

PLSS Control Collection - Whitefish, MT Region

Prepared by Flathead County for Montana State Library MLIA Grant Program FY 2022

Submitted by Matt Reynolds

Submitted on 02/26/2021 2:02 PM Mountain Standard Time



Opportunity Details

Opportunity Information

Title

MLIA Grant Program FY 2022

Description

In accordance with the Montana Land Information Act (MLIA), the Montana State Library administers an annual grant program to distribute accumulated funds from the Montana Land Information Account, established by MLA. Grant applications are evaluated by the State Library and its advisory council, the Montana Land Information Advisory Council, and follow the MLIAC Grant Subcommittee Code of Ethics. Grant criteria are established based on the original intent of the MLIA and the goals and objectives of the annual Montana Land Information Plan. Please direct all grant program questions to MLIAGrants@mt.gov.

Please use the companion, MLIA Grant Application packet for more program information and instructions. https://docs.msl.mt.gov/MLIAC/FY2022/MLIAGrantApplicationPackage_FY2022.pdf

Awarding Agency Name Montana State Library

Agency Contact Name Erin Fashoway

Public Link

https://mt.amplifund.com/Public/Opportunities/Details/305887a5-8775-4ecc-999c-61558a21430e

Funding Information

Total Program Funding \$250,000.00

Funding Sources State

Award Information

Award Period 07/01/2021 - 06/30/2022

Award Announcement Date 5/31/2021

Award Type Competitive

Capital Grant

No

Indirect Costs Allowed

Matching Requirement

Submission Information

Submission Window 02/01/2021 12:00 PM - 03/05/2021 5:00 PM

Submission Timeline Type One-Time

Submission Timeline Additional Information https://docs.msl.mt.gov/MLIAC/FY2022/MLIAGrantApplicationPackage_FY2022.pdf

Allow Multiple Applications Yes

Technical Assistance Session

Technical Assistance Session Yes And Required

Session Date and Time 02/02/2021 9:00 AM

Conference Info / Registration Link https://geoinfo.msl.mt.gov/mliagrant

Eligibility Information

Eligibility Type Public

Eligible Applicants



Additional Eligibility Information

https://geoinfo.msl.mt.gov/mliagrant

Applicants must represent one of the following forms of government within Montana:

Any department, agency, board, commission, or other division of state government. (This includes the Montana University System.)

Any city, county, or other division of local government.

A tribal government/entity within the state.



Project Information

Application Information

Application Name PLSS Control Collection - Whitefish, MT Region

Award Requested \$17,000.00

Cash Match Requirement \$0.00

Cash Match Contributions \$7,170.00

In-Kind Match Requirement \$0.00

In-Kind Match Contributions \$830.00

Total Award Budget \$25,000.00

Primary Contact Information

Name

Matt Reynolds

Email Address mreynolds@flathead.mt.gov

Address 800 South Main Street, Room 203 Kalispell, MT 59901

Phone Number 406-758-5573



Part 01: Proposal Information

Proposal Information

Please see the MLIA Grant Application Package for more information about the MLIA Grant https://docs.msl.mt.gov/MLIAC/FY2022/MLIAGrantApplicationPackage_FY2022.pdf.

The applicant must identify one MLIA FY2022 Grant Priority that the proposed project will address. To read about all MLIA Grant Priorities, please read the FY2022 MLIA Land Information Plan.

Identify Grant Priority

Montana Spatial Data Infrastructure Improvement to Cadastral and Administrative Boundaries Themes

Please indicate whether or not the proposed grant is part of a multi-year proposal. If it is, please identify the intended total number of years for the project and the current year of the project. After clicking "yes" below, you will see text boxes appear in which you can enter the required information about the multi-year project.

Multi-Year Proposal

● Yes ○ No

Total Number of Proposed Project Years 4

Current Year of the Project (eg. 1 of 4)

Executive Summary

Montana's cadastral framework layer was originally based on the Bureau of Land Management's (BLM) Geographic Coordinate Database (GCDB). This database is known to be spatially inaccurate in many areas of Flathead County due to the lack of Survey Control Points in the area, particularly near Whitefish, Kalispell, and Bigfork. These inaccuracies are especially problematic when more spatially accurate data is overlaid on the cadastral framework, resulting in mistrust and/or misuse of the data.

It is the goal of both Flathead County and the City of Whitefish to address these spatial inaccuracies through a collaborative effort. The proposed solution to this problem is to acquire better survey control using Global Navigation Satellite System (GNSS) technology and to contribute this enhanced control to the Geodetic Control Framework to improve the accuracy of the Public Land Survey System (PLSS) in Flathead County. Enhancing the PLSS, through control surveys and in support of geodetic controls, allows for adjustment of cadastral and administrative boundaries to more accurately represent on-the-ground conditions. These adjustments affect several key stakeholders, including the City of Whitefish, and will improve spatial data used by both the public and local governments.

Put simply—as mapping control data is collected by a licensed surveyor, reviewed by Flathead County GIS, and submitted to the MSDI theme stewards—the proposed project will improve the Montana Spatial Data Infrastructure (MSDI) and Public Land Survey System (PLSS) standardized data for the Cadastral National Spatial Data Infrastructure (PLSS CadNSDI) to increase spatial accuracy for the area in and around the City of Whitefish.

In future years, we intend to collect additional control points in the Columbia Falls, Bigfork and Kalispell regions, to improve the spatial accuracy in those geographic regions.

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Part 02: Funding Partners & Statements of Support

Funding Partners

All funding partners must be identified. Statements of support are required for each identified funding partner. Please attached a statement of support for each identified partner in .pdf version. Any funds pledged to this proposal must be reflected in the statements of support. See MLIA Grant Compliance – MLIA Grant Funding Partners section for the definition of a funding partner in the FY2022 MLIA grant application packet.

