

Date of Hearing: June 22, 2015

ASSEMBLY COMMITTEE ON TRANSPORTATION
Jim Frazier, Chair
SB 719 (Hernandez) – As Amended April 21, 2015

SENATE VOTE: 35-0

SUBJECT: Department of Transportation: motor vehicle technologies testing.

SUMMARY: Authorizes the Department of Transportation (Caltrans) to test technologies that involve motor vehicles being operated within less than 100 feet between each vehicle. Requires the vehicles and routes used in the testing process to be approved by the California Highway Patrol (CHP). Specifies the authorized testing period will end on January 1, 2018.

EXISTING LAW:

- 1) Provides that Caltrans has full possession and control of the state highway system.
- 2) Prohibits a driver of a motor vehicle from following another vehicle more closely than is reasonable and prudent contingent on various factors such as vehicle traffic and weather conditions.
- 3) Prohibits motor vehicles being driven outside of a business or residence district traveling in a caravan or motorcade to travel less than 100 feet between each vehicle or combination of vehicles, as specified.

FISCAL EFFECT: Unknown

COMMENTS: The study of intelligent transportation systems (ITS) by the federal government, state agencies, and research institutions has significantly increased over the past five years. At the federal level, the Federal Highway Administration's (FHWA) Exploratory Advance Research Program is currently researching advanced transportation tools such as vehicle-to-vehicle (V2V) technology, vehicle-to-infrastructure (V2I) technology, and automated highway systems (AHS). Additionally, FHWA also allocates federal grants to state transportation agencies to further advance ITS research efforts in their respective states.

These studies aim to identify transportation solutions that will improve traffic effectiveness and improve road safety. For example, AHS holds great promise in improving traffic flow on congested roadways and producing significant improvements in capacity. AHS is a vehicle- and road-based system that can drive a vehicle automatically. This is done using sensors that determine a vehicle's lane position and the speed and location of other vehicles. Actuators on the throttle, brake, and steering wheel give the vehicle the necessary commands to safely navigate on the roadway. AHS vehicles often also have equipment to communicate with other AHS vehicles. Automated highways can be safer, more efficient, and produce lower emissions compared to the traffic flow on conventional highways.

Currently, Caltrans has received federal funds to research and conduct demonstrations on partially automated trucks in closely spaced operations, also known as "truck platooning."

This demonstration program is in partnership with the University of California at Berkeley, private truck manufacturers, and a number of other stakeholders and will study the technical feasibility and benefits of partially automated truck platooning with the end goal of developing a policy framework that will allow for the general use of this technology. Ultimately, Caltrans and program partners will focus on two specific research areas: 1) testing truck driver preferences using truck platooning technology in different environments; and, 2) testing energy consumption savings associated with this technology. The \$2 million demonstration program is funded primarily through a \$1.6 million federal grant coupled with \$460,000 from state and local sources and will run until December 2016.

The author introduced SB 719 to provide a temporary exemption from existing law in order to allow Caltrans to carry out truck platoon testing throughout the demonstration program. The author notes SB 719 will ensure that federal grant money is utilized and will allow Caltrans and stakeholders the opportunity to identify trucking efficiencies, improve traffic congestion, and reduce pollution.

REGISTERED SUPPORT / OPPOSITION:**Support**

Department of Transportation (Caltrans)

Opposition

None on file

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