

City of Ouray, Colorado
Request for Proposal - To Develop a Comprehensive GIS Data Set

Proposals Due: March 12, 2018

City Administrator
Public Works – Community Development
City of Ouray, 320 6th AVE, P.O. Box 468, Ouray, Colorado 81427

Invitation

The City of Ouray is seeking proposals from qualified consulting firms to provide professional services to the City to develop a Comprehensive GIS data compilation set. The compilation is estimated to begin in 2018 in coordination with the Community/Master Plan and proceed in 2019 and 2020 as funds are appropriated to finalize GIS attributes necessary to properly identify utilities and process land use applications effectively. The City is seeking a system-wide approach to GIS attribute acquisition, management and use. The firm will be responsible to develop goals, policies and guidelines along with achievable strategies to further GIS technology use as a staff tool and eventually provide access to the public.

Ouray History

The City of Ouray is located in the southern portion of Ouray County. The City is bounded by Federal lands and marvelous outdoor recreation. Highway 550 divides Ouray centrally, east from west. Ouray has benefited from the substantial growth of the region in the last twenty years. Ouray has been a special destination of world travelers for more than 100 years. This small intimate community is nestled in some of the most rugged and towering peaks of the Rockies. Set at the narrow head of a valley at 7,792 feet and surrounded on three sides with 13,000 foot snowcapped peaks - Ouray is home to hundreds of miles of historic Jeep roads, sulfur-free hot springs with stunning views and the world-famous Ouray Ice Park.

Remarkably, two-thirds of Ouray's original Victorian structures, are still occupied, and have been lovingly restored in order to preserve their turn-of-the-century charm.

Originally established by miners chasing silver and gold in the surrounding mountains, the town at one time boasted more horses and mules than people. Prospectors arrived in the area in 1875. In 1877, William Weston and George Barber found the Gertrude and Una gold veins in Imogene Basin, six miles south southwest of Ouray. Thomas Walsh acquired the two veins and all the open ground nearby. In 1897 opened the Camp Bird Mine, adding a twenty-stamp mill in 1898, and a forty-stamp mill in 1899. The mine produced almost 200,000 ounces of gold by 1902, when Walsh sold out to Camp Bird, Ltd. By 1916, Camp Bird, Ltd., had produced over one million ounces of gold.

At the height of the mining, Ouray had more than 30 active mines. The town – after changing its name and that of the county it was in several times – was incorporated on October 2, 1876, named after Chief Ouray of the Utes, a Native American tribe. By 1877 Ouray had grown to over 1,000 in population and was named county seat of the newly formed Ouray County on March 8, 1877.

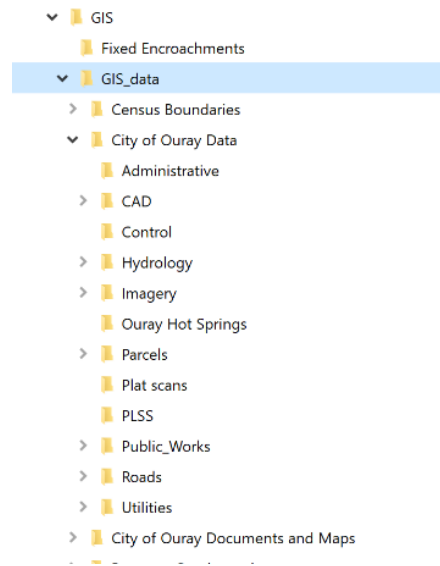
The Denver & Rio Grande Railway arrived in Ouray on December 21, 1887. It would stay until the automobile and trucks caused a decline in traffic. The last regularly scheduled passenger train

was September 14, 1930. The line between Ouray and Ridgway was abandoned on March 21, 1953.

The entirety of Main Street is registered as a National Historic District with most of the buildings dating back to the late nineteenth century. The Beaumont Hotel and the Ouray City Hall and Walsh Library are listed on the National Register of Historic Places individually, while the Ouray County Courthouse, St. Elmo Hotel, St. Joseph's Miners' Hospital (currently housing the Ouray County Historical Society and Museum), Western Hotel, and Wright's Opera House are included in the historic district.

