

## **FINAL STATEMENT OF REASONS**

### **1) The Update to the Initial Statement of Reasons**

There are no changes to the initial statement of reasons, with exception to a non-substantive edit that was made to Section 227.26(g). Language was added to clarify where the term ‘motortrucks’ is defined in the regulations.

### **2) Imposition of Mandate on Local Agencies or School Districts**

The department’s regulatory action amending Article 3.7, sections 227.26 and 227.38, and Article 3.8 section 228.02, Chapter 1, Division 1, of Title 13, does not impose any mandate on local agencies or school districts and imposes (1) no cost or savings to any state agency, (2) no cost to any local agency or school district that is required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4 of the Government Code, (3) no other discretionary cost or savings to local agencies, and (4) no cost or savings in federal funding to the state. No studies or data were relied upon to make this determination.

### **3) Summary of Comments Received and Department Response**

The proposal was noticed on April 12, 2019, and made available to the public from April 12, 2019 through May 27, 2019. The department received 24 written comments during the 45-day comment period.

Letters from the following commenters expressed support of the proposed regulations and described possible benefits to businesses, customers, and local economies.

- David Flaks, Los Angeles County Economic Development Corporation
- Robert Branton, Ralphs and Jack Breeding, Food 4 Less & FoodsCo
- Maryo Mogannam, San Francisco Council of District Merchants Associations
- Rodney Fong, San Francisco Chamber of Commerce
- David Heller, Greater Geary Boulevard Merchants & Property Owners Association
- Charles Bililies, Souvla
- David Pearl, Andro’s Rostilj, LLC
- Jacy Cohen, The Arc San Francisco
- Jill Fox, India Basin Neighborhood Association
- Albert Chow, People of Parkside Sunset
- Judy Wilkinson, California Council of the Blind
- Gwyneth Borden, Golden Gate Restaurant Association
- Gwen Litvak, Bay Area Council
- Marc Berman, Assemblymember, 24th District and Jerry Hill, Senator, 13th District
- Jessica F. Nigro, Daimler North America
- David Ferguson, Nuro, Inc.

Final Statement of Reasons  
Autonomous Vehicles

The department appreciates the letters of support, however, the comments were not related to the proposed regulatory text and no response is necessary.

- Xavier Maltese, AAA Northern California, Nevada & Utah  
Tim Chang, Automobile Club of Southern California  
*Public Hearing:* Xantha Brusco

**Comment:** Given the complexity of AV technology and the environments in which they will be used, the AAA clubs urge the DMV to continue to critically evaluate AV manufacturers' applications to test or deploy AVs in California, including the data on vehicle performance in simulation and closed course testing as well as the manufacturer's implementation of best practices.

***Department's Response:***

For testing of Autonomous Vehicles, manufacturers are required by the regulations to submit data associated with disengagement of autonomous technology and collisions. Section 227.18 (b) says before on road testing manufacturers must test vehicles under controlled conditions that simulate the intended operational design domain ("ODD") and reasonably determine it is safe to operate in the ODD. They are not required to report this data to the department; consequently, the department would not be able to analyze the additional data suggested in the comment.

Additionally, manufacturers applying for a deployment permit must provide a summary of the manufacturer's autonomous technology testing in the ODD. The data provided by the department shall include: number of vehicle test miles driven on public roads, test tracks or other private roads in autonomous mode; a description of testing methods used to validate the performance; the number of collisions originating from the operation of the autonomous test vehicles in autonomous mode on public roads.

**Comment:** Assessing the AV's functionality should be the primary focus while testing on public roads; working to satisfy customer demands while a vehicle is still being tested could detract from that focus and potentially compromise safety. The AAA Clubs contend that the appropriate time to allow manufacturers to charge fees for transporting goods in AVs is after an AV has been approved by the DMV for deployment.

