Initial Statement of Reasons Title 13, Division 1, Chapter 1 Article 3.7 – Testing of Autonomous Vehicles Article 3.8 – Deployment of Autonomous Vehicles

PURPOSE

The Department of Motor Vehicles proposes amending Article 3.7, sections 227.26 and 227.28 related to the testing of autonomous vehicles, and section 228.02 in Article 3.8, related to the deployment of autonomous vehicles.

Senate Bill 1298 (Chapter 570; Statutes of 2012) enacted Vehicle Code §38750 which requires the DMV to adopt regulations necessary to ensure the safe operation of autonomous vehicles on public roads, with or without the presence of a driver inside the vehicle. The department initially adopted regulations for the testing of autonomous vehicles that require the presence of a driver inside the vehicle in 2014. Currently there are 61 manufacturers testing autonomous vehicles with test drivers behind the wheel on public streets in California.

Subsequently, the department adopted regulations for the testing of autonomous vehicles that do not require the presence of a driver inside the vehicle and for the submission of an application to the department for the deployment of autonomous vehicles on public roads. For ease of reference the department refers to the operation of autonomous vehicles by members of the public as "deployment." Currently there is one manufacturer that has received a permit to test autonomous vehicles that do not require the presence of a driver inside the vehicle.

Senate Bill 1298 did not restrict the testing or deployment of autonomous vehicles on public roads to vehicles capable of carrying passengers; however, Section 227.28 of the existing regulations specifies that certain vehicles shall not be approved for testing or deployment. One of the vehicle types excluded under Section 227.28 is motortrucks. As defined in Vehicle Code Section 410 a "motortruck" is "a motor vehicle designed, used, or maintained primarily for the transportation of property." The department is amending Section 227.28 to include the testing or deployment of autonomous vehicles that can be classified as a motortruck with a gross vehicle weight rating of less than 10,001 pounds.

PROBLEMS THIS DEPARTMENT INTENDS TO ADDRESS AND BENEFITS ANTICIPATED FROM THE REGULATORY ACTION:

California law, at Vehicle Code Section 410 defines a motortruck as "a motor vehicle designed, used, or maintained primarily for the transportation of property." Current regulations as Section 227.28 (a) (5) specify that "Vehicles described in Vehicle Code sections 31309 and 34500" shall not be approved for testing or deployment on public roads. Subdivision (j) of Vehicle Code Section 34500 specifies that any motortruck "not specified in subdivisions (a) to (h), inclusive, or subdivision (k), that is regulated by the Department of Motor Vehicles, the Public Utilities Commission, or the United States Secretary of Transportation, is subject to regulation by the California Highway Patrol. Motortrucks delivering goods or products are subject to regulation by the DMV and are thus currently excluded from testing or deployment on public roads.

A motortruck with a gross vehicle weight rating of less than 10,001 pounds fits a business model that the Department of Motor Vehicles has observed gaining momentum. Due to the current restrictions on testing and deployment some manufacturers interested in developing autonomous motortrucks have been forced to move their testing operations to other states. Those manufacturers indicate an interest to test and initiate pilot programs involving autonomous motortrucks in California. The amendment proposed by the department will allow the testing and deployment of light duty autonomous vehicles to occur on public roads in California.

ALTERNATIVES CONSIDERED:

The Department initially adopted regulations that did not allow the testing or deployment of motortrucks on public roads. The development light duty autonomous vehicles capable of performing motortruck functions necessitated the reconsideration of the exclusion of such vehicles in the department's regulations.

COMPARABLE FEDERAL AND STATE REGULATIONS:

The National Highway Traffic Safety Administration (NHTSA) establishes motor vehicle safety standards on the federal level. On May 30, 2013, NHTSA issued a

"Preliminary Statement of Policy Concerning Automated Vehicles" to "help states implement this technology safely so that its full benefits can be realized." The NHTSA policy statement affirmed that "NHTSA is responsible for developing, setting, and enforcing Federal motor vehicle safety standards (FMVSSs) and regulations for motor vehicles and motor vehicle equipment." NHTSA indicated that the U.S Department of Transportation was researching the introduction of automated cars onto public roadways and advised states to leave safety standards up to federal regulators.

On September 20, 2016, NHTSA released the Federal Automated Vehicles Policy ("Policy") to establish a national framework for the safe testing and deployment of highly automated and autonomous vehicles. NHTSA's Policy includes a "Vehicle Performance Guidance for Automated Vehicles" that specifies a reporting process consisting of a 15-point safety assessment letter that outlines how a vehicle manufacturer is meeting the Guidance. In September 2017, NHTSA released Automated Driving Systems 2.0: A Vision for Safety which emphasized the voluntary nature of the guidelines listed in the safety assessment, and modified the list of the safety elements that manufacturers were encouraged to consider for autonomous system assessments, testing and validation. In October 2018, NHTSA released Preparing for The Future of Transportation: Automated Vehicles 3.0, which built upon but did not replace Automated Driving Systems 2.0. Despite releasing four policy documents on automated/autonomous vehicles, NHTSA has not adopted any regulations governing the testing or operation of automated, or self-driving, vehicles on public roads, streets, and highways.

Article 3.7

§227.26. Prohibitions on Operations on Public Roads.

