



RESOLUTION AWARDING THREE-YEAR PROFESSIONAL SERVICES CONTRACTS, WITH AN OPTION TO EXTEND FOR TWO ADDITIONAL ONE-YEAR PERIODS, TO WSP USA, INC. AND RESOURCE SYSTEMS GROUP, INC. IN A COMBINED AMOUNT NOT TO EXCEED \$400,000 FOR ON-CALL MODELING SERVICES, AND AUTHORIZING THE EXECUTIVE DIRECTOR TO NEGOTIATE CONTRACT PAYMENT TERMS AND NON-MATERIAL CONTRACT TERMS AND CONDITIONS

WHEREAS, The Transportation Authority relies on on-call consultants to support the Technology, Data, and Analysis Division with various services related to travel modeling and analysis; and

WHEREAS, On-call modeling services include assistance with travel demand model development, dynamic traffic assignment modeling, project-level modeling assistance, data collection, traffic operations analysis and data warehousing and visualization in support of the Congestion Management Program, Connect SF, the San Francisco Transportation Plan update, the Freeway Corridor Management Study, Travel Demand Management strategy evaluation, Transportation Network Company research and numerous other local and regional studies; and

WHEREAS, Given the wide range of desired proficiencies and experience, the amount and complexity of the Transportation Authority's work program, and occasional conflicts of interest or availability that arise for specific efforts, staff propose to contract with two consultant teams with which the Transportation Authority may call upon on a task order basis; and

WHEREAS, On September 5, 2017, the Transportation Authority and the Treasure Island Mobility Management Agency (TIMMA) issued a Request for Qualifications (RFQ) for on-call modeling services to support the Transportation Authority's work program over the next three years; and



WHEREAS, The Transportation Authority received three Statements of Qualifications (SOQs) in response to the RFQ by the due date of October 4, 2017; and

WHEREAS, A selection panel comprised of San Francisco Municipal Transportation Agency and Transportation Authority staff evaluated the SOQs based on qualifications and other criteria identified in the RFQ; and

WHEREAS, Interviews were not conducted nor deemed necessary due to the quality of the SOQs and the familiarity of staff with previous work performed by the majority of firms who submitted SOQs; and

WHEREAS, Based on the competitive process defined in the evaluation criteria of the RFQ document, the selection panel recommended awarding contracts to the two highest-ranked firms: WSP USA Inc. (WSP) and Resource Systems Group, Inc. (RSG); and

WHEREAS, The selection panel recommended that the Transportation Authority and TIMMA both award contracts to the same two firms as the agencies' share modeling staff resources which will enhance staff efficiency in issuing task orders and supporting project needs; and

WHEREAS, The Transportation Authority's portion of the scope of work described in the RFQ is anticipated in the Transportation Authority's adopted Fiscal Year (FY) 2017/18 work program and budget through relevant projects and studies, and sufficient funds will be included in future fiscal year budgets to cover the cost of these contracts; and

WHEREAS, The professional services will be funded by a combination of federal Surface Transportation Planning grants, federal and/or state grants from Caltrans and the Metropolitan Transportation Commission, local agency contributions and Prop K sales tax funds; and

WHEREAS, At its October 25, 2017 meeting, the Citizens Advisory Committee considered and unanimously adopted a motion of support for the staff recommendation; now, therefore, be it

RESOLVED, That the Transportation Authority hereby awards three-year professional



services contracts, with an option to extend for two additional one-year periods, to WSP and RSG in a combined amount not to exceed \$400,000 for on-call modeling services; and be it further

RESOLVED, That the Executive Director is hereby authorized to negotiate contract payment terms and non-material contract terms and conditions; and be it further

RESOLVED, That for the purposes of this resolution, “non-material” shall mean contract terms and conditions other than provisions related to the overall contract amount, terms of payment, and general scope of services; and be it further

RESOLVED, That notwithstanding the foregoing and any rule or policy of the Transportation Authority to the contrary, the Executive Director is expressly authorized to execute agreements and amendments to agreements that do not cause the total agreement value, as approved herein, to be exceeded and that do not expand the general scope of services.

Attachment:

1. Scope of Services
2. Work Assignments for Current On-Call Modeling Contract



The foregoing Resolution was approved and adopted by the San Francisco County Transportation Authority at a regularly scheduled meeting thereof, this 5th day of December 2017, by the following votes:

**Ayes:** Commissioners Breed, Cohen, Fewer, Peskin, Ronen and Tang (6)

**Absent:** Commissioners Farrell, Kim, Safai, Sheehy and Yee (5)

 12-18-17

Aaron Peskin  
Chair

Date

ATTEST:  12/18/17

Tilly Chang  
Executive Director

Date

## Attachment 1 – Transportation Authority Scope of Services

The Transportation Authority seek consultant teams with expertise in multimodal activity-based modeling, dynamic traffic/transit assignment, land use modeling, and data collection, analysis, visualization and warehousing in complex urban settings. It is the intent of the Transportation Authority to pre-qualify multiple consultant firms and/or teams of firms in the major tasks described below that will collectively provide the best overall service packages, inclusive of fee considerations, on an as-needed basis for modeling projects through the issuance of Task Orders. The Transportation Authority will separately contract with the selected teams for a three-year term, with an option to extend, which may be exercised at the discretion of the Transportation Authority, for two additional one-year periods (up to a total of five years). Consultant firms will be pre-qualified to perform services for the Transportation Authority. The Transportation Authority has budgeted \$400,000 for these contracts for the first three-year term, with the value of subsequent one-year extensions to be determined by future Transportation Authority budgets.

