ADD-ON ITEM

Add-on item pursuant to Government Code Section 54954.2(b)(2)

AGENDA: February 3, 2011

TO: Regional Transportation Commission

FROM: Tegan Speiser, Sr. Transportation Planner
Ginger Dykaar, Transportation Planner

RE: Monterey Bay Area 511 Traveler Information System Feasibility Analysis and Implementation Plan Consultant Agreement

RECOMMENDATION

The evaluation committee for the 511 Plan proposals and staff recommend that the Santa Cruz County Regional Transportation Commission approve a resolution (Attachment 1) authorizing the Executive Director to negotiate and execute a consultant agreement with The ICx Transportation Group to prepare a Monterey Bay Area 511 Feasibility Analysis and Implementation Plan.

BACKGROUND

The Santa Cruz County Regional Transportation Commission (RTC) and the Transportation Agency for Monterey County (TAMC) received a Caltrans Planning grant to prepare a Feasibility Analysis and Implementation Plan for a Monterey Bay Area 511 Traveler Information System (The 511 Plan). Initial goals of a 511 system for this area include increasing customer satisfaction with the transportation system by providing easy access to traveler information, optimizing the use of the existing transportation infrastructure by enabling people to make more informed choices for how and when they travel, fostering sustainability and reducing greenhouse gases, and enhancing the economy by moving residents, visitors and goods more efficiently.

Of the $259,210 in grant funding secured for this project, $150,000 is designated for contracting with a consultant to prepare a Feasibility Analysis and Implementation Plan for a Monterey Bay Area 511 Traveler Information System (The 511 Plan).

The first part of The 511 Plan, a Feasibility Analysis, will determine the viability of establishing a traveler information system for the region and, if feasible, will recommend the type of system and major features and resources that will be used. Systems to be considered include building a 511 service from scratch, franchising another system or contracting with a consultant who operates multiple 511 systems. Findings from the fall 2010 survey and outreach effort will be used to inform the consultant of the types of traveler information that communities in Santa Cruz and Monterey Counties would find most useful.

Part two, the Implementation Plan, will lay out the functional requirements needed to design and implement a comprehensive, centralized, and multi-modal traveler
information system to serve the Monterey Bay Area. It will also identify the steps and provide an estimate of costs required to implement the recommended system. The scope of work for The 511 Plan (Attachment 2) follows a systems engineering design approach as recommended by Federal Highway Administration for Intelligent Transportation System (ITS) projects.

DISCUSSION

The request for proposals for The 511 Plan was released in November, 2010. A proposer’s conference was held in December, 2010. Five proposals were submitted to perform the work as specified in the request for proposals for the Monterey Bay Area 511 Feasibility Analysis and Implementation Plan.

Evaluation Committee Recommendation

An evaluation committee comprised of staff from RTC, TAMC, Caltrans and technical advisors from the Metropolitan Transportation Commission and the Sacramento Area Council of Governments reviewed the five proposals in early January, 2011 and selected three firms to be interviewed: The ICx Transportation Group, IBI Group, and PBS&J. Based on criteria specified in the RFP and information from the written proposals, interviews and references, the evaluation committee recommends contracting with The ICx Transportation Group (ICx) to prepare the Monterey Bay Area 511 Feasibility Analysis and Implementation Plan for an amount not to exceed $150,000.

ICx is a consulting engineering firm with experience working on a variety of ITS projects. Their expertise includes traffic engineering; transportation planning; and systems and software engineering, development and implementation. Together with their subconsultant, Iteris, Inc., they have extensive experience developing and deploying 511 systems throughout the U.S. including the San Francisco Bay Area, San Diego, the San Joaquin Valley, and San Luis Obispo.

The Evaluation Committee and staff recommend negotiating and executing an agreement with the ICx Transportation Group to prepare a Feasibility Analysis and Implementation Plan for a Monterey Bay Area 511 Traveler Information System for an amount not to exceed $150,000.

SUMMARY

A Feasibility Analysis and Implementation Plan to consider a 511 traveler information system for the Monterey Bay Area is being conducted as a joint project between the RTC and the Transportation Agency for Monterey County (TAMC). The Evaluation Committee, RTC and TAMC staff recommend that the RTC contract with ICx Transportation to prepare a Feasibility Analysis and Implementation Plan for a 511 Traveler Information System for an amount not to exceed $150,000.

