Teton County

Planning Department

Application for

Montana Land Information Act

Fiscal Year 2017

Teton County Next Generation E9-1-1

STEP 1 - Applicant and Partner Information

Primary Applicant (Required):

Name of principal individual:	Paul Wick
Name of agency\entity:	Teton County Planning Office
Street:	19 Main Ave. S.
City:	Choteau
County:	Teton
State:	Montana
Zip Code:	59422
Contact email address:	planning31@3rivers.net
Contact fax address:	(406) 466-2138
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Organizational Unit (if applicable)

Department:	Planning
Division:	

Other Project Partners:

Name of contact:	Ken Wall
Name of Agency:	Geodata Services, Inc.
Street:	P.O. Box 8081
City:	Missoula
County:	Missoula
State:	Montana
Zip Code:	59807
Contact email address:	kwall@geodataservicesinc.com
Contact phone:	(406) 203-4684

Date Submitted (Required): February 11th, 2016 **Date Received by State:**

Descriptive Title of Applicant's Project (Required):

Modernization of Teton County E9-1-1 GIS data and workflows.

STEP 2 - Relevance and Public Benefit

Land Plan Goal 1. Land Records

1.a. Next Generation 9-1-1 Data Standardization

Throughout the last several years there has been significant discussion and movement towards a more efficient, agile, accessible and accurate system for emergency response commonly referred to as Next Generation 9-1-1 (NG 9-1-1). One integral component of NG 9-1-1 is the inclusion of accurate and standardized geospatial information that will be at the core of this new system. Keeping this information up to date in an efficient and timely fashion is paramount in allowing the NG 9-1-1 system to be successful. Traditionally this type of data maintenance has required significant resources in hardware, software, and technical skill and has proven to be a challenge for small rural local governments. In response to this challenge we are planning to leverage ArcGIS Online and ArcGIS Pro to enable staff to successfully prepare for, and maintain, NG 9-1-1 data. Both of these software products provide a robust yet affordable solution to managing NG 9-1-1 data and require a smaller skill set compared to tradition ArcGIS Desktop and Server. As such we intend for this project to serve as a model and solution for other small rural governments who are facing the issues surrounding NG 9-1-1 and lack an experienced GIS professional.

As part of this project Teton County's GIS data will be migrated to a standardized database schema based on the National Emergency Number Association's (NENA) NG 9-1-1 standards and Esri Local Government Data Model. This will provide an important base upon which to implement and enable the development of consistent and standardized update procedures related to NG 9-1-1 data. Once standardized, this data will be shared via ArcGIS Online allowing other county departments, such as EMS, to easily access accurate and up to date critical geospatial information on multiple platforms including mobile devices located in emergency response vehicles.

Land Plan Goal 3. Rural County and Tribal GIS Development

As part of this project we are proposing a close collaboration between the Teton County Planning Department and EMS to demonstrate the value of GIS as it relates to emergency services and NG 9-1-1. This project provides an opportunity to significantly improve the quality of life and public safety for the citizens of Teton County and Montana by building grassroots support for GIS and MSDI data in a way that resonates with local citizens though improvements to 911.

At this time we are not proposing a formal regional consortium, but are planning on working with the Montana Association of Counties (MACo) to demonstrate how this technology and NG 9-1-1 solution can be implemented in other rural counties in Montana. Collaboration will likely occur with Carbon County who is also interested in many of the same tools (ArcGIS Online and ArcGIS Pro) and workflows related to NG 9-1-1 presented in this proposal. Establishing a working relationship with Carbon County will also be important as they have the unique situation for a small rural county in Montana of having a

very experienced GIS professional. Finally, the work outlined in this proposal will allow for data sharing and collaboration with other neighboring county EMS groups, State, and Federal agencies.

The combination of consistently formatted information and web accessible data will also provide opportunities for the many of the publicly available NG 9-1-1 datasets to be published in a standardized way by employing the Esri Open Data Portal. This will also serve as a model for other small rural governments who want to improve their response to citizen requests in an efficient manner despite limited local GIS staff time.

STEP 3 - Scope of Work Narrative

Goals and Objectives

Objectives A and B of this proposal specifically state how Teton County's GIS data will be migrated to a standardized database schema based on the National Emergency Number Association's (NENA) NG 9-1-1 standards and Esri Local Government Data Model. This will provide an important base on which to implement and maintain updates.

