

REPORT TO SHASTA COUNTY RTPA

SUBJECT	MEETING DATE	ITEM NUMBER
Master Service Agreement with Vestra Resources and PSA Amendment #4 with Moore & Associates	2/23/10	8

RECOMMENDATION

It is recommended that the Board:

1. Approve Master Service Agreement (MSA #54157) with VESTRA Resources for completion of the:
 - a. Shasta County Regional GIS Platform Feasibility Study (not to exceed \$65,000); and
 - b. Development and application of the 'Mobility Assessment Tool' (MAT) (not to exceed \$60,000).
2. Amend Personal Services Agreement (PSA) with Moore & Associates to extend the termination date to December 31, 2010 for completion of remaining work tasks.

SUMMARY

VESTRA Resources is recommended to perform the Shasta Regional GIS Platform Feasibility Study and for the development and GIS-based application of MAT. The Agency's PSA with Moore & Associates for public involvement and communications must be amended to extend the term of the agreement. Deliverables from these projects are key components of the Agency's Sustainable Communities Strategy (SCS) planning process pursuant to Senate Bill 375 (SB 375).

DISCUSSION

Shasta Regional GIS Platform Feasibility Study – As directed by the Board on October 27, 2009, a request for proposals (RFP) to study the feasibility of a regional GIS platform in Shasta County was distributed. Key tasks and corresponding deliverables of the study include the following:

- An evaluation of available GIS data across the region;
- Development of region-wide GIS data standards;
- An evaluation of available hardware/software systems and potential locations/entities for housing and administering regional GIS data;
- A cost assessment for set-up and ongoing maintenance of the platform;
- An assessment of immediate and long-term potential funding sources; and
- Development of a prototype web portal to demonstrate and test the recommended system architecture.

Six proposals were received and evaluated by Agency staff and members of the Shasta County GIS Advisory Committee (GISAC) and Far North Regional GIS Council (FNRGC). VESTRA Resources proposal was unanimously scored highest based on their project understanding and detailed approach. Interviews with the top two firms confirmed this evaluation. VESTRA Resources' fee proposal was highest by a small margin (\$3,300 more than the lowest bid), but was determined to provide the highest value per dollar. All tasks are expected to be complete by June, followed by a presentation and final report to the Board in September.

Although multipurpose in nature, the design of the regional GIS platform is specifically geared toward demonstrating SCS compliance and tracking greenhouse gas (GHG) reductions toward the CARB-assigned target. Both functions will be critical to Shasta County's continued competitiveness for discretionary funding under transportation, housing, and a growing number of state programs.

Mobility Assessment Tool (MAT) – MAT, as described in the prior agenda item of this RTPA meeting, is a set of GIS-based procedures and tools used to isolate those areas with the highest degree of transportation system connectivity and where the greatest potential exists for reducing vehicle miles traveled (VMT) and transportation sector CO2 emissions. Results are presented visually via a set of color-coded maps that can be summed or layered into a single compound view.

MAT will be utilized to develop meaningful and objective land use inputs for the region's SCS pursuant to SB 375. Further detail is provided via the attached 'Proposal to Develop and Apply Mobility Assessment Tool'. Total project cost, including a 10% contingency line item for additional GIS data development as needed, shall not exceed \$60,000. All deliverables are expected to be complete by July, followed by a presentation and final report to the Board in October.

VESTRA Resources is pre-qualified to provide such services to the Agency pursuant to the state's Master Service Agreement for GIS and related services (MSA# 54157). A separate RFP process is not required for the development and application of MAT if 'piggy-backing' on the existing state contract. The MSA also permits the Agency to take advantage of the state's significantly reduced fee schedule. It is recommended that both the 'Shasta County Regional GIS Platform Feasibility Study' and the development and application of MAT be combined under one MSA (see attached Std. Form 213).

Moore & Associates PSA Amendment – Since 2007, Moore & Associates has been under contract with the Agency to provide public engagement services related to the Shasta *FORWARD* >> Regional Blueprint process. The PSA expired on December 31, 2009, and must be extended in order to complete the final task – e.g. printing of the Shasta *FORWARD* >> Final Report.

OTHER AGENCY INVOLVEMENT

With regard to the Regional GIS Platform Feasibility Study, local agency planning departments from the County and three cities were consulted during the scoping period. Members of the Far North Regional GIS Council (including staff from Shasta County and the City of Redding) helped craft the RFP and score consultant proposals.

Regarding the development and application of MAT, local agency planning departments from the three cities have been consulted. An invitation was extended to the County Planning Division. Additional local agency staff from various departments have been consulted for both projects by way of the Shasta *FORWARD* >> Steering Committee.

The Technical Advisory Committee (TAC) concurs with the staff recommendations.

ALTERNATIVES

The Board may choose not to approve the MSA with VESTRA Resources to perform the Regional GIS Platform Feasibility Study and the development and application of MAT, or to separate the two and prepare an individual RFP for the MAT. This is not recommended as the deliverables specified therein are dependant upon each other and needed to continue development of the region's SCS.