GIS Background

GIS data have been collected, obtained from Ouray County and provided by local vendors. Currently, some data is in local grid, some in COSP South Zone NAD83, some in UTM NAD83, some in geographic coordinates with different datums. Ouray County created a translation to convert the local grid to a published grid. This translation is accurate and can be used to convert the CAD data to the projection and coordinate system that the City of Ouray selects. Appropriate attributes need to be determined for each of the data layers and then populated. Layers that have newer attributes defined, are partially populated in most cases. Ouray wall maps have more data than the GIS data. A new version of the CAD data would help to fill in some gaps.



Project Description

The City of Ouray is seeking proposals from qualified consulting firms to provide professional services to the City to develop a Comprehensive GIS data compilation set. The compilation is estimated to begin in 2018 in coordination with the Community/Master Plan and proceed in 2019 and 2020 as funds are appropriated to finalize GIS attributes necessary to properly identify utilities, process land use applications effectively and mitigate hazardous situations. The City is seeking a system-wide approach to GIS attribute acquisition, management and use. The firm will be responsible to develop goals, policies and guidelines along with achievable strategies to further GIS technology use as a staff tool and eventually provide access to the public.

The consultant will work closely with City staff in preparing a Comprehensive GIS data compilation set. The consultant will collect and analyze data. Data will be compiled and published into one coordinate system. Appropriate attributes for each data layer will be determined in coordination with city staff and then populated. Layers that have newer attributes defined and partially populated will be completed. Data represented in Ouray wall maps will be collected and incorporated in to the Comprehensive GIS data set. In the event a new version of CAD data is available this information will be obtained to help to fill in some gaps.

In summary the following categories are considered important GIS layers that will assist the City in planning, infrastructure operations and public land coordination.

- A. 2018 – Community/Master Plan update GIS data includes; boundaries, properties, public land survey, recreation and transportation.
- B. 2018 or 2019 with appropriated funding – Utility GIS data includes; water, geothermal sources, sewer, storm water, refuse/recycle and capturing other utility information provided by entities other than the City.
- C. 2019 and 2020 with appropriated funding: Long term GIS data includes; asset management, coordinated federal land information, wildfire protection, wildlife migration corridors and future land use capacity.

Comprehensive GIS Data Set – Attached Exhibit A

Funding

Recommended that the consultant provide initial funding mechanisms, compile grant applications or requests on behalf of the City of Ouray and provide administrative assistance on grant reports.

Progress Reporting

- The consultant and city staff shall hold progress meetings as often as necessary, but in no case less than once per month. The consultant shall supply the City Administrator completed or partially completed GIS data sets, maps or plans as deemed necessary by the City Administrator at least three (3) working days before each progress meeting. The City Administrator shall schedule the meetings, as necessary, at key times during the development of the GIS Data Set.

Items to be provided by the City of Ouray

- City staff: City Administrator, Public Work Director, Community Development Director and other city staff deemed necessary to coordinate the project.
- Current GIS data acquired, CAD data and maps necessary to reduce duplication of GIS data collection.
- Assistance with public presentations.

All proposals should include the following background information:

- A Letter of Submission shall include the name address and telephone number of the person(s) who is authorized to legally represent the vendor. Any confidential material contained in the proposal shall be clearly indicated and marked as "Confidential."
- Firm qualifications, background, experience and firm professional staff working on the project.
- A minimum of two (2) references for projects of a similar nature to this project.
- A schedule outlining items in Exhibit A.
- Provide in a separate sealed envelope the cost in phases.
 - A. \$_____Community/Master Plan update GIS data includes; boundaries, properties, public land survey, recreation and transportation.
 - B. \$_____Utility GIS data includes; water, geothermal sources, sewer, storm water, refuse/recycle and capturing other utility information provided by entities other than the City.