Work plan goals 2 through 4 build toward the development of consistent and standardized update procedures related to NG 9-1-1 data while providing the ability to share that same information via ArcGIS Online.

Goal 2-C is an example of the benefit of digital maps supplementing printed maps and map books. The ability to update and maintain information in near real-time by leveraging ArcGIS Online is very powerful and important change to the way NG 9-1-1 data is currently updated and handled.

Goal 1: Develop and migrate Teton County GIS data to a consolidated NG 9-1-1 compliant file geodatabase.

- **Objective A:** Create a file geodatabase schema based on draft NENA Next Generation 9-1-1 and Esri Local Government data models.
    - Task 1: Create new file geodatabase
    - Task 2: Create new template feature classes based on the draft NENA Next Generation 9-1-1 data model.
    - Task 3: Download and load the Esri Local Government data model.
    - Task 4: Import selected template feature classes from the Esri Local Government data model to Teton County file geodatabase.

- **Objective B:** Load existing Teton County datasets into new file geodatabase schema.
    - Task 1: Use ArcGIS simple data loader to import existing structures, road centerlines, administrative boundaries, and EMS boundaries into NENA compliant feature classes matching attribute fields where possible.

Goal 2: Develop standard workflows and procedures to update Teton County GIS data hosted on ArcGIS Online.

- **Objective A:** Publish NG 9-1-1 related datasets to ArcGIS Online
    - Task 1: Publish structures, road centerlines, administrative boundaries, EMS boundaries and other datasets to ArcGIS Online.
    - Task 2: Configure item details (summary, description, access constraints) for each hosted feature layer.
    - Task 3: Create FGDC metadata.

- **Objective B:** Participate in Webex training sessions with Geodata Services, Inc.

  - Task 1: Teton County staff members will participate in training sessions to learn how ArcGIS Pro can be used to manage and edit data hosted on ArcGIS Online.
  - Task 2: Teton County GIS staff will learn how to spatially adjust GIS data layers based on updates to GCDB survey control.

- **Objective C:** Create a standardized workflow and procedures document(s) that includes detailed steps on how to update data hosted on ArcGIS Online.
  - Task 1: Create standard operation procedures document including data dictionary, ArcGIS Online hosted feature layer RestService URLs, and updates procedures.

- **Objective D:** Create an ArcGIS Online web application that allows EMS personnel to review and provide comments on EMS boundaries (e.g., Fire, Ambulance).
  - Task 1: Create and configure ArcGIS Online web map and Web AppBuilder application of EMS boundaries
  - Task 2: Coordinate with adjacent Counties to integrate existing EMS boundaries and identify areas with interlocal agreements

- **Objective E:** Collect cell tower locations from various data sources including EMS groups, FCC ULS, and County records.
  - Task 1: Download cell tower data for Teton County from the FCC website.
  - Task 2: Create an ArcGIS Online web map with editable point layer to collect cell tower locations from EMS personnel.

- **Objective F:** Collect attribute information related to NG 9-1-1 datasets using Collector for ArcGIS.
  - Task 1: Configure ArcGIS Online web maps for driveway access points and associated attributes (i.e., gates, etc.).
  - Task 2: Configure ArcGIS Online web maps for information related to public highways and roads (e.g., access issues, surface type, plowing frequency).

- **Objective G:** Integrate utility provider information with structure points
  - Task 1: Coordinate with local utilities to collect service area boundaries.
  - Task 2: Set up ArcGIS Online web app for local utilities to add and review service area boundaries.

- **Objective H:** Report to MSDI theme stewards
  - Task 1: Work with MSDI theme stewards to integrate updated structures and EMS boundaries data.

Goal 3: Improve and enhance access to Teton County's NG 9-1-1 data.

- **Objective A:** Enable the Teton County ArcGIS Online Organizational Account.
  - Task 1: Purchase five additional seats for existing Teton County ArcGIS Online for Organizations account.

