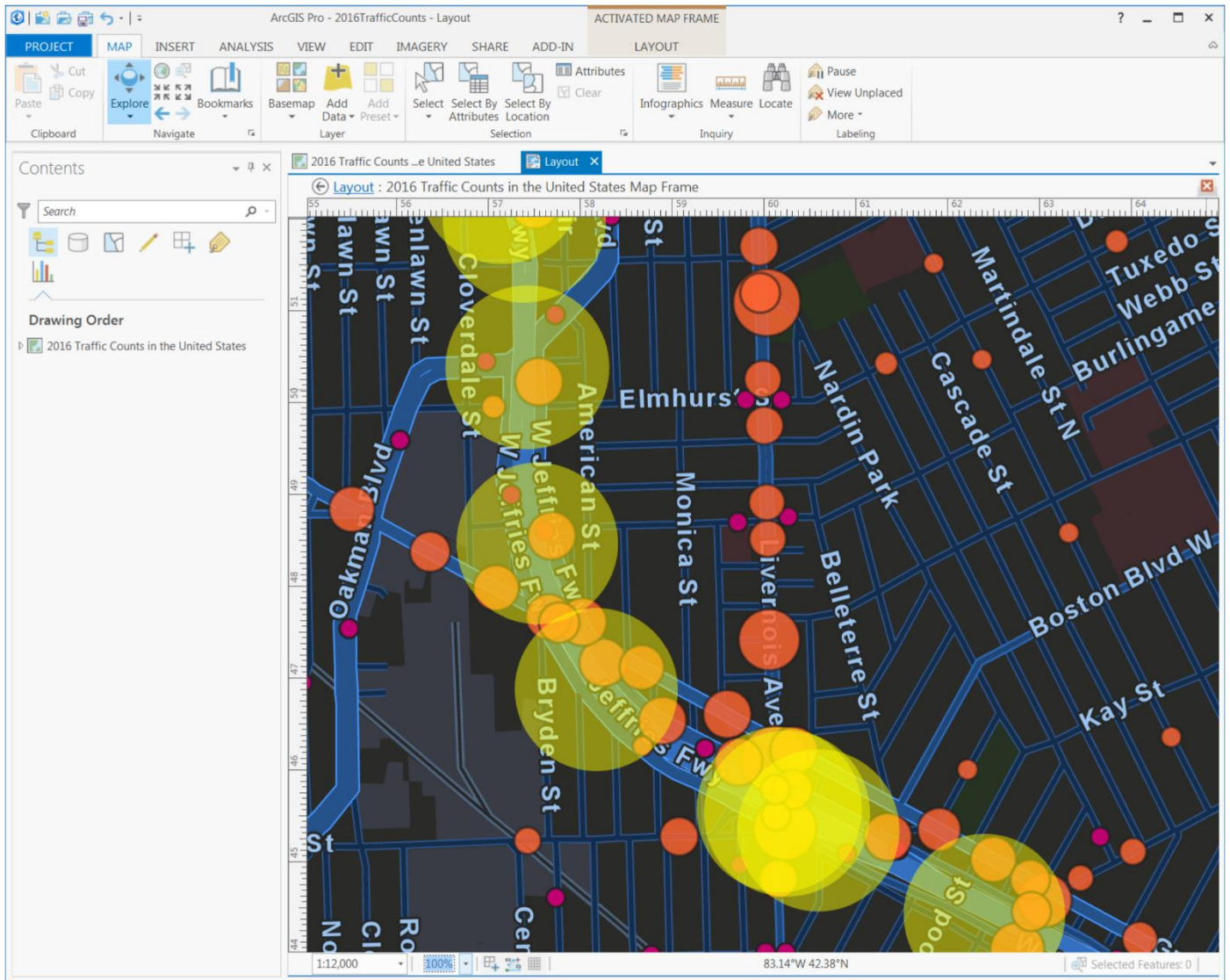
Click the map to open the Format Map Frame window, then click the Placement tab to adjust the Width and Height to match your map Layout size...



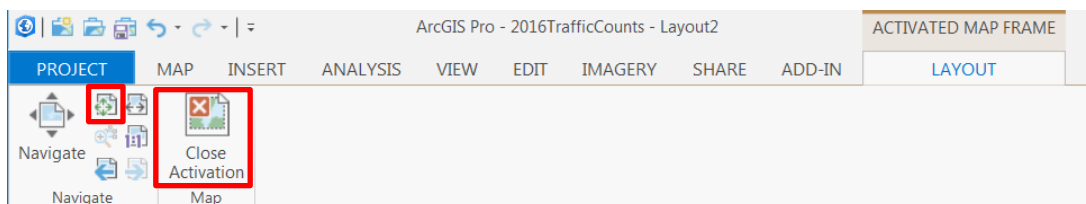
Set Position (X/Y) to 0 for both.



