

**MONTANA GEOSPATIAL
INFORMATION ACT
GRANT APPLICATION
STATE FISCAL
YEARS 2027-2028
JULY 1, 2026 – JUNE 30, 2028**

***CITY OF GLENDIVE NG9-1-1 DATA
STANDARDIZATION PROJECT***



APPLICATION FOR FY2027 MGIA GRANT FUNDING

SECTION 1 – ORGANIZATION, PARTNER, AND PROPOSAL INFORMATION

Provide basic information about your organization, the total MGIA grant request and any match, and a short executive summary of your project (up to 400 words). Identify the FY2027 MGIA grant program priority, whether the project is one or multiple years, and list all funding partners.

Primary Applicant Contact Information <i>(Please fill this section out in its entirety)</i>	
Name of Agency/Entity:	City of Glendive
Department:	Public Works
Division/Section:	Public Works – Engineering / Infrastructure
Street:	300 S. Merrill Ave.
City:	Glendive
County:	Dawson
State:	Montana
Zip Code:	59330
Project Manager Contact Information:	
Name:	Frank Ceane
Title:	Public Works Director
Email Address:	ceanef@glendivemt.gov
Phone Number:	406-377-3318 ext 15
Secondary Project Manager Contact Information	
Name:	Ryan Russett
Title:	Assistant Public Works Director
Email Address	russettr@glendivemt.gov
Phone Number:	406-377-3318 ext 16
Authorized Signer Contact Information	
Name	Frank Ceane
Title	Public Works Director
Email Address	ceanef@glendivemt.gov
Phone Number	406-377-3318 ext 15

Funding Partners <i>(required for each partner, add rows as needed)</i>	
Name of Contact:	Not applicable – no external funding partners.
Name of Agency:	
Street:	
City:	
County:	
State:	
Zip Code:	
Contact Email Address:	
Contact Phone Number:	

NOTE: Each identified Funding Partner MUST also submit a letter of support.

Proposal Information	
Date Submitted:	2-25-2026
Identified Grant Priority: <i>*See the Montana Geospatial Info Plan for information on priorities.</i>	Next Generation 9-1-1 (NG9-1-1) Data Development – Road Centerlines and Address Points
Proposal Prepared By:	Frank Ceane
Short Title of Proposal:	City of Glendive NG9-1-1 Data Standardization Project
Executive Summary	
<p>The City of Glendive Public Works Department, in coordination with the Glendive Police Department, proposes a two-year project to develop, standardize, and validate NENA-compliant road centerline and address point datasets to support full implementation of Next Generation 9-1-1 (NG9-1-1) services. This project directly advances the Montana Geospatial Information Act (MGIA) priority of NG9-1-1 Data Development and strengthens the MSDI Transportation and Structures & Addresses framework themes.</p> <p>While operational GIS datasets exist, they currently require attribute standardization, topology correction, schema alignment, and formal validation to meet NENA-STA-006.2a-2022 standards and successfully integrate into the Montana State Library’s NG9-1-1 GIS Data Validation and Aggregation Portal. The project will reconcile departmental datasets, correct routing and addressing inconsistencies, validate connectivity, and implement formal quality assurance procedures to ensure data accuracy and statewide interoperability.</p> <p>The City has committed \$40,000 in local cash match to build permanent internal GIS capacity, including acquisition of a survey-grade GNSS rover system, advanced NENA standards training, and dedicated staff time for field verification and workflow development. The GNSS</p>	

investment is funded entirely through local match and ensures high positional accuracy for address and roadway verification while reducing future dependence on consultant services.

The requested \$50,000 in MGIA funding will support specialized technical services necessary to achieve portal validation compliance and statewide aggregation acceptance. Deliverables will include validated NENA-compliant datasets, portal validation documentation, complete MSDI-compliant metadata, published public datasets, and a documented internal maintenance workflow.

This project transitions the City of Glendive from reactive data correction to a sustainable, standards-driven GIS management model aligned with Montana’s long-term geospatial strategy and strengthens public safety across eastern Montana communities.

MGIA Grant Funding Request and Match	
Total Requested MGIA Funds:	\$50,000
Total Matched Funds:	\$40,000

SECTION 2 – PUBLIC BENEFIT

Briefly explain how your project supports one or more MSDI Themes or initiatives, what you will deliver, and how the results will benefit multiple agencies and Montana communities through local impact, cost savings, or efficiency gains.

10% of the Total Score - 300-word limit

This project directly supports the MGIA priority of NG9-1-1 Data Development and strengthens the MSDI Transportation and Structures & Addresses framework themes by improving the consistency, accuracy, and interoperability of foundational emergency response datasets.