Please follow the instructions below to report information about all applicable funding partners and to attach letters of support. If there are no funding partners on this project, please select "Mark as Complete" and move on to the next form.

Do you have a Funding Partner?

● Yes ○ No

Name of Contact Matthew Trebesch

Name of Agency City of Whitefish

Street Address 418 E 2nd ST

City

Whitefish

County Flathead

Zip Code

59937

Contact Email Address mtrebesch@cityofwhitefish.org

Contact Phone Number (406) 863-2458

Please attach the applicable statement of support from the funding partner by clicking "Browse" below and selecting the appropriate document. Please attach the statement of support as a PDF document.

Statement of Support City of Whitefish Funding Partner support MLIA

Do you have a second Funding Partner?

● Yes ○ No

Name of Contact Board of Commissioners

Name of Agency Flathead County

Street Address 800 South Main Street

City

Kalispell

County Flathead

Zip Code 59901

Contact Email Address cocontactus@flathead.mt.gov

Contact Phone Number 406-758-5503

Statement of Support Memo to the Commissioners_signed

Do you have a third Funding Partner? O Yes

No



Part 03: Relevance

Relevance to the FY2022 Montana Land Information Plan: In this section, please:

- 1. Describe how the proposal meets the purpose of the Montana Land Information Act: to develop a standardized, sustainable method to collect, maintain, and disseminate information; and
- Clearly demonstrate how the proposal meets the defined <u>FY2022 Montana Land Information Plan Priority</u>.
 EXCEPTION: This section is not required for applicants submitting proposals for the sole purpose of collecting new survey control data

Relevance

Is the proposed project for the sole purpose of collecting new survey control data

Yes \bigcirc No

SCORING: RELEVANCE - 100 TOTAL POINTS

EXCEPTION: This section is not required for applicants with the sole purpose of collecting new survey control data. Assign full credit in this category for those applications.

The applicant clearly states how the proposal will meet the purpose of the Montana Land Information Act: to develop standardized, sustainable methods to collect, maintain, or disseminate information in digital formats about the natural and artifical land characteristics of Montana (0-50 Points)

(Reviewer Only)

Meets Purpose of MLIA (0-50 Points) (Reviewer Only)

The applicant describes how the proposal will meet one of the defined grant priorities of the FY2022 Land Information Plan. The applicant provides specific examples that clearly explain how the project addresses specific goals and objectives in the Land Plan. If the proposed grant applies to an MSDI theme, the applicant demonstrates a knowledge and understanding of that theme. (0-50 points)

(Reviewer Only)

Meets Land Information Plan Defined Grant Priority (0-50 Points) (Reviewer Only)



Part 04: Public Benefit

Public Benefit: In this section, please describe why and demonstrate how the grant project will:

- 1. Benefit a specific MSDI theme;
- 2. Enhance the land information needs of multiple agencies or jurisdictions; and
- 3. Benefit the citizens of Montana
- 4. Exception: This section is not required for GIS Project Planning applicants and applicants with the sole purpose of collecting new survey control data.

Is the proposed project for GIS Project Planning applicants and applicants with the sole purpose of collecting new survey control data?

● Yes

SCORING: PUBLIC BENEFIT - 100 TOTAL POINTS

EXCEPTION: This section is not required for applicants with the sole purpose of collecting new survey control data or proposing a GIS project planning grant. Assign full credit in this category for those applications.

(Reviewer Only)

The applicant's proposal demonstrates how the proposal will benefit a specific MSDI theme; enhance the land information needs of multiple agencies and across jurisdictions; and/or benefits the citizens of Montana. (0-100 points)

1. The proposed project describes how it will benefit at least one other agency across departments; for example, a county project benefits public works, the sheriff's office, and planning department. The proposed project describes how it will benefit multiple cross-jurisdictional agencies. For example, a county project may also benefit the Forest Service, BLM, and a tribal government entity;

2. If applicable, the proposal clearly describes how it will benefit an MSDI theme;

3. The proposed project demonstrates public benefit to the citizens of Montana.

(Reviewer Only)

Public Benefit (0-100 Points) (Reviewer Only)



Part 05: Project Management

Primary Project Manager Contact Information

Salutation Mr

Primary Project Manager Name Matt Reynolds

Primary Project Manager Title IT Director

Primary Project Manager Organization Flathead County

Primary Project Manager Email Address mreynolds@flathead.mt.gov

Primary Project Manager Phone Number 406-758-5573

Secondary Project Manager

Salutation Mr

Secondary Project Manager Name Nathan Holm

Secondary Project Manager Title GIS Analyst

Secondary Project Manager Organization Flathead County

Secondary Project Manager Email Address nholm@flathead.mt.gov

Secondary Project Manager Phone Number 406-758-2405

Organizational Capability

In this section, please demonstrate the organization's past record of performance with similar projects; the ability to implement the methodology described in the scope of work; and the organization's capability to support and sustain the project.

Organizational Capability

The proposed project will be undertaken collaboratively by Flathead County GIS and the City of Whitefish, each of which contributes pertinent knowledge to support and sustain the project. The GIS Division of the Flathead County Information Technology department provides GIS services throughout Flathead County while also supporting the spatial data needs of other local jurisdictions and agencies. Of particular importance to the implementation of this project is the success that Flathead County GIS has shown in maintaining the parcel data geometry of the Cadastral theme. Flathead County is but one of a few counties in Montana that maintains the cadastral parcel geometry within their own boundaries in place of the MT Department of Revenue.

