PROMOTING SPATIAL DATA ACCESS IN RED LODGE

A Grant Application Submitted By The

City of Red Lodge

To The

Montana Land Information Act Grant Program

February 15, 2013

Primary Applicant:

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Date Submitted (Required): February 14, 2013

Date Received by State:

Descriptive Title of Applicant's Project (Required):

Promoting Spatial Data Access in Red Lodge

RELEVANCE AND PUBLIC BENEFIT

Project Description

Red Lodge (pop. 2,125) is a progressive rural Montana City on the brink of becoming an exemplary community for its use of GIS technology. With assistance from MLIA grant funding in 2008, the City has developed a robust GIS database for a community of its size. However, the limited budget of the City has prevented it building the GIS infrastructure (e.g., ArcGIS Server) needed to efficiently deploy this database. Therefore, the City's GIS database remains under-utilized.

Enter ArcGIS Online (AGOL). AGOL is a complete, cloud-based, collaborative content management system that lets organizations manage their geographic information in a secure and configurable environment. A subscription to AGOL allows organizations to publish maps and data in Esri's secure cloud, configure their own AGOL website, and create maps and apps from APIs, templates, and tools. Organizations can share their geospatial content and provide access to critical information while staying in control of their data.

AGOL is tailored for small local governments such as Red Lodge because it provides an affordable entry into the hosted map services (i.e., Web maps). AGOL would provide the City of Red Lodge with the tools and hosting service it needs to deploy and better utilize its spatial data holdings.

For this reason, the City of Red Lodge is requesting MLIA grant funding to **standardize its local GIS data**, integrate these data with a **new basemap** and make this basemap and **local GIS data more accessible via AGOL**.

Project Merits and Purpose

This project will meet priority B2.2 of the FY 2013-14 Montana Land Information Plan: *"Localized GIS solutions that demonstrate the value of GIS in improving the quality of life for Montana citizens and build grass roots support for location based services."* This project will meet this priority item because it will provide increased access to valuable geographic information to both the City and the community. This project will result in the public having easy access to a variety of Web maps showing zoning, future land use, physical addresses, parklands and trails, trees and public utilities. City officials, local business owners, community members, perspective residents and visitors will benefit from the project.

This project will build upon the MLIA grant that the City received in 2008. The 2008 grant helped the City convert its CAD data to GIS and develop metadata for inclusion into the Montana GIS Portal. Funding of this project will take the next step and make these data even more accessible and to a much wider audience.

SCOPE OF WORK

Goal 1. Standardize local GIS data.

Objective 1. Utilize an established local government data model for storing and managing the City's GIS data.

Task 1. Adopt the ESRI local government information model and adapt existing GIS layers to fit this model. The local government information model includes a series of essential foundation layers and operational information that support a range of key maps and apps within a local government. Its design reflects specific application requirements and the cartographic design elements necessary to produce infrastructure, public safety, elections, planning, address and public works maps and apps. Layers to be imported into the model include (at a minimum) municipal boundaries, zoning, land use, census blocks, election precincts, and public utilities.

Goal 2. Develop a new community basemap.

Objective 1. Enroll in ESRI's Community Base Map program to create a detailed topographic base map for Red Lodge

Task 1. Prepare local GIS data to the standards of the World Topographic Map that ESRI publishes and hosts online. The World Topographic Map is a multi-scale basemap designed for use as a reference map or for GIS professionals to add operational layers. The City will prepare its local geographic content (i.e., building footprints, elevation contours, parks and trails, and other layers commonly found on a topographic map) to the cartographic standards of the World Topographic Map.

Task 2. Complete the Community Maps Participation Agreement and contribute content to the World Topographic Map by uploading data to ESRI. Once published, the City's content will be integrated with data from other providers and then published through AGOL as a map service.

Goal 3. Increase access to the City's spatial data

Objective 1. Make local GIS data available on AGOL

Task 1. Establish an account with AGOL to create a web-enabled service for the City. The City will utilize the State Library's AGOL account to test the functionality and monitor use of the system for a period of up to one year (as offered by Stewart Kirkpatrick). After this period the City will plan to subscribe to AGOL and establish their own account. The City's GIS data will be published to AGOL as both tiled maps and feature services to allow for viewing and editing of geographic information.

Task 2. Customize an AGOL website to showcase the City's geographic information that's important to the City and its citizens. The City will customize a landing page on AGOL with the City's name, logo, description, map gallery and other aspects to fit the look and feel of the City.

Task 3. Train City administrators and staff on the use of AGOL. The GIS consultant involved with the project will set up a half-day demonstration and training session for City officials.

Task 4. Market the City's AGOL landing page to the general public. The city will promote and encourage its citizens to use AGOL by advertising the Website in the local paper, establishing links from other local Websites and by publishing the Web address on monthly water/sewer bills.

Project Schedule

The project will have a start date of July 1, 2013 and an end date of June 30, 2014. Progress reports will be submitted to the State Library on September 1 2013, January 1, 2014 and April 1, 2014. The final progress report will submitted by August 1, 2014.

Goal 2, Task 2 is dependent upon the completion of Task 1 which is scheduled for completion on January 30, 2014. Goal 4, Tasks 3 and 4 are dependent up on the completion of all other tasks and not be completed until the end of the project in June, 2014.

