

TOWN OF ENNIS
MONTANA LAND
INFORMATION GRANT
APPLICATION

STATE FISCAL YEAR 2019

APPLICATION FOR MLIA GRANT FUNDING

SECTION 1 – APPLICANT, PARTNER, AND PROPOSAL INFORMATION

Primary Applicant Contact Information <i>(Please fill this section out in it entirety)</i>	
Name of Agency/Entity:	Town of Ennis
Department:	Public Works Department
Division/Section:	
Street:	328 W Main Street
City:	Ennis
County:	Madison
State:	Montana
Zip Code:	59729
<i>Project Manager Contact Information:</i>	
Name:	Kelly Elser
Title:	Public Works Director
Email Address:	kelly@ennismontana.org
Phone Number:	(406) 682-4287
Fax Number:	(406) 682-5011
<i>Secondary Contact Information:</i>	
Name:	
Title:	
Email Address:	
Phone Number:	
MLIA Grant Funding Request & Match:	
Total Requested MLIA Funds:	
Total Matched Funds:	

Proposal Information	
Date Submitted:	February 15, 2018
Identified Grant Priority:	II. Build Geographic Information Systems to Improve Local & Tribal Government Workflows, Business Processes, and Operations
Annual or Multi-Year Proposal:	Annual Proposal
Proposal Prepared By:	Stahly Engineering & Associates in cooperation with Kelly Elser, Town of Ennis, PWD
Short Title of Proposal:	Town of Ennis Infrastructure and Asset GIS
<p>Executive Summary (<i>required – 250 maximum word count</i>):</p> <p>The Town of Ennis will utilize MLIA grant funds and Town budgeted funds to purchase computer software and hardware to create GIS solutions that will assist the local government by improving the efficiency of operations of their Public Works and other City Departments. The Town will utilize GIS to map existing infrastructure including streets, water mains, and sewer systems.</p> <p>The Town's GIS will leverage a multi-jurisdictional approach as they work with project partners such as Madison County to share information that will benefit the citizens of Ennis. This includes managing ongoing coordination of projects for water and sewer infrastructure improvements, fire and police protection, multi-use trail construction, and road maintenance.</p>	
List All Past Awarded MLIA Grants:	
None	

Funding Partners: <i>(required for each partner, copy box as needed)</i>	
Name of Contact:	N/A
Name of Agency:	
Street:	
City:	
County:	
State:	
Zip Code:	
Contact Email Address:	
Contact Phone Number:	

SECTION 2 – RELEVANCE

This proposed project will meet grant category priority II(b) Build GIS to Improve Local & Tribal Government Workflows, Business Processes, and Operations by providing infrastructure and asset management.

The Town of Ennis is planning inception of a GIS system to develop a sustainable, efficient method to collect and maintain attributes and records of its public infrastructure data including water, sewer, and storm water systems within the Town. The Town recognizes the need to map and inventory streets, water mains, and sewer systems, adding detail that will also include lighting, traffic signage, air release valves, curb stops, fire hydrants, sewer manholes, and water valves as the system is initiated.

To date, Ennis has not utilized and is in need of software and hardware for a GIS System. Two in office personal computers, two field tablets, ArcGIS software and licenses, and training will all be required to support the efforts to begin creating and maintaining a local GIS.

SECTION 3 – PUBLIC BENEFIT

The Town has recognized the need for a GIS database in order to keep an accurate inventory of public infrastructure and utilize the database for long term planning of future projects. Having geographic coordinates tied to each feature will help to streamline maintenance for public works staff, assist the Town in planning, and will generally improve the functionality of the infrastructure in the Town. As staff changes in the years to come, this project will ensure continuity of information that gets passed on regarding the Town's infrastructure.

Implementing a GIS database will lead to time efficiencies and, ultimately, save taxpayer dollars.

Acquiring GIS data and assisting the Town of Ennis in GIS program development will benefit base geographic data layers of the MSDI now and in the future as the Town utilizes GIS for future data-gathering projects.

In coordination with Madison County the GIS information will be shared for potential annexation of projects currently outside Town of Ennis city limits. The ability to graphically show access to infrastructure eases the local government decision making process on projects related to Town/County growth.

