Statement of Reasons for the Second Modified Regulatory Text

Title 13, Division 1, Chapter 1
Article 3.7. Testing of Autonomous Vehicles and Article 3.8 Deployment of Autonomous Vehicles

The Department of Motor Vehicles (department) proposes amendments to Sections in Articles 3.7 and 3.8 related to autonomous vehicles. The department published notice of the proposed changes on April 25, 2025, and the initial comment period closed on June 9, 2025. A public hearing was held on June 10, 2025, in San Francisco, attended by representatives from vehicle and technology manufacturers, special interest groups, and local transportation agencies. Based on written and oral comments, the department determined that further revisions were necessary and initiated a 15-day comment period for modified express terms and a revised statement of reasons on December 3, 2025. Following this additional comment period, the department has concluded that further revisions are still required.

§ 227.00. Purpose.

No additional amendments are being made to Section 227.00.

§ 227.02. Definitions.

Subdivision (xx) is amended based on stakeholder feedback and removes the terms "completed" and "compliance with" from the regulatory text. A safety case is a document that manufacturers must refine throughout the lifecycle of the automated driving system. The department recognizes that no single overarching safety standard exists for automated driving systems. Instead, multiple recognized approaches exist for addressing safety and engineering. The intent of the regulation is not to prescribe one specific standard but to require manufacturers to clearly articulate the standards, methodologies, and best practices they applied in the design and validation of their systems. The amendment further specifies that the required description should articulate how the manufacturer's evidence supports the safety case, rather than requiring submission of all supporting evidence, which may be highly technical and voluminous. Additionally, the amendment removes capitalization from the phrase "Artificial Intelligence (AI) safety," as it does not reference a specific standard or defined term within the regulations. AI safety addresses risks unique to machine learning, and industry best practices and safety frameworks—such as those developed by the AV Safety Consortium—are increasingly recognizing AI safety as a distinct domain that warrants explicit consideration.

§ 227.04. Requirements for a Manufacturer's Testing Permit.

No additional amendments are being made to Section 227.04.

§ 227.06. Evidence of Financial Responsibility.

No additional amendments are being made to Section 227.06.

§ 227.08. Instrument of Insurance.

No additional amendments are being made to Section 227.08.

§ 227.10. Surety Bond.

No additional amendments are being made to Section 227.10.

§ 227.12. Certificate of Self-Insurance.

No additional amendments are being made to Section 227.12.

§ 227.14. Autonomous Test Vehicles Proof of Financial Responsibility.

No additional amendments are being made to Section 227.14.

§ 227.16. Identification of Autonomous Test Vehicles.

No additional amendments are being made to Section 227.16.

§ 227.18. Manufacturer's Testing Permit and Manufacturer's Testing Permit -- Driverless Vehicles.

No additional amendments are being made to Section 227.18.

§ 227.20. Term of Permit.

No additional amendments are being made to Section 227.20.

§ 227.22. Enrollment in Employer Pull Notice Program.

No additional amendments are being made to Section 227.22.

§ 227.24. Prohibitions on Operation on Public Roads.

No additional amendments are being made to Section 227.24.

§ 227.26. Vehicles Excluded from Testing and Deployment.

No additional amendments are being made to Section 227.26.

§ 227.28. Manufacturer's Testing Permit Application.
Subdivision (d) is amended based on stakeholder feedback and removes the terms "completed", "accompanied", and "compliance with the following areas" from the regulatory text. A safety

case is a document that manufacturers must refine throughout the lifecycle of the automated driving system. The department recognizes that no single overarching safety standard exists for automated driving systems. Instead, multiple recognized approaches exist for addressing safety and engineering. The intent of the regulation is not to prescribe one specific standard but to require manufacturers to clearly articulate the standards, methodologies, and best practices they applied in the design and validation of their systems. The amendment further specifies that the required description of a safety case should articulate how the manufacturer's evidence supports the safety case, rather than requiring submission of all supporting evidence, which may be highly technical and voluminous. The amendment removes capitalization from the phrase "Artificial Intelligence (AI) safety," as it does not reference a specific standard or defined term within the regulations. AI safety addresses risks unique to machine learning, and industry best practices and safety frameworks—such as those developed by the AV Safety Consortium—are increasingly recognizing AI safety as a distinct domain that warrants explicit consideration.

§ 227.30. Review of Application.

No additional amendments are being made to Section 227.30.