**Travel Model Technical Assistance Required:** As noted above, it is the intent of the Transportation Authority to contract with one or more modeling consultant teams, with whom the Transportation Authority shall select prospective consultants on a Task Order basis for modeling development and application projects. The establishment of contracts with one or more consultant teams will enable the Transportation Authority to enlist the services of a broad range of modeling specialists on an on-call, as-needed basis. As needs arise, the Transportation Authority will share outline scopes of work with lead firms to obtain more detailed team task order proposals (scopes, schedules/availability, personnel, budgets). The Transportation Authority will assign tasks on these criteria as well as conflicts of interest, if any. No selected team is guaranteed a Task Order under this contract.

A list of six general areas of expertise sought in prospective teams is provided below, lettered A through F. The Transportation Authority will favorably consider teams that have capabilities in all six areas of expertise, but specialized teams may also submit responses for one or more areas of expertise that match the team's capabilities. Teams must declare which of these areas of expertise they are qualified to support.

### A. Activity-Based Travel Model (“ABM”) Development

- Developing and managing travel model source code using git/github version control
- Update individual subcomponents of SF-CHAMP to provide enhanced analytic capabilities
- Enhance local-area validation for specific corridors as project studies arise; for example, improve the peninsula roadway validation in support of San Francisco's Freeway Corridor Management Study
- Support estimation and calibration of DaySim subcomponents within SF-CHAMP
- Evaluate the latest technologies in activity-based travel models around the globe, and prioritize next steps for continuing the incremental advancement of SF-CHAMP capabilities based on the needs of planners in San Francisco
- Evaluate areas for improving computational efficiency, legibility, and maintainability
- Develop comprehensive SF-CHAMP model documentation
- Further develop the Transportation Authority's Quality Assurance/Quality Control (QA/QC) process for network coding
- Economic, land use, and demographic forecasting to support ABM

## **Attachment 1 – Transportation Authority Scope of Services**

### **B. Dynamic Traffic Assignment (“DTA”) and/or Dynamic Transit Assignment**

- Update the Transportation Authority’s DTA model and expand the network regionally
- Update regional activity-based model and DTA demand and supply integration
- Validate and apply the DTA model for various projects
- Support continuing development of fast-trips dynamic transit assignment model

### **C. Model Applications**

- Provide modeling support for various upcoming ABM and/or DTA model applications
- Develop, code, run, and provide insight on modeling scenarios
- Update Network Wrangler project files based on recently adopted Plan Bay Area 2040 and a forthcoming refinement of MTC’s zone system and network (as part of Travel Model Two)

### **D. Data Collection and Analysis**

- Traffic data collection and surveying
- Collection and analysis of passively collected and/or location-based data

### **E. Traffic Operations Analysis**

- Evaluate roadway operations
- Conduct traffic microsimulation analysis
- Analysis and forecasting of toll roads, managed lanes, transportation pricing, and travel demand management policies
- Advise on transportation facility design regarding operational performance and geometric or technological constraints

### **F. Data Warehouse and Visualization**

- Data warehouse system development
- Data warehouse maintenance
- Graphical representation, mapping, and visualization
- Web-based data presentation and interactive tools
- Develop data delivery methods (i.e. open application programming interfaces (APIs)) for public data per open data and Gov 2.0 ideals

The above-mentioned areas of expertise and example task types are representative of needs in the coming three years – additional undetermined task types are anticipated to be needed and not all task types listed above will necessarily be produced under this contract in the next three years.

**Attachment 2**

**On-Call Modeling Work Assignments (2013 – 2017)**

<b>Prime Consultant</b>	<b>Subconsultant(s)</b>	<b>Work Assignment Description</b>	<b>Amount</b>
WSP USA Inc. (formerly Parsons Brinckerhoff, Inc.)	Resource Systems Group, Inc., Transportation Analytics	Treasure Island Mobility Management Program	\$261,752
	Resource Systems Group, Inc.	San Francisco Parking Study Travel Demand Forecasts	\$125,655
	Resource Systems Group, Inc.	BART Incentives Evaluation	\$93,292
	None	Geary Bus Rapid Transit Environmental Impact Report Modeling	\$8,708
	None	South of Market Ramps Dynamic Traffic Assignment Model Runs	\$3,988
<b>Total Work Assignments Awarded to Date</b>			<b>\$493,395</b>