SECTION 4 – PROJECT MANAGEMENT AND ORGANIZATIONAL CAPABILITY

Project Manager: Kelly Elser, Town of Ennis Public Works Director
Key Personnel: Dan Bedman, Town of Ennis
Subcontractors: Stahly Engineering & Associates
Key Personnel: Dan Stahly, Max Shchemelinin

Kelly Elser, Ennis Public Works Director, will serve as the project manager. Kelly has served in his position with the Town for 11 years. Kelly served as Mayor of Sheridan for 16 years. He has a working knowledge of all systems of the Town of Ennis including street, sewer and water and has managed projects on all systems.

Field data input and maintenance will be performed partially by Dan Bedman. Dan and Kelly will assist with collecting field data including collection of all attributes of city public works.

Kelly Elser will be responsible for reporting progress and communicating with the State Library. He will ensure that all infrastructure data fields follow LGIM Standards. The City of Ennis plans to procure the services of Stahly Engineering & Associates to assist in developing the GIS. Kelly oversees the contract with the consultant and will be responsible for managing assignments and reviewing deliverables, including oversight of the set up for the City's GIS.

All staff will undergo training by Dan Stahly, P.L.S. and Max Shchemelinin from Stahly Engineering & Associates. Max is an experienced GIS technician. Dan and Max have assisted a number of Montana communities, including Hardin, Lewistown, Manhattan, Belgrade, Three Forks, West Yellowstone, and Deer Lodge with data collection, LGIM database template building, and training. Collection included infrastructure position and initial data for streets, water, sewer and storm water both in the field and digitized from as-built records including water valves, manholes, hydrants, air boxes, curb stops etc. Positional data was collected using a ruggedized tablet along with Arc Collector in conjunction with ArcGIS Online and most recently, a combination of survey-grade collectors and receivers were utilized on critical infrastructure positions (City of Deer Lodge and West Yellowstone). This proved to be the most cost-effective method in implementing positional information into these cities' information systems.

Dan and Max have also developed and standardized an Electronic Plat Book for Sanders County. The book is created by linking scanned land information records (Plats, Easements, Deeds, etc.) to a Cadastral parcel "polygon" shapefile. The County manages the plat book as an ArcGIS Online web mapping application.

SECTION 5 – SCOPE OF WORK

Goal: Create GIS to include streets, water, sewer, and storm features.

Narrative

The Town of Ennis Infrastructure and Asset GIS Project will include purchase of all hardware and software required to build a sustainable GIS. It will establish positional data within the GIS and begin the process of scanning historical records into the system. It will involve the Town's first priority to collect data and upload local government information management (LGIM) attributes associated with the Town's infrastructure system which is approximately 10 miles of streets and includes 107 fire hydrants, 234 sewer manholes, 166 water valves, and 597 curb stop boxes within the Town's right-of-way.

Once the GIS System is established the Town may undertake additional data collection and attribute upload associated with the Town's water, sewer, and storm features. This may entail a second application to MLIA.

Objective 1: Purchase personal computers, hardware, and software for GIS coordination staff. All procurement of equipment and software will comply with section 90-1-411 (1) of MCA.

Task:

1. Purchase two personal computers capable of efficiently running ArcGIS software for in-office staff and install ArcGIS for Desktop Basic including ArcGIS Online Subscription (or approved equal) by July 1, 2018 to create a map and working database. Staff will consist of Town Public Works Director and the Assistant Public Works Director.

Objective 2: Purchase Field Tablets with ArcCollector

Task:

1. Purchase two iPads with ArcGIS Collector (or approved equal) installed by July 1, 2018 for Town staff to use in field infrastructure data input and maintenance operations.

Objective 3: Collect Feature Coordinate Data

Task:

1. Consultant will collect survey grade positional data on all features as required by the Town. This will occur by July 31, 2018. The total fee for

the Consultant for this project is anticipated to be below the threshold of \$50,000 that would trigger a procurement process following 18-8-201, MCA which defines the process for selection of a consultant for architectural, engineering, or surveying services.

