Maine Library of Geospatial Information Program Plan Fiscal Year 2025 -2026

This document contains the Program Plan of the Maine Library of Geospatial Information for the Fiscal Year 2025-2026.

The Program is designed to further the activities of the GeoLibrary by providing current, complete, and correct statewide framework data sets for use by the State of Maine's government agencies and the public as well as supporting the greater mission of the GeoLibrary as described in our charter.

1. Geodetic Control

1.1. Coordinate references, GNS control points, MaineDOT CORS network, selected MaineDOT roads.

1.2. This framework layer may change with the NGS movement to new coordinates in the next year. It will move when MaineDOT decides to adopt the new system.

2. Elevation

2.1. We will provide 3 new elevation data sets,

2.1.1. A Digital Elevation Model (DEM) constructed from 11 LiDAR coverages previously captured over a period of 10 years.

2.1.2. A DEM constructed from the same aerial imagery as provided in item 1.1.

2.1.3. A Digital Surface Model (DSM) constructed from the aerial imagery as provided in item 1.

2.1.4. A Digital Height Model (DHM) derived from subtracting the DEM from the DSM and creating a new raster DHM.

2.1.5. A process to create 2-foot contour data from the most current DEM available and provide those contours to users.

2.1.6. A review of older elevation data and possible removal of older data.

2.1.7. Bathymetry

2.1.7.1. We will provide new Bathymetry coverage for the entire Maine coast supplied by NOAA. The coverage will be in the form of a DEM of the subsurface conditions.

3. Orthophotography

3.1. We will provide high resolution aerial imagery for the State. The imagery will be 4-band multi spectral, 6" pixels, and no older than 3 years for any area of Maine.

3.2. Any data license for the orthophotography will be extensible to Non-State Data Custodians with a joinder license whereby the State will be able to supply access to the orthophotography with no additional charges.

3.3. The imagery will be available as an upgrade in 3" coverage for additional cost to any agency or non-state custodian that desires to purchase it.

3.4. The new ortho data will be tested yearly using GNS and other control to obtain an RMSE accuracy value.

3.5. A review of existing Ortho photographic data sets and possible removal of older data.

4. Hydrography

4.1. We will carry forward our 3DHP project from FY 2024-25 assuming the USGS continues the program.

4.2. If the USGS does not continue the program we will renegotiate the project to include as much area as possible without the USGS matching funds.

4.3. A review of hydrographic data and possible removal of older data.

5. Land Cover

5.1. We will provide updated high resolution land cover data from USGS and the University of Maine.

5.2. We will undertake an analysis of the best method to extract Land Cover features from the 4-band imagery in the Orthophoto layer.

5.3. A review of land cover data and possible removal of older data.

6. Transportation

6.1. The transportation framework layer will be made up of 911 Roads and the MaineDOT public map viewer.

7. Boundaries

7.1. We will use the US Bureau boundary data sets for Maine as our authoritative source for Civil Boundaries.

7.2. A review of all Boundary data and possible removal of older data.

8. Cadastral

8.1. This framework layer will consist of Parcels and Structures.

8.2. The parcels will be merged into a Statewide service.

8.3. The Parcel Project from FY 2024-25 will continue into FY 2025-26.

Technology Projects

Technology projects fall under the Maine Office of GIS (MEGIS) and the GeoLibrary provides requirements for them as requested. Budget for

MEGIS/GeoLibrary projects will be funded by the Department of Administrative and Financial Services (DAFS) and GeoLibrary funds will not be used for these projects unless specifically requested by OIT.

1. Complete the Platform Migration

1.1. Assure stability and functionality of the data store.

1.2. Assure continued access to the data catalog

1.2.1. Provide a system allowing the Data Librarian quality management functionality over what is published to the public web site.

1.2.2. Provide a "Card Catalog" data system to allow for keyword search and metadata management.

1.2.3. Provide continued distribution of basemap imagery services via the ESRI platform.

2. Design and implement a new Web Site for the GeoLibrary

2.1. Integrate data catalog into web site

2.2. Provide new discovery tools for imagery and raster products.

2.3. Provide a system for defining, compressing, and distributing download requests though email links.

2.4. Provide a self-service map making tool, preferably in an OGC compliant software system.

2.5. Provide a solution for near-line and off-line archival systems.

2.6. Assure that the new web site non-gis content can be updated by individuals without needing coding skills.

Community Projects

1. Provide an Outreach Program

1.1. Contact and inform all identifiable non-state data custodian candidates of the GIS data and services that the GeoLibrary provides and encourage them to become users and contributing members.

1.2. Develop a current mailing list

1.3. Set up mass marketing capability

1.4. Use the intelligence that we gain from the email marketing to personally contact each willing candidate and look for partnerships.

1.4.1. Sub-license the basemap imaging

1.4.2. Provide data awareness training

1.4.3. Provide information and justifications for upgrading to buy-up data sets

2. Create an Educational User Experience

2.1. This covers basic GIS concepts and tasks using OGC compliant software.

2.2. Encourage all users to learn how to work with data services in their chosen software environments.

2.2.1. Simple instructional videos.

2.2.2. Access to 3rd party training sites.

2.3. Provide relevant news and information on events.

2.3.1. Update at least quarterly, monthly is better.

2.3.2. Information posted needs to be able to be managed without specialized code or advanced technical training.

2.3.3. Allow public posting of information through the Maine GeoLibrary email account with Staff having editorial discretion.