§ 227.32. Requirements for Autonomous Vehicle Test Drivers.

No additional amendments are being made to Section 227.32.

§ 227.34. Qualifications for Autonomous Vehicle Test Driver.

No additional amendments are being made to Section 227.34.

§ 227.36. Autonomous Vehicle Test Driver Training Program.

No additional amendments are being made to Section 227.36.

§ 227.38. Requirements, Qualifications, and Training for Remote Drivers.

No additional amendments are being made to Section 227.38.

§ 227.40. Requirements, Qualifications, and Training for Remote Assistants.

No additional amendments are being made to Section 227.40.

§ 227.42. Manufacturer's Permit to Test Autonomous Vehicles That Do Not Require a Driver in the Driver's Seat.

No additional amendments are being made to Section 227.42.

§ 227.44. Refusal of Autonomous Vehicle Testing Permit or Testing Permit Renewal.

No additional amendments are being made to Section 227.44.

§ 227.46. Restriction of Autonomous Vehicles Testing Permit.

No additional amendments are being made to Section 227.46.

§ 227.48. Suspension, or Revocation, or Restriction of Autonomous Vehicle Testing Permit.

No additional amendments are being made to Section 227.48.

§ 227.50. Demand for Hearing.

No additional amendments are being made to Section 227.50.

§ 227.52. Reinstatement of Testing Permit.

No additional amendments are being made to Section 227.52.

§ 227.54. Reporting Collisions.

Section 227.54 is amended based on stakeholder feedback and further aligns California's regulations with federal Automated Vehicle (AV) crash reporting requirements. The full title of the Standing General Order is used to provide clarity to the regulated public. In the event that the National Highway Traffic Safety Administration (NHTSA) Standing General Order (SGO) is rescinded, the department will continue to apply the existing NHTSA SGO (June 2025) reporting requirements to ensure consistency with established processes. This revision updates the SGO version referenced in the regulations to the most recent version issued in June 2025. This approach maintains continuity and balances manufacturers' existing reporting mechanisms with the department's need to obtain data on safety incidents occurring on public roads.

Subdivision (a) is being removed as crash reporting requirements from the National Highway Traffic Safety Administration Standing General Order (June 2025) shall apply in California if the Standing General Order 2021-01 is rescinded.

Subdivision (b) is renumbered to subdivision (a).

Subdivision (c) is renumbered to subdivision (b).

Subdivision (d) is renumbered to subdivision (c).

§ 227.56. Reporting of Dynamic Driving Task Performance Relevant System Failures.
Subdivision (a) is adopted to establish a 120-day implementation period following the effective date of the regulations. This delay allows manufacturers sufficient time to establish reporting processes in compliance with the regulatory requirements. The department determined that this approach supports an orderly transition and minimizes disruption to existing operations while ensuring timely compliance.

Subdivision (a) is renumbered to subdivision (b).

Subdivision (b) is renumbered to subdivision (c).

Subdivision (c) is renumbered to subdivision (d).

Subdivision (d) is renumbered to subdivision (e).

§ 227.58. Reporting Vehicle Immobilizations.

Subdivision (a) is adopted to establish a 120-day implementation period following the effective date of the regulations. This delay allows manufacturers sufficient time to establish reporting processes in compliance with the regulatory requirements. The department determined that this approach supports an orderly transition and minimizes disruption to existing operations while ensuring timely compliance.

Subdivision (a) is renumbered to subdivision (b).

Subdivision (b) is renumbered to subdivision (c).

§ 227.60. Reporting Vehicle Miles Traveled.

Subdivision (a) is adopted to establish a 120-day implementation period following the effective date of the regulations. This delay allows manufacturers sufficient time to establish reporting processes in compliance with the regulatory requirements. The department determined that this approach supports an orderly transition and minimizes disruption to existing operations while ensuring timely compliance.

Subdivision (a) is renumbered to subdivision (b).

Subdivision (b) is renumbered to subdivision (c).

§ 227.62. Test Vehicle Registration and Certificates of Title.

No additional amendments are being made to Section 227.62.

§ 227.64. Transfers of Interest or Title for an Autonomous Test Vehicle.
No additional amendments are being made to Section 227.64.
§ 227.66. Reporting Braking Events.