Matt Reynolds will serve as the primary project manager. Matt has held the position of IT/GIS Director for Flathead County since 2019, and prior to that served as a programmer and database administrator for Flathead County since 2015. Nathan Holm serves as the secondary project manager. Nathan works as the department's GIS analyst, and has been working with Flathead County in that role since 2003. The Flathead County GIS team works towards projects which further the accessibility of records while promoting intradepartmental collaboration to improve efficiency and reduce the duplication of efforts across Flathead County.

Flathead County already has the compute and data storage capacity and infrastructure necessary for a project of this scope. The GIS department utilizes ESRI Enterprise tools. Along with their extensive cadastral knowledge, they can achieve its goal of providing comprehensive, accurate and accessible GIS data and services to support the unique business needs of Flathead County and the communities it serves.

The Clerk & Recorder maintains all recorded documents and works in collaboration with the GIS department on the proper recording of surveys and other parcel data. Additionally, GIS collaborates with the Flathead County Health Department, Planning & Zoning, Treasurer, County Attorney, and the Board of County Commissioners to meet their individual department business needs. Community support for the project is demonstrated through the attached letters of support.

ORGANIZATIONAL CAPABILITY

The applicant demonstrates the organization's past record of performance with similar projects; the ability to implement the methodology described in the scope work; and the organization's capability to support and sustain the project.

(Reviewer Only)

Organizational Capability (0-25 Points) (Reviewer Only)





Project Management

In this section, the applicant must demonstrate the defined project managers', key personnel's, and funding partners' adequate skills, qualifications, and experience for the defined project. And the following, if applicable, must be demonstrated.

1. Management Plan - The applicant must demonstrate how the defined project manager—not the hired consultant—will manage the entire project, including meeting the mandatory reporting requirements, communicating with the State Library, fulfilling data requirements, and managing all hired consultants.

2. Financial Management – Applicant provides a contact and a copy of the official invoice document for their respective organization in a .pdf format. (uploaded below)

3. Past Record of Performance -- The applicant must demonstrate the defined project managers' GIS project management experience, grant management experience, and (if applicable) consultant management experience. The applicant must provide concrete examples of each and explain how the experience gained in those projects relates to the current proposal.

4. Hiring a Consultant (if applicable) – The applicant must describe the plans to hire a consultant and the procurement process for acquiring these professional services.

Project Management

Matt Reynolds and Nathan Holm will work together through all stages of this project to fulfill its goal of collecting new PLSS control data and improving the Montana spatial data accuracy to cadastral and administrative boundaries. Both Matt and Nathan have a combined experience of 30 years of project management, which include reporting progress, meeting project milestones and communicating with external partners. Matt and Nathan will coordinate work with the City of Whitefish and a third party surveyor on this project. This is Matt and Nathan's first major project which involves a third party surveyor.

Matt Reynolds will be the primary project manager, coordinating all aspects of this project, including communication with the surveying firm that will do this data collection. Matt will also report progress to the State Library, as required. Matt will also manage the financial aspects of the project, as part of his regular duties as director.

Nathan Holm will serve as the secondary project manager, also coordinating with the surveying firm that will perform data collection. Matt and Nathan will also work with the City of Whitefish to determine points for collection, before contracting with a third party surveyor. Nathan will handle the technical GIS requirements of this project, coordinating with the rest of the GIS department as needed.

We will use Flathead County's purchasing policy for guidance on how we hire a surveyor. That policy currently only requires going out for bid (using an RFP or RFQ process) if the surveying services are anticipated to cost more than \$50,000. Matt has already reached out to 3 different surveying firms to get cost estimates, and those estimates are well under the \$50,000 threshold.

Project Management:

a. The applicant must demonstrate adequate skills, qualifications, and experience for the defined project managers, key personnel, and funding partners.

b. Financial Management - Applicant provides a contact and a copy of the official invoice document for their respective organization in a .pdf format.

c. Management Plan – The applicant demonstrates how the defined project manager—not the hired consultant—will manage the entire project, including meeting the mandatory reporting requirements, communicating with the State Library, fulfilling data requirements, and managing all hired consultants.

d. Past Record of Performance – The applicant must demonstrate the defined project managers' GIS project, grant, and, if applicable, consultant management experience. The applicant must provide concrete examples of each and explain how the experience gained in those projects relates to the current proposal.

e. Hiring a Consultant – If applicable, the applicant must describe the plans to hire a consultant and procurement process for acquiring professional services. If a consultant has been hired, applicant must identify the consultant, define the amount of time, identify key personnel, and the consultant's procured services and work completed relevant to the proposal.

(Reviewer Only)

Project Management (0-75 Points) (Reviewer Only)

Identified Consultant Information

If the applicant plans has hired and is under contract with a consultant who will perform work on the project, please select "yes" and complete the fields that appear below.

Has the applicant hired a consultant to perform work on the proposed project?

⊖ Yes

No

Invoicing Methodology

In order for the Montana State Library to distribute awarded grant funds for incurred authorized project costs, the MLIA Grant Award Recipient must invoice the Montana State Library for reimbursement. The applicant must provide a sample, in PDF format, of the applicant's official invoice document.

Please attach sample invoicing documents Example Invoice - PLSS

AGENCY'S FINANCIAL CONTACT

Salutation Mrs

Financial Contact Name Amy Dexter

Financial Contact Title Finance Director



Financial Contact Organization Flathead County

Financial Contact Email Address adexter@flathead.mt.gov

Financial Contact Phone Number 406-758-5538



Project Sustainability

Sustainability is one of the key pillars of the Montana Land Information Act's purpose. In this section, the applicant must demonstrate future project sustainability and include a plan for long-term funding and future enhancements. Please explain how the project will be maintained in the long term, including staffing and funding plans and reducing dependencies on MLIA funding. If the grant proposal has identified improving an existing MSDI data layer, please explain how the applicant will coordinate with the Montana State Library to ensure the information will be made available. Explain any projected future enhancements that may require additional third-party funding.