- **Objective B:** Enable EMS with digital and analog mapping tools. We are demonstrating the benefit of digital maps supplementing printed maps and map books. The ability to update and

maintain information in near real-time by leveraging ArcGIS Online is very powerful and important change to the way NG 9-1-1 data is currently updated and handled. That said, the mobile technology is evolving and in potentially life and death situations, back-up plans are required. We are proposing hard copy map books for EMS responders and Montana citizens.
    - Task 1: Create a targeted EMS data driven pages plat book.
    - Task 2: Create an interactive web map of the County plat book for use by EMS and other agencies/departments utilizing ArcGIS Online.
    - Task 3: Conduct training session with County EMS personnel.

- **Objective C**: Enable and configure ArcGIS Online Open Data option for citizen and department access.
    - Task 1: Prepare public data for Open Data portal.
    - Task 2: Publish Open Data portal.
    - Task 3: Webex training with Geodata Services to learn how to maintain the Open Data portal.

Goal 4: Prepare documentation of processes and workflows to share with other rural Counties in Montana.

- **Objective 1:** Prepare materials and share with other rural local governments on developing and maintaining a NG 9-1-1 compliant database with ArcGIS Online and ArcGIS Pro.
    - Task 1: Develop detailed report to share with County Commissioners, MLIA, State Library, and other rural local governments.
    - Task 2: Create an ArcGIS Online Story Map.
    - Task 3: Present results of the grant project at the Montana Association of Counties (MACo) annual conference and/or mid-year meeting.
    - Task 4: Report results to MLIA Council.

Tasks or Activities

The detailed tasks and milestones are listed below with the hours assigned, the itemized labor or contracting cost and the assigned partner for the task. The tasks that do not have hours assigned are milestones. Reflected in the detailed Gantt chart we prepared for the project. Note that the items in bold are the goal and objective subtotals rolled up from the tasks below them.

TASK	HOURS	COST	ASSIGNED
1) Goal 1: Develop and migrate Teton County GIS data to a consolidated NG 9-1-1 compliant file geodatabase	**1w 2h**	**$3,300.00**	
1.1) Objective A: Enable Teton County AGO	**2h**	**$150.00**	
1.1.1) Set up and configure the organizational account	2h	$150.00	Geodata
1.2) Objective B: Create a file geodatabase schema	**2d 2h**	**$1,350.00**	
1.2.1) Create a new file geodatabase	2h	$150.00	Geodata
1.2.2) Create new template feature classes based on the draft NENA Next Generation 9-1-1 data model	6h	$450.00	Geodata
1.2.3) Download the Esri Local Government data model	2h	$150.00	Geodata
1.2.4) Import selected template feature classes from the Esri Local Government data model to Teton County file geodatabase	1d	$600.00	Geodata
1.3) Objective C: Load existing Teton County datasets into new file geodatabase schema	**3d**	**$1,800.00**	
1.3.1) Use ArcGIS simple data loader to import existing structures, road centerlines, administrative boundaries, and EMS boundaries	3d	$1,800.00	Geodata
1.3.2) Task complete file geodatabase			
2) Goal 2: Develop standard workflows and procedures to update Teton County GIS data hosted on ArcGIS Online.	**47w 6h**	**$12,474.00**	
2.1) Objective A: Publish NG 9-1-1 related datasets to ArcGIS Online	**> 4d 4h**	**$1,215.00**	