- C. \$ _____ Long term GIS data includes; asset management, coordinated federal land information, wildfire protection, wildlife migration corridors and future land use capacity.
- D. Or any assortment as outlined in Exhibit A.
- Provide a brief statement on recommended coordinate system, methodology to project or re-project current data, proposed metadata and how the firm will provide deliverables.
- Recommended but not required proposals that outline funding or grant sources.

Proposal Response

The proposal response submitted shall contain all information as requested herein, and any additional information necessary to summarize the overall benefit of the proposal to the City. Proposing firms shall submit at least one unbound original proposal that can be printed or scanned no later than 4:00pm March 12, 2018.

Submittals should be directed to

Attn: GIS RFP, City Administrator, City of Ouray, 320 6th AVE, PO Box 468, Ouray, CO 81427
Phone: (970) 325-7060, Fax: (970) 325-7212, sicklesk@cityofouray.com

This solicitation does not commit the City of Ouray to award a contract, to pay any cost incurred with the preparation of a proposal, or to procure or contract for services or supplies. The City of Ouray reserves the right to accept or reject any or all proposals received in response to this request, to negotiate with any qualified source, or cancel in whole or part this proposal process if it is in the best interest of the City to do so.

Project Budget Range

A budget was provided for the Community/Master Plan update without specific itemization for a Comprehensive GIS Data set.

Preliminary Project Schedule

The following tentative schedule is anticipated for firm selection, collection, projection and Community/Master Plan compilation. Firm selection is expected **March 19, 2018**. Collection and projection **April 2 to July 31, 2018**. Community/Master Plan compilation through 2018 with completion estimated **December 31, 2018**.

General Requirement of the Selected Proposing Firm

- Enter into a contract with the City. (These documents and proposal submittals become the contract.)
- Maintain insurance coverage for the duration of the contract period.
- Prohibited from assigning or subcontracting the whole or any part of the contract without the prior written consent of the City.
- Shall not hire, discharge, promote, demote or otherwise discriminate in matters of compensation, terms, conditions or privileges of employment against any person otherwise qualified solely because of race, creed, sex, national origin, ancestry, physical or mental disability, color or age.
- Contractor shall be in compliance with the applicable provisions of the Americans with Disabilities Act of 1990 as enacted and from time to time amended and any other applicable federal, state, or local laws and regulations.

- Operate as an independent contractor and will not be considered employee(s) of the City of Ouray.
- Successful consultant will be paid on actual invoices as work is completed.

Evaluation Criteria

Selection of the successful firm with whom negotiations shall commence will be made through an evaluation process based on the following criteria:

Percent	Component
25	Project Approach
25	Project Team
20	Past Project Experience & Client References
15	Project Schedule
10	Project Fee Structure & Cost Estimate
5	Funding Opportunities

EXHIBIT A

1. Boundaries

- a. City limits boundary- a compilation of the original town site and all annexations to the original town site
 - i. Provided by Ouray County and dated 2010
 - ii. Any annexations that would change boundary?
 - iii. Contains minimal attributes
 - iv. An important feature class for the Community update plan
- b. Urban Growth Boundary- a boundary designed to contain and/or limit urban development
 - i. Provided by Ouray County, dated 2009
 - ii. Contains minimal attributes
 - iii. An important feature class for the Community update plan
- c. Ouray AOI- the area in which the City of Ouray would have input on any land use change
 - i. Provided by Ouray County, dated 2009
 - ii. Contains minimal attributes
 - iii. An important feature class for the Community update plan
- d. Annexations- additions to the original townsite
 - i. No data has been found
 - ii. Annexation boundaries and original plats are useful in research and historic conditions.
- e. Zoning- a designation of the allowable land uses for each zoning type
 - i. A zoning map created by Monadnock Mineral Services is provided online with a date of 2013
 - ii. Investigation needed to determine:
 - 1) existing zoning districts that have been rezoned since 2013
 - 2) annexations to the City and subsequent zoning designations since 2013
 - i. The digital data (DWG or similar) from this map can be incorporated into the GIS compilation
 - ii. Attribute data will need to be developed
 - iii. An important feature class for the Community update plan
- f. Subdivisions- an area of land divided into plots to sell
 - i. Provided by county, dated 2009
 - ii. Minimal attributes- include only Subdivision name
 - iii. Plats are available to tie to subdivision boundaries
 - iv. Polygon layer needs some cleanup
 - v. Check for subdivisions since 2009
- g. County Boundary-
 - i. BLM derived County Boundary
- h. Surface management- who manages the lands including Federal, State, Local government entities. Private ownership is typically reflected in the parcel data.