FINANCING

Total cost of all tasks referenced in this report equal \$125,000. Funding is provided by the California Regional Blueprint Planning Program (80%). State Planning, Programming, and Monitoring (PPM) funds are used to meet local match requirements (20%). The scope of work and accompanying cost for each project referenced herein are budgeted in the Agency's existing Regional Blueprint grants and approved by the Regional Blueprint Planning Program.

In addition to Regional Blueprint funding, a \$400,000 Proposition 84 grant was awarded to the Agency to augment GIS data and travel modeling capabilities related to development of the region's SCS. Proposition 84 funds are expected to be available in March.

A handwritten signature in black ink, appearing to read 'D. Little', is written over a horizontal line.

Daniel S. Little, AICP, Executive Director

DSL/DTW/jac

Attachments:

Std. Form 213: State Master Service Agreement (MSA #54157)

MSA Exhibit A: Shasta County Regional GIS Platform Feasibility Study Proposal

MSA Exhibit B: Development and Application of 'Mobility Assessment Tool' Proposal

PSA Amendment #4 with Moore & Associates

AGREEMENT NUMBER

5-06-70-18

REGISTRATION NUMBER

1. This Agreement is entered into between the State Agency and the Contractor named below:

STATE AGENCY'S NAME

Shasta County Regional Transportation Planning Agency

CONTRACTOR'S NAME

VESTRA Resources Inc.

2. The term of this Agreement is: 02/23/2010 through 12/31/2011

3. The maximum amount of this Agreement is: \$ 125,000 (Part I - \$65,000, plus Part II - \$60,000)

4. The parties agree to comply with the terms and conditions of the following exhibits which are by this reference made a part of the Agreement.

Exhibit A – Scope of Work 10 page(s)

Exhibit B – Budget Detail and Payment Provisions 3 page(s)

Exhibit C* – General Terms and Conditions

Check mark one item below as Exhibit D:



Exhibit - D Special Terms and Conditions (Attached hereto as part of this agreement)

page(s)



Exhibit - D* Special Terms and Conditions

Exhibit E – Additional Provisions

page(s)

Items shown with an Asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto.
These documents can be viewed at www.ols.dgs.ca.gov/Standard+Language

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR

CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.)

BY (Authorized Signature)

DATE SIGNED(Do not type)

PRINTED NAME AND TITLE OF PERSON SIGNING

ADDRESS

STATE OF CALIFORNIA

AGENCY NAME

BY (Authorized Signature)

DATE SIGNED(Do not type)

PRINTED NAME AND TITLE OF PERSON SIGNING

ADDRESS

**California Department of General
Services Use Only**

☐ Exempt per:

EXHIBIT A

SCOPE OF WORK

In accordance with the terms and conditions set forth in the State of California Agreement Number 5-06-70-18, Master Service Agreement (MSA) for Geographic Information System (GIS) commercial software and/or related services, VESTRA Resources, Inc. (VESTRA) will provide GIS development services described herein to Shasta County Regional Transportation Planning Agency.

PART I

1. PROJECT UNDERSTANDING

There has been a local desire to create a regional GIS in the North State for many years, and the need is increasing with state-wide initiatives like SB375. The primary impediments have so far proved insurmountable.

- There is a lack of a legal framework, memorandum of understanding (MOU), or other document that would allow the various participating agencies to apply resources to the collective mission. To date, all efforts have been largely voluntary and mostly outside the job scope of the individuals involved.
- Concerns exist over what happens with the merged data that follows a new regional standard (essentially, a new data product). These include who owns the derivative data, how and by whom will it be utilized/modified and for what purposes.
- Obtaining one-time grant money to help build a regional database is not the biggest hurdle, finding a source of steady long-term funding that will at least house and sustain the technical infrastructure is in many ways the most pressing concern.

Completing a Shasta Regional GIS Platform Feasibility Study will lay down the essential groundwork for a multi-agency Memorandum of Understanding (MOU). As such, the questions that will need to be addressed for the potential decision-makers are:

- What are the tangible benefits to each organization?
- What are the roles and resources (level of effort) that will be provided by each participant?
- Where will the data be stored and what will be on-going infrastructure maintenance costs?
- How are the maintenance costs to be funded?
- Who will own any derivative data products (what existing or new legal entity) and how will decisions be made concerning the distribution and use of the data?

Project Approach

VESTRA proposes to attack this project conducting multiple workshops with the Technical Advisory Committee (TAC), developing a working document, and delivering a value-added product. Towards the ultimate purpose, the current effort is to work closely with the TAC, explore and document the available options, make recommendations, and help to develop a consensus about the best path forward.

VESTRA's workshop techniques, which are engaging and easy to understand, include informative presentations, facilitated open discussions with recording, and project task prioritization. The objective of these workshops is to provide an informal, yet effective venue for TAC input and interaction. VESTRA will use GoToMeeting to enable regional collaboration, reaching a wider audience of GIS professionals and interested parties. Presentations will update workshop participants about project developments and encourage input regarding future tasks. Workshop materials will be wallboards, handouts, flipcharts, and agendas. VESTRA is proposing matrices, such as the ones presented in this proposal, be displayed on

wallboards and marked-up during the Shasta Regional GIS Platform Workshops. Minutes and webcast recordings will be made available to all participants and interested parties. Light refreshments will be included.