Attachments
1. Resolution authorizing a consulting agreement with ICx
2. 511 Plan Scope of Work

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RESOLUTION NO.

Adopted by the Santa Cruz County Regional Transportation Commission
on the date of February 3, 2011
on the motion of Commissioner
duly seconded by Commissioner

A RESOLUTION AUTHORIZING THE EXECUTIVE DIRECTOR
TO EXECUTE A CONTRACT WITH THE ICx TRANSPORTATION GROUP FOR A
MONTEREY BAY AREA 511 TRAVELER INFORMATION SYSTEM
FEASIBILITY ANALYSIS AND IMPLEMENTATION PLAN

WHEREAS The Santa Cruz County Regional Transportation Commission (RTC) and the
Transportation Agency for Monterey County (TAMC) received a $259,210 Caltrans
Planning grant to perform public outreach and prepare a Feasibility Analysis and
Implementation Plan for a Monterey Bay Area 511 Traveler Information System (The
511 Plan); and

WHEREAS A portion of the funding for this project ($150,000) is designated for
contracting with a consultant to prepare a Feasibility Analysis and Implementation Plan
for a Monterey Bay Area 511 Traveler Information System (The 511 Plan); and

WHEREAS, through a competitive bid process, an evaluation committee comprised of
staff from RTC, TAMC, and Caltrans recommend The ICx Transportation Group to
prepare The 511 Plan.

THEREFORE, BE IT RESOLVED BY THE SANTA CRUZ COUNTY REGIONAL
TRANSPORTATION COMMISSION THAT:

1. The Executive Director is hereby authorized to negotiate and execute an
   agreement with The ICx Transportation Group for the Monterey Bay Area 511
   Traveler Information System Feasibility Analysis and Implementation Plan; and

2. The Executive Director is further authorized to make amendments to the
   agreement as long as they are within the adopted RTC budget.

AYES: COMMISSIONERS

NOES: COMMISSIONERS

ABSTAIN: COMMISSIONERS

ABSENT: COMMISSIONERS
Mark Stone, Chair

ATTEST:

________________________
George Dondero, Secretary

Distribution:
RTC Fiscal
The ICx Transportation Group
Sr. Transportation Planner-TS

\RTCSERV2\Shared\RESOLUTION\2011\RES0211\511-ConsContRFS.doc
Attachment 2

Scope of Work

MONTEREY BAY AREA 511 TRAVELER INFORMATION SYSTEM
FEASIBILITY AND IMPLEMENTATION PLAN

DESCRIPTION

The Santa Cruz County Regional Transportation Commission (RTC) and the Transportation Agency for Monterey County (TAMC) received a Partnership Planning Grant from the California Department of Transportation to conduct a Monterey Bay Area 511 Traveler Information System Feasibility and Implementation Plan, referred to hereafter as The 511 Plan. The 511 Plan is needed to determine the feasibility of establishing a traveler information system for the region, and to appropriately set the functional requirements to design and implement a comprehensive, centralized, and multi-modal traveler information system to serve the Monterey Bay Area.

As envisioned, such a system could provide up-to-date transportation information including: real-time roadway traffic conditions and incident information, transit route and schedule information, carpooling and bicycling information, and emergency notices, to visitors, residents, businesses, and commuters. The information would be accessed through one easy to remember phone number, a one-stop shop website, and mobile devices. The information could also be tailored to individual needs using personalized trip planning tools and customized transportation notices to subscribers who opt into this service.

Project Goals

The 511 Traveler Information Feasibility and Implementation Plan must be designed in accordance with the following goals which are consistent with both Federal and State Transportation Planning Goals (See Attachments A-1 and A-2).