Standardized and validated road centerlines and address points are essential for reliable emergency dispatch routing and responder navigation. By achieving NENA compliance and successful validation through the Montana State Library's NG9-1-1 GIS Data Validation and Aggregation Portal, the City of Glendive will reduce routing errors, improve dispatch confidence, and enhance emergency response effectiveness.

Beyond emergency services, creation of a single authoritative dataset will improve subdivision review, address assignment, infrastructure planning, capital project coordination, and interdepartmental data management. Standardization reduces duplication of GIS maintenance and increases operational efficiency.

Validated datasets aggregated at the state level strengthen interoperability with Dawson County and adjacent jurisdictions responding across municipal boundaries. Alignment with statewide standards ensures that Glendive's data contributes to a more reliable and consistent geospatial framework across eastern Montana.

Project impact will be measured by:

- Number of road segments standardized to NENA requirements
- Number of address points created or corrected
- Successful portal validation acceptance
- Reduction of known addressing discrepancies
- Implementation of a documented maintenance workflow

All datasets will include complete MSDI-compliant metadata and will be publicly accessible to promote transparency and statewide integration.

SECTION 3 – PROJECT MANAGEMENT AND ORGANIZATIONAL CAPABILITY

Use this section to show that your organization and team can successfully deliver and manage the project. Briefly describe your relevant experience with similar projects or grants, name the primary and secondary Project Managers and their roles, and explain how you will oversee any consultants, meet reporting requirements, and invoice the State Library for reimbursement.

10% of Total Score - 2-page limit

The City of Glendive will designate a Primary Project Manager (PM) from the Public Works Department and a Secondary PM to ensure continuity. The PM will be responsible for overall project execution, reporting, invoicing, consultant coordination (if utilized), and communication with the Montana State Library.

Public Works maintains authoritative institutional knowledge of road infrastructure, subdivisions, and addressing systems. The Glendive Police Department (Dispatch) will serve as an operational partner to validate addressing logic, routing accuracy, and emergency response needs.

The PM will:

- Manage project timeline and deliverables
- Oversee QC/QA procedures
- Coordinate validation through the NG9-1-1 portal
- Ensure compliance with NENA and MSDI standards
- Submit required reports and financial documentation
- Publish data and metadata upon completion

If consultant services are required for technical data standardization or validation support, the City will follow applicable procurement procedures and retain full project management authority. Deliverables will be reviewed internally prior to submission to MSL.

The Public Works Department has demonstrated experience managing complex infrastructure projects, regulatory compliance requirements, capital improvement planning, and interagency coordination. The Department routinely oversees state and federal reporting, procurement compliance, and contractor management for public infrastructure projects. This administrative and technical experience ensures disciplined oversight of project timelines, consultant deliverables, reporting requirements, and financial accountability throughout the grant period.

SECTION 4 – SCOPE OF WORK

The Scope of Work (SOW) section explains what your project will accomplish, how it will be carried out, and what it will produce. Applicants should develop their SOW using the Workbook provided, then copy the completed version into this section. Define goals, objectives, and tasks concisely but with enough detail to show clear, logical steps from project purpose to on-the-ground work and deliverables, and ensure that your SOW directly supports the Geospatial Information Plan priority you selected.

Formatting of the SOW is critical. Use the required multilevel list structure provided in the Workbook. If needed, the required formatting can be found within this word document in the *Home Menu Ribbon > Paragraph Section > Multilevel List > List Library*.

Tasks must appear in chronological order, each with a specific completion date. All hardware or equipment purchases must be listed as separate, clearly justified tasks.

40% OF TOTAL SCORE – 4 page-limit

Goal 1. Establish NENA-Compliant Road Centerline Dataset

Objective 1.1. Standardize and validate the City of Glendive road centerline dataset to meet NENA NG9-1-1 standards and MSDI Transportation theme requirements.

Task 1.1.1. Data Inventory and Gap Analysis –

Compile and reconcile all existing road centerline datasets maintained by Public Works and Police. Identify discrepancies in geometry, address ranges, naming conventions, topology, and required NENA attributes.

- Completion Date: 09/30/2026

Task 1.1.2. Data Model Standardization –

Align road centerline attributes with NENA-STA-006.2a-2022 standards and MSDI Transportation framework requirements. Update geometry, address ranges, and required schema fields including required NENA data fields necessary for successful portal validation.

- Completion Date: 12/31/2026

Task 1.1.3. Topology & Connectivity Correction –

Perform topology validation to correct connectivity errors, overlapping segments, address range conflicts, and routing inconsistencies.