SCRTPA's Short and Long-Term Objectives

Short-Term

The development and implementation of a regional GIS that allows data sharing and the ability to meld city and county datasets would produce immediate benefits due to the fact that current geographic data is de-centralized within many organizations in Shasta County. Specific short-term benefits would include:

- Reduction in time and expense by having GIS data in a single location
- Increased speed in accessing GIS data due to standardization
- Most current, best available data and imagery
- Improved synergy between state, city and local agencies
- Localized hosting capabilities
- Additional grant and funding opportunities

Long-Term

Under SB 375, SCRTPA must include a Sustainable Communities Strategy in the 2014 scheduled update of their regional transportation plan. This strategy must demonstrate how the region will meet its GHG reduction targets. These targets are to be collaboratively developed with the CARB no later than September 30, 2010. SCRTPA would like to be in a good position to influence targets. Specific long-term goals of a regional GIS would include:

- Additional data types
- Future expansion opportunities
- Additional geographic areas
- Additional technical applications
- Meeting the directives of SB 375
- Ability for future expansion
- Enhanced modeling capabilities, both land use and transportation

2. WORK ACTIVITIES

Task A - Internal Kick-off Meeting

Following the intent-to-award notice, VESTRA and SCRTPA project managers will meet with the appropriate staff and TAC members to:

- Review and refine the proposed strategy, scope, schedule and deadlines to ensure that they meet project objectives.
- Clarify and establish responsibilities, coordination and logistical procedures – including a communication protocol.
- Identify background information, materials and databases that are needed for project completion.
- Discuss performance measures and draft scenarios.

This is a non-reimbursable task, a three-hour meeting, plus preparation, travel time and the development and distribution of an action summary has been allotted for.

Deliverables:

- Kick-off meeting agenda and action summary.
- Final scope work, schedule and budget for SCRTPA's approval.

Task 1—GIS Data Acquisition & Management

Task 1.1 – Data Layers

Recent efforts by the California Geographic Information Association (CGIA) (<http://www.cgia.org/geospatial-draftplan.htm>) have defined the most critical datasets to regional application development within California. VESTRA intends to use this list as a starting point, initially focusing on project-essential datasets defined by SCRTPA. Subsequently data status will be determined. It will not be sufficient to read the metadata; the goal will be to obtain electronic copies of the data for quality and compatibility analysis. Readily-available (e.g. free) local, regional, state, federal, and private data sources will be evaluated.

VESTRA staff completed informal GIS data availability and status surveys and acquired data during the scenario modeling task of the ShastaFORWARD>> project. Staff is familiar with status and update procedures for a majority of the local data. VESTRA staff have working knowledge of the project-essential datasets listed in the matrix below.

This draft matrix, for use at the Shasta Regional GIS Data Platform Workshops, outlines potential project essential data, data sources, authoritative sources and availability.

POTENTIAL THEMES / LAYERS	GIS DATA PROVIDERS							
	SHASTA COUNTY	REDDING	ANDERSON	SHASTA LAKE	CALIFORNIA	REDDING AREA BUS AUTHORITY	MCCONNELL FOUNDATION	ShastaFORWARD>>
	AUTHORITATIVE SOURCE							
PROJECT ESSENTIAL DATA SETS								
Transportation								
Circulation	☒	☒						
State Highways					☒			
Land Use								
Land Use Codes	☒							
Developed Urban Areas								☒
General Plan Land Use	☒	☒	☒	☒				
Green House Gas Emissions								
Bikeways	☒	☒	☒	☒			☒	
Walking Routes / Sidewalks / Trails	☒	☒	☒	☒				
Traffic Analysis Zones (TAZs)								☒
Bus Stops						☒		
Bus Routes						☒		

Deliverables:

- Workshop 1 to present a draft Project Data Matrix and begin discussion on availability, standards and protocols.
- List of core/project essential data and secondary datasets as identified (the draft document will be shared with SCRTPA and TAC for input and feedback).
- Results matrix of core/project essential data by priority (e.g. immediate utility and benefit).
- Data stats including but not limited to data gaps and most recent updates.
- Demonstration of specific compatibility issues.
- Reporting of ability to create or assemble respective datasets and accompanying metadata, including cost and availability.

- Funding opportunities, additional grant funding, local contributors, state and federal resources.

Task 1.2 –Data Standards/Protocols

Efforts by the Federal Geographic Data Committee (FGDC) (<http://www.fgdc.gov/standards/projects/FGDC-standards-projects/framework-data-standard/framework-data-standard-part5>) have defined the standards for many of the GIS data layers that SCRTPA is interested in including in the Regional Data Platform. VESTRA intends to recommend using these standards as a starting point.

