How to Put Your Family History on the Map: Georeferencing and Geocoding Historical Information

Slides – http://z.umn.edu/ALAgeo2017
Guide – http://z.umn.edu/ALAgeo2017guide
Data Examples – http://z.umn.edu/ALAgeo2017data

Georeferencing in Map Warper

- Go to http://mapwarper.net/ - create an account
- To start, click the Upload Map button at the left
- Enter metadata (yay for metadata!)
  - Title, Description, Year, Source
- Choose file and Create
- Click on Rectify tab to start georeferencing
- Use Reference map (on right) to find the area for your map
- Click Add Control Point button 📍
  - Click on scanned map, then basemap
  - Once both are in the right spot, click Add Control Point below maps
- Click the hand icon ✋ to move the map around in between adding control points
- Once you have enough, click Warp Image button at bottom left
- Map will be overlayed on right, you can then add more points if needed and Warp Image again
- Click Preview Map tab to see map
- Click on Export Tab:
  - WMS Capabilities URL (web mapping service)
    - Can add as Layer from Web in ArcGIS Online
      - Use WMS OGC Web Service option
    - URL will be in this format: "http://mapwarper.net/maps/wms/12646?"
    - Use the URL above and substitute the number from your map
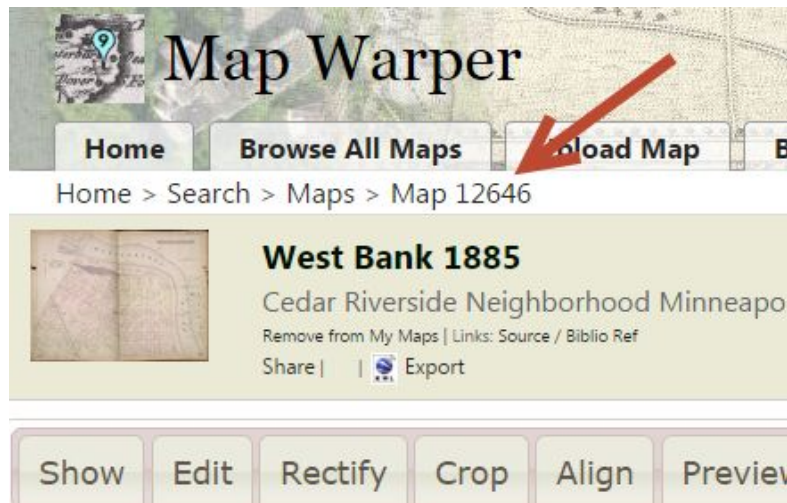
Creating Your Data

- Easiest way is to use a spreadsheet (Excel or Google Sheets)
- Create columns for the information you want to display
    - Name
    - Address
    - City
    - Country
    - Latitude
    - Longitude
    - Birth year
    - Information link
    - Photo link
    - Text Description
- Enter the information in the spreadsheet (notes):
    - For addresses, be sure to put address, city, country in different columns
    - **Historical** addresses can be problematic if the street no longer exists; in this case, try to determine where the address was located and determine the lat/long
    - Latitude/Longitude is the most accurate (see slides for options for determining lat/long)
    - Information link should be to a web page
    - Photo link should be to an image (should end in .jpg or similar)
- Save your data as a spreadsheet format (.xls, .xlsx, or in Google Sheets)
- Save or export your data as a CSV file
    - In Excel, Save As −> Save As Type −> CSV (Comma Delimited)
    - In Google Sheets −> Download As −> CSV

Using ArcGIS Online to Display Your Data

- Go to http://www.arcgis.com/
- Click Sign In on the upper right (Create a Public Account if you do not have one)
- If you already have maps, they will be under My Content
- Otherwise, click the "Map" link at the top to open a map
- To add your georeferenced map layer:
    - Click Add
    - Add Layer from Web −> select "A WMS OGC Web Service" from the drop down
    - Use the URL from MapWarper section above, for example: http://mapwarper.net/maps/wms/21254?
    - Click Get Layers
    - Click Add Layer
    - You may need to navigate on the map to where your layer would appear
- To add your family data:
    - Click Add
    - Add Layer from File
    - Choose your CSV file
    - Click Import Layer

- ○ **Geocoding notes:**
  - ■ If you have latitude/longitude, select that at the top and select which fields the coordinates are in
  - ■ If you have addresses or cities, be sure the fields are selected for each aspect of the location
  - ■ Default country is United States – strangely, "World" is in the drop down as well, in case you have cities from multiple countries

- ○ Click Add Layer when done
- ● To format how your data looks:
 - ○ Choose Show location only and then click the Options button