- Completion Date: 02/28/2027

Task 1.1.4. Portal Validation & Correction –

Submit road centerline dataset to the MSL NG9-1-1 GIS Data Validation & Aggregation Portal. Resolve validation errors and achieve compliance for aggregation.

- Completion Date: 04/30/2027

Goal 2. Improve and Validate Address Point Dataset

Objective 2.1. Create and validate authoritative address point data aligned with NENA and MSDI Structures & Addresses requirements.

Task 2.1.1. Address Reconciliation –

Compare utility records, subdivision plats, dispatch records, and existing GIS data to identify missing or inconsistent address points.

- Completion Date: 11/30/2026

Task 2.1.2. Address Point Creation & Correction –

Create new address points where missing and correct attributes to ensure compliance with NENA standards.

- Completion Date: 03/31/2027

Task 2.1.3. Field Verification Using GNSS –

Utilize survey-grade GNSS equipment to verify and improve positional accuracy of critical address points and infrastructure locations where legacy or aerial-based data do not meet NENA accuracy thresholds.

- Completion Date: 06/30/2027

Task 2.1.4. Portal Validation & Aggregation –

Submit finalized address dataset to the MSL portal and correct deficiencies until compliant.

- Completion Date: 07/31/2027

Goal 3. Build Internal GIS Maintenance Capacity

Objective 3.1. Establish sustainable, in-house capability for ongoing NG9-1-1 compliance.

Task 3.1.1. Acquire Survey-Grade GNSS Rover –

Purchase a survey-grade GNSS rover system (Trimble or equivalent) to support high-accuracy address, infrastructure, and road data collection. This equipment supports required field verification and long-term maintenance of NG9-1-1 compliant datasets.

- Completion Date: 10/31/2026

Task 3.1.2. Advanced GIS & NENA Standards Training –

Provide advanced technical training for the designated GIS Project Manager in NENA data standards, NG9-1-1 validation workflows, GNSS data collection, and MSDI integration.

- Completion Date: 03/31/2027

Task 3.1.3. Develop Maintenance Workflow Documentation – Create a documented internal workflow for editing, validating, and publishing GIS updates to ensure continued compliance with NG9-1-1 and MSDI requirements.

- Completion Date: 12/31/2027

Goal 4. Data Publication & Statewide Integration

Objective 4.1. Ensure public accessibility and statewide interoperability.

Task 4.1.1. Metadata Creation – Develop complete metadata consistent with MSDI standards.

- Completion Date: 09/30/2027

Task 4.1.2. Publish to Montana GIS Data List – Publish finalized datasets for public access and statewide use.

- Completion Date: 11/30/2027

Task 4.1.3. Final Reporting & Presentation – Submit final report and present outcomes to the MGIA Council, Commission, or professional conference as required.

- Completion Date: 06/30/2028

Deliverables:

- NENA-compliant road centerline dataset
- NENA-compliant address point dataset
- GNSS-supported positional improvements
- Portal validation acceptance documentation
- Published datasets & metadata
- Internal GIS maintenance workflow
- Final project report

SECTION 5 – BUDGET JUSTIFICATION AND BUDGET TABLE

Use this section to explain your project’s financial need and overall funding plan, including how MGIA funds, your own funds, and any partner contributions will cover the full cost of the work. Briefly state whether this is one-time project work or support for ongoing maintenance, and summarize any matching funds (cash or in-kind) and the approximate share of the total project they represent.

You must also complete Budget Table using the provided Excel spreadsheet. Applications without a completed budget table will be rejected.

30% of total score – 2-page limit

The City of Glendive requests \$50,000 in MGIA funding to complete technical standardization and validation of NG9-1-1 road centerline and address point datasets. The City is committing \$40,000 in local cash match to ensure long-term sustainability and internal GIS capacity development.

MGIA funds will support professional technical services required to align datasets with NENA-STA-006.2a-2022 standards, correct topology and schema deficiencies, resolve routing conflicts, and achieve successful validation through the Montana State Library’s NG9-1-1 GIS Data Validation and Aggregation Portal. These services require specialized expertise to ensure full compliance and statewide interoperability.

The City’s \$40,000 match includes:

- Acquisition of a survey-grade GNSS rover system to support high-accuracy address and infrastructure verification
- Advanced GIS and NENA standards training for the designated project manager
- Internal labor dedicated to field verification, data reconciliation, and workflow implementation

The GNSS investment is funded entirely through local match and ensures high positional accuracy for address and roadway verification, thereby reducing future dependence on consultant services. This approach ensures MGIA funding is used strategically for immediate compliance while local investment builds permanent operational capability.