- i. Online sources can provide this information, helpful in determining forest service and BLM boundaries and access to these resources
- ii. An important feature class for the Community update plan

2. Properties

- a. Parcels- the designation of land plots by individuals or commercial interests
 - i. Provided by Ouray County and dated 4/10/2017
 - ii. Usually parcel data is maintained by County Assessor's offices. Since Ouray County GIS is minimal at this time, it may behoove the City to work on the parcels themselves and share the results with the County.
 - i. Some parcel data may need to be adjusted to align with the aerial photography but appears to be in good shape
 - ii. Needs to have topology applied to identify and/or correct gaps and overlaps
 - iii. Attribute data looks very good, tied to assessor's data and contains links to assessor's online parcel site (Tyler)
 - iv. An important feature class for the Community update plan
- b. Address Points- the site address for the structure on which it is located
 - i. Provided by the County as part of the data integration project affecting the Region 10 area
 - ii. A workflow is already in place for this data set. Unless the data integration group needs assistance, updates can be requested every quarter from them and the City of Ouray need not maintain this data
- c. Places- places of interest or common names of places that do not necessarily have a site address but might be used to describe where you are or are going, especially with regard to emergency response.
 - i. Provided by the County as part of the data integration project affecting the Region 10 area
 - ii. A workflow is already in place for this data set. Unless the data integration group needs assistance, updates can be requested every quarter from them and the City of Ouray need not maintain this data

3. Public Land Survey- Township, Range, Section, and Quarter section delineations

- a. Section data only provided by Ouray County
- b. These datasets are maintained by BLM
- c. Download complete dataset for Ouray County from BLM or use online sources

4. Recreation

- a. Parks/Open space- day use public and private parks and open space areas
 - i. No polygon data found
 - ii. Most park/recreation facilities are included as point features in the Places feature class
 - iii. An important feature class for the Community update plan
- b. Trails- bike, pedestrian, and motorized trails- public and private
 - i. No data found

- ii. Much of this data may be available online and through various Federal and State agencies as well as local trails groups such as the Ouray Trails Group
- iii. Many trailheads are identified in the Places feature class
- iv. An important feature class for the Community update plan
- c. Campgrounds- overnight private and public campgrounds
 - i. No polygon data found
 - ii. Most campground facilities are included as point features in the Places feature class
 - iii. An important feature class for the Community update plan

5. Transportation

- a. Roads- the road network within and adjacent to the City of Ouray
 - i. Provided by the County as part of the data integration project affecting the Region 10 area
 - ii. This roads data is focused on emergency response and includes address and emergency responder info
 - iii. HUTF, pavement management, and other City of Ouray maintenance information is not included in this data
 - iv. Tables can be generated and joined to the roads data on the fly to include more information beyond the emergency response info provided
 - v. Alley ways are not included and would need to be added if they are important to the City
 - vi. An important feature class for the Community update plan
- b. Trails- as above, as a means of getting from one place to another, they could be included in this grouping

6. Utilities- All utilities datasets will need to be checked for completeness and locational accuracy. All utilities datasets need to have attributes added that are appropriate for the features and will help the Public Works department with asset management and maintenance. Locational accuracy is critically important for quick location of valves, manholes and lines during emergencies such as water breaks and sewer backups. Losses to both the City of Ouray and its citizens can be reduced significantly with an accurate GIS. For the Community update plan, the extent and condition of the public works assets may be a key factor in determining the ease and cost of development. All utilities may be considered important feature classes for the Community update plan.

