

February 12, 2021

Becky Gray Director of Housing Chaffee County Touber Building 448 East 1st St. Salida, Colorado 81201 bgray@chaffeecounty.org

RE: Letter of Interest in regards of the Statement of Work for Geographic Information System Needs Assessment, Recommendation, and Implementation Plan

Dear Ms. Gray and Collaborative Members:

Argis Solutions helps local governments overcome budgeting and time constraints by providing a seasoned geospatial consultancy that can be relied on for high quality GIS, enterprise, and cloud solutions. We are an award-winning Silver Partner with Esri based out of Aurora, Colorado. We bring to the table not only over 20+ years of experience delivering solutions for local governments in geospatial data management, but also earning Esri's Release Ready Specialty. We are also proud to be active members with GIS Colorado and the local GIS professional community.

Argis proposes to deliver a fair and objective assessment, evaluating available GIS services and create an actionable plan that will empower all stakeholders the GIS support they need, while consolidating the infrastructure of the region overall to find efficient solutions. With our technical expertise, history of superior project management, and dedication to client support, the planning collaborative can be assured to get the best GIS support services and technology guidance available on the market today.

Please reach out to me with any questions you might have and let me know if I can put you in contact with any of our references.

Thank you for your time and consideration.

Sincerely,

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Brady Hustad Founder and CEO, Argis Solutions, Inc. 303-328-1061 brady@argis.com P.O. Box 461677, Aurora, Colorado, 80046 (303) 482-2040

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Scope Understanding and Approach

Argis is a full-service GIS consultancy with a depth of experience in the design, rollout and maintenance of geospatial infrastructure, data architectures and systems. The following sections detail Argis' understanding of the project scope for Chaffee County and our approach to delivering that scope.

Project Understanding

Chaffee County is the county surrounding Buena Vista, Salida and Poncho Spring in the western slope of Colorado. Because of the location, Chaffee and the other jurisdictions have challenges with wildfires, land maintenance due to visitor traffic, emergency response and finally a growing population and the maintaining of a healthy lifestyle for that growing population.

Because of the proximity and shared borders of these jurisdictions, they share many similar challenges, needs and requirements for their GIS data and solutions.

At present, each jurisdiction handles its own GIS and spatial data in separate methodologies, sharing as needed, but in general, in self-contained solutions. Most of these jurisdictions are running a few simple licenses of desktop software, with little or no enterprise implementations.

Through a grant from CDPHE (Colorado Department of Public Health and Environment), Chaffee County has an opportunity to explore the benefit of a cohesive enterprise solution that can better serve all four jurisdictions, creating a platform that can be shared. This solution could create efficiency and better integrate knowledge for each organization, both saving time, money and increasing the value of the data.

Furthermore, an enterprise solution could provide data that could be used for the public, improving services given to both citizens and visitors, creating a foundation for data analytics in the region, and providing more informed care and maintenance of the land and assets of Chaffee County and other jurisdictions.

Therefore, Chaffee County, working with the other jurisdictions as a planning collaborative, is requesting to have a GIS assessment completed that achieve the following objectives:

• *Evaluation and documentation* of existing GIS Infrastructure and the quality of that infrastructure to meet future needs, including a robust documentation of:

- The existing GIS software and data systems
- GIS personnel and their general expertise
- IT infrastructure such as network, servers, and end user hardware

• *Data lifecycle management:* From data collection to data grooming, quality assurance, editing and retirement. This will include evaluation of existing datasets and general methods for managing, updating, creating and maintaining those datasets.

• *Review of existing organizations* and how non-GIS assets and personnel can or do support GIS initiatives and goals.

• Identify architecture for a future recommended state:

This can include features such as:

- The current systems value and ability to leverage existing assets for enterprise growth.
- o a central repository for GIS data
- Public access to GIS data
- \circ $\;$ Improved GIS analytics tools available across jurisdictions that address such initiatives as:
 - land use
 - housing and other development efforts
 - growth scenarios
 - natural resource management
 - public health analytics
 - transportation and more
- Emergency Management including wildfire and other emergency mitigation,
 - Identify the correct and efficient way to integrate and import Public Health
- Outcome data and establish this integration for yearly update in the future.
- *Field and Mobility Development and Access:* The ability to view, review and update GIS data from remote locations.

