

Date of Hearing: April 23, 2018

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 2851 (Grayson) – As Amended April 12, 2018

SUBJECT: Regional transportation plans: traffic signal optimization plans

SUMMARY: Requires each city within the jurisdiction of the Metropolitan Transportation Commission (MTC) to develop and implement a traffic signal optimization plan and appropriates \$2 million from the Greenhouse Gas Reduction Fund (GGRF) in fiscal year 2020-21 to assist these cities in implementing their plans. Specifically, **this bill:**

- 1) Requires, on or before July 1, 2020, each city in the MTC region to develop and implement a traffic signal optimization plan. Each plan must estimate the extent to which, through the coordination and optimization of traffic signal timing and sensing, each city can reduce greenhouse gas (GHG) and particulate emissions as well as travel times, number of stops, and fuel use.
- 2) Creates the Traffic Signal Optimization Fund in the Transportation Tax Fund and authorizes the moneys in the fund, upon appropriation by the legislature, to be expended as grants to assist cities in implementing their traffic signal optimization plans.
- 3) Appropriates \$2 million from the GGRF in fiscal year 2020-21 to the Traffic Signal Optimization Fund.
- 4) Requires MTC, within its next adopted regional transportation plan, to consider and reference any plans developed by cities within its jurisdiction.

EXISTING LAW:

- 1) Requires designated regional transportation planning agencies to, among other things, prepare and adopt a regional transportation plan with various elements as specified. Regional transportation planning agencies must consider and incorporate the transportation plans of its jurisdiction's cities, counties, and districts into its regional transportation plans.
- 2) 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.
- 3) 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).
- 4) Establishes the GGRF in the State Treasury, requires all moneys, except for fines and penalties, collected pursuant to a market-based mechanism implemented to reduce GHG emissions be deposited in the fund and requires the Department of Finance, in consultation with the Air Resources Board (ARB) and any other relevant state agency, to develop, as specified, an investment plan for the moneys deposited in the GGRF.

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 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 directing 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 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%.

Writing in support of the bill, the Automobile Club of Southern California and AAA Northern California, Utah & Nevada (AAA Clubs) state that effective and successful traffic optimization projects offer great benefits to mobility, traffic safety, air quality, and reduce fuel consumption. According to the Institute for Traffic Engineers, successful traffic optimization projects have demonstrated benefit-to-cost ratios of 40-1, or even more.

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 annually. PASS has helped Bay Area cities and counties successfully re-time some 1,900 traffic signals since the program began in 2010.

Committee Comment: Department of Finance and ARB work together to develop an investment plan for the moneys deposited in the GGRF. To date, no GGRF funding has been used for traffic light synchronization. While these programs have demonstrated their ability to reduce GHG emissions, it is unclear whether Finance and ARB will be supportive of dedicating scarce GGRF resources to these programs at any level. In contrast, given MTC's experience that they are able to optimize roughly 320 signals with \$1 million per year, it is difficult to imagine a one-time investment of \$2 million will have much of an impact.

In addition, given the fact that MTC already has in place a program to assist agencies within its jurisdiction with signal coordination, perhaps it would be better to simply dedicate the appropriated GGRF moneys to MTC's PASS instead of creating a new program for the state to administer.

REGISTERED SUPPORT / OPPOSITION:

Support

AAA Clubs

Opposition

None on file

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