Building regional datasets and the on-going maintenance and up-keep of those layers are challenges that a regional data platform will have. In developing a solution to both of these problems VESTRA recommends the following initial set of requirements can be used as a starting point when considering a possible technological solution that might be required:

- The solution must be able to easily translate to and from participant agency and regional data models, preferably storing the translation parameters safely within a regional database.
- Extracting, translating, and loading whole data layers in order to provide updated information would be an unnecessary burden on the data stewards; the solution should be able to easily synchronize only changes between the two datasets (e.g. additions, modifications, and deletions).
- There should be no restrictions on the file structure or format of the participating agencies (e.g. the data can reside in a DWG, SDF, personal geodatabase (MDB), shapefile, coverage, or ArcSDE.)
- The solution must be able to support a wide array of levels of agency participation, such as participation only within a certain geographical areas, partial participation for the region, or entire regional layers with no data steward (e.g. un-sponsored).
- There must be an easy, reliable mechanism for users of the data to communicate errors and omissions in the datasets to the appropriate data steward.
- The requests or updates from one user to another user (e.g. a data steward) need to be communicated easily and organized effectively for both parties.
- The solution should be extensible and adaptable to any number of regional datasets.

Deliverables:

- Workshop 2 to present draft data availability, standards and protocols and begin discussion on data acquisition plan.
- Report of data availability across the region, noting the variances between local agencies and the status/extent of GIS data standardization among the data sets.
- Plan development for standardization datasets from multiple agencies to facilitate merging and querying of spatial/attribute data as well as integration into the Shasta County Travel Model, UPlan and other potential modeling tools.
- Recommendation of a minimum set of guidelines and common standards for all data and metadata to be uploaded into the regional GIS database, such that a desired level of integrity can be established and maintained.
- Development of quality assurance and quality control process.

Task 2- Regional GIS Platform Development

Task 2.1 – Explore & Evaluate Data Storage Location Options

VESTRA will conduct much of the data storage hosting locations research independently to present examples, ideas, and concepts to TAC for input and feedback.

This draft matrix, for use at the Shasta Regional GIS Data Platform Workshops, outlines potential data host/storage locations and capabilities

POTENTIAL DATA HOST/STORAGE LOCATIONS	POTENTIAL CAPABILITIES									COST	
	HOST CAPABILITIES	RESOURCE CAPACITIES	LOCAL	GROWTH CAPACITY	NETWORK BANDWIDTH	PHYSICAL SECURITY	FACILITY ACCESS	EXTENDABILITY	BACKUP AND RECOVERY SERVICE	SET UP	MAINTENANCE
VESTRA											
Shasta College											
SCRTPA											
CAL-ATLAS											
TBD											

Deliverables:

- Workshop 3 to present draft standardization, acquisition, QA/QC plans and to begin discussion on data storage hosting locations, hardware, software and user interface.
- Report of data storage host/location options. This report shall include but will not be limited to: all reasonable feasible alternatives, established off-site locations, public agencies, contracted private vendors, hosting, cloud services or an in-house effort with additional SCRTPA staffing. Report shall include options such as hybrid partnerships between public, private, and/or higher education entities.
- Matrix of data storage host/location options including assessment of 1) host expertise and capabilities; 2) resources/capacities that may be required for implementation; and 3) estimated set-up cost.
- Narrative discussion of the most promising host/location options, including discussion of possible incorporation of GIS data from neighboring regions and larger Sacramento Valley in the future.
- Work flow diagram illustrating entity responsibility of all involved, and the general movement of GIS data from its point of origin to viewing/application.

Task 2.2 - Hardware / Software / User Interface

The display and accessibility of the data stored in the regional platform needs to be open for both GIS professionals and novice participants. Based on projects of a similar nature, two contextual issues need to be addressed: permission to acquire data with personal information and permission to access data, not view only capabilities.

This draft matrix, for use at the Shasta Regional GIS Data Platform Workshops, outlines potential software/user interface options, functionality and costs.

POTENTIAL SOFTWARE USER INTERFACE OPTIONS	POTENTIAL FUNCTIONALITY												COST	
	VIEWER ONLY	RED LINING	SEARCH OPTIONS	PERMISSIONS	REPLICATION	FIELD VISIBILITY	DOWNLOADABLE	PRINT MAPS	PRINT REPORTS	DATA FORMATS	EXTENSIBLE	ESRI COMPATIBILITY	SET UP	MAINTENANCE
Open Source														
Google Maps														
Open Streets														
Corporate GIS														
Geocortex Essentials														
MapGuide														
ESRI														
ArcGIS Server Database														
TBD														

This draft matrix, for use at the Shasta Regional GIS Data Platform Workshops, outlines potential hardware options, capabilities and costs.

POTENTIAL HARDWARE OPTIONS	POTENTIAL CAPABILITIES											COST	
	EXPANDABILITY	VIRTUAL	REDUNDANCY	MANUFACTURE	WARRANTY	SUPPORT	TBD	TBD	TBD	TBD	TBD	SET UP	MAINTENANCE
Server													
Cloud Computing													
TBD													

Deliverables:

- Recommendation of a benchmark for best practice (the process of identifying the standard against which all other options are judged).
- Recommendations on hardware and software based upon affordability, flexibility, and compatibility with other systems in California and the GIS industry. Redundancy
- Report of how the data will be searched for, quickly viewed for suitability, accessed within typical application software and data viewers and possibly linked to other online services such as ESRI's ArcGIS Online, Google Maps, Google Earth, etc.
- Development of data back-up and recovery plan.

Task 2.3 - Explore & Evaluate Ongoing Maintenance Requirements

Based upon the outcome of Task 1.2 and 2.2, VESTRA will provide an estimated annual budget for all of the major tasks and staffing associated with maintenance and regular upkeep of the platform and regional GIS housed therein.