Because of the multiple jurisdictions, these objectives will be identified across the various organizations and any redundancies or efficiencies that can be found between the jurisdictions will be identified and documented as part of the overall process.

Expected Deliverables

The planning collaborative has asked that this assessment is completed with specific deliverables. Those deliverables include:

1. **A written and oral presentation** documenting the evaluation of existing information and the architecture of the future recommended state.

2. A recommendation on development of a cohesive and collaborative GIS system within Chaffee County. Meaning a future state solution that includes all four jurisdictions, their existing and future personnel, assets, and datasets, and how those can be built to meet the above-mentioned objectives.

3. A cost estimation for the recommendation, including a detailed architecture of hardware and software required to rollout the recommendation, and any updates required.

4. An established process for importing Public Health Outcome Data Layer(s) directly from CDPHE, annually, as well as the most current layer. This immediately implementable will a be detailed method for importing the Public Health Outcome Data Layers and establishing that method into Chaffee Counties immediate and existing GIS infrastructure.

The completed recommendation will include all findings about GIS personnel, assets, software, hardware, initiatives, and architecture. Following this compilation, the report will present a projected future state plan (To Be) with architecture,

design, prioritized recommendations, and a framework for a five-year plan. The future state plan will be organized in a prioritized structure. This structure will focus on costeffective enhancements that give demonstrable forward progress for the GIS implementations as recommended to the planning collaborative. A Memorandum of Understanding, or other agreement between the jurisdictions, could be provided if need is identified.

The Approach

The Argis Team has been working with GIS organizations for multiple decades and will be relying on that experience and partnerships to create a robust, complete, and cohesive plan that can create an Enterprise GIS solution for Chaffee County. The team will consist of three primary members with support from additional team members as we require any specific expertise and support. The key members will be Brady Hustad – Technical Architect and Solution Designer, Genie Hayes GIS Expert and Project Manager and Margaret DeLauter GIS Data Specialist. Support personnel available will include Christopher Anderson, Forestry, Natural Resources and GIS Expert, Alyssa Grant Technical Writer and Kevin Criss, Government, Health and GIS Expert.

Agile Methodology

Argis is an agile consultancy with in-depth experience working with local government. Using Agile methodology Argis maintains clear lines of communications and delivers a high rate of success in all areas of responsibility and procedures.

The Agile approach delivers by using a team of experts that work together to deliver specific priorities identified by the County, following the expected deliverables and requirements for a specific timeframe or sprint. There could be varying skillsets required during a sprint. In that instance, Argis will assign the work among the appropriate team members.

The recommendation will be developed into an Agile Backlog and the delivery of this project will be worked through in a Sprint methodology



Figure 1: How a Sprint works.

working through the Backlog of expected tasks and deliverables. Each Sprint will be completed with a Review of completed tasks with the Chaffee County Point of Contact and approved as completed and ready for the next tasks.

Project Approach

Argis will start initially with interviews of the key GIS personnel in the four jurisdictions. It is expected that there will be approximately 8 roles will need to be interviewed to get a clear snapshot of the current state of GIS of the region. Critical information included, but not limited to will be:

• General IT Infrastructure

- General GIS Infrastructure
- Review of GIS Software
- Review of GIS Personnel
- Review of important other Personnel
- Existing Datasets and Datasets used (owned and unowned)
- Existing GIS and relevant non-GIS software
- Access to GIS Infrastructure of the four jurisdictions for review and interrogation of software and data.



Figure 2: Proposed Process

After the interviews, the Argis team will interrogate and review the existing software, hardware, data, network, and integration points existing in the jurisdictions. This will likely create another round of questions which will be presented to the point of contact from Chaffee County for dissemination to the correct members of the team for response.

Upon completion of the data gathering portion, Argis will start designing a recommended future state that would best serve the County, their citizens and the jurisdictions that share boundaries and responsibilities with the County.

With the Agile methodology, Argis at this point will discuss findings and plans with the Chaffee County point of contact to confirm assumptions, clarify misunderstandings, and discuss future ideas to see how they line up with Chaffee County's needs, wants, requirements for the future.