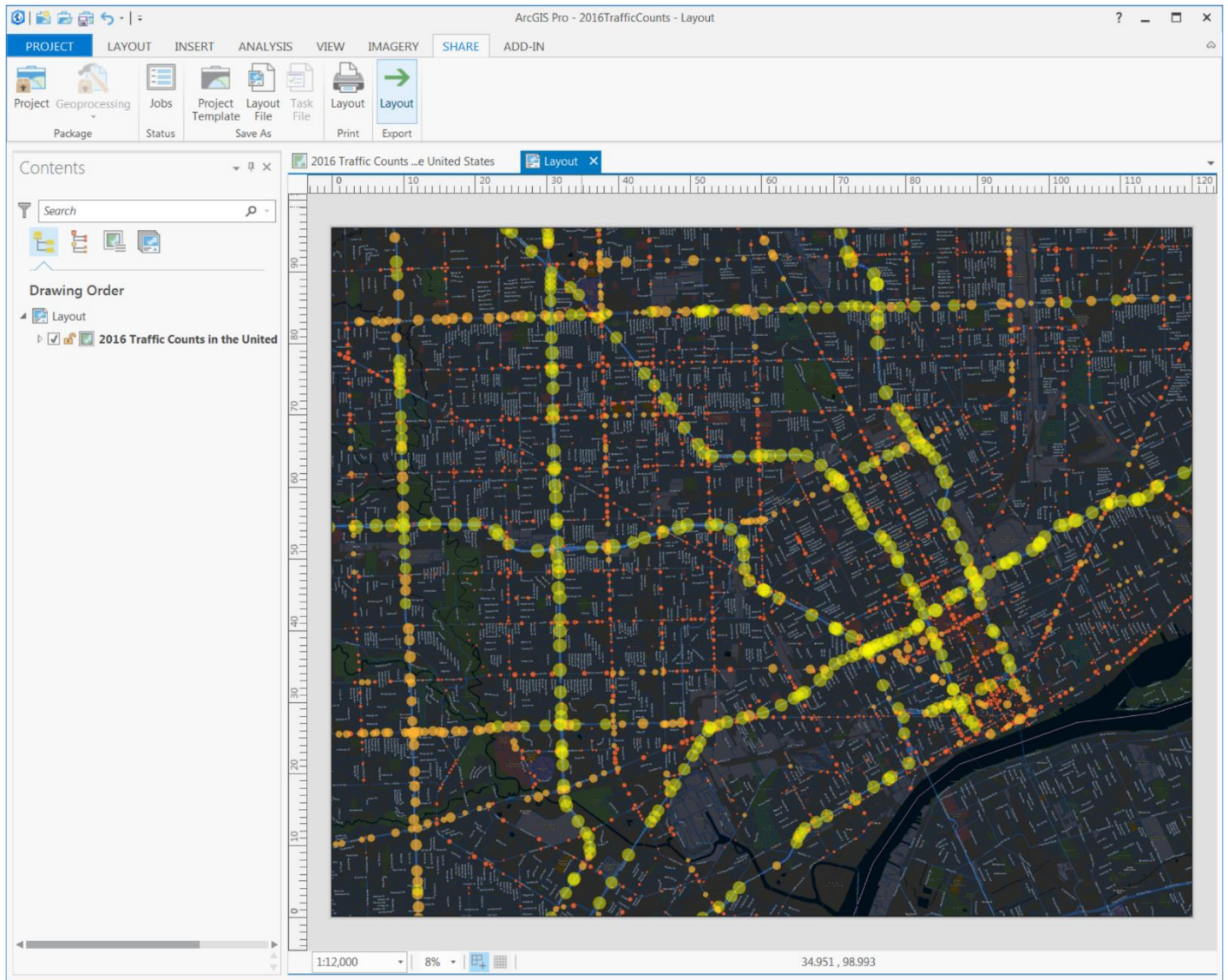
Activate the map frame under the LAYOUT tab to adjust (zoom/pan) to area of interest.