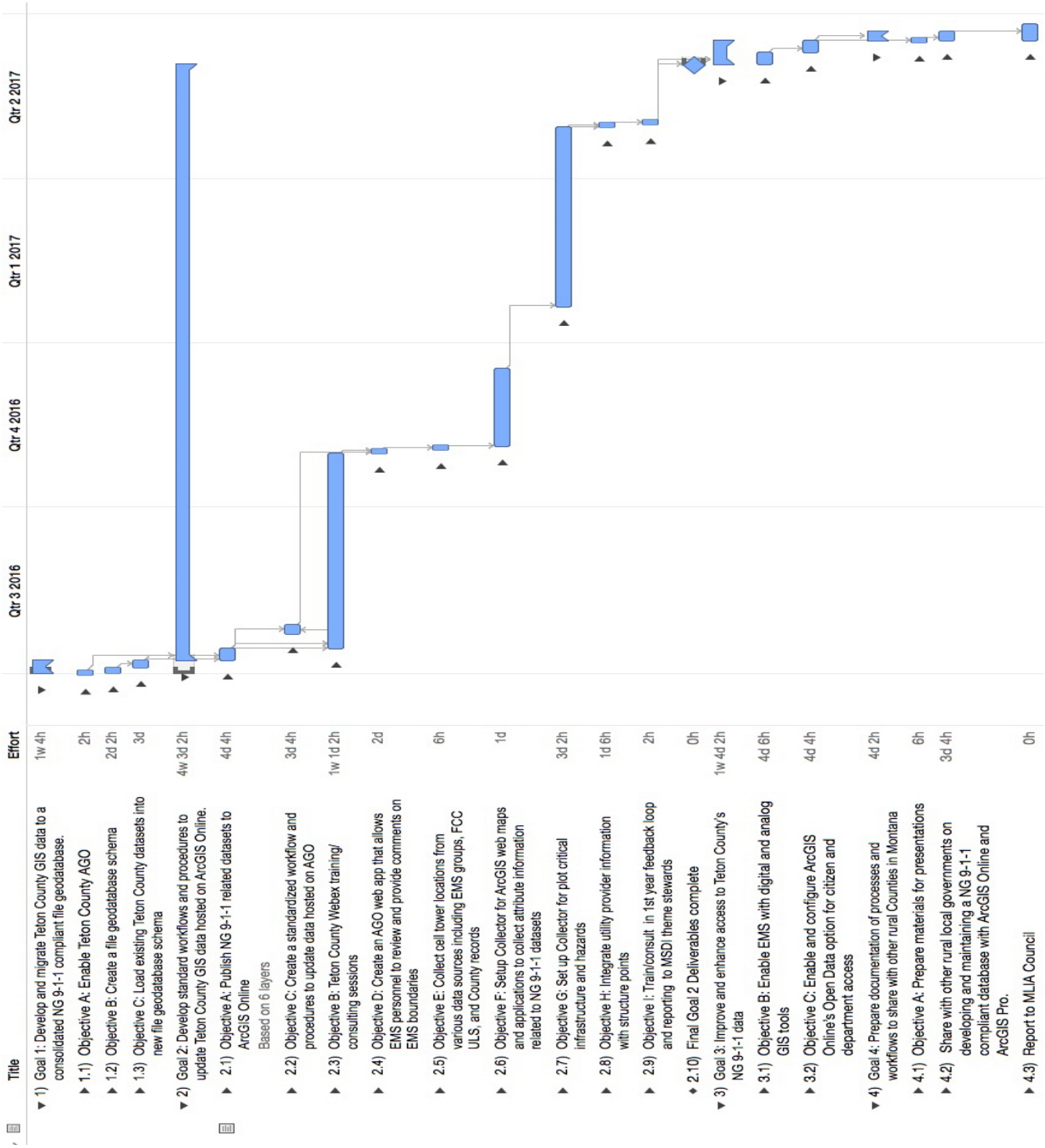
2.1.1) Publish structures, road centerlines, administrative boundaries, EMS boundaries and other datasets to ArcGIS Online	1d	$600.00	Geodata
2.1.2) Configure item details (summary, description, access constraints) for each hosted feature layer	1d 2h	$75.00	Geodata; Teton County GIS
2.1.3) Create FGDC metadata	> 2d 2h	$540.00	Geodata; Teton County GIS
2.2) Objective C: Create a standardized workflow and procedures to update data hosted on AGO	**> 3d 6h**	**$1,546.50**	
2.2.1) Create documentation of the workflows	2d	$1,200.00	Geodata
2.2.2) Draft Update procedures SOP DOC			
2.2.3) Coordinate with Bullberry - Sheriff contractor	> 1d 6h	$346.50	Geodata; Teton County GIS
2.3) Objective B: Teton County Webex training/consulting sessions	**< 15w 2d 2h**	**$3,750.00**	
2.3.1) Preparation for On-site visit #1	2h	$150.00	Geodata
2.3.2) ArcGIS Pro to manage and edit AGO	1w	$3,000.00	Geodata; Teton County
2.3.3) Spatially adjust GIS data layers based on updates to GCDB survey control	1d	$600.00	Geodata; Teton County GIS
2.3.4) Onsite VIsit			
2.4) Objective D: Create an AGO web app that allows EMS personnel to review and provide comments on EMS boundaries	**1w**	**$1,800.00**	
2.4.1) EMS Response data definition	4h	$300.00	Geodata
2.4.2) Create and configure ArcGIS Online web map and Web AppBuilder application of EMS boundaries	4h	$300.00	Geodata
2.4.3) Teton County internal review and modification	3d		Teton County GIS

