

Date of Hearing: April 4, 2016

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 1592 (Bonilla) – As Amended March 28, 2016

SUBJECT: Autonomous vehicles: pilot project

SUMMARY: Authorizes the Contra Costa Transportation Authority (CCTA) to conduct a pilot project for the testing of autonomous vehicles under specific conditions. Specifically, **this bill:**

- 1) Authorizes CCTA to conduct a pilot for the testing of autonomous vehicles not equipped with a steering wheel, a brake pedal, an accelerator, or an operator.
- 2) Limits the venue for the pilot project to a private business park designated by CCTA, including the public roads within that business park, and the GoMentum Station at the Concord Naval Weapons Station.
- 3) Limits the operating speed of the autonomous vehicle involved in the pilot project to 35 miles per hour.
- 4) Declares the necessity of a special statute for CCTA.

EXISTING LAW:

- 1) Authorizes the operation of autonomous vehicles on public roads for testing purposes under certain circumstances specified in regulations adopted by the Department of Motor Vehicles (DMV).
- 2) Prohibits the operation of autonomous vehicles on public roads for non-testing purposes unless the manufacturer of the vehicles submits an application to DMV that is approved pursuant to DMV regulations.
- 3) Requires DMV, by January 1, 2015, to adopt regulations setting forth requirements for the application to operate autonomous vehicles on public roads for non-testing purposes.
- 4) Requires the application submitted to DMV for the operation of autonomous vehicles on public roads for non-testing purposes to include a certification from the manufacturer that the vehicle allows the operator to take control through the use of the brake, the accelerator pedal, or the steering wheel.
- 5) Requires DMV to approve an application submitted by a manufacturer for the operation of autonomous vehicles for non-testing purposes if DMV finds that the applicant has submitted all information and completed testing necessary to satisfy DMV that the autonomous vehicles are safe to operate on public roads and the applicant has complied with all requirements specified in DMV regulations.
- 6) Authorizes DMV to impose additional requirements it deems necessary to ensure the safe operation of autonomous vehicles if those vehicles are capable of operating without the presence of a driver inside the vehicle, including the presence of a driver in the driver's seat

of the vehicle, if DMV determines that such a requirement is necessary to ensure the safe operation of those vehicles on public roads.

- 7) Requires DMV to notify the Legislature of the receipt and approval of an application from a manufacturer seeking to operate autonomous vehicles capable of operating without the presence of a driver inside the vehicle on public roads for non-testing purposes.

FISCAL EFFECT: Unknown, this bill is keyed non-fiscal by the Legislative Counsel.

COMMENTS: In response to arguments for the traffic safety benefits of increasingly automated vehicle technology, the Legislature passed and the Governor approved legislation requiring DMV to adopt regulations for the operation of autonomous vehicles on California's public roads in 2012 [SB 1298 (Padilla), Chapter 570, Statutes of 2012]. The rollout of DMV's regulations was separated into two stages: regulations for insurance requirements for the purposes of testing autonomous vehicles and regulations for the full deployment of autonomous vehicles on California roads for non-testing purposes. Both sets of regulations were required to be adopted by January 1, 2015. DMV adopted testing regulations on May 19, 2014, and have yet to adopt regulations for the deployment of autonomous vehicles for non-testing purposes out of a desire on the part of DMV to receive more input from the public and stakeholders before making a final regulatory action.

The original legislation directing DMV to adopt these regulations includes several requirements for the operation of autonomous vehicles, including the presence of an operator inside the vehicle and the ability of the operator to take over control of the vehicle from the autonomous technology through the use of the brake, the accelerator pedal, or the steering wheel.

This bill would authorize CCTA to conduct a pilot project for the testing of autonomous vehicles – separate from the framework for testing autonomous vehicles that already exists – that are not equipped with these control features and do not have an operator inside the vehicle at specific sites in Contra Costa County.

CCTA, the bill's sponsor, intends to conduct this pilot using a specific type of vehicle as an electric, fixed-route people mover to act as a first mile/last mile connector between existing transportation infrastructure and employment centers. The pilot will be used to first test the vehicles at the GoMentum Station, located at the former Concord Naval Weapons Station and which already acts as a testbed for extensive autonomous vehicle testing, and then to test the transportation of employees at the Bishop Ranch business park in San Ramon. While CCTA is currently able to conduct testing of autonomous vehicles on the private roads at GoMentum and Bishop Ranch, it requires authorization to conduct the pilot where public roads intersect with the existing facilities, and will potentially need this authorization should jurisdiction over the former naval base revert to the local authorities.