1. Increase customer satisfaction with the transportation system by providing easy access to comprehensive, real-time and multi-modal information in the Monterey Bay Area;

2. Optimize use of the existing transportation infrastructure thereby reducing peak period traffic congestion;

3. Foster sustainability, improve air quality, and lower greenhouse gas emissions by reducing vehicle miles traveled and increasing the use of sustainable transportation options;
4. **Enhance economic benefits** across the region by moving more residents, visitors, and goods on existing facilities in a shorter amount of time;

5. **Apply and leverage advances in technology** to distribute transportation information quickly, efficiently and economically to large numbers of people simultaneously; and

6. **Build public-private partnerships and improve interagency coordination** among entities dealing with various parts of the transportation system by sharing information, adding value to each other’s services and improving regional connections.

Ensuring the safety and security of people using the transportation network and the 511 system, is a key consideration in any traveler information system designed to implement these goals. Additional goals may be identified through the process of developing The 511 Plan.

**SCOPE OF CONSULTANT SERVICES**

To determine the feasibility of a 511 Traveler Information System and to develop an Implementation Plan, the Santa Cruz County Regional Transportation Commission, in partnership with the Transportation Agency of Monterey County, plans to contract with a qualified consultant or consulting team to provide the services and products identified in this Scope of Work. This plan is intended to provide the information necessary to design and build a 511 traveler information system that is best suited to serve Monterey and Santa Cruz Counties. This plan should also be designed to allow participation in 511 by San Benito County at a future date and to coordinate with San Benito Council of Governments on the transit portion of this plan. The consultant is required to be objective in their analysis and not to propose an alternative that gives preference to a build scenario or service that only the selected consultant can provide.

The consultant shall apply a systems engineering design approach developed by the California Division of the Federal Highway Administration and the California Department of Transportation, Division of Research and Innovation (Figure 1). This approach is documented in the *Systems Engineering Guidebook for Intelligent Transportation Systems, 2009* (http://www.fhwa.dot.gov/cadiv/segb/files/segbversion3.pdf). Work performed under this contract also needs to be consistent with the Regional Intelligent Transportation System (ITS) Architecture and satisfy the requirements of the new Section 1201 Rulemaking regarding copyright protections.
Figure 1: Systems Engineering “V” Diagram

The intent of this scope is to get progress reports by task as work on The 511 Plan proceeds. A set of deliverables is outlined under each task. Interim reporting is required for effective communication between consultant and the project team. The project schedule can be found in Attachment A-3. Key milestones include the completion of the Feasibility Study and completion of the Implementation Plan.

PART I: Evaluate the Feasibility of a Monterey Bay Area 511 System

Consultant shall evaluate and determine the feasibility of deploying a 511 traveler information system in the Monterey Bay Area. The feasibility analysis, also referred to as the concept exploration in the systems engineering design approach, shall be based on, but not limited to, the following:

- The level of interest and demand for the information from various potential user groups including, but not limited to, residents, visitors and businesses
- The availability of data to support a 511 system
- The sustainability/longevity/scalability of the system
- The availability of funding and potential revenue streams to support development, ongoing operation and marketing
- The availability and quality of existing traveler information resources that provide similar functions and how a local 511 system may compete with, duplicate, complement or incorporate such services
- Support from the local leaders and partner agencies for system deployment

The objectives of the Feasibility Analysis/Concept Exploration are to:

- Identify the superior, most cost-effective and usable 511 system model and concept for our region and document alternative systems with a clear rationale for the recommended selection
- Verify the project feasibility and identify risks
- If a 511 system is deemed feasible, garner support and necessary approvals for the recommended alternative
The Feasibility Analysis/Concept Exploration will be used to refine:

- Problem statements and opportunities
- Project needs, goals, and objectives

The key activities of the Feasibility Analysis/Concept Exploration are to:

- Define evaluation criteria
- Perform initial risk analysis
- Identify alternative 511 system concepts
- Evaluate alternatives and document results
- Present recommended 511 system concept

The Feasibility Analysis/Concept Exploration shall include, but is not limited to:

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**TASK 1: Define Problems, Needs, Goals and Objectives**

Consultant shall work with the project team to clearly define and quantify the problems and opportunities that will be addressed by this project. RTC, TAMC and consultant shall meet at beginning of project to refine problem statements and project goals and define project objectives.