Objective 4: Train assigned Town staff

Task:

1. Consultant will complete a day of training on basic functions of ArcGIS by August 15, 2018 and will provide support on an as-needed basis to Town staff.
2. Consultant will complete a day of ArcGIS Collector field training with Town staff by August 15, 2018

Objective 5: Complete 2018 goal of collecting street/infrastructure data and upload into ArcGIS

Task:

1. Kelly Elser (Public Works Director) will assign LGIM attributes to uploaded infrastructure data by May 30, 2018.
2. Public Works staff, under the supervision of Mr. Elser, will collect and input street/infrastructure feature attribute data for upload into ArcGIS by March 30, 2019. The features anticipated include 107 fire hydrants, 234 manholes, 166 water valves, 597 curb stop boxes, and street condition information/rankings
3. Kelly will also be inputting data layers available to the Town from existing records such as planning and zoning information from project partners.
4. As-built and other historic infrastructure record information will be scanned into the GIS by public works staff or a consultant.

Project Schedule (Activity and Completion Date):

Purchase hardware and software for office and field staff: July 1, 2018
(dependent on acquisition of MLIAC grant)

Collect Feature Coordinate Data July 30, 2018

Assign attributes to features: August 1, 2018

Train Town staff: (dependent on acquisition of all equipment and software)	August 15, 2018
Input street/infrastructure data and upload into ArcGIS: (dependent on training schedule being satisfied)	March 30, 2019
Scan and link as-built drawing and other historic records	Optional future project

SECTION 6 – BUDGET JUSTIFICATION AND BUDGET TABLE

Budget Narrative

The project is expected to cost \$54,442.00. The Town of Ennis will be contributing \$26,842 in personnel costs, local personnel travel, supplies, and the cost of the survey consultant as in kind and cash match funding. The Town requests \$27,600 in MLIA funding for the remaining costs associated with the first phase of the project.

The long-term plan for the subsequent activities associated with the project is to be financially sustained by the Town using a combination of MLIA funds and as budgeted items for the Public Works Department; not excluding the possibility of reapplying for MLIAC grant funding in the future. The personnel tasked with collecting data and attributes will be Town permanent employees and a (preferably) locally hired intern as needed. The maintenance of the database will be conducted by Kelly Elser or his successor. Consultant will continue to be available to provide training, support, and maintenance to the Town on an as-needed.

1. Personnel

Town of Ennis staff will conduct field data input and perform all of the research related to infrastructure attributes.

Field data input will be supervised by Kelly Elser and Dan Edman and will be performed by other permanent Town of Ennis Public Works personnel. Town staff is expected to work 20 hours per week at an average rate of \$17.50 per hour for 16 weeks. Dan is expected to commit 8 hours per week at a rate of \$22 per hour for 12 weeks, assisting and supervising the staff.

Kelly Elser and Dan Edman will provide research and be responsible for uploading data to the GIS system in the office. It is anticipated that he will spend 15 hours per week for 16 weeks throughout the grant period at an average \$26 per hour.

The Town of Ennis will hire an intern for approximately 105 hours. Duties will include scanning and uploading historical data. Depending on the extent of this work, an intern may be utilized in subsequent years for uploading data.

A fringe benefit factor is added to the cost per hour in the estimated amount of 12%, which totals \$1,800 for all personnel.

Consultant will collect survey grade positional data on all features as required by the Town. Professional survey and consulting services are anticipated at a cost of \$15,000. The two-person survey crew with all necessary equipment is expecting to complete this part of the project in approximately six days. Town staff will be responsible for any utility locating and marking.

Consultant will also contribute up to 40 hours in training with both ArcGIS Collector and ArcGIS software at a contractually negotiated rate of \$80 per hour, with a travel budget set at \$1,200 which will include mileage, room and board during staff training and per diem allowance. The firm will work closely with the Public Works department to manage the Town's infrastructure.

2. Travel

Accounting for travel back and forth to the Town shop, along with travel between streets, the Town is anticipating an average of 15 miles per day. Based on the standard mileage rate for 2018 of \$0.535/mile the total mileage will be \$642 for 16 weeks of data collection.