After iterating through the interview process with representatives from Argis and the planning collaborative working towards the best goal for jurisdictions, Argis will start documenting and creating the final report in both presentation and written form. A finished draft of the presentation and report will be presented for review by the Chaffee County Point of Contact.

The deliverable report and presentation will then be given by Argis to the planning collaborative, either as a virtual or in person meeting. Argis will work within the best health practices of Chaffee County to determine the proper level of safety as we hopefully continue to see a decrease of COVID in Colorado.

Experience

Argis Solutions is pleased to submit the following projects and references for review by the planning collaborative. These projects highlight our familiarity with working with municipalities, counties, and governing bodies and serving their ArcGIS and web development needs.

Town of Windsor, Colorado

Description: GIS Process Automation, GIS Environment Upgrade

- Project Date: August 2020-December 2020, on-going relationship
- Completion Time: Initial project 5 months
- Key Staff: shown below
- Deliverables:
 - Plan for Transitioning to ArcGIS Enterprise, Esri Architecture and Programming
 - ArcGIS Enterprise Server stood up, Portal and full federation implemented.
 - Advanced Data Rules using ARCADE implemented.
 - Workflow to convert field collected water system data into production quality GIS data implemented.
- Final Cost: \$13,500
- Contact: Scott Tometich, GIS Supervisor 970-674-2483
 <u>stometich@windsorgov.com</u>

Key Staff	Role	Applicable Skills	Level of Involvement
Brady Hustad	Project Manager, Secondary Developer	 ArcGIS Enterprise management, deployment and configuration Python Esri Geoprocessing Services Training and Documentation Data Management Workflow Strategy and Implementation GIS Strategy and Architecture 	Project Manager, Part- time
Malaika Penn	Primary Developer	 Esri Arcade Rulesets Python Esri Geoprocessing Services Data Management 	Primary Developer

	• Esri Model Builder	

Project Summary

Argis became an extension of Windsor's GIS team to deliver technology that required specific skill sets,

while delivering additional man hours of effort to complete critical projects on time.

Challenge: The GIS team at Windsor identified a need to upgrade their GIS services to an Enterprise solution to better support the town and their citizens. Additionally, Windsor needed to transition to the latest Esri software including ArcGIS Pro. Windsor also chose to use this system upgrade to review its GIS environment architecture and improve on its arrangement to best serve the new configuration.

Solution: Using the Agile method of project planning, Argis broke each task into separate iterative sprints that allowed feedback from Windsor at every stage of implementation.



Figure 3: Example of project for Windsor, CO

The Argis team began by evaluating the current GIS system, noting critical path elements. The team recommended an ArcGIS Pro workflow and created a geoprocessing (GP) service to manage this workflow. Windsor had developed 47 discrete attribute rules that are currently functioning in their ArcMap environment. Argis rebuilt these into rule scripts within ArcGIS Pro using the Arcade scripting language. Argis reviewed Windsor's user and portal setup and implemented the initial stages of federation, including the ADFS implementation. Argis started and configured the Portal Web and set up the Portal website with basic UX/UI and town branding identity. Finally, Argis documented the process of data collection that Windsor used, Trimble Business Center (TBC), to collect their water utility assets as new development occurred. Argis then designed a automated workflow using Esri Model Builder and Esri Geoprocessing Services written in Python to convert the TBC data into a completed data set of approximately 14 layers that included complete topology of the water network.

City and County of Broomfield, Colorado

Description: Custom and Configured Esri-Based Web Application

- Project Date: March 2017 August 2018, on-going relationship
- Completion Time: Initial project 8 months
- Key Staff: shown below
- Deliverables:
 - o Customized WebApp Builder widget
 - o Architectural design support
 - o Advanced Server planning and management

- Final Cost: \$12,625 (of initial project)
- Contact: Adrian Kropp Manager of GIS, Information Technology 303-438-6257 akropp@broomfield.org