Problems identified, but not limited to, include:

- Recurring and non-recurring traffic congestion and its related impacts
- Traveler frustration due to lack of adequate and timely multi-modal information
- Economic impacts due to time wasted in traffic
- Environmental impacts due to transportation and the need to address new GHG requirements
- Lack of centralized information and coordination
- Inefficient and labor intensive delivery systems to address transportation information needs

Factors for establishing needs, goals and objectives should include, but are not limited to:

- Information about 511 usage in other regions and the resulting improvements in traffic congestion, environmental degradation, and customer satisfaction
- Evaluating the level of interest and demand for traveler information from the residents, visitors and businesses
- The availability of existing traveler information resources that provide similar functions

In fall 2010, a survey was performed by RTC and TAMC to assess the level of interest and demand for a 511 system from residents, visitors, and businesses of
the Monterey Bay Area. Results from this survey and stakeholder meetings will be analyzed by the consultant as one basis for assessing need. The sponsoring agencies will continue to do primary outreach to users and community groups with advice from the consultant.

A number of existing resources now provide traveler information. The consultant shall provide an inventory of other systems and their function, strengths and limitations as part of the needs assessment for a 511 system.

**Deliverable 1:** Problem statements, needs, goals and objectives including supporting evidence and target markets

**Deliverable 2:** Analysis of the 511 survey and stakeholder input

**Deliverable 3:** Inventory of other traveler information services already available in the Monterey Bay Area

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**TASK 2: Provide Inventory of Data and Data Gaps for Monterey Bay Area**

The consultant shall provide a thorough inventory of existing data in Santa Cruz and Monterey Counties and, as relevant, via neighboring 511 systems, the contact person and agency responsible for each data source, its format, accuracy and the ease with which each data source can be integrated and delivered through a 511 system. Inventory should include traffic, incidents, transit, bicycling, construction and special events as well as a wide range of Transportation Demand Management support services including rideshare, locations and access to car-sharing, bike lockers, park and ride lots, and emergency ride home programs. This inventory should include the opportunities and constraints to obtaining and using this data. Gaps in data shall be identified and the consultant shall make recommendations on ways to collect and/or obtain the necessary data for an effective, multi-modal traveler information system.

**Deliverable 4:** A matrix illustrating the inventory of currently available data including: data format, its ability to be obtained and used, an assessment of the data’s accuracy, its ability to be fused into an integrated 511 system and exchanged with neighboring 511 systems, the frequency with which the data changes, if updated data can be transmitted automatically or will regular inquiries and/or follow-up be needed by 511 staff, how would the data be collected, costs to build the connection and maintain it, the responsible agency or business and office within that organization providing the data, and contact information.

**Deliverable 5:** An inventory of data gaps and suggestions for what data should be collected and/or obtained to make the system more complete, accurate and reliable

**Deliverable 6:** Any identified costs and potential opportunities (funding, partnerships, etc.) associated with procuring and maintaining missing data

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**TASK 3: Define Evaluation Criteria**

Consultant shall work with the project team to determine the evaluation criteria for assessing the best alternative to address the stated problems. The evaluation
criteria will consider cost, as well as any other constraints that will limit the acceptable alternatives. The evaluation criteria should also consider how a 511 system would compete with, duplicate, complement, incorporate or replace existing traveler information resources.

**Deliverable 7: Evaluation criteria**

**TASK 4: Define Risk and Barriers**

Define potential risks and challenges that may affect the outcome of the project and any mitigation steps and opportunities that may lessen the risks associated with this project.

**Deliverable 8: Potential risks and challenges and any steps that may be taken to mitigate or lessen these**

**TASK 5: Outline and Describe the Components of a 511 Traveler Information System**

Include the best practices used in 511 systems that are up-to-date with current technology, market conditions and partnerships. These components include, but are not limited to:

1. **511 System Guiding Documents**
   a. Strategic Vision
   b. Business Plan (including revenue and funding)
   c. Partnership and/or collaboration agreements
   d. Other

2. **Market Research/Marketing**
   a. Outreach
   b. Marketplace & consumer research
   c. Customer Comment Management
   d. Marketing Plan that includes no-cost and low-cost strategies
   e. Advertising and promotion
   f. Revenue generation
   g. Co-marketing and other creative alliances with public and private entities

3. **Performance Measures (all media not just call volumes)**
   a. Progress towards system goals and objectives
   b. Usage rates, tracking and monitoring
   c. User satisfaction