2.4.4) Coordinate with adjacent Counties to integrate existing EMS boundaries and identify areas with interlocal agreements	4d	$1,200.00	Geodata
2.5) Objective E: Collect cell tower locations from various data sources including EMS groups, FCC ULS, and County records	**6h**	**$450.00**	
2.5.1) Download cell tower data from FCC	2h	$150.00	Geodata; Teton County GIS
2.5.2) Create an ArcGIS Online web map with editable point layer to collect cell tower locations from EMS personnel.	4h	$300.00	Geodata; Teton County GIS
2.6) Objective F: Setup Collector for ArcGIS web maps and applications to collect attribute information related to NG 9-1-1 datasets	**5w 2d** **6h**	**$600.00**	
2.6.1) Set up Collector for driveway access points and associated attributes	4h	$300.00	Geodata; Teton County GIS
2.6.2) Set up Collector for information related to public highways and roads	4h	$300.00	Geodata; Teton County GIS
2.7) Objective G: Set up Collector for plot critical infrastructure and hazards	**14w 1d**	**$1,912.50**	
2.7.1) Create and configure an ArcGIS Online GeoForm/Survey 123 application to collect pilot info - critical infrastructure & hazards	6h	$450.00	Geodata; Teton County GIS
2.7.2) Pilot Integrate critical infrastructure (e.g. hazard, etc.) attribute information with the official structures layer	1d 4h	$900.00	Geodata; Teton County GIS
2.7.3) Prep for debrief meeting	7.5h	$562.50	Teton County GIS; Geodata
2.7.4) Debrief & evaluate results and document for report			Geodata; Teton County GIS
2.8) Objective H: Integrate utility provider information with structure points	**1d 6h**	**$1,050.00**	

2.8.1) Set up app for local utilities to add and review service area boundaries	2h	$150.00	Geodata; Teton County GIS
2.8.2) Consult on processing CAD or other submissions	6h	$450.00	Geodata; Teton County GIS
2.8.3) Train for spatial analysis on attribute structure points with existing utility provider	6h	$450.00	Geodata; Teton County GIS
2.9) Objective I: Train/consult in 1st year feedback loop and reporting to MSDI theme stewards	**2h**	**$150.00**	
2.9.1) EMS boundary recommendations and rural addressing reporting formats and metadata to MSDI	2h	$150.00	Geodata; Teton County GIS
2.10) Final Goal 2 Deliverables complete			
3) Goal 3: Improve and enhance access to Teton County's NG 9-1-1 data	**1w 3d 4h**	**$5,100.00**	
3.1) Objective B: Enable EMS with digital and analog GIS tools	**4d 4h**	**$2,700.00**	
3.1.1) Create a targeted EMS data driven pages plat book	3d	$1,800.00	Geodata; Teton County GIS
3.1.2) Final product - binding, etc.	1d		Teton County GIS
3.1.3) Create an interactive web map of the County plat book for use by EMS and other agencies/departments	1d	$600.00	Geodata; Teton County GIS
3.1.4) Conduct training session with County	4h	$300.00	Geodata; Teton County GIS
3.2) Objective C: Enable and configure ArcGIS Online's Open Data option for citizen and department access	**4d**	**$2,400.00**	
3.2.1) Prepare public data for open data portal	3d	$1,800.00	Geodata

3.2.2) Publish open data portal	4h	$300.00	Geodata; Teton County GIS
3.2.3) Train Teton County to maintain portal	4h	$300.00	Geodata; Teton County GIS
4) Goal 4: Prepare documentation of processes and workflows to share with other rural Counties in Montana	**> 1w 6h**	**$2,910.00**	
4.1) Objective A: Prepare materials for presentations	**4h**	**$450.00**	
4.1.1) Prep for MACO	4h	$300.00	Geodata; Teton County GIS
4.1.2) MACO presentation			Geodata; Teton County GIS
4.1.3) Prep for on-site project conclusion	2h	$150.00	Geodata; Teton County GIS
4.1.4) On-site conclusion debrief			Geodata; Teton County GIS
4.2) Share with other rural local governments on developing and maintaining a NG 9-1-1 compliant database with ArcGIS Online and ArcGIS Pro.	**> 4d 4h**	**$1,860.00**	
4.2.1) Create a report & SOP	2d	$1,200.00	Teton County GIS; Geodata
4.2.2) Final delivery of report/SOP			Teton County GIS
4.2.3) ArcGIS Online Story Map	> 2d	$360.00	Geodata; Teton County GIS
4.2.4) Assist in presentation with Teton County to MACO conference or mid-year meeting	4h	$300.00	Geodata; Teton County GIS
4.3) Report to MLIA Council	**1d**	**$600.00**	

