

## APPLICATION FOR GRANT FUNDING

### STEP 1 – Applicant and Partner Information

**Primary Applicant (Required):**

Name of principle individual: Leslie Zolman, GIS Coordinator

Name of agency/entity: Montana Department of Commerce

Street: 301 South Park Ave, Suite 582

City: Helena

County: Lewis and Clark County

State: Montana

Zip Code: 59620

Contact email address: lzolman@mt.gov

Contact fax address: 406-841-2728

Contact phone: 406-841-2742

**Organizational Unit (if applicable)**

Department: Montana Office of Tourism and Business Development

Division: Census and Economic Information Center (CEIC)

**Other Project Partners – complete for each partner (copy box as needed):**

Name of contact: To be determined\*

Name of Agency:

Street:

City:

County:

State:

Zip Code

Contact email address

Contact phone:

\* CEIC is a state agency and must comply with state contracting and procurement. Due to these requirements we are unable to name "other project partners" until the grant is awarded and the required procurement process has been completed.

**Date Submitted (Required): February 12, 2016 Date Received by State:**

**Descriptive Title of Applicant's Project (Required):**

Census Designated Places Update

## **STEP 2 – Relevance and Public Benefit**

### **Land Plan Goal 3. Rural County and Tribal GIS Development**

The Census and Economic Information Center (CEIC) serves as the Montana State Census Data Center and works closely with the US Census Bureau although they do not receive any funding from the Census Bureau. CEIC has been asked by the Census Bureau to provide recommendations on potential new Census divisions in preparation for the 2020 Census. CEIC has identified the need to update Census Designated Places (CDPs) across the state. Many of the populated places in Montana are not currently represented with census boundaries and therefore detailed economic and demographic data is not available for these areas.

The US Census Bureau will reduce the number of Census Blocks in Montana by 36% in 2020. Currently many of our unincorporated towns that do not fall within a Census Block Group do not have any economic or demographic data available, which is required for many federal grant programs, urban and rural growth plans, community health and school district plans, reports and grant applications. Many smaller rural local governments do not have the capacity or GIS resources to recommend CDP boundaries, which must adhere to specific Census Bureau standards.

Some examples of how CDPs affect Montana citizens are:

- The West Valley Helena CDP was judged to be potentially eligible for HUD funding for a National Disaster Resilience Competition Grant, with significant impact and distress, along with high amounts of unmet recovery needs.
- Richland County would not qualify for a CDBG grant for an area-wide benefit project but the Savage CPD within the county had a much higher low income ratio allowing qualification.
- Missoula County applied for a 2015 wastewater grant on behalf of Buena Vista Trailer Court but it was not funded because no income data was available since it was not a CDP.

We are proposing a standardized method to use MSDI framework layers and other sources to document areas for CDP creation. We will utilize ArcGIS Online to share the project, provide draft CDP proposed boundaries, and provide a consistent and fair method for local communities to review and modify draft boundaries. We will also promote the use of web mapping in rural and tribal communities across the state. The final deliverables will include a detailed report to the Census Bureau including GIS boundaries and a story map that will document the process and help others to use web mapping in similar projects across Montana.

### **Land Plan Goal 1. Land Records - 1.a. Next generation 9-1-1 Data Standardization**

CDP boundaries will improve jurisdictional boundaries across the state and assist in developing a populated place layer that can be used in NG 9-1-1 standardization and emergency response plans required by every county in Montana. CDPs will assist in estimating recovery cost from natural and man-made disasters, and provide important local data on populations at risk and common operating systems when emergency operating centers are deployed. The final deliverables will be NENA compliant.

## **STEP 3 – Scope of Work Narrative**

In those tasks listed in the scope of work narrative below that are listed as (CEIC & Contractor), CEIC will provide approximately 65% of the labor to accomplish the task

### **Goal 1. Identify towns that meet CDP requirements**

Objective A. Determining possible new Census Designated Places. (CDPs)

1. Identify which of the Montana State Library 629 populated place features that are not currently an incorporated place or CDP are potentially eligible to become a CDP. (The Census dataset currently has 364 places in Montana.) (EIC)
2. Compile a list of local government officials and leaders to contact about the project. (CEIC)
3. Acquire GIS layers that would provide the ability to rank benefits of CDPs for potential communities. Examples might include growth projections, areas with higher levels of medium to low income populations, areas likely to apply for school, health, housing or other federal, state or local government grant programs, areas at higher risk for natural or man-made disasters, areas with critical infrastructure, etc. (CEIC & Contractor)
4. Develop a list of criteria for ranking the communities (Contractor)
5. Geoenrich and prepare spatial overlays of GIS layers for potential communities to be mapped. (CEIC & Contractor)

Objective B. Finalize towns that meet CDP requirements and publish in web map.

