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INFORMATIONAL HEARING

Overview of the Department of Motor Vehicle's April 2026 Autonomous Vehicle Regulations

Monday, June 8, 2026
2:30 PM 1021 O Street, Room 1100

Background

Purpose of the Hearing

On April 28, 2026, the Department of Motor Vehicles (DMV) updated its autonomous vehicle (AV) regulations, providing additional oversight and enforcement for AVs while also permitting heavy-duty AVs with a gross vehicle weight rating (GVWR) over 10,001 pounds to operate on California roads with a testing and deployment permit. These changes are the most significant update to the DMV's AV regulations since the DMV first permitted driverless testing and deployment on April 2, 2018.

This hearing is focused on the three major components of the changes DMV made to its AV regulations:

- 1) DMV's oversight role in collecting data regarding AV operations and its new enforcement tools.

- 2) Updates to requirements for interaction with first responders, the ability for law enforcement to issue notices of noncompliance for violation of the laws, and regulations for the remote operation of AVs.
- 3) Testing and deployment of AVs with a GVWR of greater than 10,001 pounds.

This hearing will give the Legislature the opportunity to learn about these new regulations and how DMV will improve its oversight of AV operations in the state, while giving the members of the Legislature the opportunity to hear from stakeholders.

Introduction

The Legislature passed SB 1298 (Padilla), Chapter 570, Statutes of 2012, which permitted AVs to operate on public roads for testing by a driver under certain conditions. In 2014, DMV released regulations to allow for testing AVs with a test driver, and in April 2018, DMV finalized regulations for the testing and deployment of AVs on public roads without a driver.

Thirty-six companies currently have a permit for testing with a driver (down from a high of 58), and six companies have received a permit for testing without a driver. Three companies have received a deployment permit without a human driver. One company has a deployment permit for a level three AV, which requires a human operator. One or two companies currently have a deployment permit. One company, Cruise, has lost both its deployment permit and its permit to test without a human operator.

California has been the epicenter of the testing and deployment of AVs. AV permit holders in California logged more than 9 million test miles between December 1, 2024, and November 30, 2025. Nearly half (4.192 million) of those miles were driverless testing miles. Waymo, the only AV company with a deployment permit, drove a total of 61.5 million miles between 2023 and the third quarter of 2025, including 32.3 million miles with passengers. As of September of 2025, Waymo has made over a million passenger trips a month in California, carrying 1.37 million passengers.

The National Highway Traffic Safety Administration (NHTSA) requires AV companies to report crashes to NHTSA. In the last 12 months, AV companies have reported 927 crashes. Since NHTSA began collecting data on AVs in 2021, only 218 injury-related crashes and two fatalities have been reported to NHTSA. 183 of the 218 injury-related crashes were minor injuries, while only seven were serious. Most crashes occurred in California (1,352), Arizona (435), and Texas (237). All other states reported double-digit, single-digit, or no collisions, indicating that AVs are primarily operated in three states.

Since 2021, AVs have provided passenger service in California, with most testing and deployment occurring in San Francisco. In January 2023, the San Francisco County Transportation Authority asked the California Public Utilities Commission to reject Waymo's request to allow commercial deployment throughout the city. The letter notes a series of 9-1-1 calls that the city had received, noting AVs causing traffic obstructions and backups, and erratic driving. The duration of unplanned AV stops obstructing travel lanes appeared to range from minutes (extending through many traffic light cycles) to hours. Additional incidents were posted on social media or reported by the media. The number of reported incidents is likely a fraction of the total unplanned stops because most are reported during late-night hours when few people are on the streets to notice them and because many people would not think of calling 9-1-1 in these circumstances. The AV failure incidents the public has reported have been significantly concentrated on downtown streets, streets with transit service, streets on the bike network, intersections, and streets on the City's High Injury Network (the 12% of San Francisco streets that account for more than 68% of severe or fatal injury crashes)."

Since authorizing the testing and deployment of AVs, DMV has only taken two actions against AV manufacturers. According to the California Resilient and Innovative Mobility Initiative report, *A Blueprint for Improving Automated Driving Safety*, "In October 2021, [Pony.AI] test vehicle collided with a road center divider and a traffic sign. After the accident was reported, the California DMV swiftly revoked their permit. After this occurred, the National Highway and Traffic Safety Administration (NHTSA) opened an investigation into Pony.AI's Automated Driving System (ADS), finding that the vehicle crashed into a street sign within 2.5 seconds of the ADS operation shutting down due to a confluence of rare errors involving small floating-point number rounding errors (or "discrepancies"). As a result, it was possible that one specific diagnostic matching function could incorrectly interpret an inconsequential rounding discrepancy as a geolocation mismatch.' This series of errors caused the vehicle's ADS system to turn off, and it quickly collided with barriers in the roadway. In their recall safety report, NHTSA recognized that Pony.ai had immediately addressed the erroneous code after the crash. For this reason, NHTSA stated that the 3 vehicles affected by the recall did not require permanent removal from the road and that the remedy that Pony.ai took was sufficient."

