

Grant Application
Montana Land Information Act
Fiscal Year 2018

Flathead County 911
GIS Improvement Initiative

Flathead Emergency
Communications Center



Flathead County, Montana

Submitted By
Flathead Emergency Communications Center
Kalispell, MT
February 14, 2017

SECTION 1 – APPLICANT, PARTNER, AND PROPOSAL INFORMATION

Primary Applicant:	
Name of principle individual:	Darrell Schwartz
Name of agency/entity:	Flathead Emergency Communication Center
Street:	625 Timberwolf Parkway
City:	Kalispell
County:	Flathead
State:	Montana
Zip Code:	59901
Contact email address:	dschwartz@flathead911.mt.gov
Contact fax address:	406-758-5562
Contact phone:	406-758-2400
Department:	N/A
Division:	N/A

Funding Partners:

(required for each partner, copy box as needed)

NA – No funding partners are involved with this Flathead Emergency Communications Center project.

Project Partners:

(required for each partner, copy box as needed)

NA – No project partners are involved with this Flathead Emergency Communications Center project.

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Proposal Information	
Date Submitted:	2-12-2017
Date Received by State:	
Short Title of Proposal: Flathead County 911 GIS Improvement Initiative	
Executive Summary (<i>required – 200 maximum word count</i>): <p>The Flathead County 911 GIS Improvement Initiative is a project to improve the quality of GIS data used for public safety. The goal of the project is to synchronize all Flathead County GIS data with phone databases used by Communication Center dispatchers, making Flathead County ready for NG 9-1-1. To help provide system synchronization, the Flathead Emergency Communications Center will purchase a GeoLynx DMS software program and train staff on effective utilization of the software. GIS analysts will use the software to coordinate existing databases. Coordination of the systems will improve data accuracy and eliminate jurisdictional confusion, preventing the dispatch of emergency responders to inaccurate or non-existent locations.</p>	

List All Past Awarded MLIA Grants:
NA – Flathead Emergency Communication Center has not received any past MLIA grants.

SECTION 2 – RELEVANCE

GIS data is the backbone of Next Generation 9-1-1 (NG 9-1-1). An accurate, high quality roads layer is essential to an effective NG 9-1-1. An important part of a 9-1-1 roads layer is the address ranges and attribute tables. To meet National Emergency Number Association's (NENA) standards, it is important to have synchronization between the road layer address ranges in the Master Street Address Guide (MSAG) and the Automatic Location Identifier (ALI), and check for discrepancies between them. GeoLynx DMS is a software program, which among other features will enable Flathead County Emergency Communications Center to synchronize the GIS roads, MSAG, and ALI systems in house.

The Flathead County 911 GIS Improvement Initiative project relates to the FY18 Land Information Plan Priority B.b – Next Generation 9-1-1 Standardization. The project includes the purchase of GeoLynx software system. With training, GIS analysts will utilize the software program to improve the data that is already NENA compliant, and improve other datasets until it meets NENA standards. The GeoLynx software contains a tool that can compare datasets, enabling analysts to easily uncover spatial or attribute errors in datasets, improving the quality of data used for public safety.

The Flathead County GIS system provides road centerline and address data to the MSDI. Flathead County GIS department needs to keep records of all addresses that have ever existed in Flathead County, but the 9-1-1 Center is only concerned with active addresses, so two separate datasets are maintained. The two road datasets are also maintained because different attribute data is needed for public safety than for the legal road names dataset.

SECTION 3 – PUBLIC BENEFIT

The proposed project will create more accurate GIS data for public safety agencies and will improve GIS data to be more compliant with NENA standards for NG 9-1-1. The Flathead County Emergency Communication Center already uses enhanced 9-1-1; the proposed project will make the data ready for NG 9-1-1. Improvements in the data will provide benefits to urban firefighters, wildland firefighters, Emergency Medical Services (EMS), local and state law enforcement, and Search and Rescue. These agencies will benefit from more accuracy in locations and address ranges when responding to emergency calls. Data improvements will also help eliminate ambiguity on which agency

to dispatch during an emergency. Synchronizing GIS data, MSAG, and ALI will greatly reduce errors when verifying the location of an emergency, streamlining the dispatching process.