**Department's Response:** The department agrees. Vehicle Code section 38750 governs the testing and deployment of autonomous technology and requires that the regulations include standards that the department concludes are necessary for the safe operation of the vehicles on public roads. The regulations govern testing of the vehicles, not the testing of a specific uses of the vehicles, and as such the prohibition on compensation is consistent with the goal of testing the safety of the autonomous technology.

**Comment:** It is unclear what data or criteria the DMV is using to support its decisions to permit AV testing or deployment. The AAA Clubs encourage the DMV to consider how to communicate

Final Statement of Reasons  
Autonomous Vehicles

its decision-making process to the public, and continue to rigorously and critically evaluate AV manufacturers' applications before permitting them to operate their vehicles on public roads.

***Department's Response:*** The department thoroughly reviews all applications to ensure that all of the requirements of the regulations have been satisfied prior to issuing a permit.

***Comment:*** The DMV is encouraged to provide more direction to AV manufacturers to make their reporting of disengagements and crashes both more specific and consistent (e.g., by categorizing the types of causes of disengagements) so that manufacturers report information in a more similar way, in order to better track data over time and facilitate comparison between manufacturers.

***Department's Response:*** The specificity suggested in this comment has already been incorporated into the disengagement data reporting form as part of the department's existing driverless testing and deployment regulations.

- Hugo Fozzati, AutoX

***Comment:*** The proposed regulations prohibit charging a fee or receiving compensation for transporting property. Deliveries are an essential part of his company's efforts by allowing them to refine and improve their technology while the public experiences the benefits of autonomous vehicles. Deliveries require extensive preparation and the data produced requires labor-intensive processing, charging for deliveries will help to offset the costs associated with the testing and provide a funding mechanism to support the delivery program. The comment request that the prohibition of compensation be stricken.

***Department's Response:*** Vehicle Code section 38750 governs the testing and deployment of autonomous technology and requires that the regulations include standards that the department concludes are necessary for the safe operation of the vehicles on public roads. The regulations address the testing of the autonomous technology, not the testing of specific uses of autonomous vehicles. While the regulations prohibit a manufacturer from receiving compensation for transporting goods during testing, they do not prohibit a manufacturer from compensating a third party for that third party's costs associated with participating in the testing of the manufacturer's autonomous technology.

- Robert Grant, Cruise and General Motors

***Comment:*** Proposes a modification to 227.26(g) (changes underlined): *(g) When members of the public are charged a fee for transporting property by the manufacturer or the manufacturer receives compensation for transporting property in motortrucks as defined in this article.*

The suggested modification clarifies that the AV manufacturer remains prohibited from charging fees in the testing phase, while the traditional goods delivery business entity would not be subject to the same prohibition, and thus remain free to operate its business and generate fees. Generation of revenue while testing is the key distinction between testing and commercial deployment. The proposed modification respects that distinction while removing barriers to the creation of partnerships between manufacturers and goods delivery services.

Final Statement of Reasons  
Autonomous Vehicles

**Department's Response:** The department's regulations are designed to govern the safe testing of the autonomous technology that is operating vehicles. The amendment proposed in the comment is unnecessary because although the regulations prohibit a manufacturer from receiving compensation for transporting goods during testing, they do not prohibit a manufacturer from compensating a third party for that third party's costs associated with participating in the testing of the manufacturer's autonomous technology, thereby leaving manufacturers free to create partnerships with goods delivery services.

- Edward Reiskin, San Francisco Municipal Transportation Agency  
Seleta Reynolds, Los Angeles Department of Transportation

**Comment:** Autonomous delivery vehicles should be required to display the manufacturer's trade dress and the department should develop a phone/email/internet portal so members of the public can effectively report their observations about AV delivery vehicles testing on public roads directly to DMV. Trade dress requirements would be consistent with the Public Utilities Commission requirements for transportation network companies.

**Department's Response:** Manufacturers are not required to display trade dress; however, they are required to identify to the department all vehicles used in testing by make, vehicle identification number, and license plate number. The vehicle identification information provided in permit application process allows the department to match a vehicle to the manufacturer holding a testing permit. The Autonomous Vehicle page on the department's internet web site already includes a section entitled "Public Feedback" with a link to the email address AVFeedback@dmv.ca.gov which provides members of the public an effective mechanism to report observations regarding their experience with autonomous vehicles operating on public roadways.