Project Sustainability Narrative

Flathead County has a team of 4 GIS professionals, who can continue to maintain and enhance the cadastral data in the Whitefish, MT region, as well as the remainder of Flathead County. We have two cadastral specialists, one analyst and one survey specialist. Our survey specialist doesn't have the licensure required for this project, which is why we are pursuing this grant request. As this is a multi-year project, we anticipate working in 3 additional geographic regions within Flathead County, to further enhance our PLSS and cadastral alignment.

Our cadastral specialist performs draft work on new land splits, certificate of surveys, subdivisions and are primarily responsible for maintaining the parcel base and associated layers in an accurate and efficient manner. Their drafting work is based on legal descriptions and documents, performed in conjunction with the Clerk & Recorder's office. They work to resolve any "fit problems" to ensure the integrity and accuracy of maps we produce. Our analyst provides technical expertise in GIS technology to create, maintain and display spatial and non-spatial data. This individual also administers our address improvement

Our analyst provides technical expertise in GIS technology to create, maintain and display spatial and non-spatial data. This individual also administers our address improvement program, which is responsible for naming and re-naming roads, as well as handling any requisite re-addressing. They assist with enhancing our 911 system response, by coordinating with GIS staff at our local FECC (Flathead Emergency Communications Center, a.k.a. the 911 center).

Our survey specialist coordinates with the analyst and cadastral specialists, investigating land records on file with the Flathead County Plat Room. This individual also assists with training public, private and government organizations in the use of our mapping website and its various services. They operate mapping grade GPS equipment to collect data, such as road centerlines, addresses and other pertinent County data.

SCORING: PROJECT SUSTAINABILITY - 100 TOTAL POINTS

The applicant must demonstrate future project sustainability. (0 - 100 points)

a. This must include future enhancements and a plan for long-term staffing for the continued maintenance of the deliverables created with MLIA grant funds.

b. The application must explain funding plans and plans for reducing dependencies on MLIA funding.

c. If the grant proposal has identified improving an MSDI data layer, the proposal should explain how the applicant will coordinate with the Montana State Library to ensure the integration into the statewide framework layers.

(Reviewer Only)

Project Sustainability (0-100 Points) (Reviewer Only)



Part 07: Grant Accountability

Renewable Grant Accountability

The applicant must identify all awarded MLIA Grants to their organization. All MLIA grants awarded to the applicant's governmental entity/agency must be accounted for. State government applicants must only report for their respective agency. Performance on previously awarded MLIA grant projects will be taken into consideration in the final prioritization. Please consult the following resources to research previously awarded grants:

- For a detailed listing and interactive map of the previsouly awarded MLIA Grants - https://geoinfo.msl.mt.gov/Awarded_MLIA_Grants

Did the applicant receive an MLIA grant in fiscal year 2021? O Yes

No

Fiscal Years 2017-2020 MLIA Grant Cycles

Please indicate whether or not the applicant was awarded any MLIA grants during state fiscal years 2017-2020. Please select "yes" for any of the following applicable years. After clicking "yes," you will see a text box appear in which you can enter a written narrative explaining the grant project. In the text box, please 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.

Did the applicant receive an MLIA grant in fiscal year 2020?

○ Yes

Did the applicant receive an MLIA grant in fiscal year 2019?

⊖ Yes ● No

Did the applicant receive an MLIA grant in fiscal year 2018?

● Yes ○ No

FY 2018 MLIA Grant Project Title

Flathead County 911 GIS Improvement Initiative

FY 2018 MLIA Grant Summary

The Flathead County 911 GIS Improvement hitiative 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 GeoLymx 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.

NOTE: This grant was initiated when the FECC was a separate entity, financially speaking. The FECC only officially joined Flathead County operations (including financial management) in 2021.

Did the applicant receive an MLIA grant in fiscal year 2017?

○ Yes● No



Part 08: Project Authorization

Authorization Statement

I have read the application in its entirety, and I certify that the information and all statements in the application are true, complete, and accurate to the best of my knowledge. I further certify that we are committed to funding our share of the project, including both pledged applicant cash and pledged applicant in-kind, as stated in the proposed project budget. I further certify that the proposed project, should it be approved for MLIA funding, will comply with all applicable state, local, and federal laws, regulations, and standards.

I authorize the Montana State Library to publish the contents of this application and to use the contents of this application for training, promotional, or other purposes.

Finally, I 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.

Please read the above statement and accept the following terms

- Acknowledgment that I have read and accept the Terms and Conditions contained in this online application
- Acknowledgment that the applicant understands that the MLIA grant program is funded using State funds and does not involve any federal funding.
- Acknowledgment that the applicant has read the FY 2022 Montana Land Information Plan.

X Acknowledgment that the applicant understands that the purchasing of supplies or acquisition of contractual services may be subject to local or state procurement laws, and the applicant agrees to comply with any applicable laws, rules, and regulations governing the procurement of supplies or contractual services for their grant project.

Please type First and Last Name

Matt Reynolds

Date Signed 2/24/2021

Additional Documents

MLIA Proposed Survey Control Point Collection Form - https://docs.msl.mt.gov/MLIAC/FY2022/PLSSForm_MLIA_FY2022.zip

Please provide any additional uploads such as maps or other forms

Additional Upload

ProposedCollectionPoints

Applicants proposing projects for the sole purpose of collecting new survey control data must include a completed MLIA Proposed Survey Control Point Collection form. Please indicate whether or not the proposed project is a PLSS/survey control project. If it is, please attach the required form. After selecting "yes," you will see a field appear where you can upload the form.