Project Schedule



STEP 4 - Project management and Organizational Capability Narrative

This project will be managed and carried out by Paul Wick of the Teton County Planning Department. We also plan to work with Geodata Services, Inc. who will provide training, consulting, and project work. Paul and other Teton County staff, including Jim Hodgkiss, one of the county commissioners, attended the 50 weeks of two hour ArcGIS Online (AGOL) training and capacity building provided by Geodata Services for four rural Montana counties, funded by a FY 2015 MLIA grant. This was general training on most aspects of AGOL and specific ArcGIS Desktop functions supporting AGOL. This proposal does not duplicate that training; it builds on it and is focused specifically on implementation and maintenance of NG 9-1-1, and the new recommended workflow of supporting NG 9-1-1 data and updates with AGOL and ArcGIS Pro.

In many rural Montana counties GIS is part of "other duties as assigned" to staff. Many staff "pick up" GIS skills on the job but do not have formal training in GIS or extensive GIS experience. NG 9-1-1 is heavily reliant on standardized and accurate GIS data compared to the current 9-1-1 system. This proposal provides a model for other rural counties to adopt standards and best practices in workflows, and greater chance for success when the duties are passed on to new employees.

As mentioned in the Goals section of the proposal, additional collaboration will likely occur with Carbon County who is interested in many of the same tools (ArcGIS Online and ArcGIS Pro) and workflows related to NG 9-1-1. Carbon County has the unique situation for a small rural county in Montana of having a very experienced GIS professional with almost two decades of experience. Carbon County has also requested assistance from Geodata Services, but in a more limited capacity of consultation on best practices limited to ArcGIS Online and ArcGIS Pro workflows.

Paul Wick - Teton County Planner and GIS Lead

Paul has been the Weed District coordinator for Teton County for 15 years and has been using other GIS software to compile data for known infestations of invasive species and the treatment of these plants. He has used ArcGIS desktop and ArcExplorer in a limited capacity for the past 5 years. His current duties include GIS management, rural addressing, subdivision review and floodplain administration.

Paul Wick also served as the project manager for Teton County's MLIA_2015_12 grant. This 50 week collaborative project brought 4 rural counties together with Geodata Services via Webex for weekly training in the broad topics of ArcGIS Desktop and ArcGIS Online. This project provided the foundation for GIS work in rural counties and across borders but did not allow for much time to work specifically on rural addressing and NG 9-1-1.

Many of the Goals and Objectives of the 2015 grant were met and some were exceeded. Most of the participants would have liked to get into the "nuts and bolts" of NG 9-1-1 addressing and this project will provide that opportunity. The experience gained through administration and participation of this 2015 grant has prepared the administrator for the 2017 grant both in commitment to the project and organizational skills to follow through.

The administrator of this grant proposal has working relationships with Teton County EMS, Sheriff, and Fire Departments as well as Geodata Services, formed in the previous grant that will be integral in making the the 2017 grant successful. The previous grant experience along with two years of hands on experience with rural addressing has Teton County well situated to administer and implement the goals and objectives of this proposal.

Geodata Services, Inc.

Geodata Services, Inc. specializes in GIS services for local, state and federal governments, natural resource management, regional and community planning, and demographic and socioeconomic analysis.

Ken Wall, president, served on the MLIAC council for 6 years, and currently serves on the Montana State Library Commission. For 21 years Geodata has provided training and services in GIS including, spatial analysis, image analysis, database development, collaborative GIS, suitability modeling, and 3D scenario visualizations. Geodata has been an Esri business partner for 18 years, with awards including New Partner of the Year and Foundation Partner of the Year and more than 60 years of combined experience with GIS.

