



Board of Directors Special Meeting
Meeting Date: 5/17/2018
Agenda Item No.: 2018-May-1.

SACOG Board of Directors - Special Meeting

Subject: Approve Overall Work Program Amendment #6

Action

Prepared by: Bruce Griesenbeck

Approved by: James Corless

Attachments: Yes

1. Issue:

Should the Board of Directors approve an amendment to the Overall Work Program (OWP) to add the Big Data Transportation Planning Pilot Project?

2. Recommendation:

Staff recommends that the board approve this amendment to the Overall Work Program.

3. Background/Analysis:

In February, the board approved SACOG's entry into a partnership with the California Air Resources Board (CARB) and the California Department of Transportation (Caltrans) for pilot testing a transportation planning application of big data, and authorized the Chief Executive Officer to negotiate and sign necessary agreements to carry out the pilot effort. For background information, the February staff report to the Board is attached hereto (Attachment A).

In pursuit of this effort, as noted in the February staff report, staff has been working to develop agreements with the CARB and Caltrans to deliver this project. Staff recently learned from Caltrans staff that while it will not be possible to execute agreements for the project, Caltrans has the available funds to commit to the project in FY 2018, if SACOG can amend the funds into its FY 2018 OWP before the end of the fiscal year. For this reason, this item was not presented to the Transportation Committee.

4. Discussion/Analysis:

In order to secure the available Caltrans' funding for this project, staff recommends that the Board adopt a resolution approving Amendment #6 to the FY 2018 OWP, adding \$510,000 for the Big Data for Transportation Planning Pilot Project, with \$400,000 coming from Caltrans. (Attachment B.) The project description for the OWP is included in Attachment C; this description already is included in the proposed FY 2019 OWP/Budget. Staff will follow up to document the funding and SACOG responsibilities through

appropriate agreements.

5. Fiscal Impact/Grant Information:

This action adds \$510,000 in revenues to the FY 18 OWP.

ATTACHMENTS:

Description

Attachment A - February Board Item

Attachment B - Resolution

Attachment C - OWP Description

This staff report aligns with the following SACOG Work Plan goals:

#5 - Establish the sacramento region as an Innovator & Test-Bed for new ideas.



SACOG Board of Directors

Board of Directors Regular Meeting
Meeting Date: 2/15/2018
Agenda Item No.: 2018-February-5.

Subject: Approve Big Data Pilot Project

Consent

Prepared by: Shengyi Gao

Approved by: James Corless

Attachments: No

1. Issue:

Should SACOG partner on pilot testing the use of big data for transportation planning?

2. Recommendation:

The Transportation Committee unanimously recommends that the Board approve SACOG's entry into a partnership with the California Air Resources Board (CARB), and California Department of Transportation (Caltrans) for pilot testing a transportation planning application of big data, and authorize the chief executive officer to negotiate and sign necessary agreements to carry out the pilot effort.

3. Background/Analysis:

"Big data" refers to extremely large data sets that may be analyzed to reveal patterns, trends, and associations, especially relating to human behavior and interactions. Of particular interest for transportation planning is big data such as cell signals, GPS, and location data collected through smart phones and other electronic devices such as in-vehicle navigation systems. Several vendors have begun offering big data products and services targeted to transportation planning agencies. Although the offerings of each vendor vary significantly, the common elements are: estimates of volumes of person or vehicle trips from origin to destination, tabulated by time of day, day of week, etc.; the ability to query trip data for specific information (e.g., all trips using a particular roadway segment at a particular time); and options for mapping the data. Vendor offerings vary in how the confidentiality and privacy of the underlying raw data is protected, and the level of detail for mode of travel and trip purpose. The market for these big data products and services is evolving quickly, with changes occurring frequently in the type of data offered, user interfaces, pricing of data, and services, etc.

4. Discussion/Analysis:

Over the last six months, SACOG organized a review of some of the available big-data-

for-transportation offerings, in collaboration with several local and state agencies, and UC Davis. At the conclusion of this review, Caltrans, the California Air Resource Board, and UC Davis indicated a strong interest in pooling resources to pilot test an application of big data for transportation planning. This group of agencies foresees that big data will be a major tool in understanding and tracking transportation in our region; the question is when public agencies will elect to participate more actively in on-boarding of data and services. This group also believes that though the marketplace is evolving quickly, the products and services currently available are developed enough to merit a serious pilot test.

In order to activate this partnership, a Memorandum of Agreement (MOA) will need to be signed by the participating agencies for purposes of the pilot project. The MOA will include the following components: 1) a statement of goals of the pilot test; 2) definition of roles of each participant in the pilot; and 3) the funding each partner is willing to commit. SACOG would serve as manager of the pilot.

The total cost for the pilot will be based on proposals from vendors. The goal is to acquire an up-to-two-year license providing full access to data and services from the selected vendor to all partners. Based on current discussions with the other partners, the funding commitments from each partner are: SACOG—up to \$200,000 (local funds); Caltrans—up to \$400,000 (federal and state funds); ARB—up to \$110,000 (state funds). UC Davis indicated strong interest but has not committed any funding to join the partnership at this time.