Deliverables:

- Workshop 4 to present draft best practices, backup and recovery plan and top rated host location options and to begin discussion on long-term funding possibilities.
- Based on the results of Task 2.1 and consultation with the RTPA project manager, VESTRA will select at least three (not to exceed five) of the top-rated host/location options to explore & evaluate in greater detail.

- VESTRA will provide an itemized annual budget for ongoing maintenance of the selected regional GIS platform options.
- Cost estimates shall reflect a range of assumptions based on: 1) platform hosting strategy; 2) incorporation of primary and secondary data sets (results of Task 1.1); 3) data coordination, cataloging, and file management needs; 4) frequency and comprehensiveness of routine server hardware and application software maintenance and upgrades; and 5) other factors as identified.

Task 3 - Long-term Funding Outlook

In addition to funding sources related to AB 32 and SB 375, there is also potential for funding sources related to homeland security, transportation, health, and public safety. Most of the state-level initiatives are being facilitated by the GIO, so that is a starting point, but individual departments have other funding sources and priorities that could also come into play. Direct funding from federal agencies is another possible funding source (e.g. USGS, DHS).

This draft matrix, for use at the Shasta Regional GIS Data Platform Workshops, outlines potential long-term funding options and funding elements for consideration.

POTENTIAL LONG-TERM FUNDING OPTIONS	POTENTIAL FUNDING ELEMENTS							
	GRANT FUNDING	REVENUE BASED	CONTRIBUTION BASED	LOCALLY FUNDED	STATE FUNDED	FEDERALLY FUNDED	PRIVATE FUNDED	LONGEVITY
SB 406								
CA Regional Blueprint Program								
Proposition 84 - Model Improvement Plan								
Proposition 84 - Sustainable Communities Planning and Incentive Program								

Deliverables:

- Workshop 5 to present draft funding sources and implementation plan and to demonstrate optional prototype GIS platform.
- Assessment of existing and long-term funding sources.
- Implementation plan of a financially constrained project, including major project phases with accompanying tasks, responsibilities, and funding requirements.

Task 4 - Final Report & Presentation

VESTRA will assemble all findings and deliverables into a single report: Shasta Regional GIS Platform Feasibility Study. This study will be presented to the SCRTPA Board.

Deliverables:

- Shasta Regional GIS Platform Feasibility Study: Final Report and Recommendations.
- VESTRA will make a presentation to the SCRTPA Board to present the final report and recommendations.

Optional Services

VESTRA proposes developing a prototype Regional GIS Data Platform and hosting it house. Project essential datasets will be standardized to the extent possible according to the Final Standardization Plan. The concept is to have a working model that TAC participates in developing. Assumptions for this option include utilizing software/hardware capabilities that VESTRA staff and facility already have onsite or are open source and well documented.

VESTRA currently hosts Plumas County's GIS data viewer and is prepared to use their expertise in creating a working Regional GIS Platform model for SCRTPA.

Deliverables:

- Working prototype Regional GIS Data Platform
- Demonstration of system architecture and functionality

Shasta Regional GIS Data Platform Feasibility Study

Project Schedule
February '10 thru August '10



Task/Milestone	February				March				April				May				June				July				August			
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4
Task A - Internal Kick-Off Meeting																												
► Internal Kick-Off Meeting																												
Scope of Work and Budget Finalized																												
Task 1 - GIS Data Acquisition & Management																												
► 1.1 Data Layers																												
► Comparison Matrix																												
Workshop #1																												
► 1.2 - Data Standards/Protocols																												
► Gap Analysis and Standardization Report																												
Workshop #2																												
► Standardization Plan																												
► Data Acquisition Plan																												
► QA & QC Process																												
Task 1 Complete																												
Task 2 Regional GIS Platform Development																												
► 2.1 Explore and Evaluate Data Storage Location Options																												
► Data Storage Host/Location Matrix																												
► Recommended Host/Location Narrative																												
Workshop #3																												
► Work and Data Flow Diagrams																												
► 2.2 Hardware/Software/User Interface																												
► Hardware/Software Benchmarks and Best Practices																												
► User Interface Description and Demonstration																												
► Data Back-up and Recovery Plan																												
► 2.3 Explore & Evaluate Ongoing Maintenance Requirements																												
► Top Rated Host/Location Options Narrative																												
► Budgets for Top Rated Host/Location Options																												
Workshop #4																												
Task 2 Complete																												
Task 3 Long-term Funding Outlook																												
► Long-term Funding Outlook																												
► Funding Assessment																												
► Project Implementation Strategy																												
Workshop #5																												
Task 3 Complete																												
Task 4 Final Report & Presentation																												
► Final Report and Presentation																												
► Final Report																												
► Presentation to SCRTPA Board																												
Task 4 Complete																												
Optional Task - Prototype Regional GIS Platform																												
► Standardize Project Essential Datasets																												
► Load Data onto SDE Server and Consume Services in Viewer																												
► Demonstration at Workshop #5																												
Optional Task Complete																												

PART II

1. PROJECT UNDERSTANDING

Shasta County Regional Transportation Planning Agency (SCRTPA) would like to identify areas of strong accessibility and connectivity inherent in the existing local transportation network. Findings are intended to support the transition between conceptual outputs developed through ShastaFORWARD>> to specific and objective land use inputs needed for development of the region's Sustainable Communities Strategy.

