



METROPOLITAN
TRANSPORTATION
COMMISSION

Agenda Item 3a
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Memorandum

TO: Operations Committee

DATE: July 7, 2016

FR: Executive Director

W.I. 6840

RE: Consultant Panel: Vehicle Occupancy Detection Services: Conduent Inc., Indra Sistemas and TransCore

Summary

This memorandum requests approval of a pre-qualified panel of consultants to provide on-call planning, deployment, operations and analytical services related to automated vehicle occupancy detection (VOD) for a three-year period ending June 30, 2020, with an option to extend for an additional five years, in increments to be determined later. The recommended firms are Conduent Inc., Indra Sistemas and TransCore.

Background

At the May 2016 Operations Committee meeting, staff presented study results from the Managed Lanes Implementation Plan suggesting that vehicle occupancy violations in Bay Area High Occupancy Vehicle (HOV) lanes did not, on average, meet the California Department of Transportation (Caltrans) goal of 10%. Of the sites surveyed, the average occupancy violation rate of the HOV lanes was 24%, with the highest violation rate being 39%. At that meeting, several Commissioners expressed interest in learning more about occupancy enforcement solutions for both HOV facilities and the Bay Area Express Lanes network.

At its December 21, 2016 meeting, the Commission approved \$550,000 to deploy vehicle occupancy enforcement pilots, with a portion of this funding to go towards a pilot of VOD technology on the HOV-only Sterling (Bryant) Street on-ramp to eastbound San Francisco-Oakland Bay Bridge. This effort stems from a larger initiative, referred to as Bay Bridge Forward, which would increase HOV enforcement on the bridge and convert the Sterling Street on-ramp to a tolled ramp.

The decision to pilot VOD technology was driven by the results of several pilots of VOD systems in the state. The pilots included a test deployment by Caltrans which suggested that VOD technology could more accurately detect violators than what human roadside observers could detect. Some assessments of VOD technology indicate that it could achieve an accuracy rate between 90% and 95%.

Since VOD technology is still developing and has not undergone rigorous third-party testing, staff opted to issue a Request for Qualifications (RFQ) to create a panel of pre-qualified firms that would allow MTC to potentially test the systems of multiple firms. The resulting selections from the RFQ will permit MTC to assess VOD systems using distinct technical methods, as long as each system uses detection hardware mounted on the roadside to generate images and automatically determine the number of passengers in a vehicle. Each pre-qualified firm on the bench must own or have

authorization to use a VOD system. The RFQ allows the firms to provide a range of different services, including system testing, application development and long-term deployments.

Procurement Process

On March 29, 2017, MTC issued an RFQ for Vehicle Occupancy Detection Services. Invitations to submit Statements of Qualifications (SOQs) were sent to 550 contacts working in the relevant professional fields.

By May 17, 2017, three SOQs were received. Each SOQ was reviewed against the Minimum Qualifications (MQs). All were determined to meet the MQs and were then evaluated by a panel comprised of staff from MTC, the California Department of Transportation (Caltrans) and the San Francisco County Transportation Authority (SFCTA). The panel members had a variety of experiences and ongoing involvement with VOD, tolling and camera systems.

The panel reviewed each SOQ against the evaluation criteria specified in the RFQ, as listed below in descending order of importance.

- | | |
|--|--------|
| 1. Experience and Qualifications | (35%) |
| 2. Hourly Rates | (25%) |
| 3. Quality and Thoroughness of Work Plan and SOQ | (25%) |
| 4. Demonstrated Accuracy of VOD System | (15%) |
| | (100%) |

The resulting average scores were: 84.9 for Indra Sistemas, 84.1 for Conduent Inc., and 82.5 for TransCore. All firms identified qualified key staff with relevant project experience; described acceptable work plans for generic VOD deployments; and submitted sufficient evidence about prior testing of their VOD systems' accuracy. Based on the evaluation, the panel recommends that all firms be qualified for the bench.

Award of a contract with one of the pre-qualified firms may take place by direct selection or via a mini-procurement, pursuant to MTC's procurement procedures.

Recommendation

Staff recommends that this Committee approve the pre-qualified panel of consultants, comprised of Conduent, Inc., Indra Sistemas and TransCore, to provide on-call planning, deployment, operations and analytical services related to automated vehicle occupancy detection on an as-needed basis, for a period extending through June 30, 2020, with an option to extend, in varying increments, through June 30, 2025. Funding will become available in each fiscal year, subject to approval of MTC annual budgets. Staff will return to the Operations Committee for authorization of any contracts exceeding the Executive Director's signature authority.



Steve Heminger

SH: rr

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REQUEST FOR COMMITTEE APPROVAL
Summary of Proposed Consultant Panel

Work Item No.:	6840
Contractors:	Conduent Inc. Florham Park, NJ Indra Sistemas Alcobendas, Spain TransCore Nashville, TN
Work Project Title:	Vehicle Occupancy Detection Services
Purpose of Project:	To provide on-call planning, deployment, operations and analytical services related to automated vehicle occupancy detection
Brief Scope of Work:	To provide planning, operational and analytical services related to testing, development and deployment of automated vehicle occupancy detection systems and related systems
Project Cost Not to Exceed:	Individual contracts TBD.
Funding Source:	CMAQ RM2
Fiscal Impact:	No immediate fiscal impact until contracts are awarded. Funds for future fiscal years are subject to agency budgetary approval process.
Motion by Committee:	That the above-referenced consultants be pre-qualified to enter into contracts with MTC to provide on-call vehicle occupancy detection services on an as-needed basis through June 30, 2020, as described above and in the Executive Director's memorandum dated July 7, 2017, with an option to extend, in varying increments, through June 30, 2025, subject to applicable contract approval procedures and necessary budget approvals.
Operations Committee:	<hr/> Dave Cortese, Chair
Approved:	Date: July 14, 2017