SACOG's funding commitment will come from funds awarded for the Household Travel Survey Project through the Regional/Local funding round by the SACOG Board of Directors in 2015 and from the SAFE Board of Directors in 2016. Staff has reserved \$200,000 of those funds for this Big Data Pilot Project. The big data acquired through the Pilot will augment the detailed, person- and household-level data collected through the Household Travel Survey, and provide a "universe" of travel activity data that will be useful for weighting and expanding the survey data, as well as for independently analyzing current travel patterns in the region.

To minimize the cost and meet the requirements of federally funded projects, SACOG will conduct a competitive procurement through a request for proposal (RFP) process to enter into a contract with the selected consultant.

At the Transportation Committee meeting, staff received direction to take steps to consider and include Sacramento State and other universities as potential partners for funding and implementing projects like this. Staff will contact Sacramento State to inform them of this specific effort, and will do more targeted outreach, such as a formal request for information, for future efforts similar to this project. Additionally, the Transportation Committee requested that the RFP for this project be structured and distributed to encourage responses from local tech companies and start-ups. Staff will work to structure the RFP to achieve this.

5. Fiscal Impact/Grant Information:

The project is a proposed new project in SACOG's 2018 work plan. Existing SACOG

funding from the budget for the household travel survey will be used towards this project.



SACRAMENTO AREA COUNCIL OF GOVERNMENTS

RESOLUTION NO. 49 – 2018

**APPROVING OVERALL WORK PROGRAM AND BUDGET AMENDMENT #6
FOR FISCAL YEAR 2017-18**

WHEREAS, the Sacramento Area Council of Governments (SACOG) is the Metropolitan Planning Organization (MPO) for the Sacramento Metropolitan area and the Yuba City/Marysville Urbanized area, the Regional Transportation Planning Agency (RTPA) for Sacramento, Yolo, Yuba and Sutter counties, the Areawide Clearinghouse for the cities and counties that are signatories of the SACOG Joint Powers Agreement, the Airport Land Use Commission for the counties of Sacramento, Sutter, Yolo and Yuba and a Joint Powers Agency with the purposes and functions defined in the Joint Powers Agreement; and

WHEREAS, annually each MPO/RTPA in California is required to develop and submit for state and federal approval an Overall Work Program (OWP) adopted by its Governing Board; and

WHEREAS, SACOG's OWP describes the continuing, comprehensive, and coordinated metropolitan planning process for the six-county Sacramento region, including annual agency revenues and expenditures; and

WHEREAS, SACOG's OWP is used by Caltrans, federal agencies, and others to track activities of SACOG, Caltrans, the El Dorado County Transportation Commission (EDCTC), and the Placer County Transportation Planning Agency (PCTPA); and

WHEREAS, amendments to the OWP are typical throughout the year to modify or add projects or revenues, change project descriptions, and adjust staff and expenditures between OWP activities; and

WHEREAS, approval is requested for Amendment #6 to the OWP and Budget for FY 2017-18 to add \$510,000 with \$400,000 coming from a Caltrans Grant and \$110,000 coming from the California Air Resources Board for the Big Data for Transportation Planning Pilot Project;

NOW THEREFORE, BE IT RESOLVED, that the SACOG Board of Directors hereby approves Amendment # to the OWP and Budget for FY 2017/18 including total expenditures of \$40,815,069 and authorizes its submission to Caltrans for review and approval.

PASSED AND ADOPTED, this 17th day of May 2017, by the following vote of the Board of Directors:

AYES:

NOES:

ABSTAIN:

ABSENT:

Jay Schenirer
Chair

James Corless
Chief Executive Officer

SACOG BIG DATA FOR TRANSPORTATION PLANNING PILOT PROJECT *Project #200-002-15*
(Board Policy)

To answer some questions with high priority in transportation planning, SACOG is partnering with Caltrans and California Air Resources Board (CARB) to seek a contractor to provide data services on personal travel, personal vehicle activities, and freight flows. The contractor will develop an Internet based platform and authorize the partners to access the platform for more than eighteen months. SACOG staff will make use of the data to conduct in depth analysis on some topics of high priority. Work completed in FY 2017-18: exploration of vendors offering big data products and services; formation of the SACOG Big Data Pilot Project partnership; and procurement processes. Work to be completed in FY 2018-19: Completion of procurement process and on-boarding of big data products and services; applications using the products and services for the 2020 MTP/SCS update, and on behalf of member agencies for selected projects and analysis requests. Additionally, the partners in this pilot will document usage of the products and services and the outcomes of that usage.

This work will be performed by SACOG and its consultant.

Tasks and *End Products*:

- a. Internet based platform (December 2018)
- b. Licensed access to the platform for eighteen months or more (December 2018 to June 2020)
- c. Quarterly data updates (December 2018 to June 2020)
- d. Data analysis report and invoices quarterly (December 2018 to June 2020)

Total Expenses	\$710,000
Consultant	\$710,000

Total Revenues (includes deferred)	\$ 710,000
Grant	\$ 400,000
Air Resources Board Grant	\$ 110,000
Other State or Local	\$ 200,000

* Total Revenues do not include Toll Credit Match