1. Develop final decision process to select potential CDP recommended boundaries and recommend a method to rank them. (CEIC & Contractor)
2. Prioritize and rank the prospective towns based on the decision process and recommend a ranked order of the towns. (CEIC & Contractor)
3. Create web map with towns that meet CDP requirements and acquired supportive ranking data. (CEIC & Contractor)

Objective C: Notify communities on CDP review process and their requested role.

1. Contact community, local government official and leaders to notify them of the project, process and benefits to their community. Use web map in communication and to aid in understanding. (CEIC & Contractor)
2. Ask for community participation in the project. (CEIC & Contractor)

**Goal 2. Compile data layers for potential boundary mapping.** The Census Bureau requires CDP boundary lines must include areas of housing density, proof that the populated place has a name and follow identifiable feature boundaries.

Objective A. Recommend which authoritative GIS layers would best meet those criteria.

1. Examine state, federal and local authoritative GIS data layers suited for this task such as water and sewer districts, fire districts, levy districts and visible features such as roads and rivers. (CEIC & Contractor)
2. Acquire and analyze suitable layers. (CEIC & Contractor)

### **Goal 3. Map proposed CDP boundaries**

Objective A. Draft boundary delineation.

1. Recommend and implement criteria for data creation protocol and workflow. Census stores all boundaries as line segments not as polygons. Therefore, feature level metadata will be created for each boundary line segment making up a CDP, in order to identify the source it was derived from and stored as a database attribute of the feature class. (CEIC & Contractor)
2. Prepare web map with draft CDP boundaries to be used in communications and outreach with towns. (CEIC)
3. Obtain local review of the draft boundary delineations, and local names of entities within the community such as community anchor institutions or other establishments. (Contractor)
4. Document suggested changes and "mark-up" of draft boundaries and publish to web map for local approval. (Contractor)
5. Prepare FGDC compliant metadata on the process. (CEIC & Contractor)

### **Goal 4. Presentation and Reporting**

Objective A. Compile recommendations, text, web maps, printed maps and exhibits for reporting and presentations.

1. Compile recommendations, text, maps and exhibits for a technical report to the Census Bureau. This report will supply ranking data in Goal 1, Objective 3 to aid the Census Bureau in their research and approval process. (CEIC & Contractor)
2. Summarize the feature level metadata for the technical report. (CEIC & Contractor)
3. Prepare an Esri story map describing the project steps and process for the public. This will serve as an example of how web mapping applications can aid in collaboration with rural and local governments across the state. (CEIC & Contractor)
4. Prepare maps, exhibits and text for a presentation at the MACo and Montana League of Cities and Towns annual conferences. Attend and co-present to these conferences in Billings in September 2016 and Missoula in October 2016. (CEIC & Contractor)
5. Submit final deliverables to CEIC. (Contractor)

### **Tasks or Activities**

Since CEIC is a state agency, we must comply with state contracting requirements determining the type of contractor selection process. These are different than typical MLIA proposals from local governments which have higher thresholds for sole source contracting. We have developed a more detailed methodology of the steps to accomplish the tasks in the scope of work narrative in order to determine the maximum amount to recommend for the project and rules we must enforce in the contracting process. In our detailed scoping we determined that the maximum amount for the project would be \$14,275 in contract labor and travel. This amount would require obtaining three bids on the project. (Greater than the \$5,000 limit allowed for sole source solicitations, and less than \$25,000 requiring a full request for proposal process.)

We have not provided the specific detailed methods we developed, since there are many ways to accomplish these tasks. We want to maintain flexibility for the consultants who bid on the process within the constraints of the goals, objectives and tasks. We are also interested in efficiencies we may not have thought of to do the project at lower cost. CEIC will contract for assistance in developing the methodology and completing the project and we are available to share the operational workload with the consultant whenever possible. We have indicated the steps that we anticipate being able to provide direct assistance to the contractor as indicated in the detailed scope of work narrative with (CEIC & Contractor), (Contractor) or (CEIC) at the end of the applicable tasks. We anticipate the CEIC contribution of processing time to be 65% of the total labor available for the project.

