

Geospatial Data Literacy for Public Libraries: A GIS-Mapping Exchange Program

The Portland State University Department of Geography request a National Leadership *Implementation* grant in the amount of \$249,845 to further the impact of our previous work by: running an in-person and an online workshop for teams of librarians and geographic information systems (GIS) professionals; awarding another round of ‘field projects’ (subawards) that stimulate libraries’ engagement supporting geospatial data through partnerships in their local communities; and improving the existing online GIS-Mapping Toolkit through additional resources and design.

This project aligns with the IMLS Program Goal 1 and builds on previous IMLS-funded work that recognizes the importance of library professionals gaining experience and training in the use of GIS software and geospatial data to help grow community connections. A common barrier library staff report is that they feel unqualified to participate in their geospatial ecosystems. With this barrier in mind, our team will develop and pilot instructional material that can be used in library settings. By implementing and refining our Toolkit resources and events, our work will address Objective 1.1. Our project is also in alignment with Objective 1.2 as local collaboration and partnerships are at the core of this project.

The project team includes: Nancee Hunter (PI), David Banis (GIS Lead), and Savannah Madden (Project Coordinator). We also have a team of GIS professional and public library advisors, who will provide feedback to the team members during program planning and development.

Project Justification

By design, this project will have a broad impact, supporting American libraries' capacity to make GIS more accessible to the public. Our previous work has revealed many libraries’ innovative methods towards incorporating geospatial technologies into their operations, for example: staff helping patrons set up public ArcGIS Online accounts and offering basic tutorials; developing a participatory mapping exhibit to provide entrée to local history; building a StoryMap to show important regional landmarks; using GIS to explore useful data sets; and maintaining a geocoded address database for non-profit organizations that help people in need.

Maps are essential to an informed and engaged society, but only if people are comfortable using them. When participants see the potential of geospatial technology they are filled with curiosity and an overall enthusiasm for doing it themselves. This new effort will expand upon these successful, free trainings, including the development of a repository of past projects.

Library workers help people find information and conduct personal and professional research. As such, they understand the power of geography as both an archival and dynamic resource. Our proposal requests funds to support a far-reaching program that will include updated resources and training, along with new field project funding for libraries to partner with community GIS professionals. For convenience, an in-person workshop will be held in conjunction with the 2025 ALA conference. In addition, an on-line workshop will help reduce participants’ travel burden. We believe our collaborative approach provides a model for building strong communities of practice. These relationships take time to develop and nurture which this new funding will support. Publishing a series of case studies will allow more buy-in and input.

Project Work Plan

This implementation project will have four components: 1) Organize and Deliver Workshops; 2) Promote and Manage Field Projects; 3) Update Toolkit; and 4) Program Outreach.

There are many potential applications for using GIS in public libraries, from how-to workshops to interactive digital exhibits that allow users to explore data sets at a local level. We aim to train a new cohort of librarians on the use of GIS software and applications. As such we will hold an in-person multi-day workshop before or after the 2025 Annual ALA Conference. We will recruit participants from a variety of communities around the country. In addition, we will deliver one entirely free online course. These trainings achieve one of our project's core goals: to bring together librarians and GIS professionals to better understand their own geospatial ecosystems, design new local data projects and partnerships, and learn from innovative peers from across the country.

We will support field projects that demonstrate a commitment to understanding and engaging with local geospatial ecosystems. The subaward funding will range from \$2,000 to \$7,000. Published case studies from our previous awardees will provide ideas for potential projects; we will also be available throughout the process to help brainstorm, answer questions, address concerns, etc. Each awardee will also be required to write a project report which will inform and grow our case study collection. We will also create new instructional materials, which may be adopted for LIS courses and library professional development initiatives. More ways of connecting to our work will also be established via a mailing list, social media and an online community of practice.

Diversity Plan

Our approach continues to be that *all* our partners are invited to co-create resources, contribute to the outreach process, and otherwise help inform the project's path. New materials will be designed to build geospatial data literacy and support library workers in understanding the power of maps and how individual perceptions, histories and knowledges inform and shape maps; as well as serving as geospatial data intermediaries in their communities. We will be intentional with our outreach, focusing on diverse populations and minority communities. In fact, our past work indicates that these are the most responsive communities due to lack of resources.

Project Results

This project will implement and expand upon the GIS-Mapping Exchange Program partners and resources. We will establish new partners and educational modules for the project. Through the workshops and supporting community of practice, library workers will develop, iterate, and share geospatial data services and roles for their libraries, growing the prevalence of libraries as geospatial data intermediaries and strengthening regional networks. This project will also result in guidance on usable and implementable open educational resources that can inform related projects in the future.

Budget Summary

The requested budget amount of \$249,845 will support: Personnel: \$77,572 for a Project Manager (PI), Project Coordinator, and Graduate Research Assistant; Fringe Benefits: \$17,177; Subawards to Libraries: \$50,000, travel to the ALA and PLA conferences: \$10,000; workshop hosting: \$5000, Tuition: \$32,326; Indirect Costs: \$57,800.