Key Staff	Role	Applicable Skills	Level of Involvement
Brady Hustad	Project Manager, Secondary Developer	 ArcGIS Enterprise integration Data Model Architecture Database Integration (MS SqlServer) AWS Server Deployment Esri Web AppBuilder Esri ArcGIS API for JavaScript Esri ArcGIS API for REST HTML, CSS and JavaScript Dojo framework External data systems integration Agile Project Management / Scrum Master 	Part-Time
Malaika Penn	Primary Developer	 Esri Web AppBuilder Esri ArcGIS API for JavaScript Esri ArcGIS API for REST HTML, CSS and JavaScript Dojo framework Proxy configuration External data systems integration 	Primary Delivery
Kevin Criss	Esri Integration, Secondary Developer	 ArcGIS Enterprise integration Esri Web AppBuilder Esri ArcGIS API for JavaScript Esri ArcGIS API for REST HTML, CSS and JavaScript Dojo framework Proxy configuration 	Primary Delivery

Project Summary

The Broomfield project demonstrated how Argis Solutions listens, documents, and responds to the feedback of local government projects with the appropriate technology and skill sets to solve their critical needs.

Challenge: The City's GIS team identified a need for better management of a new extension of the cemetery. They needed to determine the best approach to serve the internal cemetery management team, share appropriate information with prospective plot owners, and create a system of record that would last for generations.



Figure 4: Broomfield's Web AppBuilder widget was featured in Esri's 2020 User Conference Plenary.

Solution: After researching the original workflow for buying cemetery plots, Argis Solutions developed a

customized Web AppBuilder widget that could be inserted into the already robust GIS website maintained by Broomfield. The widget shows which plots are available, indicated by color. Next, when a plot is chosen, the app changes the plot's color and creates a PDF report detailing the legal agreement the customer will adhere to. Once the newly signed document has been scanned back into the system by the cemetery administration and payment is received, the app automatically updates the plot with a new color to reflect its purchased status.

Outcome: Through relationship and effective delivery, Argis has partnered with Broomfield on other projects since, included conversion of open space solutions from Linux to Serverless Web Portal (ongoing), Leaflet support and most importantly architectural discussions and system planning to help design the future state and plans for Broomfield.

The Institute for Transportation Research and Education at North Carolina State University

Description: Collaborative Web Map supporting Project Zero

- Project Date: November 2016 to December 2017
- Completion Time: Initial project 1 year
- Key Staff: shown below
- Deliverables:
 - Interactive map pulling from multiple data sources with an easy-to-use interface for public use.
 - o Fully integrated data model and data backup system
 - Architectural Support and Design
 - o Advanced Analytics including Highway Patrol Route Planning
- Final Cost: \$75,000
- Contact: Greg Ferrara, GISP
 Program Manager
 Geospatial Analytics and Decision Management Group (GADA)

Institute for Transportation Research and Education (ITRE), NC State University 919-515-8656 gpferrar@ncsu.edu

Key Staff	Role	Applicable Skills	Level of Involvement
Brady Hustad	Project Manager, Secondary Developer	 ArcGIS Enterprise integration Data Model Architecture Database Integration (Microsoft SqlServer) Microsoft SqlServer Data Cubes Esri ArcGIS API for JavaScript Esri ArcGIS API for REST HTML, CSS and JavaScript Dojo framework External data systems integration Agile Project Management / Scrum Master 	Part-Time
Kevin Criss	Esri Integration, Primary Developer	 ArcGIS Enterprise integration Esri ArcGIS API for JavaScript Esri ArcGIS API for REST HTML, CSS and JavaScript Dojo framework Proxy configuration Advanced Server Deployment 	Primary Delivery
Christopher Anderson	Esri Integration, Data Integration	 Microsoft SqlServer Management ArcGIS Enterprise Management and Architecture 	Part-Time

Project Summary

The Argis Team has created analysis and visualization tools for the NC Vision Zero program and the NC Highway Patrol's Size and Weights Program.

Challenge: The Institute for Transportation Research and Education (ITRE) is an institutional center located at NC State University; ITRE conducts research, training, and technical support activities for municipal, state, and federal clients addressing critical transportation issues. ITRE needed to create an interactive tool for public engagement with the goals defined by the Vision Zero program to lower highway



Figure 5: Available at http://visionzeromaps.azurewebsites.net

deaths to zero in the State of North Carolina. Additionally, ITRE was challenged to create advanced

analytics for the NC Highway Patrol to aid in better planning their patrols, routes, and locations to eliminate deaths and overweight vehicles on North Carolina highways.