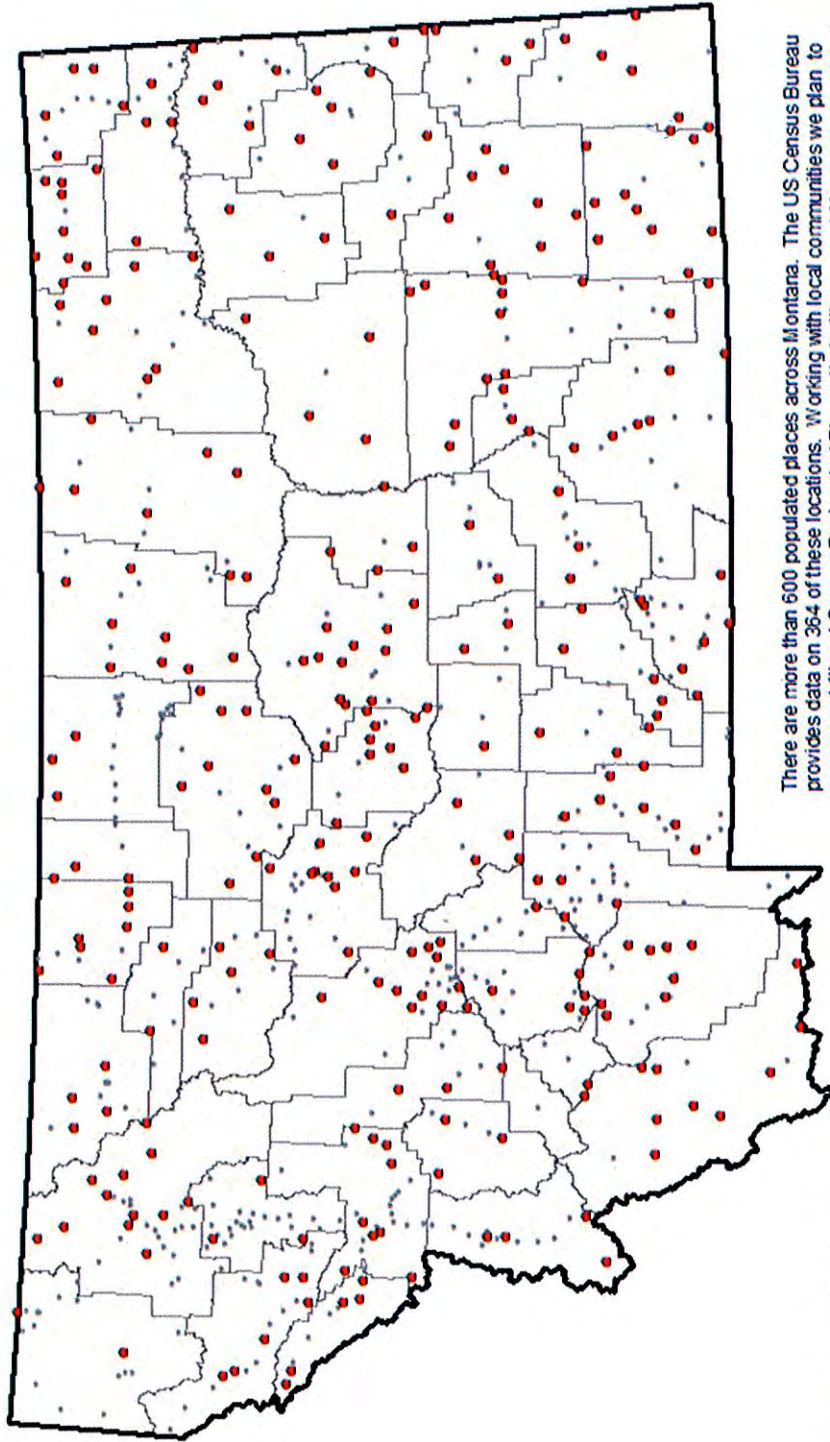
### Project Schedule

The project will begin August 1, 2016 and must be completed by December 31, 2016 in order to meet Census Bureau scheduling constraints. The following is a suggested timeline.

