



CORPORATE February 1, 2017

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Mike McKee | Chair
Six County Infrastructure Coalition
147 East Main
Vernal, UT 84078

RE: Six County Infrastructure Coalition | Sevier County

Dear Commissioner McKee:

Our team has appreciated the opportunity to assist the Coalition in its efforts to understand the infrastructure situation and proactively plan and implement critical regional projects. The initial study covered the six original member counties.

The Coalition has added Sevier County to its membership. Based on discussions with the Board and the former executive director, it is important that Sevier County's infrastructure be identified and mapped and that potential regional projects be identified and prioritized according to the Coalition's evaluation criteria.

This work will be much more efficient than the initial study. The mission of the Coalition has been defined. The GIS and website framework is already in place. Project evaluation tools are ready to be utilized. Much of the heavy lifting has been done. However, there is still significant work that needs to be completed in order to understand and evaluate regional infrastructure project priorities relative to the Coalition's already-identified projects. We estimate the tools and framework generated by the initial study will save the Coalition approximately 15% on a per-county cost.

SCOPE OF WORK

The following scope of work mirrors the elements that were completed as part of the initial planning effort for the other counties. There are many tasks that need to be completed in order to fully absorb Sevier County and its infrastructure and possibilities into the rest of the Coalition.

Task Description
Team Coordination and Strategic Direction
Establish communication protocols
Develop process and applications for sharing data with Coalition
Coalition steering committee Mtgs.
Weekly internal team leaders updates (Conference calls as needed)
Monthly Status Report at Board Mtgs.
Monthly project website update

Develop Strategic Plan to guide this survey & plan and on-going decision making processes

Coalition Project Leadership Meetings

Develop project work plan and critical path method schedule & Possible Immediate projects

Existing & Planned Infrastructure Data Gathering & Organization

Design a clearly-designed geodatabase structure to house and organize project data

Develop workflows and assignments for coordinating efforts with GIS specialists and team members

Establish handling protocols for sensitive data

Identify known energy-related data sources

Identify known non-energy data sources

Identify known utility owners

Identify private oil, gas, energy and relevant mineral extraction entities

In-house data gathering and cataloging

Prioritize data sources

Public GIS data gathering and cataloging (AGRC, UPlan, IBIC, etc.)

Published data gathering and cataloging (land use plans, studies, etc.)

Private entity GIS data gathering and cataloging

Third-party data gathering (McGraw Hill, PLATTS, School of Mines, etc.)

Non-GIS data scanning/digitizing

Field GPS data collection

Planned future infrastructure data cataloging

Identify and catalog environmental risks and sensitive areas

Identify barriers (national parks, monuments, terrain)

Categorize and prioritize data (type, existing, planned, etc.)

General regional data

Counties and cities demographics and population trends

Land ownership and public land management breakdown (GIS)

Land uses categorization (available public land RMP data)

Map existing infrastructure corridors

Map known existing vital connecting corridors

Economic data

Historical and projected oil and gas revenue trends

Jobs and gross regional product (GRP) trends (by County)

Jobs and gross regional product (GRP) trends (by region)

Catalog available industry survey data (USU, USTAR, Moody's etc.)

Append in-house data to master geodatabase

Convert collected data from all team members to geodatabase format and append to master geodatabase

Determine relevancy of collected data to overall analyses

Determine data gaps and develop strategy for obtaining necessary data or develop logical assumptions to fill gaps

Visualize data in an easy-to-use, interactive, web-based GIS format (make available to Coalition management)



Corridor Prioritization & Analysis

Oil and gas field production data

- Historical production trends
- Projected production trends
- Known production fields identification and output
- Planned production fields identification and output
- Visualization of production areas (GIS)

Oil and gas delivery facilities

- Inventory and visualize existing pipeline facilities
- Inventory existing trucking delivery capacities
- Determine existing pipeline facilities corridors service capacities (identify bottlenecks & deficiencies)
- Determine projected necessary delivery facilities corridors capacities (identify bottlenecks & deficiencies)
- Corridor preference analysis (industry, utility, government entities, preferences)
- Identify existing pipeline and trucking delivery terminus points
- Estimate delivery terminus points capacities

Transportation

- Incorporate/integrate county and city transportation master plans
- Gather/Determine state route corridors levels of service (LOS)
- State route corridors LOS projections and trends
- State routes safety data analysis
- Freight corridors capacities analysis
- Freight corridors projections & trends
- Rail corridors capacities and projections
- Other relevant routes cataloging
- Airport usage and capacity cataloging (John)

Water treatment, storage and distribution

- Determine existing service corridors and capacities
- Determine oil and gas development existing and future water demands

Power transmission facilities

- Determine existing major service corridors capacities
- Determine general oil and gas development and production existing and future power demand trends
- Identify oil and gas major development/ production power demand centers
- Identify possible opportunities for on-site power generator replacement and related air quality benefits
- Gather other available relevant commodity production and delivery trends and capacities (potash, coal, other significant non-aggregate minerals)

Telecom

- Inventory available general written capacity data
- Summarize available general demand projections

Produced water processing

- Gather available re-use demand and potential revenue data
- Identify Existing Disposal facilities & Capacities