The combined \$90,000 project investment modernizes foundational public safety datasets without increasing tax burden and transitions the City from reactive data correction to a standards-driven GIS management model.

This project represents a one-time modernization effort, with long-term maintenance incorporated into routine Public Works operations following grant completion.

<u>Category</u>	<u>Description</u>	<u>Funding Source</u>	<u>Quantity/Hours</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
Professional Services	GIS Consultant – Data inventory & gap analysis	MGIA Grant Funds	40	\$125	\$5,000
Professional Services	GIS Consultant – NENA schema alignment & attribute standardization	MGIA Grant Funds	80	\$125	\$10,000
Professional Services	GIS Consultant – Topology correction & connectivity validation	MGIA Grant Funds	80	\$125	\$10,000
Professional Services	GIS Consultant – NG9-1-1 portal validation & error resolution	MGIA Grant Funds	80	\$125	\$10,000
Professional Services	Project QA/QC review and final compliance documentation	MGIA Grant Funds	40	\$125	\$5,000
Equipment	Survey-grade GNSS rover system (Trimble or equivalent)	Local Match	1	\$30,000	\$30,000
Training	Advanced GIS & NENA standards training (registration, materials)	Local Match	1	\$5,000	\$5,000
Personnel	Internal staff labor – field verification & reconciliation	Local Match	200	\$25	\$5,000
Total MGIA Request					\$50,000
Total Local Match					\$40,000
Total Project Budget					\$90,000

SECTION 6 – PROJECT SUSTAINABILITY

Use this section to explain how the results of your project will be maintained and used after the grant ends, including who will be responsible, how ongoing costs will be funded, and how the work will fit into your regular operations. Describe how you will coordinate with the Montana State Library on any MSDI data updates and, if you are new to GIS, how this project will help you establish sustainable workflows and build long-term GIS capacity.

10% of score - 300-word limit

The City of Glendive is committed to long-term stewardship of NENA-compliant road centerline and address point datasets beyond the grant period. Upon completion of this project, Public Works will serve as the authoritative data steward, integrating NG9-1-1 standards into routine operations including subdivision review, address assignment, capital project development, and infrastructure management.

Investment in a survey-grade GNSS rover system and advanced GIS/NENA standards training establishes permanent in-house technical capacity to collect, verify, and maintain high-accuracy spatial data. This capability ensures that future address additions, roadway modifications, and infrastructure updates can be validated to required positional accuracy standards without recurring consultant expense.

A documented internal maintenance workflow will formalize procedures for dataset editing, topology validation, quality assurance, metadata updates, and submission through the Montana State Library NG9-1-1 GIS Data Validation and Aggregation Portal. These procedures will be incorporated into standard Public Works operations and staff responsibilities.

Ongoing operational costs, including software licensing and staff time, will be supported through the existing Public Works GIS budget. Coordination with the Glendive Police Department (Dispatch) will continue to ensure routing accuracy and emergency response reliability. The City will maintain regular coordination with the Montana State Library to support MSDI integration and statewide data consistency.

This project represents a one-time modernization effort that transitions the City of Glendive from reactive data correction to a sustainable, standards-driven GIS management model aligned with Montana's long-term geospatial strategy.

SECTION 7 - RENEWABLE GRANT ACCOUNTABILITY

Please use [this web map to research and identify past awarded MGIA Grants](#).

Applicants awarded MGIA Grants within the past five years, must provide a written narrative for each grant awarded, outlining the successes and failures of the grant. Explain how tasks, timelines, and deliverables of the project were or were not met. Demonstrate how past project failures will ensure future successes. (200-word limit each).

The City of Glendive has not been awarded MGIA/MLIA grants within the past five program years.



INVOICE

Invoice Number:	MGIA-2027-001
Invoice Date:	February 25, 2026
Grant Program:	Montana Geospatial Information Act (MGIA)
Project:	City of Glendive NG9-1-1 Data Standardization Project
Billing Entity:	City of Glendive – Public Works Department

Description	Hours/Qty	Unit Cost	Total
GIS Consultant – Data Standardization & Validation	320 hrs	\$125/hr	\$40,000
GIS Consultant – QA/QC & Portal Validation	80 hrs	\$125/hr	\$10,000

Total Amount Due:	\$50,000
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This invoice is submitted for reimbursement under the Montana Geospatial Information Act (MGIA) Grant Program. All services listed were performed in accordance with the approved Scope of Work and comply with NENA standards and Montana State Library NG9-1-1 validation requirements.

Authorized Signature: _____

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