



**DATE:** February 11, 2019

**TO:** Transportation Authority of Marin Programming and Projects Executive Committee

**FROM:** Dianne Steinhauser, Executive Director  
Bill Whitney, Principal Project Delivery Manager

**SUBJECT:** Highway 101 Phase-One Ramp Metering Project Update (Discussion), Agenda Item No. 6

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**RECOMMENDATION:**

For discussion only.

**DISCUSSION/ANALYSIS:**

Ramp metering in Marin County is about to begin the construction phase. The phase one project will install meters on the northbound highway corridor from Spencer Avenue Golden Gate Bridge to Sir Francis Drake Blvd. The project consists of installing a permanent overhead changeable message sign just north of the Golden Gate Bridge, installing a highway traffic monitoring system in the corridor and installing on-ramp meters (the Alexander Avenue on-ramp will not be metered). The metering project needed to be implemented in phases due to limited funding sources available. It was determined the first fundable phase would be the northbound corridor described above and the second phase would complete the remaining northbound on-ramps and meter the Highway 101 southbound corridor. The final phase project is currently identified in the Caltrans 10-year SHOPP workplan for final design to be completed FY2026/27 and then into construction thereafter.

Staff has discussed the ramp metering project with the Board and Executive Committee on many occasions to review elements of the modern metering equipment, including the end of queue ramp loop detector that prevents vehicles backing up on local approach roadways. Also discussed have been corridor travel time benefits, case studies where implementation of metering has decreased congestion, increased vehicle throughput, and increased highway reliability and safety in a metered corridor. Ramp metering is a well-accepted tool to address congestion and done in a way that does not back traffic up onto city streets or cause diversion.

Previous Reports

2014 Preliminary Ramp Metering Assessment Report: To better understand the benefits of the metering project MTC commissioned a report in the phase-one corridor. The report documented the significant delays in the PM northbound commute and further analyzed the highway section from the Bridgeway on-ramp to the US101/ I580 junction. The report summarized the scope and components of the corridor, ramp configuration and storage capacity, preliminary metering rates for each on-ramp which defines the through-put capacity of the ramp per hour and then presents the travel time savings in corridor (6.5miles). The report concluded that a vehicle traveling the length of the corridor will benefit from an estimated four-minute time saving or a 24% reduction in travel time.

2015 Local Road Data Collection Report: TAM prepared a report to document and present existing traffic conditions on our local roads approaching the interchanges in the phase-one corridor. This provides a good baseline of travel times, travel speeds, vehicle queues, on ramp service rates and vehicle collisions within the project sphere of influence.

#### RMTAC

TAM staff have been coordinating the project development process over many years now with Caltrans, MTC, and our member agencies. A “ramp metering technical advisory committee” (RMTAC) has met multiple times over the last eight years to monitor Caltrans progress and promote a dialog amongst our partners. The RMTAC will continue to provide input as the implementation phase continues and will provide input prior to meter activation.

#### Implementation and Ramp Meter Activation

Caltrans has retained a contractor, Ghilotti Construction, and will begin construction and installation of meters and equipment in the spring of 2019. They estimate this work will take about a year to complete with activation of the metering lights in the spring of 2020.

During the construction period Caltrans will begin to collect traffic data for the highway and local roads approaching the interchanges. They will then develop a model to simulate current traffic patterns and use this to develop a metering plan that defines the actual metering rate for each on-ramp. This metering plan will be presented and discussed at future RMTAC meetings to inform our local agencies of the metering plan, receive input and suggestions, and to allow them to bring the information back to their respective communities.

#### Outreach

Caltrans was recently invited to the Marin Public Work Association and updated the Directors on the scope, schedule and public outreach efforts that will take place during the project. TAM will work with Caltrans’ public outreach coordinator to make sure we get the upcoming capital improvement work information out and keep the public informed of the progress. Outreach will be critical during the planned ramp closures and associated detours. These closures will occur only at night (11:00PM-6:00AM)

Prior to activation of the meters Caltrans has indicated they will implement an outreach effort to inform the traveling public and local agencies of the activation process and schedule well in advance of the actual activation.

It should also be noted TAM has previously presented the metering project and benefits to multiple community groups including a workshop in Mill Valley. Caltrans and MTC later presented the topic to the TAM Board.

#### **FISCAL CONSIDERATION:**

Funds have been budgeted to assist with the implementation phase of the metering project but staff does not anticipate expenditures at this time.

#### **NEXT STEPS:**

Monitor Caltrans activities and ensure information is distributed to local agencies for current project updates regarding ramp closure and associated detours in each community.

**ATTACHMENTS:** None