The two primary staff who will provide training, consulting and support will be Ken Wall and Kyle Balke. Ken Wall has 24 years of experience in GIS experience, founder and president of Geodata Services, Inc. since 1993. He served as a senior analyst for GIS projects throughout the US, Canada, and Australia. For the past several years he has specialized in community mapping and planning. Geodata Services has been a business partner with ESRI and was awarded new partner of the year in 2000, and founding partner of the year in 2008. Mr. Wall served as an instructor on more than 50 short courses and training sessions in GIS. Ken Wall has earned certification as an Esri Desktop Associate and served as a certified ArcGIS Desktop instructor, and is a CompTIA CTT+ Certified technical trainer. Mr. Wall is also a certified Gold Level CommunityViz consultant.

Kyle Balke has 11 years of applied GIS experience in the planning, engineering, natural resources, and telecommunication fields. He has worked as a GIS analyst for firms in Wisconsin and Montana. His professional experience includes GIS data maintenance and editing, project development, CAD and GIS integration, geodatabase design, spatial and statistical analysis, and cartography. He has extensive expertise with the full suite of Esri GIS programs and modules, including ArcMap, Business Analyst, ArcGIS Online for Organizations, ArcPro and Spatial Analyst.

STEP 5 - Budget Justification Narrative and Tables

Applicant budget summary

The budget is listed below. The numbers in parentheses are reference numbers tied to the same reference numbers in the narrative explanation below the budget tables.

Category	MLIA Share	Applicant Share	Other Share	Total
a. Personnel		$14,100 (1)		**$14,100**
a.1 Fringe Benefits				
b. Travel		$800 (2)		**$800**
c. Equipment iPad Air 64 GB (3)	$1,797 (3)			**$1,797**
d. Supplies				
e. Contractual Geodata Services, Inc.	$23,228 (4)	$2,000 (5)		**$25,228**
f. Other ArcGIS Online (5 Seat)	$2,500 (6)			**$2,500**
Geo-Jobe Admin Assistant	$99 (7)			**$99**
Totals	**$27,624**	**$16,900**		**$44,524**

Project Partner budget summary

Category	Geodata Services, Inc.	Partner 2	Partner 3	Total
a. Personnel	$23,784.00			**$23,784.00**
a.1 Fringe Benefits	0			**0**
b. Travel	$1,444.00 (8)			**$1,444.00**
c. Equipment	0			**0**
d. Supplies	0			**0**
e. Contractual	0			**0**
f. Other	0			**0**
Totals	**$25,228.00**			**$25,228.00**

Personnel

Teton County is contributing an in-kind contribution of at least $14,100 (1) in labor for Paul Wick's time for this project. This is calculated at a wage rate of $25 per hour and includes 291 hours of direct work with the contractor in project set up configuration and training, and 273 hours of additional work in addition to direct consultant support implementing and maintaining the system

Travel

Consultant Partner, Geodata Services, Inc. has budgeted for two trips from Missoula to Choteau to work with Teton County officials. One early in the project as depicted in the work plan for on-site support and training with one staff traveling. A second trip is scheduled from Missoula to Choteau and return for one Geodata staff at the conclusion of the project to meet with GIS, EMS staff, the Sheriff's 911 consultant Bullberry and County commissioners to debrief and finalize recommendations for the project report and presentations to MACo, MLIA, and the Montana State Library Commission. These two trips combined are budgeted at $1,444 (8).

A trip for Paul Wick to attend the September MACo annual conference for an invited presentation to MACo has been included in this proposal. We have secured an invitation from the Executive Director of MACo if this proposal is funded. The total for that trip is $800 (2) and paid for by Teton County in-kind funds. We used lodging estimates for the projected dates at the Billings Hotel and Convention Center. We used standard state per diem rates and mileage rates and gas estimates for the transportation costs.

Equipment

Teton County will purchase three refurbished iPad Air 128gb with Wi-Fi+Cellular tablets at a cost of $599 each (3). These devices will be used in hands on training and data collection by EMS personnel to collect and update NG 9-1-1 related geospatial information as well as test mobile access to NG 9-1-1 data while in the field.

Supplies

None

Contractual

Labor for each step of the project, are provided in detail in the Task or Activities section in the table. These are itemized by task. Teton County is applying $2,000 (5) in direct contribution derived from the local government share of the MLIA recordation fee during the fiscal year (25% of every recordation fee goes to the local government and 75% to the state). This will be used to cover a portion of total contractual amount of consulting labor (4).

