REPORT TO THE CITY COUNCIL



DATE: May 15, 2018

TITLE: Participating Agreement for Coachella Valley Regional

Traffic Signal Synchronization Program

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RECOMMENDATION

Approve and authorize for signature, the Multi-Agency Participation Agreement for the Coachella Valley Regional Traffic Signal Synchronization Program

DISCUSSION

As a way to improve traffic flow and improve the Coachella Valley's air quality, the Coachella Valley Association of Governments (CVAG) has been working on a regional traffic signal synchronization program. The program will take into account local city traffic signal systems, develop a master plan, and implement a regional traffic signal synchronization project.

Key objectives of the project include:

- Enhancement to existing and/or newly proposed traffic signal systems (communications, operations, etc.) to achieve inter-agency signal coordination.
- Implementation of traffic management systems that can be remotely accessed in real-time for operations and management.
- Implementation of a system that looks beyond the traditional time-of-day operations (e.g. signal malfunction, real-time video, etc.), capturing advanced technologies for ease of operations and maintenance.
- Preparation of upcoming transportation technologies for agencies in the Coachella Valley.

In 2015, the CVAG Executive Committee awarded a contract to Advantec Consulting Engineers for the completion of the Traffic Signal Interconnect (TSI) Master Plan, which is Phase 1 of the regional project. The Master Plan Executive Summary is shown in Exhibit 3 and the entire document can be downloaded at https://www.cvag.org/TSI.htm.

As part of the TSI Master Plan, a detailed analysis was used to evaluate and rank priority corridors. Based on that analysis, the City of Desert Hot Springs Palm Drive Corridor was ranked 6 in the Coachella Valley (Exhibit 4).

Omnis Inc., a City consultant, is currently completing an engineering design of the Palm Drive Traffic Signals and Street Lighting Project (part of the Palm Drive Corridor). Omnis Inc. is using Advantec as a sub-consultant to incorporate the Traffic Signal Synchronization elements from the TSI Master Plan into the Palm Drive Traffic Signal and Street Lights Project. These elements include upgrading existing traffic signal equipment, installing new conduit and communication wires to the traffic signals, and synchronizing all new and existing traffic signals on Palm Drive between Camino Aventura and Pierson Blvd. An estimated \$247,500 of CVAG funds will be used for the expense of the traffic signal synchronization components.

As part of the TSI Master Plan, the parameters of a Participating Agreement were drafted by the CVAG Transportation Technical Advisory Subcommittee. The agreement for multi-agencies is between the Coachella Valley Association of Governments (LEAD); the Cities of Cathedral City,

Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, and Palm Springs; and the County of Riverside. The City of Rancho Mirage will not be participating. The Participating Agreement establishes the roles and responsibilities for each local agency participating in the Regional Signal Synchronization Program.

The main objective of the participating agreement is to balance local control with the need to cooperatively synchronize signals across multiple jurisdictions. The solution presents two concepts: Creating a Regional Traffic Management Center (TMC) and establishing a Transportation Systems Management and Operations Committee (TSMO). Below are some parameters that were discussed and incorporated into the participating agreement:

- A Regional TMC will be established to monitor the performance of the transportation system from a regional perspective.
- Each participating agency will have a Local TMC, equipped to facilitate the hardware and software necessary for signal synchronization within their jurisdiction.
- The TSMO Committee will be comprised of technical representatives from each of the agencies, and meets as needed to work out signal timing issues, as they arise.
- The TSMO Committee will develop a manual that establishes equipment standards and operational protocols.
- The TSMO Committee will work with a traffic consultant to engineer solutions for complex traffic timing situations.
- Shared access to traffic signal timing for traffic synchronization purposes.
- Local agencies must maintain and monitor traffic synchronization elements of all facilities installed as part of this project.
- If a local agency opts out of signal synchronization in the future, they would have to pay back funding allocated for signal improvements.

After the Master Plan and Participating Agreement are approved, Advantec will move forward with the remaining elements of the project, including environmental and preliminary engineering. Construction is anticipated to begin in 2018.

On February 26, 2018, the CVAG Executive Committee approved the Traffic Signal Interconnect Master Plan and the corresponding Participating Agreement.

FISCAL IMPACT

There is no fiscal impact at this time; all construction elements will be funded separately.

EXHIBIT(S)

- 1. Multi-Agency Participating Agreement
- 2. CVAG Staff Report February 26, 2018
- 3. TSI Master Plan Executive Summary
- 4. TSI Master Plan Priority Corridors