**Comment:** DMV should administer existing reporting requirements for mileage, collisions, and disengagements in a way that enables the public to distinguish effectively between those involving delivery vehicles and those involving passenger vehicles.

**Department's Response:** The department's regulations require the reporting of data related to the performance of the autonomous technology performing the driving function without distinction between transporting passengers or the delivery of goods. The data collected by the department is consistent with the department's obligations under Vehicle Code §38750 to obtain information necessary to ensure that vehicles equipped with autonomous technology are safe to operate on public roads.

**Comment:** Manufacturers should be required to document the time, location, and dwell time associated with curbside stopping and parking in compliance with local curb use regulations, including those communicated digitally.

**Department's Response:** The department's regulations require the reporting of data related to autonomous technology performing the driving function. In its 2013 *Preliminary Statement of Policy Concerning Automated Vehicles*, the National Highway Traffic Safety

Final Statement of Reasons  
Autonomous Vehicles

Administration (NHTSA) encouraged states to establish reporting requirements to monitor the performance of self-driving technology during testing. NHTSA specifically suggested that states obtain data on instances in which self-driving vehicles are involved in crashes and instances in which the driver of the vehicle is prompted to take control because of a failure of the automated system or the inability of the automated system to function in certain conditions. The department's regulations are consistent with NHTSA's guidance, requiring the reporting of all crashes and an annual report of all disengagements. The additional data reporting elements suggested in this comment do not relate to the department's need to assess the safety of the autonomous systems driving vehicles on public roads.

**Comment:** DMV should host an additional workshop for industry and government that focuses explicitly on documentation requirements for testing of AV delivery vehicles and facilitates potential public private agreement on a data specification.

**Department's Response:** The Department agrees that hosting a workshop for industry and government focused on data collection and exchange would be very beneficial to the State. While not required as part of this rulemaking, DMV will work to hold such a workshop in 2020. Additionally, the department's regulations require the reporting of data related to autonomous technology performing the driving function. In its 2013 *Preliminary Statement of Policy Concerning Automated Vehicles*, the National Highway Traffic Safety Administration (NHTSA) encouraged states to establish reporting requirements to monitor the performance of self-driving technology during testing. NHTSA specifically suggested that states obtain data on instances in which self-driving vehicles are involved in crashes and instances in which the driver of the vehicle is prompted to take control because of a failure of the automated system or the inability of the automated system to function in certain conditions. The department's regulations are consistent with NHTSA's guidance, requiring the reporting of all crashes and an annual report of all disengagements.

In its 2018 *Automated Vehicles 3.0, Preparing for the Future of Transportation*, the United States Department of Transportation (US DOT) encouraged industry stakeholders to "consider working with Federal, State, and local agencies to identify opportunities to establish voluntary exchanges of data that can provide mutual benefit and help accelerate the safe integration of automation". This newer direction from NHTSA shows the value of the requested workshop.

**Comment:** There is an ambiguity in draft regulations with respect to compensation. The regulation should clearly prohibit compensation for property delivery in passenger vehicles.

**Department's Response:** The proposed regulation clearly prohibits any compensation for the transportation of property by autonomous motortrucks as defined in the regulations.

- Shane Gusman, California Teamsters Public Affairs Council

Final Statement of Reasons  
Autonomous Vehicles

**Comment:** The department states that the proposal paves the way for a “business model that the Department of Motor Vehicles has observed gaining momentum”; however this does not justify amending regulation that are designed to protect the public. The department has lost sight of its mission to protect the public by attempting to facilitate emerging business models for a few private businesses and should reject the proposed amendment.

**Department’s Response:** Vehicle Code §38750 makes no distinction between the types of vehicles allowed to test or deploy on public roads and requires the department to promulgate regulations for the testing and deployment of autonomous technology. The department has taken a phased approach to adopting regulations and this proposal is consistent with the requirements of Vehicle Code §38750.

