

OneMap Community GIS

An SDI modernization proof-of-concept application

This is submission to the [OGC Spatial Data Infrastructure Modernization Project 2025-2026](#) demonstrating a proof-of-concept application. The themes of the [OneMap Community GIS](#) application supports both the [US NSDI 2025-2035 Strategic Plan](#) (US NSDI) and the National Geospatial Advisory Committee (NGAC) [Near-Term Opportunities for Our National Spatial Data Infrastructure](#) (NSDI) recommendations.

Collaboration

The OneMap Community GIS application has been submitted by Esri in collaboration and consultation with: Alaska GIS, Overture Maps Foundation, Alan Leidner, and informed by ongoing engagement with global community leaders, partner-providers, and end-user consumers. The ideas expressed herein are based on key learnings of many real-world exemplars, through collecting and sharing proven practices from numerous government, non-profit, academia, and private sector organizations that includes:

[Digital Atlas of Australia](#), [NC OneMap](#), [Ireland GeoHive](#), [Alaska Open Data Geoportal](#), [Alaska Geospatial Council](#), [IndianaMap](#), [MassGIS Data Hub](#), [IMF PortWatch](#), [California State GeoPortal](#), [SDG Data Alliance](#), [Open Data DC](#), [USGS Colorado ASIST](#), [Vermont Open Geodata Portal](#), [Kansas Geoportal](#), [TNC Geospatial Conservation Atlas](#), and [National States Geographic Information Council \(NSGIC\)](#)

Guided by Core Values

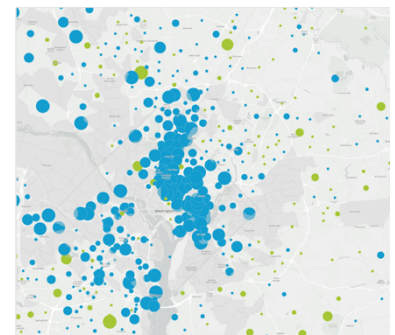
The [Core values of the US NSDI](#), including user-centric design, has guided the design and (future) governance of the OneMap Community GIS application. In addition, any future national application must be well organized, performant at the national scale, utilize open standards, and allow organizations to maintain, curate and steward their data, in a web-based environment that allows data and models to be available as a service.

OneMap Community GIS

The OneMap Community GIS application supports:

Data & Technology

- Community GIS Hub – An out-of-the-box configuration of our OneMap Community Hub template as a modern SDI implementation using ArcGIS Online software as a service (SaaS) and ArcGIS Hub. The OneMap Community Hub template is repeatable, affordable, flexible and customizable—enabling organizations worldwide to jump-start their Community GIS. Designed for audiences from engaged public to professionals, the hub:
 - Leads with the value proposition: *Modern SDI powers our future*
 - Explores the critical role of location data to support key national priorities



- Shares case studies of data sharing and collaboration that enable efficiency, effectiveness, and increased return on data investments
- AI assistant — Demonstrates the natural language AI assistant coming to the hub.
- Open and interoperable—The open catalog natively uses OGC API-Records and supports multiple open standards and specifications for catalog federation, metadata, RESTful web services, and APIs.
- Priority national datasets—Features foundational data themes and priority national datasets from distributed sources, including, but not limited to NGDAs, as described in the NSDI 2035 Strategic Plan.
- Technology innovation—Communicates how cutting-edge GIS technologies, such as Geo AI & Machine Learning, are transforming the way we understand and interact with the world.

Governance

- Tools to support governance—The open catalog contains hundreds of nationwide data, maps, apps, and tools as *potential content* from distributed data providers across government, private, and nonprofit sectors; the proof-of-concept application explores criteria for inclusion; demonstrates a system for evaluation, nomination, and content curation; and provides a content dashboard.
- Data supply chain governance—Web GIS presents new opportunities for a seamlessly interconnected national geospatial ecosystem. The proof-of-concept application provides a space for the community to explore Web GIS data supply chain patterns and governance challenges, for example with national datasets created by aggregation of local data.



People

- Goals of Community—Acknowledges the three main community roles of orchestrators, partner-providers, and end-user consumer stakeholders; it connects community members across all sectors in a hub of hubs and includes a place for the community to express their commitment to success of the NSDI.
- Capacity building—Provides a place for the SDI to engage and inspire students, professionals, and developers with career paths and learning resources, connecting learners with education providers that support workforce development.
- Supporting resources—Promotes best practices for data discoverability, reuse, AI-readiness, and more.



Aligning with the vision of the NSDI 2025-2035 Strategic Plan, the OneMap Community GIS application represents a significant step forward in modernizing the US NSDI. By leveraging cutting-edge technologies such as AI and open standards, the OneMap Community GIS application provides the right environment to enhance data sharing, collaboration, and decision-making across various sectors. Ultimately, it supports the promoting societal well-being through improved access to and utilization of geospatial data.