Tourism and Recreation

Inventory of facilities

Corridor Development Prioritization & Analysis

Oil and gas delivery facilities

Determine delivery facilities corridors bottlenecks and deficiencies, summarize and rank

Identify delivery corridor facilities expansion alternatives

Transportation facilities

Identify limitations and constraints of corridors

Summarize and prioritize facility corridor deficiencies

Identify facility corridor expansion alternatives including new corridors

Water treatment, storage and distribution facilities

Determine service corridors deficiencies (summarize and prioritize)

Identify facility corridor expansion alternatives

Power transmission facilities

Determine major service corridors deficiencies

Summarize and prioritize major facility deficiencies

Identify facility corridor expansion alternatives

Airport Facilities (John will take all of Mike's Hours)

Identify limitations, constraints and deficiencies

Identify facility corridor expansion alternatives including new corridors

Telecom Facilities

Identify major hub and trunkline facilities limitations, constraints and deficiencies

Identify facility corridor expansion alternatives including new corridors

Energy Produced Water Resources

Determine Demand Centers

Identify Re-Use and disposal options

Recreational Facilities

Analyze current and future capacities & major demand centers

Tourism and Recreation

Analyze current and future demand centers

Corridors limitations and constraints summary (include combined facilities)

Incorporate feedback and adjust GIS maps & data based on feedback from Coalition members and specialists

Vital Corridor & Revenue-Generating Project Identification and Prioritization

Oil and gas, transportation, water and power facilities vital corridor identification

Summarize/visualize existing corridors and determine current level of congestion versus total capacity

Identify potential additional or expansion of corridors

Identify vital connecting corridors

Identify corridor risks (R/W's, permits, obstacles, etc.)

Potential and vital corridors feasibility analysis based on topography, environmental risks, future demands, etc.



- Develop revenue generation project and vital corridor long lists (collaborate with Coalition)
- Develop revenue generation project and vital corridors feasibility and risk analysis decision matrix (econometrics, etc.)
- Develop revenue generation projects feasibility and risk analysis decision matrix (econometrics, market and non-market benefits, etc.)
- Rank and prioritize vital corridor expansion alternatives
- Rank and prioritize revenue generating projects
- Refine long list into short list
- Summarize/visualize short list vital corridors expansion
- Summarize/visualize short list of revenue generating projects

Vital Corridor Development Alternative Probable Costs

- Develop short list cost opinions to preserve vital corridors and/or expand capacity in existing corridors (Analysis of permitting, NEPA, R/W acquisition, engineering and construction costs).
- Develop short list conceptual order of magnitude cost opinions for revenue producing corridors (Costing of infrastructure elements such as oil gas, and water pipelines, new or improved roadways, water reservoirs, power transmission lines, etc.)

Implementation

- Prioritized revenue generation projects implementation

Oil and gas delivery facilities

- Identify project partners for feasible alternatives
- Prioritize and schedule
- Identify oil and gas private funding sources
- Identify public funding sources
- Operational econometrics summary

Transportation facilities

- Identify project partners for feasible alternatives
- Determine likely ownership of new facilities
- Prioritize and schedule
- Identify oil and gas private funding sources
- Identify public funding sources
- Operational econometrics summary

Water treatment, storage and distribution facilities

- Identify project partners for feasible alternatives
- Prioritize and schedule
- Identify oil and gas private funding sources
- Identify public funding sources
- Identify public operational entity and draft inter-local agreement framework

Power transmission facilities

- Identify project partners for feasible alternatives
- Prioritize and schedule
- Identify oil and gas private funding sources
- Identify public funding sources



Operational econometrics summary
Develop recommendations to assist the Coalition in working with local counties to preserve vital infrastructure corridors
Final Decisions and Update Prioritization Matrix
Deliverables
Conceptual value estimating tools for potential infrastructure projects
Final decision and prioritization matrix
GIS training
Online GIS planning tools
Report (bound and electronic)
Misc. Contract Management
Progress and implementation presentations

SCHEDULE

J&DE will work to complete the above scope of work in a reasonable, timely manner according to the project and funding needs. An earnest effort will be made to complete the services within six months.

FEES

The foregoing scope of work for design services can be completed for a lump sum fee of **\$239,000** as set forth below. Any adjustments to the scope of work would also be completed according to the attached standard hourly rates.

Task Item	Cost Summary	Completion Date
Team Coordination and Strategic Direction	\$ 48,000	8/4/2017
Existing & Planned Infrastructure Data Gathering & Organization	\$ 42,500	7/31/2017
Corridor Prioritization & Analysis	\$ 67,000	5/30/2017
Corridor Development Prioritization & Analysis	\$ 17,500	7/19/2017
Vital Corridor & Revenue-Generating Project Identification and Prioritization	\$ 28,000	7/1/2017
Vital Corridor Development Alternative Probable Costs	\$ 7,500	7/3/2017
Implementation	\$ 28,500	8/3/2017
TOTAL	\$ 239,000	



CLOSURE

The Coalition has a very bright future and we are excited to assist the Board and the new executive director however we can. We are committed to the rural counties and communities within the Coalition boundary. Please let us know if there are any questions or concerns.

Sincerely,

JONES & DEMILLE ENGINEERING, INC.



Brian Barton, P.E.
President/CEO

Attachment