**Comment:** The department’s fiscal impact estimates are incorrect, specifically that there is no cost to any state agency. There are hundreds of thousands of workers in California deliver goods for a living. Autonomous technology and this regulation will eventually eliminate those jobs.

**Department’s Response:** Vehicle Code §38750 requires the department to promulgate regulations for the testing and deployment of autonomous vehicles on public roads. Consistent with the requirements of Government Code Section 11346.5 the department has appropriately estimated the impacts of the required regulations on state agencies. Several other commenters have pointed out that the regulations will eventually have a positive impact on job creation.

**Comment:** The economic and fiscal impact analysis indicates that there is virtually no cost to private persons from the promulgation of this regulation; however, the impact will eventually be well over the \$50 million threshold determination for “major regulation” status, requiring a pre-notice Department of Finance impact assessment.

**Department’s Response:** Government Code Section 11346.3 (c) requires that a state agency proposing to adopt a major regulation must prepare a standardized regulatory impact analysis in the manner prescribed by the Department of Finance. In Title 1, Division 3, Chapter 1, Section 2000 of the California Code of Regulations, the Department of Finance has defined a “major regulation” as any proposed rulemaking action adopting a regulation that will “have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars (\$50,000,000) in any 12 month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented (as estimated by the state agency)...” To be a major regulation the proposed autonomous motortruck regulations must have an anticipated impact on California businesses and individuals in an amount exceeding \$50,000,000 in the 12 months from filing with the Secretary of State to full implementation.

Under Vehicle Code Section 38750 an autonomous vehicle is a vehicle that is equipped with technology that is capable of operating at Levels 3, 4, or 5 as defined in SAE International’s J3016. In Late February 2018, the department adopted regulations that permit the testing of vehicles capable of operation without a driver inside the vehicle and

## Final Statement of Reasons Autonomous Vehicles

the general deployment of autonomous vehicles on public roads. Those regulations became operative on April 1, 2018. In the sixteen months that the driverless testing/deployment regulations have been operative the department has received only three applications to test driverless vehicles and has received no applications to deploy. Only one company has been issued a permit to test driverless vehicles.

Based on statements made by manufacturers developing autonomous motortrucks, and given the emerging nature of the technology and the varying testing and deployment timelines between manufacturers, we would consider the regulations to be “fully implemented” once they become effective and the department has gone through the first 12-month cycle of processing applications. The department anticipates that the relevant 12 month period will be the 12 months following the operative date of the regulations.

There are currently sixty-two (62) companies that have permits to test autonomous vehicles with a driver in the vehicle. Including some of those current permit holders, the department is aware that there are only a small number of entities interested in testing motortrucks on public roads. Unlike other regulations where there is a clear timeframe for when regulated entities must come into compliance, there is no standard timetable for when manufacturers will seek DMV approval to test and/or deploy autonomous vehicles. As we have seen with the driverless testing/deployment regulations, the department has received only three applications to test driverless vehicles in the first sixteen months that those regulations have been effective. Given what the department knows about the development of autonomous technology for motor trucks and its experience with so few applications being submitted for driverless testing after the amendment of the existing regulations in 2018, the department does not anticipate that the proposed autonomous vehicle regulations meet the definition of a major regulation requiring the perpetration of a standardized regulatory impact assessment for major regulations.

**Comment:** Commenter also believes that this technology is still unsafe for deployment of light passenger automated vehicles on public roads and to move into heavier automated motortrucks is at best premature and some would argue reckless. Manufacturers and promoters of this technology make many safety claims on its behalf but the jury is still out on the overall safety impact of automated vehicle technology.

**Department’s Response:** The regulations require that before public road testing the technology must be tested in simulation and closed track conditions that closely simulate the intended operational design domain and the manufacturer must be reasonably sure that public road testing is safe. The regulations also require annual reports of disengagements and immediate reports on all crashes. The comment provides no data or examples to support the conclusion that the autonomous technology is unsafe for testing on public roads.