Once identified, the areas will be further investigated for 'urban seeding' potential – e.g. small-scale projects and investments aimed at encouraging desirable future development patterns and reducing vehicle miles traveled (VMT) and transportation sector greenhouse gas (GHG) emissions. Based on review of the literature provided by the SCRTPA, VESTRA will develop and apply a 'Mobility Assessment Tool' (MAT) to identify areas where urban seeding projects have a greater likelihood of meeting local and regional objectives.

Literature and research indicate a number of geoprocessing tools able to calculate the degree of accessibility/connectivity found across the urban environment. Visual outputs will be generated to communicate findings to decision-makers.

In addition to the map-based representations, VESTRA will also perform post-process analysis on selected areas of interest for urban seeding, such as distances to schools, restaurants, grocery stores, trails, sidewalks and bike lanes, and/or other geo-coded features.

2. WORK ACTIVITIES

This section provides a description of the work that will be performed by VESTRA for SCRTPA on a time and materials (T&M) basis. As such, VESTRA staff will be performing work activities under the direction of the SCRTPA Project Manager or their appointee working within the available time and budget constraints.

The following are activities for which VESTRA anticipates providing support. Staffing for these activities can come from any of VESTRA's departments, including: consulting, programming, data development, system integration, training, word processing, graphics, and so forth.

Activity #1 -- Develop MAT

VESTRA will develop the MAT process and application in house for SCRTPA. The deliverable will be SCRTPA's to share with other agencies. The application will be developed to meet SCRTPA's needs, and SCRTPA will retain control of enhancements.

Initially, VESTRA will develop a project plan and flow chart for the MAT process. As development of the tool proceeds the plan and flow chart will be edited and serve as documentation.

MAT will effectively identify the areas of strong accessibility and connectivity in a road network. Both geoprocessing models and Python scripts will be used to make the final product as user friendly and extendable as possible.

Activity #2 -- Develop / Compile data needed proof-of-concept

VESTRA will develop and compile data needed for a proof-of-concept, assumed to be a one square-mile area in downtown Redding.

The anticipated input data required for identification of areas of strong accessibility and connectivity in the road network are:

- A line feature class for the streets
- A point feature class of the intersections
- A bounding polygon feature class that would act as a processing area (one square-mile)

Activity #3 -- Run MAT on proof-of-concept area

VESTRA will run MAT analysis on the proof-of-concept area for SCRTPA's consideration. Results and discussion of the outcomes will be presented to SCRTPA.

SCRTPA may determine that revisions to MAT are required once reviewing the proof-of-concept. VESTRA will work with SCRTPA to fine-tune the application. Alternatively, SCRTPA may abort the project at this point if results from the proof-of-concept analysis do not effectively identify areas of strong accessibility and connectivity in the road network.

Activity #4 -- Develop / Compile data needed for larger area

VESTRA will develop and compile data needed for a larger area, assumed to be the south-central region of Shasta County.

The anticipated input data required for identification of areas of strong accessibility and connectivity in the road network are:

- A line feature class for the streets
- A point feature class of the intersections
- A bounding polygon feature class that would act as a processing area (one square-mile)

Activity #5 -- Run MAT on larger area

VESTRA will run MAT analysis on a larger area for SCRTPA. Results and discussion of the outcomes will be presented to SCRTPA.

Activity #6 -- Perform Post-process Analysis

VESTRA will perform additional post-process analysis on select areas of interest for urban seeding, given that necessary data can be acquired easily within the available time and budget.

Shasta Mobility Assessment Tool
Project Schedule
February '10 thru October '10

 = Work Task

Task/Milestone	February				March				April				May				June				July				August				September				October			
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4	Wk 1	Wk 2	Wk 3	Wk 4
► Activity 1 - Develop MAT																																				
► Activity 2 - Develop / Compile data needed proof of concept																																				
► Activity 3 - Run MAT on proof-of-concept area																																				
► Activity 4 - Develop / Compile data needed for larger area																																				
► Activity 5 - Run MAT on larger area																																				
► Activity 6 - Perform Post-process Analysis																																				

ASSUMPTIONS

Supporting the data and modeling development, SCRTPA or their appointee will have these general responsibilities for the project:

- The SCRTPA Project Manager or their appointee will be responsible for planning conference calls and webcasts, taking necessary steps to ensure that key staff members attend scheduled meetings and training sessions as appropriate.
- The SCRTPA Project Manager or their appointee should be readily accessible to the VESTRA project team throughout the project and is expected to participate in all teleconferences and meetings.
- The SCRTPA will assist in data knowledge, compilation, and/or professional contact information when their expertise is required.
- The SCRTPA will assign staff time both for clarifying solution needs and, when required, for reviewing and accepting project deliverables.
- The SCRTPA is solely responsible for the accuracy and quality of any data provided to VESTRA and its fitness for the intended use(s).