4. **Information Coverage - Data Collection, Sources and Quality**
   a. Traffic speed
   b. Roadway incidents
   c. Construction activity
d. Roadway conditions
e. Driving times
f. Special events
g. Transit – Schedules, trip planning and real time information
h. Rideshare information
i. Park and ride lot information
j. Parking availability
k. Truck/freight information including agriculture
l. Bicycling and pedestrian information
m. Airport information
n. Emergency information (including use of the 511 system for floodgate messages, website delivery and priority use of the eAlert system)
o. Weather Information
p. Tourism

5. Data Processing and Integration
   a. Standards for data processing, integration, accuracy and timeliness of travel-related information including traffic speed data from various sources, incidents, construction, camera feeds, etc...
   b. Standards for data processing, integration and accuracy of real-time transit data
   c. Standards for data quality assurance and control and systems in place for timely corrections (for example that incidents are reporting correctly on the IVR and on the web, that recordings are phonetically correct, aliases understood, and any changes or corrections are made in a timely manner).

6. Data Dissemination Methods
   a. 511 Phone System - Interactive Voice Response (IVR) system (English and Spanish) designed to be accessible to people with disabilities and to provide automatic, dynamic traffic and transit departure information and other information as listed above under “Task 5, Item 4. Information Coverage”.
   b. Call Routing – Landline and Wireless
   c. 511 Website with Spanish language translation and accessibility features for people with disabilities
   d. Traffic/Transit data feeds
   e. Mobile device applications and/or mobile websites
   f. Customized Info and Alerts – texting, email, Twitter, Facebook, automated calls from 511 system to subscriber, other

7. Hosting Facilities
   a. Phone and IVR System
   b. Website and mobile applications
   c. Databases
   d. Data processing and integration

8. Testing, Soft Launch and Deployment
9. Operations and Maintenance
   a. Data Collection System Maintenance and Operations Plan
      i. Operating and maintaining communications infrastructure
      ii. Maintaining the data, database and website content
      iii. Strategy for upgrades/enhancements and replacements for hardware and software
      iv. Staffing requirements
   b. Security Safeguards

**Deliverable 9:** Report describing 511 system components and best practices

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**TASK 6: Identify Alternative Models**

Identify a range of potential models for a 511 system for Monterey Bay Area that will solve the identified problems. Model options should include, but are not limited to: building a new system from scratch, franchising another system, and/or contracting with a consultant who operates multiple 511 systems. One alternative should include bundling existing traveler information services into a 511 system and filling in data gaps. Another alternative should be to “do nothing” which provides a basis for comparison with other alternatives. Alternative models based on franchising another system should include the particular systems that are being considered.

**Deliverable 10:** Description of alternative models

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**TASK 7: Evaluate Alternatives**

Perform a systematic analysis of the alternatives by applying evaluation criteria to each alternative. The evaluation criteria should measure the effectiveness towards meeting the project goals, such as: benefits to the transportation network and to the environment; economic impacts, particularly on the region’s major industries, including but not limited to agriculture and tourism; the costs to build, operate and maintain; the ability of RTC and TMC to deliver higher quality, more efficient and economical transportation information services; and sustainability. In addition, the evaluation should address the risks associated with each alternative. A cost-benefit analysis is a key aspect of the evaluation. The alternatives analysis should include the pros, cons and how to mitigate for close proximity to a state of the art 511 system in the San Francisco Bay Area.

**Deliverable 11:** Analysis of the various alternatives

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**TASK 8: Economic Analysis**

The economic analyses will identify potential funding sources and include an analysis of strategies for generating revenue and/or offsetting costs that would be
the most appropriate and applicable to the Monterey Bay Area. This analysis will also include the life-cycle costs and benefits of both the project and the current method of delivering traveler information. The analysis should consider the sustainability of a 511 system.

**Deliverable 12:** Provide description and findings of economic analyses conducted

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**TASK 9: Document Results**

The feasibility analysis/concept exploration will establish whether or not an investment in a 511 project is feasible. If determined feasible, the reasons for undertaking the project will be defined and its costs and benefits will be analyzed.