Is the proposed project a PLSS/survey control project?

Yes

⊖ No

Please upload a completed MLIA Proposed Survey Control Point Collection form PLSSForm_MLIA_FY2022

SCORING: SCOPE OF WORK - 100 TOTAL POINTS

Please review the Performance Plan Section, then come back and complete the following scoring: (Reviewer Only)

Goals and Objectives (0-30 Points) (Reviewer Only)

Tasks or Activities (0-30 Points) (Reviewer Only)

Project Scheduling (0-40 Points) (Reviewer Only)

SCORING: BUDGET JUSTIFICATION & BUDGET TABLES - 100 POINTS TOTAL

Please review the Budget Section, then come back and complete the following scoring: (Reviewer Only)

Budget Narrative (0-45 Points) (Reviewer Only)

Budget Tables (0-45 Points) (Reviewer Only)

Matching Funds (0-10 Points) (Reviewer Only)



Budget

Proposed Budget Summary

Expense Budget

		Grant Funded	Non-Grant Funded	Total Budgeted
Personnel				
Task 1.1.1: Prioritize and Ma	p Locations for Data Collection	\$0.00	\$150.00	\$150.00
	Task 1.2.1: Finalize Contract	\$0.00	\$155.00	\$155.00
Task 1.3.1:	Review of Prioritized Locations	\$0.00	\$75.00	\$75.00
Та	ask 1.3.2: Generate Field Maps	\$0.00	\$40.00	\$40.00
Task 1.3.4: Obtain	Authorization from Landowners	\$0.00	\$150.00	\$150.00
Tas	k 1.5.1: Submit Collected Data	\$0.00	\$40.00	\$40.00
	Subtotal	\$0.00	\$610.00	\$610.0
Contractual				
	Task 1.2.1: Finalize Contract	\$17,000.00	\$0.00	\$17,000.00
	Task 1.2.1: Finalize Contract	\$0.00	\$4,000.00	\$4,000.00
	Task 1.2.1: Finalize Contract	\$0.00	\$3,325.00	\$3,325.0
	Subtotal	\$17,000.00	\$7,325.00	\$24,325.0
Other				
Task 1.3.4: Obtain	Authorization from Landowners	\$0.00	\$65.00	\$65.0
	Subtotal	\$0.00	\$65.00	\$65.0
	Total Proposed Cost	\$17,000.00	\$8,000.00	\$25,000.0
Revenue Budget				
	Grant Funded		Non-Grant Funded	Total Budgete
Grant Funding				. etal Dadgetet
Award Requested	\$17,000.00			\$17,000.00
Subtotal	\$17,000.00			\$17,000.0
Non-Grant Funding				-
Cash Match			\$7,170.00	\$7,170.0
In-Kind Match			\$830.00	\$830.0
			\$8,000.00	\$8,000.0
Subtotal			\$0,000.00	-

Proposed Budget Detail

See attached spreadsheet.

Proposed Budget Narrative

Personnel

Eligible Projects Costs: Enter the total amount in the "Direct Cost" field (Direct Cost = Grant Funded + Cash Match + In-Kind Match). Change "Non-Grant Funded" to "Yes". Enter in your Match Dollar Amount. The "Grant Funded" is your requested MLIA funds. See the Guidelines for more information.

Task 1.2.1: Finalize Contract

This is the amount of Flathead County staff time spent on finalizing this contract, between GIS, the consultant and County Attorney's office. This in-kind match is covered by County salaries.

Task 1.1.1: Prioritize and Map Locations for Data Collection

This is the City of Whitefish and Flathead County GIS staff time spent prioritizing locations for control collection. This in-kind match is covered by their respective salaries.

Task 1.3.1: Review of Prioritized Locations

This is time spent prioritizing locations between the consultant and Flathead County GIS. This in-kind match is covered by County salaries.



This is the time spent preparing and printing maps, to help organize field data collection. This in-kind match is covered by County salaries.

Task 1.3.4: Obtain Authorization from Landowners

This is the time spent, along with the postage and printing supplies needed, for obtaining authorization from private land owners to survey on their property. This in-kind match is covered by County salaries.

Task 1.5.1: Submit Collected Data

This is the time spent preparing for submission, and then submitting, the collected data. This in-kind match is covered by County salaries.

Contractual

Eligible Projects Costs: Enter the total amount in the "Direct Cost" field (Direct Cost = Grant Funded + Cash Match + In-Kind Match). Change "Non-Grant Funded" to "Yes". Enter in your Match Dollar Amount. The "Grant Funded" is your requested MLIA funds. See the Guidelines for more information.

Task 1.2.1: Finalize Contract

This project is entirely about control collection, so the majority of the cost will be in the contracting of a surveyor/consultant. The consultant we'd like to work with has quoted us \$22,600, so this is the grant funded portion of that.

Task 1.2.1: Finalize Contract

This \$4,000 is from the City of Whitefish, and goes towards the contracted price with the surveyor/consultant, for the survey data/point collection. The consultant we'd like to work with has quoted us \$22,600, so this is the matching contribution from the City to fund the contract.

Task 1.2.1: Finalize Contract

The consultant we'd like to work with has quoted us \$22,600, so this is the Flathead County cash funded portion of that.

Other

Eligible Projects Costs: Enter the total amount in the "Direct Cost" field (Direct Cost = Grant Funded + Cash Match + In-Kind Match). Change "Non-Grant Funded" to "Yes". Enter in your Match Dollar Amount. The "Grant Funded" is your requested MLIA funds. See the Guidelines for more information.