Subdivision (a) is adopted to establish a 120-day implementation period following the effective date of the regulations. This delay allows manufacturers sufficient time to establish reporting processes in compliance with the regulatory requirements. The department determined that

this approach supports an orderly transition and minimizes disruption to existing operations while ensuring timely compliance.

Subdivision (a) is renumbered to subdivision (b).

Subdivision (b) is renumbered to subdivision (c).

Subdivision (c) is renumbered to subdivision (d).

§ 227.68. Notice of Autonomous Vehicle Noncompliance.

No additional amendments are being made to Section 227.68.

§ 227.70. Preliminary Information Notice.

No additional amendments are being made to Section 227.70.

§ 227.72. Request for Information.

No additional amendments are being made to Section 227.72.

§ 227.74. Confidential Business Information.

No additional amendments are being made to Section 227.74.

§ 228.00. Purpose.

No additional amendments are being made to Section 228.00.

§ 228.02. Definitions.

No additional amendments are being made to Section 228.02.

§ 228.04. Financial Requirements for a Permit to Deploy Autonomous Vehicles on Public Roads.

No additional amendments are being made to Section 228.04.

§ 228.06. Requirements, Qualifications, and Training for Remote Drivers and Remote Assistants.

No additional amendments are being made to Section 228.06.

§ 228.08. Application for a Permit for Post-Testing Deployment of Autonomous Vehicles on Public Roads.

Subdivision (a) (1) (C) is amended based on stakeholder feedback and removes the terms "complete" from the regulatory text. A safety case is a document that manufacturers must refine throughout the lifecycle of the automated driving system. The term "compliance with" is also removed from the regulatory text based on stakeholder feedback. The department recognizes that no single overarching safety standard exists for automated driving systems. Instead, multiple recognized approaches exist for addressing safety and engineering. The intent of the regulation is not to prescribe one specific standard but to require manufacturers to clearly articulate the standards, methodologies, and best practices they applied in the design and validation of their systems. The amendment also removes the term "accompanied" and further specifies that the required description of a safety case should articulate how the manufacturer's evidence supports the safety case, rather than requiring submission of all supporting evidence, which may be highly technical and voluminous. Additionally, the amendment removes capitalization from the phrase "Artificial Intelligence (AI) safety," as it does not reference a specific standard or defined term within the regulations. AI safety addresses risks unique to machine learning, and industry best practices and safety frameworks—such as those developed by the AV Safety Consortium—are increasingly recognizing AI safety as a distinct domain that warrants explicit consideration.

Subdivision (a) (2) (A) is amended based on stakeholder feedback and removes the terms "completed", "accompanied", and "compliance with the following areas" from the regulatory text. A safety case is a document that manufacturers must refine throughout the lifecycle of the automated driving system. The department recognizes that no single overarching safety standard exists for automated driving systems. Instead, multiple recognized approaches exist for

addressing safety and engineering. The intent of the regulation is not to prescribe one specific standard but to require manufacturers to clearly articulate the standards, methodologies, and best practices they applied in the design and validation of their systems. The amendment further specifies that the required description of a safety case should articulate how the manufacturer's evidence supports the safety case, rather than requiring submission of all supporting evidence, which may be highly technical and voluminous. The amendment removes capitalization from the phrase "Artificial Intelligence (AI) safety," as it does not reference a specific standard or defined term within the regulations. AI safety addresses risks unique to machine learning, and industry best practices and safety frameworks—such as those developed by the AV Safety Consortium—are increasingly recognizing AI safety as a distinct domain that warrants explicit consideration. In addition, subdivision (a) (2) (A) is amended to include the correct reference to the definition of safety case in section 227.02 (xx).

Subdivision (a) (14) (A) is amended based on stakeholder feedback and removes the terms "completed", "accompanied", and "compliance with the following areas" from the regulatory text. A safety case is a document that manufacturers must refine throughout the lifecycle of the automated driving system. The department recognizes that no single overarching safety standard exists for automated driving systems. Instead, multiple recognized approaches exist for addressing safety and engineering. The intent of the regulation is not to prescribe one specific standard but to require manufacturers to clearly articulate the standards, methodologies, and best practices they applied in the design and validation of their systems. The amendment further specifies that the required description of a safety case should articulate how the manufacturer's evidence supports the safety case, rather than requiring submission of all supporting evidence, which may be highly technical and voluminous. The amendment removes capitalization from the phrase "Artificial Intelligence (AI) safety," as it does not reference a specific standard or defined term within the regulations. AI safety addresses risks unique to machine learning, and industry best practices and safety frameworks—such as those developed by the AV Safety Consortium—are increasingly recognizing AI safety as a distinct domain that warrants explicit consideration.