- Paul Escobar, Silicon Valley Leadership Group  
Leah Silverthorn, California Chamber of Commerce  
Jarrell Cook, California Manufacturers & Technology Association  
Gwen Litvak, Bay Area Council

Final Statement of Reasons  
Autonomous Vehicles

**Comment:** The proposed and existing regulations do not make clear if there is a similar prohibition on the charging of fees by third-party delivery provider partners (i.e., service fees) that are separate from the manufacturer of the autonomous vehicle utilized:

Suggested amendments:

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.

**Department's Response:** The regulation is written in clear and understandable language and speaks to prohibiting "compensation for transporting property". The proposed regulation is silent on the cost for the purchase of the property because it does not regulate the actual purchase of the property. Further clarification on an already clear provision is not necessary.

**Comment:** Request that the DMV confirm in a final statement of reasons that the text of the proposed regulations authorizes an arrangement where a third-party delivery service provider partners with AV manufacturer to deliver goods using autonomous test vehicles, the third party delivery service charges its fees to customers, and the AV manufacturer does not receive compensation for the operation of its autonomous test vehicles.

**Department's Response:** The department's regulations are designed to govern the safe testing of the autonomous technology that is operating vehicles. Although the regulations prohibit a manufacturer from receiving compensation for transporting goods during testing, they do not prohibit a manufacturer from compensating a third party for that third party's costs associated with participating in the testing of the manufacturer's autonomous technology, thereby leaving manufacturers free to create partnerships with goods delivery services.

**Comment:** Suggests the department outline the timeline by when the proposed regulations will be adopted and go into effect, making clear when manufacturers will be able to apply for testing and/or deployment permits for autonomous vehicles that are classified as motortrucks with a gross weight of less than 10,001 pounds. A definite timeline would provide certainty and a pathway for manufacturers to test and deploy these services in California.

**Department's Response:** The timelines for when regulations go into effect are specified in Vehicle Code Section 38750 (f) for vehicles capable of operation without a driver, and generally in Government Code Section 11343.4.

Final Statement of Reasons  
Autonomous Vehicles

**Comment:** Commenters urge the department to engage the Federal Motor Carrier Safety Administration and begin any necessary regulatory activity to allow testing and deployment of autonomous and driverless trucks over 10,001 pounds in California as soon as possible.

**Department's Response:** Due to the unique safety concerns related to vehicles that weigh more than 10,001 pounds, the department believes that regulations allowing their testing and deployment should be part of a separate regulatory proposal.

- Ali Ahmed, Robomart

**Comment:** Suggests the application process for the permit to deploy autonomous light duty trucks include the registration and licensing of the vehicles. In the current application process submitting the vehicle registration and license plate number is a requirement, however the process of attaining a license plate and registration for a completely driverless vehicle is not straightforward, thus leading to a catch-22. It would be a more straightforward process if the permit process included the registration and licensing of the driverless vehicles in addition to the issuance of the permit to operate and deploy.

**Department's Response:** Section 227.52 establishes the requirements for the registration and titling of autonomous test vehicles and Section 228.26 establishes the requirements for registering a deployed vehicle. The application process already includes the registration and titling of vehicles. Problems in registering imported vehicles may be because the vehicles does not meet federal motor vehicle safety standards and are therefore not eligible for registration and more importantly, pursuant to Vehicle Code Section 38750 and the current regulations, are not eligible for testing or deployment on public roads.

**Comment:** Suggests the application process for the permit to deploy autonomous light duty trucks consider accepting other vehicle identification or registration numbers, in the case a vehicle does not have a VIN, as is the case with some low-speed vehicles especially those procured from Japan.

**Department's Response:** Pursuant to Vehicle Code section 21251, low speed vehicles are subject to all of the provisions applicable to other motor vehicles, which would include the requirements for a vehicle identification number. Vehicles that are imported from outside of the United States must also meet NHTSA requirements and be authorized for import into the United States.