Task 1.3.4: Obtain Authorization from Landowners

This is the cost for obtaining authorization from 100 property owners. I anticipate some property owners saying no, which require additional notification mail. This cost is for postage and paper/ink.



Performance Plan

Proposed Performance Plan

Project Scope of Work

Goal Name	Goal Type	Goal Details
Public Land Survey System (PLSS) Enhancement	Milestone	Due Date 06/30/2022
Objective 1.1: Finalize scope of work	Milestone	Due Date 08/01/2021
Task 1.1.1: Prioritize and Map Locations for Data Collection	Milestone	Due Date 08/01/2021
Objective 1.2: Contract with a Licensed Land Surveyor	Milestone	Due Date 09/01/2021
Task 1.2.1: Finalize Contract	Milestone	Due Date 09/01/2021
Objective 1.3: Research and Prepare for Fieldwork	Narrative	Narrative See Below
Task 1.3.1: Review of Prioritized Locations	Narrative	Narrative See Below
Task 1.3.2: Generate Field Maps	Narrative	Narrative See Below
Task 1.3.3: Create a Data Collection Plan	Narrative	Narrative See Below
Task 1.3.4: Obtain Authorization from Landowners	Narrative	Narrative See Below
Objective 1.4: Survey the Prioritized PLSS Monuments	Numeric	Number to be Achieved 68
Task 1.4.1: Collect Survey Data	Milestone	Due Date 06/01/2022
Objective 1.5: Submit Collected Data	Narrative	Narrative See Below
Task 1.5.1: Submit Collected Data	Milestone	Due Date 06/15/2022

Project Deliverables

Goal Name	Goal Type	Goal Details
Deliverable 1.1.1.1: Scope of Work	Milestone	Due Date 08/01/2021
Deliverable 1.1.1.2: Site Maps	Milestone	Due Date 08/01/2021
Deliverable 1.2.1.1: Signed Contract	Milestone	Due Date 09/01/2021
Deliverable 1.3.1.1: Prioritized Monuments	Milestone	Due Date 10/01/2021
Deliverable 1.3.2.1: Field Maps	Milestone	Due Date 12/01/2021



PLSS Control Collection - Whitefish, MT Region

Flathead County

Goal Name	Goal Type	Goal Details
Deliverable 1.3.3.1: Data Collection Plan	Milestone	Due Date 12/01/2021
Deliverable 1.3.4.1: Owner Permission	Milestone	Due Date 04/01/2022
Deliverable 1.4.1.1: Certification of Collected Points	Milestone	Due Date 06/01/2022
Deliverable 1.5.1.1: Data Submission	Milestone	Due Date 06/15/2022

Proposed Performance Narrative

Project Scope of Work

Please add and explain your project goals, objectives, and tasks in this section. To add a new goal, objective, or task, click on the "Add Goal" link. Each new item added is considered a "goal" in the AmpliFund system, so it is important that each goal, objective, or task is labeled carefully and clearly identified as either a goal, objective, or task. The following format is required for labeling goals, objectives, and tasks: a. All goals must be numbered, e.g.: "Goal 1: Submit FY2022 MLIA Grant Application." Project goals should be broad and provide a general statement of the project purpose. Each goal should have at least one measurable objective. b. All objectives must be numbered and include their overarching goal, e.g.: "Objective 1.1: Complete All Grant Application Forms." Each project objective should describe a specific outcome of the project and explain when that outcome will be achieved. Each objective should have at least one measurable task. c. All tasks must be numbered in order and include their overarching goal and objective, e.g.: "Task 1.1.1: Complete the Applicant and Project Information Form of the Application." Tasks must be described in chronological order necessary to accomplish the work under each objective. This description must provide sufficient detail to show that the tasks are achievable and will accomplish the objectives stated in the application. The description also should provide detail concerning the specific results of each task and a deadline for when the task will be completed. It is important to choose a "goal type" that best suits the Goal, Objective, or Task that you are trying to accomplish. For example, defining a Task to purchase software should be defined as a Milestone "goal type," and a relevant purchase date should be entered. Another example, would be defining a Goal for digitizing all road centerlines in a county, which could be defined in number of road miles. In that case, a Numeric "goal type" would be chosen and the number of possible road miles entered. The Montana State Library must approve all deliverables and reports prior to releasing final grant reimbursement. Therefore, the project proposal must reflect all goals, objectives, tasks, final deliverables, final reports, and final invoicing to be completed no less than 10 business days before June 30, 2022.

Public Land Survey System (PLSS) Enhancement

Improve the spatial accuracy of the Digital Public Land Survey System (PLSS) within Flathead County in and around the city of Whitefish through the collection of survey control points.

Objective 1.1: Finalize scope of work

The initial plan is to survey 68 section corner and guarter-section corner monuments in and around the city of Whitefish.

Task 1.1.1: Prioritize and Map Locations for Data Collection

Flathead County and the City of Whitefish will prioritize PLSS corners (including sections and quarter-sections) for collection and develop a final scope of work document.

Objective 1.2: Contract with a Licensed Land Surveyor

Flathead County will contract with a licensed Land Surveyor to survey the prioritized PLSS section and quarter-section corners in and around the City of Whitefish.

Task 1.2.1: Finalize Contract

Flathead County will select a licensed Land Surveyor and sign a written contract for the collection of the prioritized PLSS section and quarter-section corners in and around the City of Whitefish

Objective 1.3: Research and Prepare for Fieldwork

Flathead County will work with the selected licensed land surveyor to develop a plan for fieldwork.

Task 1.3.1: Review of Prioritized Locations

Flathead County and contracted Surveyor will review, select and prioritize the monuments to be collected based on PLSS reliability, monument accessibility, and project area.

