GIS software: Map data geographically

Last Modified on 10/14/2025 4:45 pm EDT

Learn more about digital mapping or "GIS" (Geographical Information Software) tools that connect data points to to street addresses or longitude and latitude coordinates so that they can be displayed graphically as a map.

Available Software

Several digital mapping tools are available to Bryn Mawr faculty, students, and staff, ranging from simple, easy-to-use tools for creating web maps and using maps to tell stories, to more complex tools for analyzing and visualizing geographic data that require a steeper learning curve.

ArcGIS (ESRI Suite)

All Bryn Mawr students, faculty, and staff have access to ESRI's ArcGIS Online [] (click the **Bryn Mawr College** to log on via SSO), a premier tool. with ability to import or create geographic data, author and edit 2D maps and 3D scenes, as well as access Living Atlas data provided by ESRI.

Additionally, ArcGIS Online provides access to a variety of customizable web-based apps, including **StoryMaps, Experience Builder, Instant Apps, Survey123**, and **Dashboards**. These allow you to present your digital maps through interactive sites.

ArcGIS Pro, the full-service GIS desktop application, is available on library lab computers and for download on a personal **Windows** device via the ArcGIS online portal. For more information on installing and accessing ArcGIS Pro, please see this help article.

Resources:

- Basics Course (ArcGIS Online)
- Walkthrough—ArcGIS Online for Archaeology
- Troubleshoot—ArcGIS Online Help | Documentation
- FAQ []
- MyESRI Training Catalog □
- Step-by-step Guide (StoryMaps)
- Getting started with ArcGIS StoryMaps

П

qgis

qgis is an open-source, full-service GIS desktop application which is free to use and can be downloaded onto any personal device, including on Macs. It is available for download at https://download.qgis.org or can be used on the Carpenter DMCL lab computers.

Resources:

- LinkedIn Learning Videos [(see: Access LinkedIn Learning [)
- Tutorials □
- More Tutorials []
- User Guide □

LeafletJS

Leaflet <code>i</code> is an open-source JavaScript library for building interactive maps on the web. Leaflet provides a frameworks for displaying map data within a browser and is compatible with GeoJSON layers, tile layers, and other Leaflet objects to customize your map. While little GIS knowledge is required for this tool, it requires web development experience and some knowledge of JavaScript and HTML. This tool is best used for inserting and creating interactive maps into your site, rather than geographical data analysis.

Resources:

- Reference Page
- Leaflet FAQ □

StoryMapsJS

StoryMaps JS [is another open-source tool for digital mapping projects which creates slides and allows the use of annotated maps and sharing media. This tool is especially useful for storytelling and combining geographic locations with text, media, and other web content. In order to access StoryMaps JS, you will need a Google account to log in but the platform itself is free to use.

Resources:

- Walkthrough Blog []
- Building StoryMap by adding Media
- FAQ □

Google Maps and Google Earth

The free version of the web-based Google Maps [] is sufficient for many mapping projects and is the easiest tool to use for finding geographic coordinates (latitude and longitude). Google Earth is available to download onto a personal device or for use on the web. Google Earth allows you to get close up 3D views of places around the globe, including historical places. Additionally, you can survey distances and sizes of geographic areas as well as create or import various GIS data. Google Maps is a good tool for on-the-go location tagging or for finding latitude and longitude of your points of interest.

Resources:

• User Guide [] (Google Earth)

Flourish

With Flourish [], you can import geographical data into a variety of customizable templates offered. Thesite includes templates for 3D maps and projection maps, with the ability to make heat maps, point maps, spikes, categorical maps, animated, or hex maps. Additionally, you can use maps to create and publish stories, which can include multiple slides, images, text, and other media.

Resources:

• Flourish Help Center |

SketchUp

SketchUp is a plug-in for Google Earth that lets you create location-specific 3D models. This is available for use in the Carpenter DMCL on the lab computers.

Support

If you want more support or training on any of these tools, check out the training videos available through LinkedIn Learning (for help logging on, see: Access LinkedIn Learning) or stop by Digital Scholarship Office Hours in Carpenter Library. Additionally, consult your camera or mobile device's documentation to determine whether it has geotagging capabilities and how to turn them on or off.

Please contact the Help Desk with questions or to request an appointment with an Educational Technology Specialist: help@brynmawr.edu or 610-526-7440.

Questions?

If you have any additional questions or problems, don't hesitate to reach out to the Help Desk!

Phone: 610-526-7440 | Library and Help Desk hours

Email: help@brynmawr.edu | Service catalog []

Location: Canaday Library 1st floor