- a. Water-
 - i. Water lines-
 - 1) GIS data provided by Ouray County
 - 2) 41 features in the GIS dataset, it appears that all of the CAD data that the County had was incorporated
 - ii. Water valves-
 - 1) GIS data provided by Ouray County
 - 2) 14 features in the dataset, it appears that all of the CAD data that the county had was incorporated.
 - iii. Hydrants-
 - 1) GIS data provided by Ouray County

- 2) 87 features in the dataset, it appears that all of the CAD data that the county had was incorporated.
- iv. Meters- it does not appear that the City of Ouray has water meters at each residence. If so, no data was found.
- v. Pumps and/or Tanks- no data found for these features
- vi. Geothermal-
 - 1) GIS data provided by Ouray County
 - 2) 26 features in the dataset, 13 points in CAD data
 - 3) No hot springs pool infrastructure data was found in the GIS data but information may be gleaned from the Fellin Park Master Plan document and appendix
- b. Electric
 - i. Light Pole-
 - 1) No GIS data
 - 2) 10 in CAD, 4 unique locations, no differences between attributes
 - 3) Provided in local grid coords
 - ii. Power Poles-
 - 1) GIS data provided by Ouray County
 - 2) 369 features in dataset, it appears that all of the CAD data that the county had was incorporated
 - iii. Pipeline data from the hydroelectric dam to the City of Ouray was included in the CAD data. This information was not incorporated into the GIS data yet. No other information about the hydroelectric system was found.
- c. Sewer
 - i. Sewer lines
 - 1) GIS data provided by Ouray County
 - 2) 23 features in dataset, no sewer lines found in CAD data
 - 3) On wall map provided, all(?) sewer lines appear to be included. Need updated CAD data to convert to GIS.
 - 4) 49 sewer camera sheets scanned and available for verifying pipe sizes, materials, and distances between manholes (not all sheets are fully populated)
 - 5) Camera footage available for 2016 sewer camera work
 - ii. Manholes
 - 1) GIS data provided by Ouray County
 - 2) 176 features in dataset, 26 features in CAD data
 - 3) 182 manhole inspection reports scanned and available for helping to verify X,Y locations
 - 4) CAD, GIS, and manhole/sewer camera inspection reports do not agree on X,Y.
 - iii. Cleanouts
 - 1) Cleanouts do not appear to be included as a separate feature class in the sewer data.
 - 2) At least 5 cleanouts were noted from the sewer camera sheets.
 - iv. WWTP- no wastewater treatment plant infrastructure was found in the data other than manholes that exist in that area

- d. Storm water
 - i. No data is available yet for the storm water infrastructure. All features will need to be collected and attributed

7. Emergency Response

- a. ESN boundaries- Emergency service number boundaries to identify first responders for 911
 - i. Provided by the County as part of the data integration project affecting the Region 10 area
 - ii. A workflow is already in place for this data set. Unless the data integration group needs assistance, updates can be requested every quarter from them and the City of Ouray need not maintain this data
- b. CWPP plan document- Community Wildfire Protection Plan
 - i. Plan document is available. Some GIS data was created by AMEC to support the plan and could be incorporated into comprehensive geodatabase
 - ii. This document may be an important component of the Community update plan

8. Control

- a. NGS Control- lat-long and elevation given, link to datasheet included, data in UTM13, NAD83
 - i. 1 station: Bench Mark S 434
- b. City Control- lat-long given, no elevations, data in COSP South zone, NAD83
 - i. 6 stations
 - 1) BC ¼ S13-24- BLM brass cap
 - 2) North Cap- LS 10738 1.5" cap
 - 3) X4-MS143- BLM std monument
 - 4) Ouray West- 2" brass cap
 - 5) Ouray East- Steel pin
 - 6) NGS-S434- NGS control
- c. County Control- UTM X,Y and elevations given, data in COSP South Zone, NAD83
 - i. 166 stations in dataset, 28 in City of Ouray area, all are unique except Ouray East, Ouray West, and BLM quarter corner that are also in City Control