Other

Two items are listed under other. One is an annual subscription to Esri for a 5 named user ArcGIS Online account (6). Teton County has 2 ArcGIS Online named users from our current ArcGIS desktop licenses. Because some NG 9-1-1 data is not generally publicly available to protect the confidential nature of the data, it is necessary to have additional AGOL named users in order to publish maps and applications within the organizational account and not made public. The other item is a Geo-Jobe Pro 1 month license (7) to assist in transferring ArcGIS Online data from our contractor to the county AGOL account. This is to save consulting fees, since it provides the ability to transfer feature services, and application content in batch operations. This will be used at the end of the project.

STEP 6 - Statements of Support

The following letters of support are provided. The first is from Michael Fashoway, the Montana State Library Digital library supervisor of the NG-911 related themes. He is a MSDI theme steward for structures and supervising the MSDI theme stewards for transportation and administrative boundaries. The second letter of support is from project contracting partner Ken Wall president of contractor Geodata Services, Inc.

PO Box 201800 1515 East 6th Avenue Helena, MT 59620 (406) 444-3115

February 11, 2016

Paul Wick
Teton County Planning Office
19 Main Ave S
Choteau, MT 59422

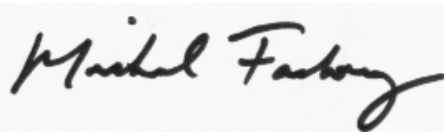
Dear Paul:

As the Land Information Lead representing the MSDI theme leads for Structures/Addresses, Transportation and Administrative Boundaries, I strongly support Teton County's Next Generation 9-1-1 Data Standardization and their FY 2017 request for MLIA funding.

The 2016/2017 Montana Land Information Plan encourages data partners to apply for grant funds to assess, improve and maintain required NG9-1-1 data, including road centerlines, address points and jurisdictional boundaries, according to the NENA standards. Teton County's grant proposal meets this goal by standardizing structures, road centerlines and boundaries datasets, implementing new workflows that will aid in better maintaining the data, and providing county EMS personnel, other county departments, and the public access to the data.

The Montana State Library looks forward to working with Teton County and will integrate structures, road centerline and administrative boundaries data collected through this grant into the statewide Framework databases.

Sincerely,



Michael Fashoway

GIS Analyst/Land Information Lead

Montana State Library

Evan Hammer
Digital Information Manager & CIO
Montana State Library

I am writing in support of this proposal in our role as project partner and consultant. I have worked closely with Teton County on this proposal and am prepared to provide technical support, GIS processing and training as they specified in their proposal.

I am very excited about this project for Teton County as an extension of the training they participated in with three other counties in a FY 2015 MLIA project. Paul has presented the results of his past project to MACO along with Stu Kirkpatrick and myself. He also testified to an interim legislative committee along with Jennie Stapp and myself , advancing the cause of local government GIS to legislators. I am equally excited in the role this project will play for as a model for other local governments in Montana in a similar situation as Teton with local staff with little formal GIS training developing data and maintaining it for NG 9-1-1.

Although many Montana local governments use quality contractors like BullBerry Systems, Inc that specialize in 911 systems, these are often large consulting firms with national scope, and no "boots on the ground" in the small rural Montana communities. In addition to the value of local knowledge in improving the quality of the rural addressing, street centerline, administrative boundaries and other NG 9-1-1 layers, Implementing these supporting workflows in ArcGIS Online and ArcGIS Pro will help them interface with 9-1-1 contractors, save money, and allow them to leverage the data in many ways for their citizens and county operations that extend beyond 9-1-1 and emergency response.

It also provides a solid data model, workflow procedures, metadata, and data structures rooted in well accepted best practices, supporting Paul's efforts and an ideal solution to the recurring problem in these rural communities of having continuity and passing on data and procedures to future staff in his position.

Sincerely,

Kenneth E Wall

Ken Wall
President
Geodata Services, Inc.
P.O. Box 8081, Missoula, MT 59807

STEP 7 - Renewable Grant Accountability Narrative

Not applicable

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.

Paul Wick

Name (print or type)

Teton County Planner

Title (print or type

Paul F. Wick / Teton County Planner

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

02/08/2016

Date