



**Item #12-9-7
Consent**

SACOG Board of Directors

September 13, 2012

Authorize Sole-Source Contract for SACOG PECAS Integrated Economic Land Use/Transportation Model

Issue: The development and deployment of an economic land use model to improve our regional planning requires the assistance of a consultant.

Recommendation: The Government Relations & Public Affairs Committee recommends that the SACOG Board authorize the Chief Executive Officer to execute a sole source contract in the amount of \$202,000 to HBA Specto, Inc., to complete development of the SACOG PECAS integrated economic land use/transportation model.

Committee Action/Discussion: SACOG recently received a Strategic Growth Council grant of \$300,000 for this project, with \$202,000 for work to be performed by HBA Specto, the sole-source contractor, and \$98,000 for SACOG staff time. Fiscal Year 2012/13 staff time and contract costs were included in the OWP amendment included in this month's committee agenda. This project will be concluded in FY 2013/2014. SACOG staff will perform: early data development tasks, including updating the base year of the model; model testing and validation; and external outreach and coordination with member agency staff. HBA Specto will perform all technical work to complete development of the model, calibration, and training of SACOG staff.

The authority for sole source selection is requested because in 2000 (with follow-up projects in 2002 and 2008) SACOG made a long-term decision and commitment to use the integrated land use/transportation modeling work of HBA Specto. Currently, they are still the only firm which can provide technical support for the PECAS model. The San Diego Association of Governments has a similar relationship to HBA Specto for its PECAS model development, as did Caltrans in partnership with UC Davis on the Statewide PECAS model.

Approved by:

Mike McKeever
Chief Executive Officer

MM:GG:ef

Attachment

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Work Scope and Budget

SACOG PECAS Integrated Economic Land Use/Transportation Model

Since 2010, CTC guidelines for regional transportation planning require the four largest MPOs in the state to build formal micro-economic land use models for use in developing and evaluating future growth scenarios. SACOG has partially developed a model which would meet this requirement, known as the SACOG Production-Exchange-Consumption-Allocation System or "PECAS." Similar models are being developed for the State (by Caltrans), Southern California Association of Governments, and San Diego Association of Governments. This project would complete technical development of SACOG's PECAS, and work with local agencies to determine an appropriate role for PECAS in the next regional growth allocation process.

TASK 1. Update Existing Model Data

SACOG has partially developed a PECAS model for SACOG using a base year of 2005. SACOG staff would update the base year inputs of the model from 2005 to 2008. (Months 1-6 of project).

Deliverable: Complete SACOG PECAS model system, with 2008 base year

TASK 2. Calibration of 2008-Base-Year PECAS

Review, modify, and calibrate the 2008-Base-Year PECAS model (Task 1 product), including basic reasonable-ness checks. Consultant trains SACOG throughout this task (Months 5-15 of project).

Deliverables: functional 2008-Base-Year PECAS and technical documentation on calibration process.

TASK 3. Validation and Sensitivity Testing

Demonstrate reliability and utility of SACOG PECAS through rigorous validation and sensitivity testing, potentially including back-cast testing (Months 8-19 of project).

Deliverables: Year 2008-Base-Year PECAS dataset and documentation of sensitivity test results

TASK 4. Documentation and Training

Prepare overall project documentation with sufficient detail to allow interested potential users to understand model system and critically evaluate the results of model validation, reasonableness checks, sensitivity testing, and back-cast testing. Provide training to SACOG staff and professional staff of member agencies (Months 18-21 of project).

Deliverables: Model documentation and training

TASK D5. External Agency Work

Hold meetings/discussions with professional staff of member agencies for input on overall model system and design and evaluation of testing (including back-cast). Hold meetings/discussions with professional staff and elected officials regarding modifications of growth allocation process to include SACOG PECAS as a new input to the process (Throughout project).

Budget for Project

The table below provides a task-level allocation of costs funded through the SGC grant for the SACOG PECAS development project.

Budget by Task—SGC Grant-Funded Work

SACOG PECAS Integrated Economic Land Use/Transportation Model Development

Tasks	HBA Specto	SACOG
1. Update Existing Model	19,454	27,615
2. Calibration of 2008-Base-Year PECAS	97,268	24,260
3. Validation and Sensitivity Testing	48,634	22,538
4. Documentation and Training	19,454	8,688
5. External Agency Work	9,727	11,887
Direct Costs	<u>7,000</u>	<u>3,000</u>
Total	\$201,535	\$97,987