**Deliverable 13:** A Feasibility Analysis/Concept Exploration Report is a key milestone for this project. (See Attachment A-3, Project Schedule, for delivery date.) At a minimum, it should contain the following:

1. A description of the problems that the 511 system is intended to address
2. The project objectives and evaluation criteria
3. The economic and risk analyses of each alternative and the reasons for rejecting the alternatives not recommended
4. A description of the recommended alternative including the major system features and resources that will be used
5. An economic analysis of the funding sources, life-cycle costs and benefits of the project and the life-cycle costs and benefits of the current method of delivering traveler information

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**PART II: Develop an Implementation Plan for a 511 System as Determined by the Feasibility Analysis in PART I**

Upon successful completion of the Feasibility Analysis and the finding that a 511 system is feasible for the Monterey Bay Area, the project will proceed to the implementation plan portion of the project.

The Implementation Plan required will include the Concept of Operations and the System Requirements as defined in the *Systems Engineering Guidebook for Intelligent Transportation Systems, 2009* developed by FHWA and Caltrans. The results of the Feasibility Analysis in Part I will determine the specific tasks to be performed under the Concept of Operations and System Requirements in the Implementation Plan.

If a 511 system is determined to be feasible for the Monterey Bay area, the outcome of the Concept of Operations and the System Requirements will provide the necessary detailed information to move into the design and build phase of a 511 system following the end of this contract. Telephone carrier agreements,
integration with surrounding 511 systems including wireless cell routing, and other important details will need to be ascertained in the Implementation Plan if the project is found to be feasible.

**TASK 10: Refine Final Scope of Work and Schedule for Part II: Implementation Plan**

Based on the findings of the feasibility study, consultant shall work with the project team to refine the draft scope of work, schedule and task budget of Part II to result in an Implementation Plan that provides the information necessary to design and build a 511 system for the Monterey Bay Area. The total project budget will not change from the amount agreed upon in the contract between RTC and consultant, but the budget associated with each task in the Implementation Plan may change. Draft versions of the scope of work, schedule and task budget will be completed and sent to the RTC Project Manager for approval. Upon approval by the RTC, the consultant will finalize the project scope of work and schedule, including detailed deliverables and a clearly identified deliverable-based budget by task.

**Deliverable 14:** Draft revised scope of work, schedule and task budget for Part II: Implementation Plan  
**Deliverable 15:** Final detailed scope of work, schedule and task budget for Part II: Implementation Plan

**TASK 11: Develop the Concept of Operations**

The Concept of Operations is a foundation document that frames the overall system and sets the technical course for the project. The objectives of a Concept of Operations are to:

- Identify user needs for multiple transportation modes and their preferences for system features and capabilities  
- Identification of target markets  
- Secure agreements among key stakeholders and partners about interrelationships and roles and responsibilities for the system  
- Develop shared understanding by system owners, operators, maintainers, and developers on how the system is organized and functions  
- Formulate a strategy for informing users about the 511 system  
- Obtain agreement on key performance measures to evaluate progress towards meeting the project goals

The Concept of Operations requirements shall include, but are not limited to:

1. The preferred components and capabilities of a multi-modal 511 System for the Monterey Bay Area (from the best practices identified in Deliverable 9, Task 5).  
2. The key stakeholder and partner roles, responsibilities and necessary agreements
3. Agreements for securing the 511 number for the Monterey Bay Area, for switching and routing with telecommunication carriers, and ensuring interconnectivity with neighboring 511 systems
4. A System Validation Plan that defines the performance measures that will be used to determine how system performance and project success will be measured based on the intent of the project.
5. A general system description
6. New resources required for implementation

**Deliverable 16: Concept of Operations Document**

**TASK 12: Develop System Requirements**

In the system requirements, the preferred components and capabilities of the 511 system identified in the Concept of Operations are reviewed, analyzed, and transformed into verifiable requirements that define *what* the system will do, but not *how* the system will do it. The objectives are to develop a validated set of system requirements that meet transportation user needs.