§ 228.10. Review of Application.

No additional amendments are being made to Section 228.10.

§ 228.12. Amendment of Application.

No additional amendments are being made to Section 228.12.

§ 228.14. Reporting Safety Defects.

No additional amendments are being made to Section 228.14.

§ 228.16. Conditions Related to the Term of Permit.

No additional amendments are being made to Section 228.16.

§ 228.18. Refusal of an Application for a Permit to Deploy.

No additional amendments are being made to Section 228.18.

§ 228.20. Demand for Hearing on Refusal of Permit.

No additional amendments are being made to Section 228.20.

§ 228.22. Restriction of Autonomous Vehicles Deployment Permit.

No additional amendments are being made to Section 228.22.

§ 228.24. Suspension, Revocation, or Restriction of Permit.

No additional amendments are being made to Section 228.24.

§ 228.26. Administrative Procedures for a Suspension, or Revocation, or Restriction of Permit.

No additional amendments are being made to Section 228.26.

§ 228.28. Information Privacy.

No additional amendments are being made to Section 228.28.

§ 228.30. Registration of Autonomous Vehicles.

No additional amendments are being made to Section 228.30.

§ 228.32. Statements About Autonomous Technology.

No additional amendments are being made to Section 228.32.

§ 228.34 Reporting Collisions.

Section 228.34 is amended, and subdivisions are renumbered based on stakeholder feedback and further aligns California's regulations with federal Automated Vehicle (AV) crash reporting requirements. The full title of the Standing General Order is used to provide clarity to the regulated public. In the event that the National Highway Traffic Safety Administration (NHTSA) Standing General Order (SGO) is rescinded, the department will continue to apply the existing NHTSA SGO (June 2025) reporting requirements to ensure consistency with established processes. This revision updates the SGO version referenced in the regulations to the most recent version issued in June 2025. This approach maintains continuity and balances

manufacturers' existing reporting mechanisms with the department's need to obtain data on safety incidents occurring on public roads.

Subdivision (a) is being removed as crash reporting requirements from the National Highway Traffic Safety Administration Standing General Order (June 2025) shall apply in California if the Standing General Order 2021-01 is rescinded.

Subdivision (b) is renumbered to subdivision (a).

Subdivision (c) is renumbered to subdivision (b).

Subdivision (d) is renumbered to subdivision (c).

§ 228.36 Reporting Vehicle Immobilizations.

Section 228.36 is amended to specify that reports must be submitted to the department at the end of each quarter and includes the specific due dates. It further clarifies that the first report is due after the first full calendar quarter following the effective date of the regulations. The department determined that this approach supports an orderly transition, minimizes disruption to existing operations, and ensures timely compliance.

§ 228.38 Reporting Dynamic Driving Task Performance Relevant System Failures.
Section 228.38 is amended to specify that reports must be submitted to the department at the end of each quarter and includes the specific due dates. It further clarifies that the first report is due after the first full calendar quarter following the effective date of the regulations. The department determined that this approach supports an orderly transition, minimizes disruption to existing operations, and ensures timely compliance.

§ 228.40. Reporting Vehicle Miles Traveled.

Section 228.40 is amended to specify that reports must be submitted to the department at the end of each quarter and includes the specific due dates. It further clarifies that the first report is due after the first full calendar quarter following the effective date of the regulations. The department determined that this approach supports an orderly transition, minimizes disruption to existing operations, and ensures timely compliance.

§ 228.42. Notice of Autonomous Vehicle Noncompliance.
No additional amendments are being made to Section 228.42.

§ 228.44. Preliminary Information Notice.

No additional amendments are being made to Section 228.44.

§ 228.46. Request for Information.

No additional amendments are being made to Section 228.46.

