

- 2) Authorizes WRCOG, in coordination with Caltrans, to establish a traffic signal synchronization pilot program in western Riverside County to evaluate a regional model for coordinating traffic signal timing between state highways and local street and road systems.
- 3) Requires Caltrans to participate in the pilot program and review work plans, data standards, and evaluation methodologies.
- 4) Authorizes WRCOG's local member agencies to conduct studies, implement coordinated signal timing plans, and deploy technology or communication upgrades necessary to implement the pilot.
- 5) Specifies that eligible activities under the pilot program include, but are not limited to:
 - a) Traffic signal synchronization studies;
 - b) Corridor-level operational analyses;
 - c) Implementation of coordinated and adaptive signal timing plans;
 - d) Upgrades to traffic signal hardware or software;
 - e) Deployment of detection and communications infrastructure; and,
 - f) Data collection and performance monitoring related to travel time reliability, congestion reduction, safety, and emissions outcomes.
- 6) Requires WRCOG, in coordination with Caltrans, to evaluate the effectiveness of the pilot program, including assessing impacts on congestion, travel time reliability, operational efficiency, and vehicle emissions.
- 7) Requires WRCOG, by January 1, 2028, to submit a report to the Legislature summarizing the pilot's outcomes and performance, identifying best practices and implementation challenges, and making recommendations regarding the applicability of the pilot program statewide.
- 8) Sunsets and repeals the bill's language on January 1, 2032.

COMMENTS:

- 1) *Purpose of the bill.* According to the author, “Riverside County is one of the fastest-growing regions in California, with cities like Murrieta consistently meeting their state-mandated RHNA housing targets. This growth increases the need for efficient traffic systems. Traffic signal synchronization can reduce emissions, save time, and ease congestion. AB 2307 is a commonsense solution to support the region’s continued growth.”
- 2) *Traffic Signal Synchronization.* Traffic signal synchronization (also referred to as traffic light synchronization or signal/light retiming) generally refers to an engineering practice of sequencing the timing of traffic lights via vehicle detectors along a corridor to improve traffic flow. This is in contrast to fixed-time signals which run at specified intervals, only accounting for time-of-day differences. Signal retiming at these intersections typically requires manual data collection and is generally only done every three to five years.

Synchronization, in contrast, calculates in real-time when a group of vehicles traveling at a set speed will reach each intersection. When signals are strategically timed, drivers arrive at the next light just as it turns green, allowing traffic to flow smoothly with minimal delay. Overall, studies show that signal synchronization reduces both travel delay and greenhouse gas and other emissions. Exact numbers vary widely based on the study, but generally accepted travel delay reductions are in the 15-20% range.

Unfortunately, high installation and maintenance costs of vehicle detectors have deterred the widespread use of detector-based systems. The installation costs of a detection system at a single intersection can cost several thousand dollars, including in some cases up to \$50,000. Thus, a large proportion of signalized intersections in the United States do not have detection capabilities and are still controlled by fixed-time traffic signals.

- 3) *Traffic Signal Synchronization in California.* California law allows local authorities to employ traffic signal synchronization to permit the safe and orderly movement of traffic. Increasingly, over the past decades, many jurisdictions across the state have taken advantage of this to engage in widespread traffic signal synchronization projects. These include most prominently Los Angeles and cities across Orange County.

In 2006, as part of Proposition 1B, the state created the Traffic Light Synchronization Program to support synchronization projects across the state. \$250 million of Proposition 1B funds were set aside for the project, with

\$150 million of that going to the City of Los Angeles. According to the Los Angeles Department of Transportation, the city synchronized all of its more than 4,500 traffic lights by 2013, increasing travel speeds by 16% and reducing travel times by 12%. Sixty other jurisdictions also received grant funding under this program including, of relevance to this bill, the Cities of Murrieta, Corona, and Temecula.

Many of these projects have been able to synchronize lights not just in particular cities, but across regions as well, including on state highways owned by Caltrans. In many of these cases, Caltrans worked collaboratively with local jurisdictions on synchronization. For example, Caltrans has executed memoranda of understanding (MOUs) with local jurisdictions such as the Coachella Valley Association of Governments, the City of Hesperia, and the City of Riverside, itself a member of WRCOG. These MOUs generally require a local government to procure and install synchronization technology on Caltrans owned signals and authorize the local government to develop signal timing plans in coordination with Caltrans.

- 4) *Traffic Signal Synchronization across WRCOG*. WRCOG is comprised of 18 cities including the cities of Riverside, Corona, Moreno Valley, Lake Elsinore, Murrieta and Temecula. Due to high rates of population growth and an increase in the number of commuters both within and originating from the region, WRCOG has seen a notable increase in traffic congestion in recent years. WRCOG has identified particular corridors of concern, primarily located near the Interstate (I-15) and I-215 freeways. There are over 400 signalized intersections throughout this area, of which only roughly 130 intersections are currently synchronized.

Based on the benefits seen from previous synchronization projects in the region, including in the aforementioned City of Temecula, WRCOG would like to synchronize the rest of the signals in this region. However, of the remaining signals, roughly 80 of them are controlled by Caltrans, primarily along State Routes 74 and 79. Furthermore, 30 of these signals are directly at I-15 and I-215 interchanges, where much of the congestion originates.

According to WRCOG, they have had difficulty reaching an agreement with Caltrans to implement traffic signal synchronization across this area, particularly at these Caltrans controlled intersection of concern. AB 2307 seeks to address this issue by requiring Caltrans to work with WRCOG on implementing traffic signal synchronization. Thus, although legislation is not technically necessary as existing law already authorizes these types of projects, AB 2307 will provide firm guidance to both WRCOG and Caltrans on how to

move forward with the pilot program.

Specifically, AB 2307 permits WRCOG to implement a pilot program, with required participation from local agencies and Caltrans. WRCOG and its member agencies are also required to fully fund the program. Finally, by January 1, 2028, WRCOG is required to submit a report to the Legislature on the outcomes of the pilot. According to WRCOG, they have the required funds available and are ready to proceed with the project once Caltrans allows them access to the signals Caltrans controls.

RELATED/PREVIOUS LEGISLATION:

AB 1447 (Waldron, Chapter 594, Statutes of 2014) – Authorized GGRF moneys to be allocated for investments in traffic signal synchronization projects under certain conditions.

SB 88 (Committee on Budget, Chapter 181, Statutes of 2007) – Allocated \$150 million to the City of Los Angeles for traffic synchronization technology.

SB 1266 (Perata, Chapter 25, Statutes of 2006) – Authorized, following voter approval of Proposition 1B, the issuance of nearly \$20 billion in state general obligation bonds for particular transportation related purposes, including \$250 million for traffic signal synchronization.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

POSITIONS: (Communicated to the committee before noon on Wednesday, June 17, 2026.)

SUPPORT:

City of Menifee
City of Moreno Valley
City of Murrieta
City of Temecula
Southwest California Legislative Council

OPPOSITION:

None received

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