**Comment:** Subdivision (g) of §227.26 should be expanded to clarify that sale of goods may be transacted at time of purchase and not necessarily prior to delivery. The robomart vehicle operates as a mobile store; our customers do not preorder items to be delivered, rather they call the store/robomart to them and shop when it arrives right at their doorstep. We are conducting retail sales at the time of purchase, although public consumers "purchase" goods from Robomart, we do not take a cut off the sale of goods, 100% of the revenue goes back to our retailers. Our intention is not to generate profits or significant revenue off these trials, but to use the permit as a means to test our unique proposition of autonomous, checkout-free store-hailing and its significant economic and societal benefits as a pioneering innovation.

Final Statement of Reasons  
Autonomous Vehicles

**Department's Response:** The regulations do not prohibit charging a customer for the good or product that is being delivered, however it does prohibit the charging a fee or a manufacturer receiving compensation for delivering goods. This comment demonstrates that the technology operating the vehicle is being tested without relying on revenue generated from providing a delivery of goods.

- Jordan Coleman, Kodiak Robotics  
Jonny Morris, Embark Trucks  
Kameron Simmons, Starsky Robotics  
Robert Brown, TuSimple

**Comment:** It is critical that the DMV act quickly to consider rules for testing and deployment of autonomous motortrucks that weigh more than 10,000 pounds. Current restrictions have forced many to move their testing teams to other states.

**Department's Response:** Due to the unique safety concerns related to vehicles that weigh more than 10,001 pounds, the department believes that regulations allowing their testing and deployment should be part of a separate regulatory proposal.

**Comment:** It is critical to allow operators of heavy-duty autonomous motortrucks to transport property for a fee while testing their systems. The restriction makes sense for operators of commercial passenger vehicles, but is an unnecessary barrier to the testing of autonomous motortrucks, particularly heavy-duty, long-haul motortrucks.

**Department's Response:** Heavy-duty motortrucks, or vehicles weighing more than 10,001 pounds are not the subject of this regulatory proposal, consequently this comment is not relevant to the proposed regulation. Due to the unique safety concerns related to vehicles that weigh more than 10,001 pounds, the department believes that regulations allowing their testing and deployment should be part of a separate regulatory proposal.

#### 4) Public Hearing

On May 30, 2019, the department conducted a public hearing in Sacramento. The public hearing was attended by several interested parties and the department heard oral comments from seven (7) individuals.

- Julie Kreuger, Los Angeles County Economic Development Corporation  
Speaking in support of proposed regulations. No comments on proposed regulations.
- Xantha Bruso, AAA Northern California  
Comments presented at the hearing are responded to in the department's responses to AAA on page 2 of this final statement of reasons.
- Katie Angotti, San Francisco Municipal Transportation Agency  
Comments presented at the hearing are responded to in the department's response to the SFMTA and LADOT joint letter.

Final Statement of Reasons  
Autonomous Vehicles

- George Ivanov, Waymo  
No comments presented on the proposed regulations.
- Tim Valderrama, Nuro  
No comments presented at the hearing are related to the proposed regulations.
- Matt Broad, Teamsters  
Comments presented at the hearing are responded to in the department's responses to the California Teamsters Public Affairs Council.
- Candice Plotkin, Cruise  
Comments presented at the hearing are responded to in the department's responses to Cruise and General Motors.

**5) Determination of Alternatives**

The department has determined that no reasonable alternative considered by the department or that has otherwise been identified and brought to the attention of the department would be more effective in carrying out the purpose for which the action is proposed, or would be effective as and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

**6) Consultation with the California Highway Patrol**

Vehicle Code section 38750 requires the department consult with the Department of the Highway Patrol (CHP) in the development of these regulation. The department has ensured CHP's participation in this and previous rulemaking activities related to autonomous vehicles. With respect to the current action, the CHP reviewed and provided input on proposed regulations, co-chaired workshops held related to autonomous motortrucks, and attended the public hearing conducted after the 45-day comment period.