The Flathead County Emergency Communications Center roads dataset is currently available for public download on the GIS department website. Any improvements to this data would be directly available to the general public. The Flathead County GIS department's Address Improvement Program would also benefit from this software because GeoLynx DMS contains tools to identify houses that need readdressing. Identifying houses for readdressing would improve the Flathead County Address layer currently in the MSDI system.

Currently, a phone company in Vancouver Washington identifies any discrepancies between the GIS, MSAG, and ALI datasets. This company does not specialize in GIS analysis. The Flathead County Emergency Communications Center has questioned the accuracy of the phone company's synchronization reports because minimal changes to data will yield vast differences in accuracy reports. This project would give Flathead Emergency Communication Center the tools needed to reassign the task to experienced GIS personnel already employed by Flathead County.

SECTION 4 – SCOPE OF WORK

1. Goals and Objectives –

- a. Goal 1 - Improve the quality of GIS data used for public safety
 - i. Objective 1 - Synchronize the GIS data, MSAG, and ALI; accurately, cost efficiently, and in house
 - ii. Objective 2 - Audit address datasets for omissions and duplications, ensuring accurate address ranges in the roads layer
 - iii. Objective 3 - Ensure compliance with NENA's standards for NG 9-1-1
 - iv. Objective 4 - Assist the Flathead County Address Improvement Project by identifying and reporting houses that need to be readdressed

2. Tasks or Activities –

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- a. Purchase the GeoLynx DMS software
- b. GIS Analyst, Darrell Schwartz will complete software training
- c. Assess the standard for synchronizing GIS data with MSAG and ALI, found in NENA's document NENA 71-501 Version 1
- d. Synchronize GIS data with the MSAG and ALI
- e. Create discrepancy reports and work with Century Link to make corrections as necessary
- f. Using comparison tools, find all duplicate and inactive addresses, removing as needed
- g. Using addressing tools, correct errors and make improvements to the address ranges of road segments
- h. Use the topology tools built into GeoLynx to segment roads along Emergency Service and Community boundaries.
- i. Assess the logic of existing addresses to find candidates for readdressing
- j. Report potential candidates for readdressing to the county GIS department
- k. Renew software support and maintenance annually for five years

3. Project Schedule –

Task	Time Frame
Purchase Geolynx DMS	Within 30 days of receiving funding
Software Training	Mid July through early September
Assess synchronization standards	early July through early August
Synchronize GIS data, MSAG, and ALI	Late August through mid September
Correct discrepancies	Mid September through project end
Correct errors in address layer	Mid September through project end
Make improvements to road layer attributes	Mid September through project end
Make road layer topology corrections	Mid September through early December
Find candidates for readdressing	Early October through project end
Report readdressing candidates	Mid October through project end
Renew maintenance and support	One year after the purchase of Geolynx

SECTION 5 – PROJECT MANAGEMENT AND ORGANIZATIONAL CAPABILITY

Project Manager:

The project manager will be Flathead Emergency Communication Center's GIS Analyst, Darrell Schwartz.

Mr. Schwartz graduated from Montana State University with a degree in GIS. During his time at Montana State University, he used GIS to do an analysis of Debris Flow susceptibility in the Bitterroot Valley of southwest Montana. He currently updates and maintains all GIS data used for public safety in Flathead County. The project manager will complete all reports required under the terms of the MLIA grant.

Darrell Schwartz will undergo the training for the GeoLynx DMS software. Once training is complete, Mr. Schwartz will generate discrepancy reports for synchronization of the GIS data, MSAG and ALI. He will also use GeoLynx DMS tools to improve the GIS data used in the Flathead County 911 dispatch system.

Project Administration:

The project administrator will be the Flathead Emergency Communication Center's Director, Elizabeth Brooks.

Ms. Brooks will provide general program oversight and management. Ms. Brooks will sign all project contracts including grant contracts, and software and maintenance purchase agreements with GeoComm. Ms. Brooks will also approve all project invoices. Elizabeth Brooks will not have extensive involvement in the project, so her time is not calculated in the project.

Project administrative tasks will be managed by Flathead Emergency Communications Center's Financial Support Specialist, Juanita Nelson.

