

Date of Hearing: April 1, 2019

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 1633 (Grayson) – As Introduced February 22, 2019

SUBJECT: Regional transportation plans: traffic signal optimization plans

SUMMARY: Authorizes each city within the jurisdiction of the Metropolitan Transportation Commission (MTC) to develop and implement a traffic signal optimization plan and directs the California Department of Transportation (Caltrans) to ensure its traffic signals within these cities are adjusted and maintained in accordance with the plan.

EXISTING LAW:

- 1) Designates MTC as the regional transportation planning agency for the nine-county San Francisco Bay area and assigns it the responsibility to, among other things, prepare and adopt a regional transportation plan.
- 2) Under Proposition 1B, enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. This bond act authorized \$250 million for traffic light synchronization projects throughout the state, administered by the California Transportation Commission (CTC).

FISCAL EFFECT: Unknown.

COMMENTS: The author states that he introduced this bill in order to encourage cities to develop and implement traffic signal optimization plans because they have been proven to reduce congestion and greenhouse gas (GHG) emissions. Indeed, CTC has implemented a traffic light synchronization effort statewide with positive results.

Over the past decade, CTC has administered the Traffic Light Synchronization Program (TLSP), with \$250 million in bond funds from Proposition 1B, funding traffic light synchronization projects and other technology-based projects to improve safety, operations and the effective capacity of local streets and roads. Implementing legislation enacted in 2007 directed CTC to allocate \$150 million of the TLSP funds to the City of Los Angeles for upgrading and installing traffic signal synchronization within its jurisdiction, with the \$100 million remainder to be made available for projects elsewhere in the state.

As of June 2017, CTC has allocated funding to 85 corridor projects statewide. CTC estimates that these projects will save motorists roughly 38,000 hours every day during peak periods alone, improving congestion along those corridors. Further, a study by the National Conference of State Legislatures claims that this traffic signal coordination reduced vehicle delay by 25%.

In addition to the time savings, studies demonstrate that routes with synchronized traffic lights can significantly reduce energy consumption and GHG emissions. A recent report by UC Davis demonstrated that signal timing and signal priority projects can result in 6-10% energy savings for vehicles on the road. In addition, ARB reports that, through a review of four studies on signal coordination systems around the world, these projects result in GHG reductions between 1% and 10%.

In the Bay Area, MTC has been successfully administering its Program for Arterial System Synchronization (PASS) for a number of years. PASS delivers financial and technical assistance to cities and counties to enhance signal coordination across jurisdictions, including engineering help for local governments seeking to re-time signals, traffic-responsive timing plans, and improving communication between local and state signals. According to MTC, it coordinates an average of 320 signals per year through this program with about \$1 million in regional funding annually. PASS has helped Bay Area cities and counties successfully re-time some 1,900 traffic signals since the program began in 2010.

This bill authorizes cities in the Bay Area to develop traffic signal optimization plans, and requires Caltrans to coordinate any signals for which it is responsible within those plans.

According to the author, “Bay Area commutes are rated second worst in the country with the amount of time the average commuter spends in congestion each weekday increasing by more than 80% since 2010. When infrastructure is strained and operating inefficiently, it exacerbates existing problems of increased congestion and commute times and can lead to a reduction in environmental health. Several recent studies and reports produced by Caltrans, UC Davis, and the Assembly and Senate Transportation Committees have concluded that ‘traffic signal optimization’ technology has been proven to reduce traffic congestion and vehicle greenhouse gas emissions. AB 1633 will authorize cities within the MTC region to develop and implement traffic signal optimization plans, which are intended to reduce greenhouse gases and particulate emissions, and reduce travel times, and the number of stops and fuel use.”

REGISTERED SUPPORT / OPPOSITION:**Support**

None on file.

Opposition

None on file.

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