Task 1.3.2: Generate Field Maps

Flathead County will produce field-ready maps for each collection area that identify each designated PLSS monument, PLSS points in the vicinity, water features, property ownership, type of ownership (private, government, tribal), road centerlines, local topography based on existing LIDAR data, and other relevant data.

Task 1.3.3: Create a Data Collection Plan

The surveyor will develop a data collection plan based on their professional estimation of the relative difficulty of survey work and project area. The surveyor will utilize either Real Time Kinematic (RTK) or post-processed GNSS data as deemed appropriate.

Task 1.3.4: Obtain Authorization from Landowners

Based on the project area and the prioritized list of monuments, Flathead County will take responsibility for gaining authorization from private property owners prior to survey work being done. If authorization cannot be reasonably obtained, Flathead County will adjust the collection plan to best compensate for the needed change.

Objective 1.4: Survey the Prioritized PLSS Monuments

Flathead County has initially estimated that 68 PLSS Monuments should be collected and incorporated as PLSS Control. This number may change after further discussion with a licensed surveyor



Task 1.4.1: Collect Survey Data

The selected licensed surveyor will survey the designated monuments following in the most general terms as described in the collection plan. Coordinates collected by the Surveyor will reduce the PLSS reliability error as much as possible with the available tools.

Objective 1.5: Submit Collected Data

Point data collected by the licensed surveyor will be submitted to the Montana State Library and the appropriate MSDI Theme Leads for incorporation in the PLSS.

Task 1.5.1: Submit Collected Data

Flathead County and the licensed land surveyor will collaborate to submit the collected points data with accompanying metadata in a format specified below, that is acceptable to the MSDI theme leads. Coordinate System Requirements: a. Coordinate System: NAD 1983 (2011) HARN State Plane Montana (METERS). b. Vertical Coordinate System: NAVD 1988.

Project Deliverables

Please clearly explain each deliverable resulting from the proposed project. To add a new deliverable, click on the "Add Goal" link. Each new item added is considered a "goal" in the AmpliFund system, so it is important that each deliverable is labeled carefully. In your description of each deliverable, please explain the specific project task(s) related to the deliverable and include a completion date for the deliverable. The Montana State Library must approve all deliverables prior to releasing final grant reimbursement. Therefore, the project proposal must reflect all final deliverables be completed no less than 10 business days before June 30, 2022.

Deliverable 1.1.1.1: Scope of Work

Flathead County will develop a scope of work document, as outlined in Task 1.1.1.

Deliverable 1.1.1.2: Site Maps

Flathead County will generate maps for all locations prioritized for data collection, as outlined in Task 1.1.1.

Deliverable 1.2.1.1: Signed Contract

Flathead County and a licensed Land Surveyor will sign a contract to collect the prioritized PLSS locations, as outlined in Task 1.2.1.

Deliverable 1.3.1.1: Prioritized Monuments

In conjunction with the selected licensed land surveyor, Flathead County will generate a final list of prioritized monuments to collect in the project area, as outlined in Task 1.3.1

Deliverable 1.3.2.1: Field Maps

Field-ready maps will be made for each collection area to identify the PLSS monument being collected, as outlined in Task 1.3.2. These maps will also include any nearby PLSS points, water features, property ownership, types of ownership (private, government, tribal, etc), road centerlines, local topography, and other relevant features.

Deliverable 1.3.3.1: Data Collection Plan

The selected licensed land surveyor will provide Flathead County with a data collection plan based on their professional estimation of the relative difficulty of survey work and project area, as outlined in Task 1.3.3.

Deliverable 1.3.4.1: Owner Permission

Flathead County will obtain written permission for data collection from the necessary private landowners, as outlined in Task 1.3.4.

Deliverable 1.4.1.1: Certification of Collected Points

Flathead County will receive certification of the collected points from a licensed land surveyor, as outlined in Task 1.4.1.

Deliverable 1.5.1.1: Data Submission

Point Data and Metadata is submitted to the Montana State Library and MSDI Theme Leads in the required format, as outlined in Task 1.5.1.



City of Whitefish

418 E. 2nd St. | PO Box 158 Whitefish, MT 59937 (406) 863-2400 | Fax (406) 863-2419

February 19, 2021

Montana Land Information Advisory Council and Erin Fashoway, State GIS Coordinator, Montana State Library 1515 E 6th Avenue Helena, MT 59620

RE: Flathead County PLSS Control Collection - Whitefish, MT Region MLIA Grant Request

To Council Members and Administrative Staff:

I am writing in support of the Flathead County GIS grant request to collect new survey control points to improve Public Land Survey System (PLSS) data within Flathead County in the Whitefish area.

The City of Whitefish is contributing \$4,000 towards Flathead County's Montana Land Information Act (MLIA) grant application as a funding partner.

We are hopeful this grant will help improve our city land use planning boundaries, asset management data and U.S. Census boundary submissions by improving the digital representation of the PLSS to enhance the accuracy of cadastral and administrative themes.

This improvement will help our citizens, staff and other stake holders that use this data make better decisions to improve our community. It will also serve as a cornerstone for all future cadastral data enhancement missions conducted by both the City of Whitefish and Flathead County.

Sincerely,

Matthew Trebesch City of Whitefish - GIS/IT Coordinator



Flathead County Information Technology

920 South Main Street, Suite B01, Kalispell, Montana 59901 (406)758-5571 http://flathead.mt.gov/information_technology/ GIS/Room 203 800 South Main Kalispell MT, 59901-5420

Phone: (406) 758-5540 gis_online@flathead.mt.gov

Memorandum

To: Flathead County Board of Commissioners

From: Matt Reynolds, Information Technology Director

Date: February 16, 2021

Re: MLIA Grant for PLSS Section Corner Surveying

Dear Commissioners,

The Geographic Information Systems department, in conjunction with the City of Whitefish, would like to pursue a Montana State Library grant. The grant is funded by the Montana Land Information Act, which is intended to develop, standardize and sustainably collect, maintain and disseminate information in digital formats. Our interactive mapping application located at https://maps.flathead.mt.gov, uses a number of different layers of information in order to present mapping data to the public.