Ms. Nelson will manage the financial components of this project, including financial tracking and reporting. Juanita Nelson has served in an administrative role on numerous state and federal grants. One of the larger grants Ms. Nelson served in an administrative role was for the FY 2011 Border Interoperability Grant for \$3,595,568.

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Ms. Nelson has substantial experience conducting financial reimbursements and writing quarterly reports

Software:

The GeoLynx DMS software will be purchased through GeoComm. GeoComm will provide Darrell Schwartz with twelve hours of training on the GeoLynx DMS software. GeoComm will also provide all software upgrades and maintenance. GeoComm has over twenty years of experience working with county governments to assess, maintain, and improve public safety GIS data.

SECTION 6 – BUDGET JUSTIFICATION AND BUDGET TABLE

The total project budget is \$41,799. Flathead County Emergency Communications Center is requesting \$20,690 in MLIA grant funds. The Communication Center would contribute \$21,109 annually in-kind toward staff salaries and fringe benefits. The budget for the Flathead County 911 GIS Improvement Initiative is based on the cost of the software license and five years of support and maintenance.

MLIA Share: A MLIA grant would be used to purchase the GeoLynx DMS software including five years of support and maintenance, for a total amount of \$20,690.

Flathead County was quoted \$13,094 to purchase the GeoLynx DMS software from GeoComm. This purchase would include the first year of support and maintenance. The remaining \$7,596 requested from the MLIA grant would cover four additional years of software support and maintenance at \$1,899 per year. After five years, the cost to support and maintain the software would be incorporated into the Flathead Emergency Communication Center's operating budget.

Applicant Share: Flathead County will provide a total of \$21,109 annually in-kind toward the project for personnel expenses.

Flathead County Emergency Communications Center has allocated a total of \$20,828 annually for the GIS analyst, Darrell Schwartz's salary and fringe benefits. This figure is calculated based on an hourly salary of \$25.03 including fringe benefits and estimating Mr. Schwartz will spend roughly 40% of his time using the software program.

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Flathead County Emergency Communications Center has allocated a total of \$281 annually for the Financial Support Specialist, Juanita Nelson's salary and fringe benefits. This figure is calculated based on an hourly salary of \$28.14 including fringe benefits and estimating Ms. Nelson will spend 10 hours of work annually on the project.

<i>MLIA GRANT BUDGET SUMMARY</i>					
Category	MLIA Share	Applicant Cash	Other Cash	In-Kind	Total
Personnel					
GIS Analyst				\$ 20,828	\$ 20,828
Financial Support Specialist				\$ 281	\$ 281
Contractual					
Software with 1-yr support/maintenance	\$ 13,094				\$ 13,094
Software support/maintenance for four years	\$ 7,596				\$ 7,596
Total	\$ 20,690			\$ 21,109	\$ 41,799

SECTION 7 – STATEMENTS OF SUPPORT

Not applicable

SECTION 8 – RENEWABLE GRANT ACCOUNTABILITY

Not applicable

SECTION 9 – SIGN THE APPLICATION

Authorizing Statement

I hereby certify that the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.

I further certify that this project will comply with applicable statutory and regulatory standards.

I further certify that I am (by my signature) authorized to enter into a binding agreement with the Montana State Library to obtain a grant if this application receives approval.

Elizabeth Brooks

Name (print or type)

911 Director

Title (print or type)

 911 Director

Signature and Title of Authorized Representative(s) of Public Entity Applicant

2-14-17

Date

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Initial or mark n/a	Completed Required Task
DS	Section 1 – Applicant, Partner, and Proposal Information
DS	Primary Applicant Information
N/A	Funding Partner <i>(if applicable)</i>
N/A	Project Partner <i>(if applicable)</i>
DS	Proposal Information
DS	List All Past Awarded MLIA Grants
DS	Section 2 – Relevance (300 max word limit)
DS	Section 3 – Public Benefit
DS	Section 4 – Scope of Work Narrative (4-page limit)
DS	Section 5 – Project Management and Organizational Capability Narrative
DS	Section 6 – Budget Justification Narrative and Table
DS	Budget Justification Narrative
DS	Complete Budget Table
N/A	Section 7 – Statements of Support (if applicable)
N/A	Section 8 – Renewable Grant Accountability Narrative (if applicable)
Parcell Schwartz 2-17-2017	