Solution: The Argis team created an interactive map using ArcGIS API for JavaScript. The team created a data warehouse system for the multiple data sources that would be displayed together on the same map. They also helped with UI (user interface) development, producing a responsive design for both web and mobile users. This system allows multiple sources of data to converge, building a more complete picture of traffic crashes because the data is aggregated together in a sensible manner. Patterns are more easily seen and detected, and the objective is to find solutions and bring awareness to what caused the accidents in the past. Eventually, the hope is to reduce traffic deaths to zero.

Esri Endorsement of Services, in the Denver Area

Contact: Lee Johnston Jr. Managing Director of Denver Regional Office, Esri <u>LJohnston@esri.com</u>

Additional project descriptions available at <u>https://www.argis.com/success-stories</u>.

Team Qualifications

Argis Solutions provides experience in key ArcGIS application including ArcGIS Enterprise, ArcGIS Server, ArcGIS Online, Portal for ArcGIS, ArcGIS Desktop, and ArcGIS Pro. To demonstrate our complete understanding of GIS data formats, we are submitting the following members as the core of our proposed project team:

- Brady Hustad, GIS Architect
- Genie Hays, Senior GIS Analyst
- Margaret DeLauter, GIS Data Specialist

In reviewing these resumes, the planning collaborative will find not only a solid understanding of GIS technology, but also solid footing in web mapping, map services and implementation of GIS data portals. The planning collaborative will also have the benefit of experts retained by Argis Solutions as part of their consultancy, including Kevin Criss, expert in County Government GIS including the Health Department, and Chris Anderson, GISP, experienced in forestry, natural resources and GIS integration.

Lastly, with a background in Agile coaching and project management, this team will be excellent communicators to the planning collaborative, delivering on time and under budget.

Brady Hustad

GIS Architect

SUMMARY: Extensive project management experience for government implementations. Successfully delivered on time and on budget geospatial applications for Douglas County (Colorado), City and County of Broomfield (Colorado, Town of Windsor (Colorado), Pasco County (Florida), Chester County (Pennsylvania), The City of Seattle, The State of Oregon, NCSU, City of Houston, Texas Railroad Commission, and numerous others.

• **B.S., Management/Management of Information Systems,** GMI Institute of Engineering and Management (Kettering University) – Cum Laude

• Multiple Published Articles in ArcNews, DP Pro, ArcUser, Directions and other publications.

Technical Skills

Databases: SQL Server, SQL Server Spatial, MySql, Oracle, Oracle spatial, Azure Cosmo Document Database

- **Development:** C#, Unity, Java, Kotlin, Node.js, Android, Swift, iOS, HTML, JavaScript, CSS, ASP.NET, C/C++, Object Oriented Programming, Functional Programming, Various Modeling, XAML, Azure Cloud Functions, Azure Logic Apps, Advanced Azure Integrations
- GIS Software: Esri ArcMap 10.0 to present, Esri ArcGis Enterprise (Portal and Server) 10.1 to present, Most Esri Frameworks and SDKs, Bing Maps, Google Maps

Certifications: Scrum.Org – Professional Scrum Master I (PSM I), Patent Holder for conversion of GIS to Augmented Reality (#10,037,627 B2 – July 31^s, 2018), Patent in process for Computer Vision Workflow

Delivered Complex Utility Web Project - Managed a multi-team, multi-phase project for a major Texas based utility company's spatial upgrade project. Coordinated deliverables for more than 10 team members throughout the project. Successfully managed project, removing obstacles and executing to meet client expectations.

Managed technical client interfacing for multiple projects with the City of Houston including advancing the Street Surface Assessment Vehicle (SSAV) project, Asset inventorying systems, data backup, infrastructure, and analytics/reporting solutions.

Multiple Web App Delivery Projects. Delivered geospatial web applications on-time and on-budget to meet specific client needs including asset management, cemetery management, open spaces, parks and recreation, specific visualization, and systems integration for City and County of Broomfield.

Architected and led team solution featured in GeoWorld, a major spatial periodical. Architected and led team to successfully deliver advanced crash analytics for North Carolina State University and N. Carolina State Highway Patrol. Delivered project that targeted improved patrol routes and to achieve zero deaths on North Carolina highways.