CCTA has begun procurement of the autonomous vehicles to be used in the pilot from EasyMile, a European company that has successfully deployed these types of multi-passenger vehicles in the Netherlands, France, and Switzerland at varying stages of testing and operation. The vehicles to be used in the pilot are not manufactured with the control features required for the operation of autonomous vehicles specified in existing law and regulation. CCTA anticipates initiating the pilot by spring of 2017, following a period of testing and mechanical evaluation. By limiting the scope of the pilot to the two specified locations and prohibiting the operation of vehicles over 35 miles per hour, CCTA hopes to minimize the divergence between this program

and existing statutory and regulatory requirements, as well as the potential safety impacts on the public roads the pilot would include.

The author states, “For California to remain on the cutting edge of transportation technology and a potential hotbed for investment, development, and new jobs, it is imperative that the State continues to support the growth of testing programs such as CCTA’s and GoMentum Station.” The author, the sponsor, and numerous organizations supporting this bill argue that California is at risk of missing out on technological innovation and the concurrent economic and scientific benefits to other states, such as Michigan, if the state does not sufficiently encourage the development of technologies like autonomous vehicles. According to the author, by encouraging technological innovation in the field of mass transit, California can improve mobility, increase road safety, reduce parking and traffic congestion, meet the state’s climate change goals, and keep jobs and technological innovation in California.

Federal Developments: In January 2016, United States Department of Transportation Secretary Anthony Foxx announced President Obama’s Fiscal Year 2017 budget proposal to allocate nearly \$4 billion over ten years towards accelerating the development of autonomous vehicle technology through real-world pilot projects. Additionally, Secretary Foxx announced that the National Highway Traffic Safety Administration (NHTSA) will, within six months, both consult with industry and other stakeholders to develop guidance on the safe deployment and operation of autonomous vehicles, and consult with state partners, the American Association of Motor Vehicle Administrators, and other stakeholders to develop a model state policy on automated vehicles that offers a path to consistent national policy.

The authorization of additional avenues to explore autonomous vehicle technology in California contained in this bill is consistent with this shift in federal policy towards encouraging the development of autonomous vehicles.

Committee Concerns: Although CCTA is currently positioned to initiate their pilot program, other agencies or companies may wish to implement a similar program, but would not be included in this authorization. By creating a carve-out specifically for CCTA, this bill could create a problematic precedent for other entities seeking to receive authorization for their own special projects outside of the existing and future DMV framework for autonomous vehicles.

While DMV has not yet adopted regulations for the deployment of non-testing autonomous vehicles, it has issued a summary of what the department expects its regulations to contain in order to receive additional feedback from the public and stakeholders before initiating the formal rulemaking process. As such, it is possible that the final regulations that DMV adopts for the operation of autonomous vehicles on public roads could accommodate CCTA’s pilot program without needing this legislative authorization.

Related Legislation: AB 2682 (Chang), requires DMV, upon the development of a model state policy on autonomous vehicles by NHTSA, to hold public hearings on the model policy and consider, to the extent authorized by other law, conforming department regulations with that policy. AB 2682 is currently awaiting a hearing in this Committee.

AB 2866 (Gatto), requires DMV and the Department of the California Highway Patrol to conduct a pilot project in three counties in conjunction with one or more manufacturers of autonomous vehicles to test the safety and feasibility of operating autonomous vehicles on public roads. AB 2866 is currently awaiting a hearing in this Committee.

Previous Legislation: SB 1298 (Padilla), Chapter 570, Statutes of 2012, established conditions for the operation of autonomous vehicles upon public roadways.

AB 2258 (Fox) of 2014, would have authorized the City of Lancaster to research and develop autonomous public buses. AB 2258 was pulled from its hearing at the request of the author.

REGISTERED SUPPORT / OPPOSITION:

Support

Contra Costa Transportation Authority (Sponsor)
Allstate Insurance Company
American Council of Engineering Companies
Bay Area Council
California Department of Insurance
City of Clayton
City of Concord
City of San Ramon
City of Walnut Creek
County Connection
EasyMile
Honda North America, Inc.
Intelligent Transportation Society of California
Metropolitan Transportation Commission
Stantec
Sunset Development Company
Telecommunications Industry Association
Telegra, Inc.

Opposition

Amalgamated Transit Union
Consumer Watchdog

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