Tasks	Start	End	Duration (Days)	% Complete	Working Days	Days Complete	Days Remaining	01 - Aug - 16	08 - Aug - 16	15 - Aug - 16	22 - Aug - 16	29 - Aug - 16	05 - Sep - 16	12 - Sep - 16	19 - Sep - 16	26 - Sep - 16	03 - Oct - 16	10 - Oct - 16	17 - Oct - 16	24 - Oct - 16	31 - Oct - 16	07 - Nov - 16
<b>1 Identify towns that meet CDP requirements</b>	8/1/16	8/24/16	24	0%	18	0	24															
1.1 Determine possible new CDPs	8/1/16	8/15/16	15	0%	11	0	15															
1.1.1 MSL list of 629 - narrow down to smaller number	8/1/16	8/1/16	1	0%	1	0	1															
1.1.2 Local government communications	8/2/16	8/3/16	2	0%	2	0	2															
1.1.3 Data acquisition and processing	8/4/16	8/9/16	6	0%	4	0	6															
1.1.4 Develop list of criteria and layers	8/10/16	8/11/16	2	0%	2	0	2															
1.1.5 Georich and spatial overlay and calculations	8/12/16	8/15/16	4	0%	2	0	4															
1.2 Finalize towns that meet requirements and publish to web map	8/16/16	8/18/16	3	0%	3	0	3															
1.2.1 Develop decision process to select potential CDPs	8/16/16	8/16/16	1	0%	1	0	1															
1.2.2 Rank towns	8/17/16	8/17/16	1	0%	1	0	1															
1.2.3 Create web map with potential CDP locations	8/18/16	8/18/16	1	0%	1	0	1															
1.3 Notify potential CDP communities	8/19/16	8/24/16	6	0%	4	0	6															
1.3.1 Contact community leaders	8/19/16	8/22/16	4	0%	2	0	4															
1.3.2 Ask for community participation in project	8/23/16	8/24/16	2	0%	2	0	2															
<b>2 Compile data layers for potential boundary mapping</b>	8/26/16	9/11/16	18	0%	12	0	18															
2.1 Examine possible data layers	8/25/16	8/28/16	4	0%	2	0	4															
2.2 Acquire and analyze suitable layers	8/29/16	9/11/16	14	0%	10	0	14															
<b>3 Map proposed CDP boundaries</b>	9/12/16	10/18/16	37	0%	27	0	37															
3.1 Implement criteria for data creation protocol	9/12/16	9/13/16	2	0%	2	0	2															
3.2 Prepare web map with draft CDP boundaries	9/14/16	9/20/16	7	0%	5	0	7															
3.3 Obtain local review of draft CDP boundaries using web map	9/21/16	9/26/16	6	0%	4	0	6															
3.4 Document suggested changes and publish to web map	9/27/16	10/14/16	18	0%	14	0	18															
3.5 Prepare FGDC compliant metadata on process	10/15/16	10/18/16	4	0%	2	0	4															
<b>4 Presentation and Reporting</b>	10/19/16	11/7/16	20	0%	14	0	20															
4.1 Compile recommendations and produce report for Census Bureau	10/19/16	10/23/16	5	0%	3	0	5															
4.2 Summarize feature level metadata	10/24/16	10/24/16	1	0%	1	0	1															
4.3 Prepare story map describing project steps and process	10/25/16	10/26/16	2	0%	2	0	2															
4.4 Present to MACo and League of Cities and Towns	10/27/16	11/8/16	11	0%	7	0	11															
4.5 Submit final deliverables	11/7/16	11/7/16	1	0%	1	0	1															

## Census Designated Places Update MLIA Proposal

Populated places in Montana not represented in Census data



There are more than 600 populated places across Montana. The US Census Bureau provides data on 364 of these locations. Working with local communities we plan to propose additional Census Designated Places that will represent Montana's populated places for the 2020 Census and future American Community Surveys.

- Towns to Research
- Census Incorporated Places and CDPs

Map by: Census & Economic Information Center, Montana Department of Commerce, 301 S. Park Ave., Helena, MT 59602-2605, (406) 541-1230, email: ceic@mt.gov, <http://ceic.mt.gov>

## **STEP 4 – Project Management and Organizational Capability Narrative**

Leslie Zolman, GISP is the CEIC GIS Coordinator and will oversee the project schedule, budget and distribution of grant funds.

Leslie Zolman has been with CEIC for over 4 years and has provided leadership and shared vision for implementing cloud based interactive maps. She received the Special Achievement in GIS Award from Esri in 2013 for her work with ArcGIS Online. Her past GIS work has included working with non-profit organizations in the US and abroad. Leslie worked for the World Health Organization on the Ebola outbreak in 2015 as the GIS Officer and team leader over GIS staff in Guinea, Sierra Leone and Liberia.

Leslie holds a master's of GIS from Penn State and an undergraduate degree in microbiology. She holds a geographic information systems professional (GISP) certification and is a member of the GISP review committee. She currently serves as the President of the Montana Association of Geographic Information Professionals and is a Mission Coordinator for GISCorps. Leslie is also pursuing her Project Management Professional certification from the Project Management Institute.

During the procurement process, we will request contractors to provide examples of similar projects they have completed and provide three project references. The contractor will be required to have advanced GIS skills along with a background in project management and community outreach.