Supporting the success of this project, VESTRA staff will have these general responsibilities:

- VESTRA will provide T&M implementation / consulting support working under the direction of the SCRTPA Project Manager.
- VESTRA will be responsible for providing labor resources supporting the proposed project plan and milestones.
- VESTRA will provide the SCRTPA with status updates monthly and more frequently upon request.
- VESTRA will inform the SCRTPA Project Manager of hours / budget expended on a minimum monthly basis.

PROJECT MANAGEMENT

VESTRA utilizes an established project management system for all projects we execute and will use this system to serve the SCRTPA. Our project management system relies on a few simple practices:

- Each project manager is given full authority and resources to execute the necessary work, without the impediment of internal organizational hierarchy. Once staff are assigned to a project or task, they may not be reassigned without the consent of the project manager. Any resource conflicts between projects are resolved by the division manager. Project manager changes are not entertained lightly and avoided if at all possible, but can become necessary due to illness or other extreme circumstance.
- Each project is chartered through a brief set of internal instructions that are created by the project manager when the project is initiated. These instructions identify client objectives, lines of communication, accounting procedures, responsibilities of the project team members, and the work to be accomplished as well as any other information necessary to the project team.
- Technical quality is assured through the involvement of senior experts who are available throughout the project.
- The status of each project is reviewed monthly by VESTRA Senior Management through in-person Project Status Review meetings with each project manager.

We find that this simple set of procedures greatly enhances the responsiveness, technical quality, and level of service we offer.

EXHIBIT B

BUDGET DETAIL AND PAYMENT PROVISIONS

This quote is exclusive of applicable administrative fees (e.g. payable directly to Multiple Award Procurement Section of the Department of General Services) and is exclusive of applicable federal, state, and local taxes for which the purchasing party shall remain liable.

PART I

The total not-to-exceed budget for the proposed effort is **\$65,000**, which was estimated based on an anticipated award of a time and materials contract using the personnel classifications of MSA Subgroup #1 - Core GIS Operations. The required staff, equipment, and travel expenses for the proposed services have been estimated based upon prior experience with work of a similar nature.

Description

Category	Rate	Hours	Price
<u>Task A—Internal Kick off Meeting</u>			
Senior GIS Specialist/Systems Integrator	\$125	3	\$0
GIS Project Manager	\$89	3	\$0
GIS Analyst/Technician.....	\$59	3	\$0
<i>Task A Estimate</i>			\$0
<u>Task 1.1—Data Layers</u>			
Senior GIS Specialist/Systems Integrator	\$125	5	\$625
GIS Project Manager	\$89	36	\$3,204
GIS Analyst/Technician.....	\$59	6	\$354
<i>Task 1.1 Estimate</i>			\$4,183
<u>Task 1.2—Data Standards</u>			
Senior GIS Specialist/Systems Integrator	\$125	16	\$2,000
GIS Project Manager	\$89	110	\$9,790
GIS Analyst/Technician.....	\$59	4	\$236
<i>Task 1.2 Estimate</i>			\$12,026
<u>Task 2.1—Explore Data Storage Location Options</u>			
Senior GIS Specialist/Systems Integrator	\$125	6	\$750
GIS Project Manager	\$89	54	\$4,806
GIS Application or Web Programmer	\$89	20	\$1,780
GIS Analyst/Technician.....	\$59	7	\$413
<i>Task 2. 1 Estimate</i>			\$7,749

Task 2.2—Hardware/Software/User interface

Senior GIS Specialist/Systems Integrator	\$125	3	\$375
GIS Project Manager	\$89	24	\$2,136
GIS Application or Web Programmer	\$89	40	\$3,560

Task 2.2 Estimate \$6,071

Task 2.3—Ongoing Maintenance Requirements

Senior GIS Specialist/Systems Integrator	\$125	7	\$875
GIS Project Manager	\$89	38	\$3,382
GIS Application or Web Programmer	\$89	3	\$267
GIS Analyst/Technician	\$59	7	\$413

Task 2.3 Estimate \$4,937

Task 3.0—Long-Term Funding Outlook

Senior GIS Specialist/Systems Integrator	\$125	12	\$1,500
GIS Project Manager	\$89	42	\$3,738
GIS Analyst/Technician	\$59	5	\$295

Task 3.0 Estimate \$5,533

Task 4.0 – Final Report

Senior GIS Specialist/Systems Integrator	\$125	16	\$2,000
GIS Project Manager	\$89	76	\$6,764
GIS Analyst/Technician	\$59	12	\$708

Task 4.0 Estimate \$9,472

TOTAL PRICE **\$49,971**

OPTIONAL - Prototype Regional GIS Platform

Senior GIS Specialist/Systems Integrator	\$125	4	\$500
GIS Project Manager	\$89	82	\$7,298
GIS Application or Web Programmer	\$89	20	\$1,780
GIS Analyst/Technician	\$59	7	\$413

Optional Estimate \$9,991

TOTAL OPTIONAL PRICE **\$9,991**

RECOMMENDED CONTINGENCY FUND (~10%) **\$4,997**

RECOMMENDED NOT TO EXCEED BUDGET **\$65,000**



The SCRTPA will be invoiced on a monthly basis, showing the compensation due for work performed during the previous thirty-day (or longer) period. VESTRA is anticipating that the period of performance will be from February 23, 2010 through October 31, 2010.