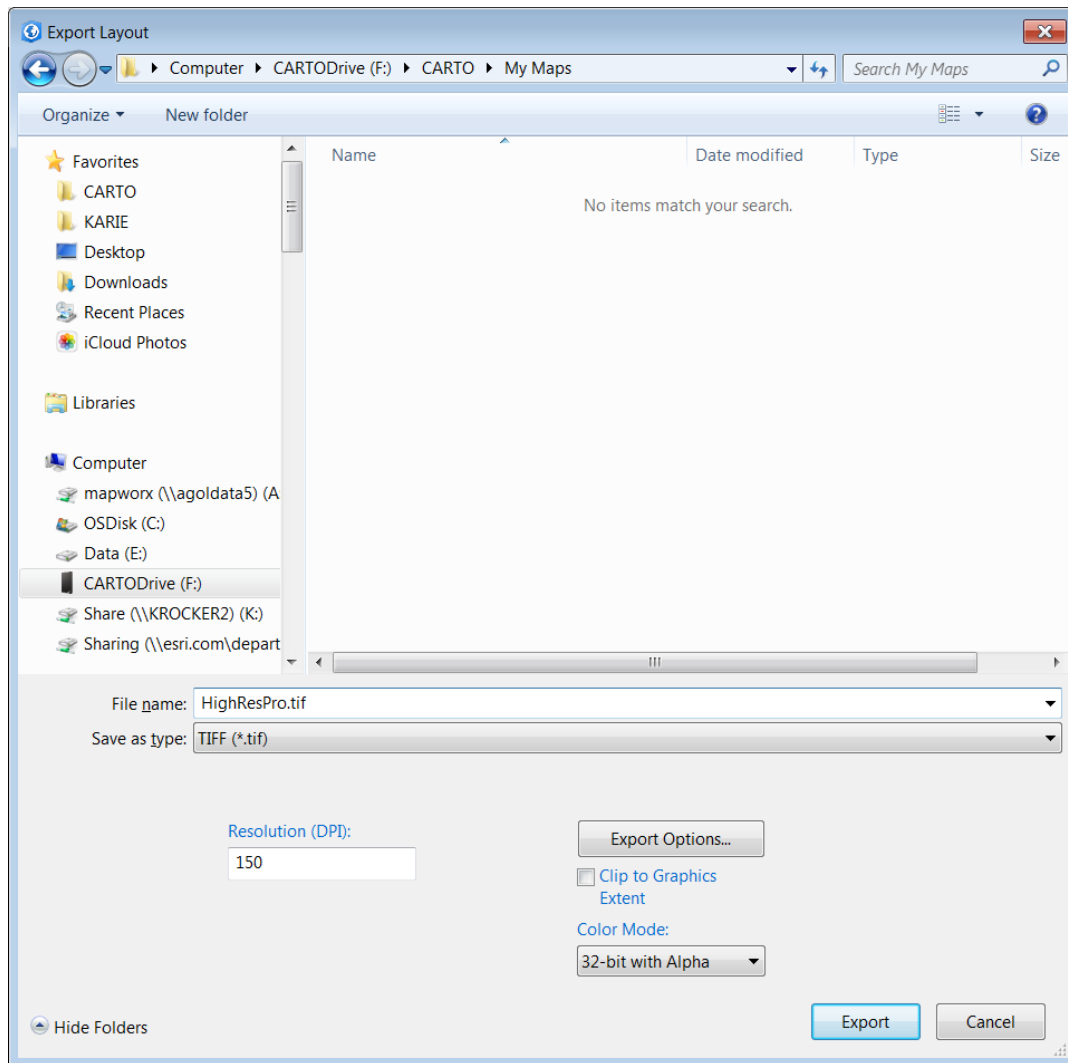
Check the map and print quality at 100% scale from the layout window.



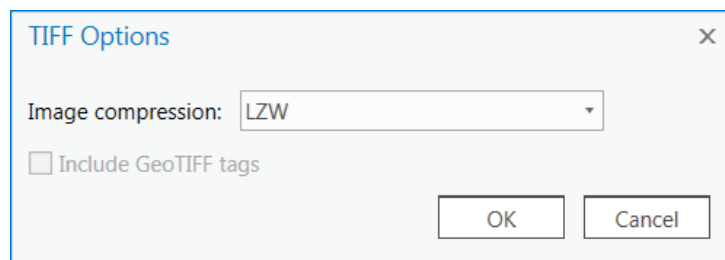
Close Activation and Zoom to Full Extent to finalized map.



Click the Layout arrow under the SHARE tab



Enter File name and Save as type: TIFF with 150 dpi



Click Export Options to make sure Image compression is set to LZW

Export.