		2013						2014				
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
GOAL 1												
Task 1. Standardize/convert data	███	3 months										
GOAL 2												
Task 1. Prepare data for WTM				4 months								
Task 2. Upload data to ESRI/WTM							1 mo.					
GOAL 3												
Task 1 Publish data to AGOL								4 months				
Task 2 Customize AGOL Website											1 mo.	
Task 3 AGOL Training												1 mo.
Task 4 AGOL Marketing												1 mo.

Organizational Capability and Project Management and

The City of Red Lodge has the organizational capacity to complete this project which is evident from past MLIA grant projects.

In 2008, the City successfully completed the MLIA grant project entitled *"Develop, Document and Distribute – 3D GIS for Red Lodge"*. This project helped the City convert its CAD data to GIS and develop metadata for inclusion into the Montana GIS Portal. The 2008 project essentially launched GIS for the City.

In 2010, the City was jointly involved with the County's MLIA grant project, *"Development of a Carbon County GeoAtlas for Emergency Responders"*. This project produced a detailed digital and hard copy road/address atlas for the entire County, including Red Lodge.

With the completion of both projects, the City can confidently say that it is familiar with the grant program and has an excellent history of completing its projects on time and within budget.

This project will be administered by City staff with the majority of the technical work to be completed by a local GIS contractor. The City is planning to sole source the GIS work to a Tom Kohley because his MLIA and GIS experience and skills are unique for this geographic area. If for some reason Mr. Kohley cannot be sole sourced, the City will pursue the services of another GIS contractor through a competitive bid process.

Listed below are the personnel who will be involved with the project along with their experience, qualifications and their role in this MLIA project.

Forrest Sanderson
Mr. Sanderson is the City's Community Development Director. He has held this position for six years but has 24 years experience as a planner and grant administrator in other local governments. Mr. Sanderson has administered numerous grants for the City of Red Lodge including a 2008 USDA-RD water rehab project ($2m), a 2010 Safe Routes to School / CTEP project ($250k), a 2010 ARRA solar panel installation project ($700k) and a 2009 DNRC planning grant ($29k). Mr. Sanderson will serve as project manager and will be the primary contact for the project.

Debbie Tomacich
Ms. Tomacich is the City Clerk and manages the finances for the City. She has held that position for 15 years but has been employed by the City for over 30 years. Ms. Tomacich has administered the financial aspects of numerous grants during her tenure including a previous MLIA grant awarded to the City. Ms. Tomacich will serve as the financial administrator for the project.

Tom Kohley
Mr. Kohley is a local GIS contractor who currently provides mapping services to the City. He has collaborated on three previous MLIA grants with the City and County. Mr. Kohley is extremely familiar with the grant program from both a technical and

administrative perspective. He has been the principle developer of GIS data for the City for the past 10 years and is familiar with the ArcGIS Local Government Information Model, Community Basemap program and AGOL.

Mr. Kohley has over 20 years of GIS experience and is certified as a Geographic Information Systems Professional (GISP) who has met the standards for ethical and professional practice as established by the GIS Certification Institute. Mr. Kohley will be responsible for the GIS database conversion, basemap development and the setup of the AGOL system. He will also be responsible for training City officials in the use of AGOL and will prepare the progress and final reports for the City.

Budget Justification Narrative and Tables

The total budget for this project is $13,640 with $11,400 being requested from the MLIA grant program. The applicant will contribute an in-kind total of $440 (<5%) towards project management and administration and an additional $2,000 of hard match.

Tom Kohley prepared a time and cost estimate to complete the GIS work for the project which amounted to $12,600 (180 hours @ $70/hr). He (or a suitable GIS contractor) will enter into an agreement with the City to complete the work for this amount.

The City intends to promote the AGOL website to encourage use by the public. $200 is budgeted to pay for advertising in the local newspaper. Travel costs in the amount of $500 are being requested from MLIA funds to allow the GIS contractor to present the results of the project at the 2014 Intermountain GIS conference or the 2015 Spring Conference to be held in Montana.

Category	MLIA Share	Applicant Share	Other Share	Total
a. Personnel				
Project Manager (6 hrs @ $60/hr)	$ -	$ 360	$ -	$ 360
Financial Administrator (2 hrs @ $40/hr)	$ -	$ 80	$ -	$ 80
a.1 Fringe Benefits				
	$ -	$ -	$ -	$ -
b. Travel				
GIS Conference Presentation	$ 500	$ -	$ -	$ 500
c. Equipment				
	$ -	$ -	$ -	$ -
d. Supplies				
Misc. Supplies	$ 100	$ -	$ -	$ 100
e. Contractual				
GIS Consultant (180 hrs @ $70/hr)	$ 10,600	$ 2,000	$ -	$ 12,600
f. Other				
Public advertisements to promote AGOL	$ 200	$ -	$ -	$ -
Totals	$ 11,400	$ 2,440	$ -	$ 13,640

Long term funding
The City is confident that this project will increase awareness and the desire to further develop and deploy GIS within its local government and to the public. The exact form and amount of future support towards GIS is unknown at this time. With continued funding from the MLIA grant program, the City is hoping to build support for GIS and secure its place in city government.

Statements of Support

Not applicable as no other project partners are involved.

Renewable Grant Accountability Narrative

Not applicable as no FY2013 grant funds were used for this project.

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.

Brian C. Roat

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Name (print or type)

Mayor, City of Red Lodge

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Title (print or type)

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

February 14, 2013

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Date