

City of Manhattan Beach

1400 Highland Avenue Manhattan Beach, CA 90266

Legislation Text

File #: 19-0263, Version: 1

TO:

Honorable Mayor and Members of the City Council

THROUGH:

Bruce Moe, City Manager

FROM:

Stephanie Katsouleas, Public Works Director Prem Kumar, City Engineer

SUBJECT:

Update on Grant Application to Metropolitan Transportation Authority (Metro) for the Manhattan Beach Advanced Traffic Signal (MBATS) System (Public Works Director Katsouleas).

RECEIVE AND FILE

RECOMMENDATION:

Staff recommends that City Council receive and file this update regarding the City's successful Measure M grant application for the MBATS System Project, which was submitted to the South Bay Cities Council of Government (SBCCOG) for review and consideration on November 15, 2018.

FISCAL IMPLICATIONS:

The fiscal implication of this grant application has yet to be fully determined. The original \$5.44 million grant request is expected to increase due to Metropolitan Transportation Authority's (Metro) request for the City to expand its original grant application scope of work. This is further described below in the Background section of the staff report.

BACKGROUND:

Currently, the City's traffic signals along the arterial corridors throughout Manhattan Beach are activated using one or more standard technologies, including loop detection, video detection and preset signal timing. These intersections carry a significant amount of outbound, inbound and through traffic during peak commute times of the day. The traffic signals' controls are limited by current technologies and they are physically maintained and programmed on-site by Los Angeles County Department of Public Works (LAC-DPW) through a long standing City-County Maintenance Service Agreement. The City's MBATS System Project proposes to upgrade signal controller equipment and connect them through a fiber optic backbone infrastructure that will support emerging traffic management technologies, such as dynamic signal timing, vehicle to vehicle connections, autonomous vehicles, public safety preemption and other smart cities initiatives that can improve traffic signalization and operational efficiencies.

The MBATS System project was initially submitted to the South Bay Measure R Highway Program (SBHP) for consideration. Under both the Measure R and Measure M program, the South Bay Cities

File #: 19-0263, Version: 1

Council of Governments (SBCCOG) conducts a preliminary review of projects for eligibility and funding, and then forwards SBCCOG Board approved projects to Metro for final approval. The SBCCOG Board of Directors approved City's MBATS System Project grant application for submittal to Metro under the Measure R SBHP program on January 24, 2019. However, upon further review of the City's objective to provide a fiber connection to all traffic signals throughout the City, Metro determined that the project should be considered for funding under the Measure M program rather than the Measure R program, and that its scope must be expanded to include signal equipment upgrades as well. With those modifications, Metro staff indicated that it would recommend approval of the project for a \$5.44 grant award in FY 2019/20 at its regular board meeting in July 2019.

Following that feedback, staff immediately began working with LAC-DPW to expand the scope of the project to include the specific equipment that is most compatible with the County's regional network given our long-standing maintenance agreement. Staff also informed Metro that, due to the expanded scope of work and the fact that Measure M does not require matching funds, the City would be requesting additional funding to complete the full project scope at a later date. Because the timing of the project's scope expansion and Metro's project funding approval process are on parallel tracks, Metro informed City staff that only the original budget would be approved in July, but that modifications to the funding request could be made through the budget amendment process after the Metro Board's initial approval. As more information becomes available, City staff will continue to brief City Council on the disposition of this project grant funding.

It is worth noting that the City's MBATS System project is an extension of the SBCCOG's SMART-Net project, which proposes to construct a fiber-optic broadband infrastructure "ring" that provides cost-effective, high speed broadband to City Halls throughout the South Bay sub-region. Ultimately, this ring will support enhancements to the region's mobility and accessibility systems, and to the networks that provide community services to South Bay residents.

DISCUSSION:

Funding for the MBATS System will allow the City to design and construct a complete fiber backbone infrastructure that will connect all City-owned signalized intersections with a high-speed fiber network that will support emerging traffic management technologies. Each traffic signal will be installed with Advanced Transportation Controllers (ATC) and Video (Detection) Management Systems (VMS) capable of communicating via advanced fiber networks. Certain strategic intersections will also include a high-definition, internet-protocol, close circuit television (CCTV) camera system for fast response traffic operation incident management. City gateway corridors such Rosecrans Avenue, Manhattan Beach Boulevard and Artesia Boulevard will have the capability to incorporate Dynamic Message Signs (DMS) and handheld mobile device application technology that will provide real time traffic information for commuter traffic to nearby freeways and the State highway. Connections to both City Hall and the Public Works Yard staff workstations will allow for remote access of the traffic signal network.

SBCCOG's Smart Net ring will provide initial pathway connectivity to Manhattan Beach, and allow for traffic data sharing with adjacent cities, including El Segundo, Hawthorne, Redondo Beach, Hermosa Beach and Los Angeles County. This more reliable communication link-up will ensure that Los Angeles County can:

Monitor the operations of existing traffic signal control assets;

File #: 19-0263, Version: 1

- Centrally adjust traffic signal timing in real-time as needed;
- Provide greater insight into corridor operations and maintenance needs
- Allow for the exchange of data needed to support the central distribution of signal phase and timing information;
- Support the growing number of signal-related intersection mobility and safety applications being implemented throughout the County; and
- Provide a more reliable connection between traffic signals and LAC-DPW's traffic command center.

Once the project is approved by Metro's Board in July, Metro staff will begin preparing a funding agreement based on the expanded scope of work. Staff anticipates that the funding agreement will be presented to the City for consideration in late fall 2019, and that design work for construction documents would commence in early 2020.

PUBLIC OUTREACH:

No public outreach has been conducted on this project. Public outreach will occur at the appropriate times during the design phase.

ENVIRONMENTAL REVIEW:

The City has reviewed the proposed activity for compliance with the California Environmental Quality act (CEQA) and has determined that the grant application submittal activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines; therefore, pursuant to Section 15060(c) (3) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

LEGAL REVIEW:

The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

ATTACHMENT:

1. Traffic Signal Locations