Delivered 3D web-based mapping concepts to the Commonwealth of Virginia's VITA team to help analyze rural broadband solutions. Architected the specific solution and managed oversight on the project to deliver the solution using Microsoft Silverlight, Esri ArcGIS Server, Esri SDK for Silverlight, Balder Tools 3D toolbox and various data sources for elevation and imagery data. Genie Hays Senior GIS Analyst

SUMMARY: Delivered multiple, complex GiS projects on time and on budget to both city and state government agencies across the State of Colorado.

- Masters Computer Information Systems, University of Denver, University College 2010
- Bachelor of Science Geographic Information Systems University of Washington 2004
- GIS Desktop Certificate, PACE University 2017

Technical Skills

ArcDesktop, ArcGIS Online, ArcPro, SQL Server, PostrgreSQL, HTML/CSS/JavaScript, QGIS, MapInfo, Google Earth, Global Mapper, ERDAS Imagine, Microsoft Suite.

Member of team to deliver on time and on budget project for town of Estes Park,

Colorado establishing community owned and operated broadband, high-speed internet service to all clients served by Estes Park Light & Power. Generated and maintained the broadband fiber implementation map for field installation teams using ArcGIS and ArcFM extensions. Provided ongoing maintenance that included implementing field updates using as built drawings, updating fiber installation based on geologic limitations such as type of surface (road, rock, field, etc.), pre-existing utilities in the area, and planning for future growth.

Member of team that created <u>Aspen Historic Aerial Photos Map Viewer.</u> <u>Scanned, georeferenced,</u> digitized, and created mosaic datasets of the **City of Aspen, Colorado.** Created Colorado historical imagery using Google Earth, Esri's ArcMap, and ArcGIS Online. Successful on-time, on budget delivery of this project promoted engagement, transparency, innovation and provided free access to GIS data services, maps and applications to the Aspen community.

One of eight delivery specialists to provide database support, software development and GIS analysis for the State of Colorado. Managed a plan to deliver an updated and new enterprise GIS for the State of Colorado. This process included RFP writing, proposal review, timeline and team management and reporting to executive team on progress. Assisted in removing road blocks to progress.

Assisted the Governor of Colorado's Office of Information Technology to develop and maintain webbased GIS mapping applications and services for various state agencies using Esri's ArcGIS Online, Web App Builder, ArcServer Manager, and Geocortex Essentials, and OpenStreetMap. Applications and services were managed through monitoring and tracking ticketing management systems to diagnose and resolve technical issues using internal change order and ticketing system.

Member of Argis Team to deliver the <u>State of Colorado Map Viewer</u>, a customized ArcGIS Online map hosting county address and parcel information. The State of Colorado contracted with Argis Solutions to customize an ArcGIS Online map and implement 3-tiered security access for public data, state only data (available only to state of Colorado employees), and emergency management only (such as Homeland Security). On time, on budget project allowed users to search, analyze and download publicly available data gathered as a public resource and subject to constant change.

Margaret DeLauter

GIS Data Specialist

SUMMARY: GIS Specialist experienced in geospatial analysis and programming. Capable of adapting to the demands of clients and project requirements.

- Geospatial Information Systems MSc., University of Denver, 2020, 4.0 GPA
- Bachelor of Science in Biology, SUNY New Paltz; 2012, 2.98 GPA

Technical Skills

ArcGIS Online, ArcGIS Desktop 10.6/10.7, Arc GIS Spatial Analyst and 3D Analyst Extensions, ArcScene, ArcPro, Hydrologic Modeling using ArcPro, Esri Arc Enterprise and Portal in ArcMap and ArcPro, Esri Web App Builder and Esri Web App Builder Developers Edition, Arc Map Model Builder, Python Programming (2.7, 3.7), ArcPy Library, Numpy Library, Pandas Library, Matplotlib Library, ArcGIS Python API, SQL, HTML, CSS, JavaScript, DB Browser for SQLite, QGIS

GIS Specialist, Insight Global (Microsoft Vendor) Currently assist with the resurrection of the Microsoft Bing 3D production program through creation of new protocols, new workflows, and new QGIS based tools to produce 3D map deliverables for external client base. Develop QGIS plugins that utilize the QGIS API and Python to create a cohesive Area of Interest Definition workflow used in conjunction with existing Microsoft production tools to meet the needs of the Bing 3D map team.

