Welcome to the Georeferencing Workshop

Chris Gist MS GISP  
GIS Specialist

Drew Macqueen MS  
GIS Specialist

slabgis@virginia.edu
## GIS Workshops

**Wednesdays – Sept. 11th to Oct. 30th**  
**10AM – 11AM**  
**Alderman Electronic Classroom (Room 421)**

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<td>Making Your First Map with ArcGIS Pro</td>
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<td>September 18th</td>
<td>Putting Old maps and Aerial Photos on Your Map: Georeferencing in ArcGIS Pro</td>
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<td>September 25th</td>
<td>Getting Your Data on a Map</td>
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<td>October 2nd</td>
<td>Points on Your Map: Street Addresses and More Spatial Things</td>
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<td>Taking Control of Your Spatial Data: Editing in ArcGIS Pro</td>
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All are welcome. Sessions are hands-on and assume no prior knowledge of GIS. No registration, just show up.

For more information email [uvagis@virginia.edu](mailto:uvagis@virginia.edu).
What is Georeferencing?

Assigning spatial location to a dataset.

Datasets can be...

- Historic Maps
- Aerial Photographs
- Construction Drawings
- Architectural Plans
...
ArcMap Georeferencing Steps

1. Add the basemap
2. Add the raster dataset to be georeferenced
3. Add control points
4. Transform the raster dataset
5. Save (create georeferencing world files)
6. Rectify to create a new raster dataset (optional)
ArcMap Georeferencing Toolbar
Transformation Types

Layer to be georeferenced

1\textsuperscript{st} Order / Affine
3 control points

2\textsuperscript{nd} Order
6 control points

3\textsuperscript{rd} Order
10 control points
World File
Today’s Maps