Subdivision (g) is adopted to prohibit the operation of motortrucks as defined in Article 3.7, when members of the public are charged a fee or the manufacturer receives compensation for transporting property. Members of the public would still be charged for purchasing the goods (e.g. groceries, restaurant order, products). This provision is necessary to ensure that vehicles are operated for testing purposes only and not for the purpose of generating revenue from providing product transportation or delivery services.

§227.28. Vehicles Excluded from Testing and Deployment.

Subdivision (a) (5) is amended to add the words "excluding motortrucks as defined in Vehicle Code section 410 with a gross vehicle weight rating of less than 10,001 pounds." Vehicle Code Section 38750 requires the department to establish regulations specifying the requirements for the testing and deployment of autonomous vehicles on public roads. The department has adopted regulations that permit the testing and deployment of vehicles that are capable of carrying passengers but those regulations prohibit the testing or deployment of vehicles that are designed or used to transport goods or property. Entities involved in the development of autonomous technology have begun exploring the use of light duty autonomous vehicles as alternatives for more than just the transportation of passengers. Those entities are interested in testing and deploying vehicles that are capable of meeting the growing demand for the delivery services that include groceries and takeout meals. The proposed amendment of subdivision (a)(5) is necessary to allow the testing and deployment of vehicles that weigh less than 10,001 pounds and are designed or used to deliver goods or products.

The department's regulations only authorize the testing and deployment of autonomous technology they do not authorize the use of vehicles in ways that are regulated under other provisions of law or regulation. Subdivision (b) is adopted and necessary to specify that a permit to test or deploy autonomous vehicles does not substitute for or replace any other license or permit requirements that are applicable to a manufacturer's intended operation of the vehicles on public roads.

Article 3.8

§228.02. Definitions.

Subdivision (c) is amended to add the words "or transporting property". This amendment is necessary to clarify that in deployment, manufacturers are not prohibited from charging a fee for transporting property in autonomous vehicles and to maintain the distinction between testing of autonomous vehicles, where manufacturers may not charge a fee.

DEPARTMENTAL DETERMINATIONS

- Technical, Theoretical and/or Empirical Studies, Reports or Documents:
 The department relied on the following documents in preparing this proposed regulatory action:
 - Preparing for the Future of Transportation: Automated Vehicles 3.0. U.S. Department of Transportation.

- Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles. American Association of Motor Vehicle Administrators
- Reasonable Alternatives That Would Lessen Any Adverse Impact on Small Business: No alternatives were considered or presented that would lessen any adverse impact on small business.
- Evidence Supporting Determination of No Significant Adverse Economic Impact on Business: This regulation will impact automobile manufacturers and companies developing systems that allow automated operation of motortrucks. The department has no evidence that the regulation will have an adverse impact on business and anticipates that these regulations will have a positive economic impact on California businesses as more automobile manufacturers and researchers enter the state to develop, test, and deploy automated automobile technology that may be incorporated into light duty vehicles in the future.

ECONOMIC AND FISCAL IMPACT DETERMINATIONS

- Cost or Savings to Any State Agency: None.
- Other Non-Discretionary Cost or Savings to Local Agencies: None.
- Costs or Savings in Federal Funding to the State: None.
- Cost Impact on Representative Private Persons or Businesses: Other than
 the costs associated with securing the evidence of financial responsibility
 as required by Vehicle Code section 38750, and the costs of applying for
 a permit to test or deploy vehicles as specified in the regulations, the
 department is not aware of any cost impacts that a representative
 private person or business would necessarily incur in reasonable
 compliance with the proposed action.
- Effect on Housing Costs: None.
- Local Agency/School District Mandates: The proposed regulatory action will not impose a mandate on local agencies or school districts, or a mandate that requires reimbursement pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code.
- Small Business Impact: This proposed action may impact small business.

Economic Impact Assessment (Government Code section 11346.3)

The department has made the following determinations related to this proposed regulatory action:

1) Creation or Elimination of Jobs Within the State of California

This proposed regulation may eventually lead to either the creation of new jobs within the State of California or new duties associated with existing jobs. These regulations apply to the testing and deployment of autonomous motortrucks that may be used to deliver goods or products. The deployment of driverless delivery vehicles could lead to a decrease in the cost of providing delivery services and an increase in public demand for delivered goods and products, which may either require a shift in existing jobs from delivery drivers to the creation of new jobs associated with preparing and loading the goods and products that are to be delivered.

2) Creation or Elimination of Existing Business Within the State of California

The department does not anticipate that the proposed regulation will either create new business or eliminate existing business within the State of California. The autonomous technology manufacturers interested in testing or deploying autonomous motortrucks within the state of California are established businesses.

3) Expansion of Businesses Currently Doing Business Within the State of California

This regulation may expand businesses currently doing business within the State of California because those businesses are currently prevented from testing or deploying motortrucks in California and are conducting testing and pilot programs in other states. Companies located in California that are currently conducting their testing and pilot programs in other states have expressed interest in testing and deployment here in California.

4) Benefits of Regulation to the Health and Welfare of California Residents, Worker Safety and the State's Environment

The proposed regulatory action is not likely to impact the health and worker safety or the environment. However, the proposed regulation intends to provide assurance of safety to the general public when technology manufacturers and researchers are developing and testing automated vehicle driving systems on public roadways.