Date of Hearing: April 17, 2017

# ASSEMBLY COMMITTEE ON TRANSPORTATION Jim Frazier, Chair

AB 1444 (Baker) – As Amended April 5, 2017

SUBJECT: Livermore Amador Valley Transit Authority: demonstration project

**SUMMARY**: Authorizes the Livermore Amador Valley Transit Authority (LAVTA) to conduct a demonstration project for the testing of autonomous vehicles without a driver in the driver's seat under specific conditions. Specifically, **this bill**:

- 1) Authorizes LAVTA to conduct a shared autonomous vehicle demonstration project 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 demonstration project to the City of Dublin, including public roads within the area of the demonstration program.
- 3) Limits the operating speed of the autonomous vehicle involved in the demonstration project to 35 miles per hour.
- 4) Requires LAVTA to obtain and provide to the Department of Motor Vehicles (DMV) proof of insurance and a detailed description of the testing program prior to testing an autonomous vehicle without an operator on a public road.
- 5) Requires the detailed description of the testing program to include specific certifications relating to the demonstration project's technical specifications and compliance with applicable laws.
- 6) Requires the operator of the autonomous vehicle technology to disclose to an individual who participates in the pilot project what personal information, if any, concerning the demonstration project participant is collected by an autonomous vehicle.
- 7) Authorizes DMV to require the submission of information and data regarding the testing of autonomous vehicles in the demonstration project, including a report of any accident involving the autonomous vehicles and an annual report summarizing information on unplanned autonomous technology disengagements, pursuant to existing law.
- 8) Provides that this bill does not limit the authority of DMV to promulgate regulations governing the testing and operation of autonomous vehicles on public roads, with or without the presence of a driver inside the vehicle, pursuant to existing law.
- 9) Declares the intent of the Legislature is not to influence the development of regulations by DMV for the testing and operation of autonomous vehicles pursuant to existing law.
- 10) Requires LAVTA to comply with regulations promulgated by DMV to allow testing of autonomous vehicles without a driver in the vehicle, and provides that the provisions of this bill are inoperative on May 1, 2018.

#### **EXISTING LAW:**

- 1) Authorizes the operation of autonomous vehicles on public roads for testing purposes under certain circumstances specified in regulations adopted by 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.
- 8) Authorizes the Contra Costa Transportation Authority (CCTA) to conduct a pilot project for the testing of autonomous vehicles without a driver in the vehicle under specific conditions, until 180 days after DMV adopts regulations for the operation of autonomous vehicles without a driver in the vehicle and requires the testing of autonomous vehicles by CCTA to conform to those regulations on that date.

#### FISCAL EFFECT: Unknown

**COMMENTS**: In response to arguments for the traffic safety benefits of increasingly automated vehicle technology, the Legislature passed and Governor Brown signed 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 submitted proposed regulations for non-testing purposes for public comment on March 10, 2017.

The public comment period will end on April 24, 2017, and DMV anticipates adopting finalized regulations before the end of 2017.

The original legislation directing DMV to adopt regulations for the operation of autonomous vehicles requires 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, although DMV can authorize the operation of vehicles without these features subject to whatever additional requirements DMV deems necessary to ensure the safe operation of these vehicles. DMV's proposed regulations for the deployment of autonomous vehicles currently include standards and requirements for autonomous vehicles that do not have an operator inside the vehicle.

Last year, Governor Brown signed AB 1592 (Bonilla), Chapter 814, Statutes of 2016, which allowed CCTA to conduct a pilot project for the testing of autonomous vehicles without a driver in the vehicle under specific conditions. That pilot is separate from the framework for testing autonomous vehicles that DMV has developed.

This bill would authorize LAVTA to conduct a demonstration project under similar parameters and conditions in the City of Dublin. The vehicles LAVTA intends to use in the demonstration project are small shuttles with a capacity of 12 persons and a fully-laden weight of approximately 6,000 pounds. According to the author, this bill is required to ensure that California remains "on the cutting edge of transportation technology and a potential hotbed for investment, development, and new jobs."

While DMV has not yet finalized its regulations for the deployment of autonomous vehicles, the proposed regulations would allow for the testing of the vehicles contemplated for LAVTA's demonstration project without additional legislative authorization. Because the DMV regulations will not be adopted until later this year and will not take effect for 120 days after they are adopted, the author intends to give LAVTA the authority to start their demonstration pilot as soon as possible. The bill's sunset date of May 1, 2018, will require LAVTA to conform with the DMV regulations after they have gone into effect.

Committee concerns: As was noted as a committee concern for AB 1592, by creating a carveout for a specific agency, this bill could continue 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.

*Double referral:* This bill will be referred to the Assembly Communications and Conveyance Committee should it pass out of this committee.

*Related legislation*: SB 251 (Cannella) would authorize the County of Merced to conduct as pilot project for the testing of autonomous vehicles without a driver in the driver's seat under specific conditions. SB 251 is awaiting in the Senate Transportation and Housing Committee.

*Previous legislation*: AB 1592 (Bonilla), Chapter 814, Statutes of 2016, authorizes CCTA to conduct a pilot project for the testing of autonomous vehicles without a driver in the driver's seat under specific conditions.

AB 2258 (Fox) of 2014, would have authorized the City of Lancaster to research and develop autonomous public buses. AB 2258 was referred to this committee but returned to the Chief Clerk without a hearing.

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

## **REGISTERED SUPPORT / OPPOSITION:**

## **Support**

Alameda County Transportation Commission Livermore Amador Valley Transit Authority

## **Opposition**

TechNet

**Analysis Prepared by:** Justin Behrens / TRANS. /