As GIS Specialist for Insight Global (current project) manage the construction and management of geopackage databases using QGIS and DB Browser for SQLite. Use Microsoft Teams, Microsoft Azure and various proprietary software to execute all imagery editing functions for a specific area including water classification editing and editing 3D structures within aerial imagery.

Assisted with the creation of bird flight digitizing maps using Python code and Arc Desktop tools for

use in geospatial data entry as GIS Liaison and Data Entry Technician for Western Ecosystems Technology Inc. Provided troubleshooting for digitizing tasks within the Tracking and Data Management. Responsible for entering data and assisting with management of a large MSSQL database pertaining to wildlife consulting projects in the renewable energy sector. Used R software to analyze entered data for quality assurance and quality control.

Utilized ArcMap, ArcGIS, DNRGPS and Base Camp to create maps, data layers and other visual tools to aid in communication and organization of research project as Lead Avian Research Technician for Colorado Parks and

Wildlife in Gunnison, Colorado. Leadership role in organizing and communicating tasks in the fie Id as well as preparing datasheets, GPS units, maps, protocols, and other resources for future use in the field by coworkers.

As Natural Resource Management Intern

mapped invasive plant species, bird of prey nests and expanding woodlots at Maxwell National Wildlife Refuge using ArcPad on Trimble GeoXTs and

created mapfiles using ArcMapv.10. Worked closely with US Department of Fish and Wildlife Service i n Northern New Mexico. Served 900 hours for AmeriCorps over a six-month period and received an Education Award for service.

Project Schedule

While the overall work to complete this assessment is under three (3) FTE weeks, Argis is scheduling approximately five (5) weeks for the team of three to deliver to give time for review, scheduling conflicts, out of office days, and other events that will slow the delivery. This will give the planning collaborative point of contact time to review findings and give Argis time to update and revise those findings to give the best possible assessment and recommendations.

Milestones

- March 9, 2021 Project Starts
- March 22, 2021 Presentation of Initial Findings
- April 5, 2021 Present Preliminary Documentation
- April 16, 2021 Project Completion Final Presentation and Report



Figure 6: Proposed Schedule

The chart gives an expected timeline and schedule, though this will be planned officially once the project is awarded and a start date is set. With cooperation in scheduling this project can be shortened as needed, but Argis would request at minimum three (3) weeks to allow time for review and revision.

Cost Proposal

Argis is excited to partner with Chaffee County and the planning collaborative to recommend the best plan for the future state of GIS in the region, creating an Enterprise GIS solution that will empower the County, and other jurisdictions for years to come. This initial Phase I assessment we believe will meet the needs of a robust, complete, and definitive assessment and recommendation to help guide the County for the next 5 years.

Argis estimates that this assessment will take approximately 104.5 hours of effort with an investment of \$10,101.00. This is a time and material estimate and will be billed monthly with Net 30 terms.

Key Staff	Rate	Hours	Total
Technical (GIS) Architect – Brady Hustad	\$135.00/hr	10.00	\$1,350.00
Senior GIS Analyst – Genie Hayes	\$110.00/hr	50.50	\$5,555.00
GIS Data Specialist – Margaret DeLauter	\$68.00/hr	47.00	\$3,196.00
TOTAL		104.50	\$10,101.00

Option: Travel to Chaffee County

Argis is willing to travel if it is determined safe by Chaffee County and follows state guidelines for COVID. The cost for a trip would be approximately \$850 for one overnight trip with ability to meet on each day. If the trip to be shortened to a single day, the price would be approximately \$500.

Not to Exceed Amount

Argis commits to the investment for delivering this project not to exceed \$11,000 including the optional travel costs. This amount is for the work detailed in this proposal in response to the *Request for Quote: Statement of Work for Geographic Information System Needs Assessment, Recommendation, and Implementation Plan.* If there are significant scope changes requested by Chaffee County and the planning collaborative, these will be outside of this agreement through a change order process, or a new agreement.