The development of system requirements includes, but is not limited to:

- Eliciting requirements
- Analyzing requirements and prioritizing with project team, key stakeholders and partners
- Documenting requirements
- Validating requirements by checking for consistency, accuracy and completeness
- Managing requirements by tracking to make sure requirements are met over the life span of the system

The system requirements specifications should include, but are not limited to, requirements that define the following:

- Geographic boundaries of the system with interfacing systems clearly defined
- Reliability, availability, usability and accuracy of system and data
- Delivery response time and system capacity
- Monitoring, tracking, and evaluation system to ensure data consistency and accuracy, software and hardware maintenance and to track system usage
- Dissemination methods that are customized to meet the needs of the Monterey Bay Area (includes language and access considerations)
- Telecommunication switching and routing
- Staffing, human factors, safety, security and privacy
- Locations for servers, data storage and delivery equipment
- Operations and maintenance
- Accessibility and flexibility of system to be updated and expanded
- Transportation user awareness, use and satisfaction
- Life-span of system
- Cost effectiveness of system to meet requirements
- Revenue generation by sponsorship goals
- Emergency capabilities
- ADA requirements
- Constraints

**Deliverable 17: System Requirements Specifications**

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**Task 13: Phasing Plan**

Consultant shall design and recommend a phasing plan that would allow the project to be implemented in stages based on priorities and funding.

**Deliverable 18: Phasing Plan for a 511 Traveler Information System for the Monterey Bay Area**

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**Task 14: Marketing Plan**

Consultant shall design a marketing plan that considers the specific qualities of the Monterey Bay Area media market, identifies outreach methods appropriate for the region, and possible strategies for generating revenue that take advantage of the local business environment.

**Deliverable 19: Marketing Plan for a 511 Traveler Information System for the Monterey Bay Area**

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**Task 15: Legal Structure**

Consultant shall assess the necessary legal structure for implementing and operating a Monterey Bay Area 511 Traveler Information System including oversight, management and stakeholder commitments.

**Deliverable 20: Report outlining legal considerations of a 511 Traveler Information System for the Monterey Bay Area**

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**Task 16: Define Scope of Work Required to Design, Build, Market, Maintain and Operate the Recommended 511 System**

**Deliverable 21: Provide a Scope of Work that will be required to design, build, market, maintain and operate the recommended 511 System**

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**Task 17: Define Business Plan that Estimates the Time and Costs Required to Design, Build, Market, Maintain and Operate the Recommended 511 System**

This plan will provide an estimate of the annual operation and maintenance costs, an estimate for how often the system needs to be upgraded and replaced and a
capital budget for upgrades and replacement. The projected schedule to design and build the recommended system shall also be outlined in this plan.

**Deliverable 22:** Business Plan with estimates of time and costs required to design, build, market, maintain and operate the recommended 511 system

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**TASK 18:** Provide a “watch list” of new technologies that may be helpful in deploying a 511 system that responds to the needs of the users

Technologies useful for 511 Traveler Information Systems are constantly evolving. Since significant changes in technology and market conditions may occur during the period in which the 511 Plan is being completed, a list of new developments to watch and potentially consider is needed.

**Deliverable 23:** “Watch list” of new technologies

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**TASK 19:** Document Results of Implementation Plan (Administrative Draft)

**Deliverable 24:** An Implementation Plan is a key milestone for this project. (See Attachment A-3, Project Schedule, for delivery date.) At a minimum, it should contain the following:

1. Concept of Operations
2. System Validation Plan
3. System Requirements Specifications
4. Phasing Plan
5. Marketing Plan
6. Legal Considerations Report
7. Scope of Work for designing and building a 511 system
8. Business Plan with Cost Estimates and Projected Schedule
9. Watch List of New Technologies

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**TASK 20:** Final Feasibility Analysis and Implementation Plan

**Deliverable 25:** Deliver Final Feasibility Analysis and Implementation Plan including one administrative draft, one public draft for review by members of the public and technical advisors, and one final document (See Attachment A-3, Project Schedule, for delivery date.)

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**TASK 21:** Public Meetings and Workshops

The RTC and TAMC staff will be responsible for scheduling the time, date and place of meetings with various organizations, elected officials and committees; providing public notice, and providing a representative to each meeting. The consultant shall make presentations for the following groups to collect input and present findings:
1. Monterey Bay Area 511 Stakeholder Group: Consultant shall make presentations to and receive comments from the 511 key stakeholder group. The consultant shall participate in at least three (3) of these meetings.