3. Equipment

Two Personal computers, compatible with ArcGIS software are expected to cost approximately \$3,000 each. ArcGIS software licenses for up to three people will be \$8,600. iPads (or approved equal), with ArcGIS Collector installed are estimated at \$1,000 each (includes "Lifeproof" case or approved equal) and will be necessary for Town staff to input and maintain infrastructure data.

The MLIA Grant Summary Budget Table is attached to this submittal.

STATEMENTS OF SUPPORT (IF APPLICABLE)

The Town of Ennis does not anticipate any funding partners for this project.

MLIA GRANT BUDGET SUMMARY TABLE

MLIA GRANT BUDGET SUMMARY						
Category	<i>MLIA Summary</i>	<i>Applicant Summary</i>			Total: <i>MLIA Share, Applicant Subtotal, Partner Subtotal</i>	
	MLIA Share	Applicant Cash	Applicant In-kind	Applicant Subtotal		
a. Personnel			15,000.00	15,000.00	15,000.00	
a. 1. Fringe Benefits			1,800.00	1,800.00	1,800.00	
b. Travel			642.00	642.00	642.00	
c. Equipment	17,600.00				17,600.00	
d. Supplies & Materials						
e. Contractual	10,000.00	9,400.00		9,400.00	19,400.00	
f. Other						
Total	27,600.00	9,400.00	17,442.00	26,842.00	54,442.00	

SECTION 7 – RENEWABLE GRANT ACCOUNTABILITY

The Town of Ennis has not had a previous MLIA grant.

SECTION 8 – AUTHORIZING STATEMENT

Authorizing Statement

I hereby certify that I have read the application and 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.

Kelly Elser

Name (print or type)

Public Works Director

Title (print or type)

Kelly Elser Public Works Director

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

2/12/2018

Date

SECTION 9 – CHECKLIST – SIGNATURES REQUIRED

Applicant's Project Manager, defined Section 1, must initial in ink or mark 'n/a' if a section is not applicable.

Initial or mark n/a	Completed Required Task
Ke	Proposal Prepared by an outside party – I have read this document in its entirety. <i>(if applicable)</i>
Ke	Section 1 – Applicant, Partner, and Proposal Information
Ke	Primary Applicant Information
Ke	Funding Partner <i>(if applicable)</i>
Ke	Proposal Information
Ke	List All Past Awarded MLIA Grants
Ke	Section 2 – Relevance <i>(300 max word limit)</i>
Ke	Section 3 – Public Benefit
Ke	Section 4 – Project Management
Ke	Section 5 – Scope of Work Narrative <i>(4-page limit)</i>
Ke	Section 6 – Budget Justification Narrative and Table <i>(3-page limit)</i>
Ke	Budget Justification Narrative
Ke	Complete Budget Table
Ke	Section 7 – Funding Partner Statements of Support <i>(if applicable)</i>
Ke	Section 8 – Renewable Grant Accountability Narrative <i>(if applicable)</i>
Ke	FY2018 Grantee Report <i>(if applicable)</i>
Ke	Past MLIA Grant Project Narrative <i>(if applicable)</i>
Ke	Section 9 – A Signed Authorizing Statement

MLIA GRANT BUDGET SUMMARY

Category	MLIA Summary		Applicant Summary	
	MLIA Share	Applicant Cash	Applicant In-kind	Applicant Subtotal
a. Personnel			\$ 15,000.00	\$ 15,000.00
a. 1. Fringe Benefits			\$ 1,800.00	\$ 1,800.00
b. Travel			\$ 642.00	\$ 642.00
c. Equipment	\$ 17,600.00			\$ -
d. Supplies & Materials				\$ -
e. Contractual	\$ 10,000.00	\$ 9,400.00		\$ 9,400.00
f. Other				\$ -
Total	\$ 27,600.00	\$ 9,400.00	\$ 17,442.00	\$ 26,842.00

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Total:	
<i>MLIA Share, Applicant Subtotal, Partner Subtotal</i>	
\$	54,442.00

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