For all software provided by VESTRA, including third-party software, VESTRA shall invoice the CLIENT upon delivery of each product and CLIENT will be responsible to pay the invoice within thirty days of receipt. All third party software will be licensed between the CLIENT and the appropriate vendor in accordance with the vendors' software licensing terms and conditions.

PART II

The total not-to-exceed budget for the proposed effort is **\$60,000**, which was estimated based on an anticipated award of a time and materials contract using the personnel classifications of MSA Subgroup #1 - Core GIS Operations. The required staff, equipment, and travel expenses for the proposed services have been estimated based upon prior experience with work of a similar nature.

VESTRA proposes that a staff GIS Application or Web Programmer provide the majority of the support for this project. When it is agreed upon by SCRTPA and VESTRA and the project tasks require their skill level, a staff GIS Analyst/Technician or Senior GIS Specialist/Systems Integrator may be utilized at the MSA rates of \$59 per hour and \$125 respectively.

Description

Category	Rate	Hours	Price
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Activity 1—Develop MAT

GIS Application or Web Programmer	\$89	110	\$9,790
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GIS Project Manager	\$89	10	\$890
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Activity 1 Estimate..... **\$10,680**

Activity 2—Develop / Compile data needed for proof-of-concept

GIS Application or Web Programmer	\$89	120	\$10,680
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GIS Project Manager	\$89	12	\$1,068
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Activity 2 Up To **\$11,748**

Activity 3—Run MAT on proof-of-concept area

GIS Application or Web Programmer	\$89	32	\$2,848
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GIS Project Manager	\$89	3	\$267
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Activity 3 Estimate..... **\$3,115**

Activity 4—Develop / Compile data needed for larger area

GIS Application or Web Programmer	\$89	170	\$15,130
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GIS Project Manager	\$89	17	\$1,513
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Activity 4 Up To **\$16,643**

Activity 5—Run MAT on larger area

GIS Application or Web Programmer	\$89	50	\$4,450
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GIS Project Manager	\$89	5	\$445
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Activity 5 Estimate..... **4,895**

Activity 6—Perform Post-process Analysis



Shasta County Regional Transportation Planning Agency

Agreement # _____

GIS Application or Web Programmer	\$89	68	\$6,052
GIS Project Manager	\$89	10	\$890

Activity 6 Estimate..... \$6,942

TOTAL ESTIMATE **\$54,023**

RECOMMENDED CONTINGENCY FUND (~10%) **\$5,963**

RECOMMENDED NOT-TO-EXCEED BUDGET **\$60,000**

The SCRTPA will be invoiced on a monthly basis, showing the compensation due for work performed during the previous thirty-day (or longer) period. VESTRA is anticipating that the period of performance will be from February 23, 2010 through October 31, 2010.

For all software provided by VESTRA, including third-party software, VESTRA shall invoice the CLIENT upon delivery of each product and CLIENT will be responsible to pay the invoice within thirty days of receipt. All third party software will be licensed between the CLIENT and the appropriate vendor in accordance with the vendors' software licensing terms and conditions.

**FOURTH AMENDMENT TO AGREEMENT BETWEEN
SHASTA COUNTY REGIONAL TRANSPORTATION PLANNING AGENCY AND
MOORE & ASSOCIATES TO EXTEND TERM FOR PUBLIC INVOLVEMENT
SERVICES RELATED TO SHASTAFORWARD>>**

This is the Fourth Amendment to the Agreement between the Shasta County Regional Transportation Planning Agency ("SCRTPA") and Moore & Associates ("Consultant") for public involvement services related to Shasta*FORWARD>>*.

RECITALS

WHEREAS, the California Regional Blueprint Planning Program awarded the SCRTPA a grant to perform the Shasta*FORWARD>>* Regional Blueprint; and

WHEREAS, the SCRTPA and Consultant entered into an Agreement on June 26, 2007, for public involvement services related to Shasta*FORWARD>>*; and

WHEREAS, the Agreement was amended to reflect additional grant funding awarded in FY 2007/08, and again in FY 2008/09, to augment public involvement tasks; and

WHEREAS, the Agreement expired on December 31, 2009 and the SCRTPA and Consultant desire to extend the agreement until December 31, 2010 to complete remaining work tasks.

NOW, THEREFORE, the Agreement is amended to read as follows:

a) Section 5, Term of Agreement, subsection A, shall be amended to read as follows:

"This Agreement shall commence on the date of signing and shall terminate December 31, 2010."

I. REAFFIRMATION

In all other respects, the Agreement, as amended, remains in full force and effect.

II. ENTIRE AGREEMENT

This Agreement, as amended, and any attachments hereto, constitute the entire understanding between SCRTPA and Consultant concerning the subject matter contained herein.

III. EFFECTIVE DATE

This Fourth Amendment shall be deemed effective as of the date it is signed by both parties.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment to the Agreement.

**SHASTA COUNTY REGIONAL
TRANSPORTATION PLANNING AGENCY**

Date: _____

Dick Dickerson
Chair

MOORE & ASSOCIATES

Date: _____

Jim Moore
President
Tax I.D. #: 680150306

Approved as to form:

By: _____
John Kenny
SCRTPA Counsel