- ○ Click "Symbols"
- ○ Choose your symbol type and size
- ○ Click Ok, then Ok, then Done
- ○ Note: To change this settings later, hover over the layer in the Contents section and click the shapes
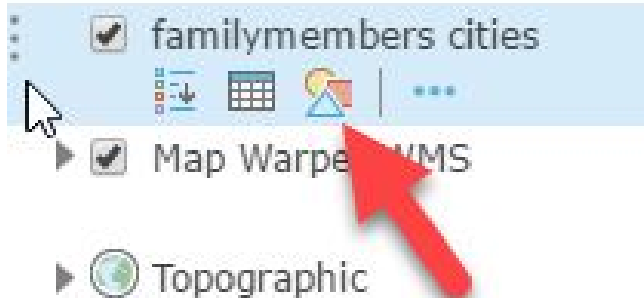
- ○ There are many other options, such as changing the name of the layer, if you hover over the layer in the Contents section and click the three dots
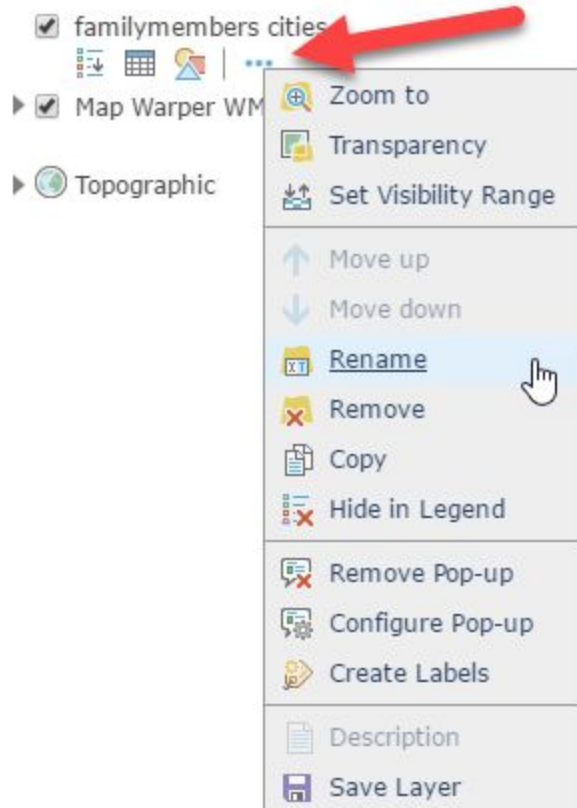
○ For example, you can Configure Pop-up to change how information appears when you click on the symbol displayed on the map

- Click the + symbol next to the Pop-up Title and select the data field to display here (such as Family Member)
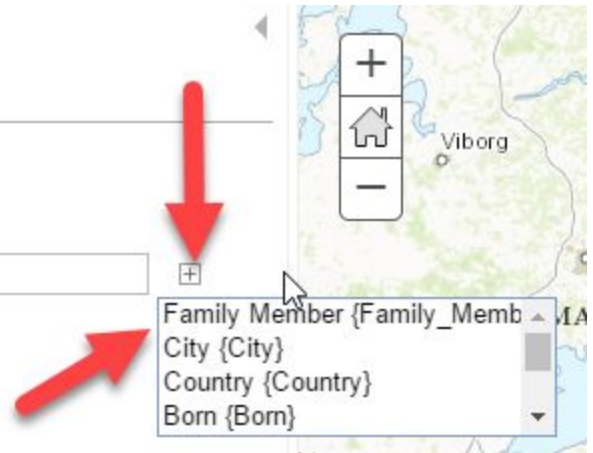

- Click Configure Attributes to choose which items to display or not (or change the label in the pop-up); for this example I've unchecked FID (not needed), Family Member (already using it as a title for the pop-up) and Photo Link (because I will also display that as an image)

- To have the photo show up in the pop-up, click Add –> Image

- I only want the photo to appear, so I removed the text from the Title box, clicked the + symbol next to URL, and selected Photo_Link

- Click OK to finish configuring the pop-up
- Completed pop-up looks like this:

- ○ The last step is to save and share
    - ■ Click the Save button at the top, give your map a title, add tags (required), and give it a summary description
    - ■ Click the Share button at the top
        - ● Once you check the "Everyone (public)" box, options will appear to embed in a website (optional)
        - ● A "Link to this map" is also on the Share dialog – send this to anyone to let them view your map

Share

Choose who can view this map.

Your map is currently shared with these people.

☑ Everyone (public)

☐ Members of these groups:

☐ Camping!
☐ Test Group
☐ University Libraries

Link to this map

http://arcg.is/4geea   f Facebook   🐦 Twitter

☑ Share current map extent

Embed this map

EMBED IN WEBSITE   CREATE A WEB APP

DONE