## STEP 5 – Budget Justification Narrative and Tables

The total project cost is \$30,856.78. The sponsor requests \$14,275.00 through the MLIA program and pledges \$16,581.78 as an in-kind match of staff time, travel expenses and software subscription usage.

### *Project Budget Summary*

Category	MLIA Share	Applicant Share	Other Share	Total
a. Personnel		\$14,361.62		\$14,361.62
a.1 Fringe Benefits				
b. Travel	\$700.00	\$1,070.16		\$1,770.16
c. Equipment				
d. Supplies		\$150.00		\$150.00
e. Contractual	\$13,575.00			\$13,575.00
f. Other - AGO & GoToMeeting Subscriptions		\$1,000.00		\$1,000.00
<b>Totals</b>	<b>\$14,275.00</b>	<b>\$16,581.78</b>		<b>\$30,856.78</b>

### *Project Partner Budget Summary*

Category	Partner 1	Total
a. Personnel	\$13,575.00	\$13,575.00
a.1 Fringe Benefits		
b. Travel	\$700.00	\$700.00
c. Equipment		
d. Supplies		
e. Contractual		
f. Other		
<b>Totals</b>	<b>\$14,275.00</b>	<b>\$14,275.00</b>

### Applicant Share Expenses

#### **Personnel and Fringe Benefits**

CEIC estimates approximately 338 hours of Leslie Zolman’s time as an in-kind match of \$14,361.62, which includes fringe benefits. Leslie will serve as the project manager and GIS lead in the project.

#### **Travel**

Travel costs of \$1,070.16 include hotel, food per diem and mileage for attending the MACo Annual Conference and League of Cities and Towns Conference. Leslie will attend each three day conference to co-present the project, staff a vendor table focused



on the project and meet with community leaders. Travel costs for Leslie will be an in-kind match. (The state hotel, food per diem and mileage rates were used to estimate costs.)

### **Supplies**

The project will focus on using web mapping and video conferencing but paper maps and communications will be used as needed. \$150.00 was added to the budget to cover printing, copying and postage costs. Supplies will be an in-kind match.

### **ArcGIS Online and GoToMeeting Subscriptions**

ArcGIS Online will be used to host web maps and GoToMeeting will be utilized for video conferencing. CEIC currently has an ArcGIS Online subscription for \$2,500.00 per year and a GoToMeeting subscription for \$588.00 per year. It is estimated that the use of these two subscriptions for this project would be \$1,000.00. All subscription fees will be an in-kind match.

### **Project Partner Expenses**

#### **Personnel**

The contractor portion is based on our internal estimation of tasks and time required. We have estimated the maximum labor allowed in the contractor proposal to be \$13,575.00. The final amount will not exceed this value, but may be lower.

#### **Travel**

Minimal travel costs of \$700.00 have been added to cover the contractor's costs associated with co-presenting at the MACo Annual Conference and League of Cities and Towns Conference. To reduce costs it has been determined that the contractor will not be required to attend for the full conferences or staff the vendor table. The final amount will not exceed this amount, but may be lower.

### **Project Future Steps**

The purpose of this project is to add CDPs across Montana to represent the populated places. This will provided Census and American Community Survey data for the small communities across our state. Census only allows CDPs to be added before each decennial census; therefore this can not be an ongoing project and has to be completed before January 2017. Depending on population increases and migration this process may be repeated in preparation for the 2030 Census for known locations of change.

CEIC is the Montana State Census Data Center and works closely with the US Census Bureau although they do not receive any funding from the Census Bureau. At the conclusion of this grant CEIC will continue to work with the Census Bureau on the proposed CDPs as needed to incorporate them into Census 2020. Many of the layers used to analyze and prioritize towns will be valuable during this process.

## **STEP 6 – Statements of Support**

See attached letter from Michael Fashoway, Land Information Lead at the Montana State Library.

## **STEP 7 – Renewable Grant Accountability Narrative**

The Montana Department of Commerce has not applied for or received an MLIA grant in the past.

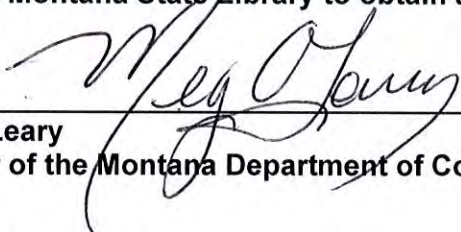
## **STEP 8 – Sign the Application**

### **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.



**Meg O'Leary**  
Director of the Montana Department of Commerce

2-11-16

**Date**