ECONOMIC IMPACT ASSESSMENT

(Government Code Section 11346.3)

In considering this proposed regulatory action, the department has identified the following impacts:

Research and rulemaking activities at the Federal level (National Highway Traffic Safety Administration [NHTSA], 2025) as well as the department's experience of over a decade regulating autonomous vehicles indicate that the safe integration of automated driving systems will occur incrementally and continue to be a gradual, step-by-step process, starting with controlled testing, then limited deployments, eventually transitioning to full integration. 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 departmental approval to test and/or deploy AVs. The lifecycle of development for autonomous technology is an iterative, complex engineering process that may include mapping specific locations, conducting testing on non-public roads, using simulation, and testing with a safety driver behind the wheel. The decision of when manufacturers apply for new or additional permissions will depend on internal development timelines, the level of autonomy being pursued, and business strategies. For example, a manufacturer may be ready to deploy a Level 3 vehicle within the next year but may require several years before testing Level 4 or Level 5 vehicles. While the department has identified the following impacts, they are expected to be gradual, and the regulations do not dictate a specific date for these impacts to be realized.

1. Creation or Elimination of Jobs within the State

The proposed action may lead to the creation of jobs within California, particularly in areas such as vehicle manufacturing, fleet operations, software engineering, and mobility services. Research suggests that AV deployment will create new employment opportunities across multiple sectors, offsetting gradual reductions in traditional driving roles. In passenger mobility, early results for human drivers have been mixed, with some AV-active cities seeing declines in hourly pay or incentives, while others report gains in monthly gross earnings (Gridwise Analytics, 2025). AV platforms—particularly in ride-hailing—are expected to maintain human roles in dispatch, compliance, data operations, and field support to ensure service coverage and operational safety. California's existing concentration of STEM talent and automotive manufacturing capacity further strengthens its ability to capture these job gains, as California ranks in the top 10 for automotive and STEM employment (Steer & Fourth Economy, 2023). For long-haul trucking, the potential impact on operator-hours could be significant under full national deployment but near-term effects are expected to be geographically limited, with offsetting new roles at transfer hubs/terminals, maintenance, and safety operations as logistics networks adapt (Mohan & Vaishnav, 2022).

2. Creation of New Businesses or Elimination of Existing Businesses

The Department has determined that the proposed action is unlikely to result in the elimination of existing businesses or significantly alter the structure of the current AV industry. Historical trends under prior AV regulatory packages did not lead to widespread business closures, and the incremental nature of AV deployment supports this conclusion. While the regulations introduce new reporting requirements, manufacturers are already collecting most of the required data for internal purposes. Compliance costs, estimated at approximately $5.8 million in the first year and $6.8 million annually thereafter, are not expected to exceed the $50 million threshold for major regulations and will be distributed across multiple entities, minimizing economic disruption.

Additionally, the regulations could create new investment opportunities across multiple sectors. In passenger mobility, AV integration into ride-hailing platforms has created specialized fleet management services, compliance operations, and data analytics firms, as platforms seek to optimize mixed fleet systems and maintain service reliability (Gao, Wu, Dimakis, & Courcoubetis, 2025). Similarly, early AV deployments will drive new partnerships between technology developers and transportation companies, creating businesses focused on vehicle maintenance, sensor calibration, and operational safety oversight (Steer & Fourth Economy, 2023). In freight and logistics, automation of long-haul trucking is projected to generate demand for transfer hubs, terminal infrastructure, and remote monitoring services, enabling potential businesses to emerge in equipment servicing, telematics, and specialized workforce training (Mohan & Vaishnav, 2022).

3. Expansion of Businesses Currently Doing Business within the State

This rulemaking action may lead to the expansion of businesses currently operating in California, driven by incremental growth in autonomous vehicle testing and deployment, including the introduction of heavy-duty AV operations. Based on discussions and comments from manufacturers, companies will require skilled personnel to develop compliance processes, manage data reporting, and support terminal operations for heavy-duty vehicles. These activities will generate employment opportunities in engineering, logistics, and technology support sectors. Additionally, the establishment of terminal infrastructure and partnerships with freight and goods delivery companies is expected to stimulate investment and business expansion within California. However, these economic impacts are expected to be gradual, and the regulations do not dictate a specific date for these impacts to be realized.

4. Benefits to Health, Welfare, Worker Safety, or the State's Environment

The department has determined there is no impact to the state's environment and that the proposed regulatory action is not likely to negatively impact worker health and safety. The regulations are designed to enhance public safety by requiring robust data reporting, operational standards, and enforcement mechanisms for autonomous vehicle operations. These measures will ensure that technology manufacturers and researchers adhere to best practices

when developing, testing, and deploying automated driving systems on public roadways. The gradual implementation of heavy-duty AV testing, combined with safety driver requirements during initial phases, further mitigates potential risks to workers and the general public.