The website and the information available in it suits our needs well, however the State of Montana has requested we improve our alignment in our County, by collecting public land survey system (a.k.a. PLSS) section corners and ¹/₄ section corners point data. The City of Whitefish has pledged \$4,000 to be a co-sponsor on this grant, as long as we address some of the misalignment in the City of Whitefish, such as the miss-alignment shown [in red] to the right.

The collection of this PLSS corner data is a Tier 1 grant priority, which puts us first in line for funding. I request we also put forth \$4,000 in matching funds (for a total of \$8,000 in matching funds) if we apply for the grant. This \$8,000 in matching funds will increase our chances of the grant being awarded to us.





Flathead County Information Technology 920 South Main Street, Suite B01, Kalispell, Montana 59901 (406)758-5571 http://flathead.mt.gov/information_technology/

GIS/Room 203 800 South Main Kalispell MT, 59901-5420

Phone: (406) 758-5540 gis_online@flathead.mt.gov

At this point in time, we'd like to collect roughly 70 section corner and ¹/₄ section corners. The area of interest in the Whitefish region is shown below:



The points of collection, especially within downtown Whitefish, will address our alignment issues there.

With your permission, I request that we apply for this grant, which would commence in fiscal year 2022. It is my intention to re-apply for this same grant in future fiscal years, to address similar alignment issues in the Kalispell, Columbia Falls and Bigfork regions.

Sincerely,

Matt Reynolds I.T. Director



Flathead County ATTN: GIS Department 800 South Main Street Kalispell, MT 59901 US (406)758-5540 gis_online@flathead.mt.gov

BILL TO Montana State Library Erin Fashoway 1515 E 6th Avenue Helena, MT 59620 INVOICE # 5119 DATE XX/XX/XXXX DUE DATE XX/XX/XXXX

TERMS Net 30

EMPLOYEE NAME Flathead County GIS **BILLABLE JOB**

MLIA Grant Program FY 2022 PLSS Control Collection - Whitefish, MT Region

PLSS Grant Control Collection 17,000.00 GPS Collection of 69 control points. See attached surveyor invoice for line-item details. 0RDERED BY: RPA, 69 @ \$327.54

Please make checks out to "Flathead County"

BALANCE DUE

\$17,000.00

Thank you for your prompt payment.

Receipt(s) from Contracted Consultant Here...

Only the costs for the grant funded portion would be submitted for reimbursement, however, the original receipt would appear attached to this invoice, for your records, as well as our own.

As stated in the budget for this application, we anticipate the cost to be roughly \$22,600.



	oject identified P	oject wanager.	Matt Reynolds,	Nathan Holm				
lumber	Township	Range	Section	Quarter	Corner	Priority	Approval Status	
	(This is where the grantee will identify the corners for collection)					(Priority Corner vs. Alternate (Approved or Not Corner) Grantee /MSL Action Approved) MSL Acti		
1	31 31	22 22	1		NE SE			
3	31	22	1		SW			
4 5	31 31	22	1		NW NW			
6	31	22	2		SW			
7	31	22	13		NE			
8	31 31	22	13		SE SW			
10	31	22	13		NW			
11 12	31 31	22	24		SE SE			
13	31	22	27		SW			
14 15	31 31	22	27		NW SW			
16	31	22	34		SE			
17 18	31 31	22	36 36		NE SE			
18	31	22	36		SW			
20	31	22	36		NW			
21 22	31 31	21 21	20		NE SE			
23	31	21	20		SW			
24 25	31 31	21 21	20		NW NE			
26	31	21	32		SE			
27 28	31 31	21 21	32		SW NW			
29	31	21	28		NE			
30	31	21	28		SE			
31 32	30 30	21	4		NE NE			
33	30	21	8		SE			
34 35	30 30	21	8		SW NW			
36	30	21	9		NE			
37 38	30 30	21	9		SE NE			
39	30	22	12		SE			
40	30	22	12		SW			
41 42	30 31	22	12	NW NE	NW			
43	31	22	24	NW NE				
44 45	31 31	22	24	SW NE SE NE				
46	31	22	24	SW SE				
47 48	31 31	22	25	NW SE NE SE				
49	31	22	26	NW SW				
50 51	31 31	22	35	NE NW SE NW				
52	31	22	35	SW NW				
53	31	22	35	SE NE				
54 55	31 31	22	35	SW SE NW NE				
56	31	22	36	SW NE				
57 58	31 31	22	36 36	SE NE SW SE				
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60 61	30 30	22	1	NE SW SE SW				
62	30	22	1	NE SE				
63 64	30 30	21	5	NE NW SW NW				
65	31	21	32	NE NW				
66 67	31 31	21	32	SE NW SW NW				
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*Proposed PLSS Control - This form is only required for applicants proposing PLSS/survey control projects. Those applicants must complete this form with their proposed collection information and upload it into their respective grant applications in Amplifund. Please do your best to fill this form out, MSL will work internally to research and review points upon award and prior to executing statement of work. It is best to have more points in the proposed list than what is requested for funding. Please insert as many lines as necessary into this excel worksheet. Please do not enter any information in the Approval Status category. MSL will work with the approved grant project Project Managers to approve points. This points are proposed and upon further research, alternative points may be required for collection.