2. Elected officials and Committees: Consultant shall present the final findings and recommendations for the Feasibility and Implementation Plan covered by this Request for Proposals to various City and County elected officials and committees. The consultant shall anticipate making four (4) presentations.

**Deliverable 26:** Participation in meetings and presentations
## RSTP Exchange Program: 722000

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<tr>
<td>15 Capitola Road Traffic Calming/Improvement</td>
<td>368,000</td>
<td>368,000</td>
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<tr>
<td><strong>City of Capitola Subtotal</strong></td>
<td><strong>158,924</strong></td>
<td><strong>158,924</strong></td>
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</tr>
<tr>
<td>19 Broadway-Brommer Bike/Ped Path</td>
<td>62,000</td>
<td>62,000</td>
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<tr>
<td>20 West Cliff Dr. Rehab (Swanton to Almar)</td>
<td>97,924</td>
<td>97,924</td>
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<tr>
<td><strong>City of Santa Cruz Subtotal</strong></td>
<td><strong>159,924</strong></td>
<td><strong>159,924</strong></td>
<td>-</td>
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</tr>
<tr>
<td>23 City of Scotts Valley</td>
<td>350,000</td>
<td>350,000</td>
<td>-</td>
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</tr>
<tr>
<td>24 Whispering Pines Sidewalk</td>
<td>275,000</td>
<td>275,000</td>
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<tr>
<td>25 Bean Creek Road Sidewalks</td>
<td>75,000</td>
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<tr>
<td><strong>City of Scotts Valley Subtotal</strong></td>
<td><strong>350,000</strong></td>
<td><strong>350,000</strong></td>
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<tr>
<td>29 City of Watsonville</td>
<td>751,000</td>
<td>751,000</td>
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<tr>
<td>29 Freedom Blvd Rehab (High - Broadis)</td>
<td>751,000</td>
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<tr>
<td><strong>City of Watsonville Subtotal</strong></td>
<td><strong>751,000</strong></td>
<td><strong>751,000</strong></td>
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<tr>
<td>32 County of Santa Cruz</td>
<td>2,278,596</td>
<td>2,278,596</td>
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<tr>
<td>33 Corralitos Road Left Turn</td>
<td>278,000</td>
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<tr>
<td>34 Green Valley Rd/Holohan Dr/Airport Blvd Intersection</td>
<td>810,000</td>
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<td>35 State Park Drive Improvement</td>
<td>587,000</td>
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<tr>
<td>36 Cabalasas Road Bike/Pedestrian</td>
<td>250,000</td>
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<td>37 Graham Hill Road Safety Project</td>
<td>160,707</td>
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<td>38 Lump Sum Road Repairs (ARRA2)</td>
<td>149,000</td>
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<td>39 Davenport Road Repairs</td>
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<td><strong>County of Santa Cruz Subtotal</strong></td>
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<td><strong>2,278,596</strong></td>
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<tr>
<td>43 South County Based Community Traffic Safety Coalition</td>
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<tr>
<td><strong>CTSC Subtotal</strong></td>
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<tr>
<td>46 SCRTTC</td>
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<tr>
<td>47 Go Green-Ecology Action Program</td>
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<tr>
<td>49 Bike Route Signage</td>
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<tr>
<td>50 Highway 1 Soquel-Morroisey Auxiliary Lanes</td>
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<tr>
<td>51 Highway 1 HOV Lanes</td>
<td>1,450,000</td>
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<tr>
<td>52 Santa Cruz Branch Rail Line Acquisition</td>
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<td><strong>SCRTTC Subtotal</strong></td>
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<td><strong>2,346,000</strong></td>
<td><strong>250,000</strong></td>
<td>CTC requirement to secure state funding for project</td>
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<td>55 Unappropriated Revenues:</td>
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<td>959,437</td>
<td>(250,000)</td>
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<td><strong>Unprogrammed Funds</strong></td>
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<td><strong>959,437</strong></td>
<td><strong>(250,000)</strong></td>
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<td><strong>TOTAL EXPENDITURES</strong></td>
<td><strong>7,800,957</strong></td>
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**Note:** 6,841,520