DMV reinstated Pony.AI's permit to drive by late 2022 but required a safety driver. Their license was suspended again for allowing drivers to test safety violations. Pony.AI's permit was reinstated at the end of the year, but the company has since shifted its operations outside of California and is currently operating in China.

In August of 2023, just days after the California Public Utilities Commission (CPUC) granted Cruise Automation approval to expand to 24/7 commercial operations, a series of

disruptive incidents occurred, including blocking emergency responders, cars frozen at intersections, and a collision with a firetruck. The only tool at the time was to suspend or revoke an AV permit to operate. Instead of taking a more drastic action of removing Cruise's ability to operate at all, DMV worked with Cruise to institute a voluntary 50% fleet reduction.

On October 2, 2023, Cruise was involved in a severe collision where a human hit-and-run driver struck a pedestrian into the path of a Cruise vehicle. While the Cruise vehicle initially stopped, it then proceeded to drag the pedestrian 20 feet. DMV revoked Cruise's permit after claims that Cruise misrepresented the crash by pausing the video of the incident before showing that they had dragged the pedestrian.

Cruise never regained its permit to operate without a human driver. By October of 2024, General Motors announced it would stop funding Cruise. In February of 2025, the robotaxi service announced it would not be returned as a passenger service. GM still uses the technology to enhance its GM Super Cruise driver assistance system for personal vehicles.

In response to concerns raised by public safety officials in San Francisco, the Legislature passed AB 1777 (Ting) Chapter 682, Statutes of 2024, which made several major changes to AV operations in the state, including:

- Requiring AV companies to maintain a dedicated emergency response telephone line,
- Providing a remote human operator the ability to immobilize an AV,
- Allowing an emergency response official to move the AV, or cause the AV to move as directed by an emergency response official.
- Equipping certain AVs with a two-way voice communication for first responders,
- Authorizing emergency response officials to issue an emergency geofencing message to an AV manufacturer to avoid an area, and
- Creating a “notice of autonomous vehicle non-compliance” that a peace officer can issue to an AV manufacturer for a violation of a traffic ordinance.

2018 AV Regulations Focused on Safety

DMV's first set of regulations for the testing of driverless AVs took effect on April 2, 2018. These regulations were safety-focused and include the following safety provisions:

- 1) Requires the vehicles to meet industry standards on defending against cyber-attacks.

- 2) Requires manufacturers to provide law enforcement with an interaction plan and local authorities and DMV with a written notification of where and when the vehicles will be tested.
- 3) Prohibits the testing of vehicles over 10,000 pounds, buses, and vehicles carrying hazardous materials.
- 4) Requires manufacturers to provide the DMV with the operating design domain (ODD) of the vehicle.
- 5) Required manufacturers to provide a yearly report summarizing how many miles were driven in autonomous mode and when autonomous modes had to be disengaged and why the disengagement occurred for vehicles in the testing phase.
- 6) Requires testing drivers to be trained on how to operate the vehicle and have three years of driving experience, no more than one point on their license, no DUIs for 10 years, and not to have been at fault for a collision resulting in serious injury or death.
- 7) Requires the vehicle to have a communication link between the vehicle and remote operator to provide information on the vehicle's location and status, and to allow for two-way communication between the remote operator and the passengers.
- 8) Only permitted AVs to charge customers for passenger service if they had a deployment permit, which required AV manufacturers to certify that their vehicles were capable of complying with all the rules of the road. In December of 2019, DMV made a minor update to this rule, also permitting AVs to provide delivery services if they had a GVWR under 10,001 pounds and had a deployment permit.

Updated AV Regulations, April 28, 2026

The DMV's updated regulations were part of a multiyear effort that began on August 30, 2024, when DMV issued draft regulations focused on establishing higher safety standards for both passenger and commercial AV operation in the state. DMV held a public workshop on the draft regulations on October 14, 2024.

On April 25, 2025, DMV officially promulgated the AV regulations, incorporating changes made by AB 1777 while also expanding DMV's oversight of AVs, and authorizing the operation of AVs with a GVWR of greater than 10,001 pounds. DMV held a public hearing for the regulations on June 10, 2025. Based on public comments, DMV issued a notice of modification to the text in December of 2025 and went back to receiving additional public comments on the regulations. In February of 2026, DMV issued another notice of modification to the text, and finalized the regulations presented in February on April 28,

The finalized DMV regulations make several major changes to the regulatory process including increased oversight of AV operations in the state, a more graduated process for

obtaining a testing and deployment permit, and allowing for heavier AVs. Changes have also been made to incorporate AB 1777 to enhance interactions between first responders and AV companies. These are described below.

Under the 2018 regulations, the only action DMV could take against a company that failed to comply with DMV regulations was to suspend or revoke its permit to operate. As discussed above, DMV used this sparingly. The new regulations provide DMV with incremental enforcement measures, including operational restrictions that include, but are not limited to:

- 1) Reduction in the daily fleet in an area determined by the department or any portion of the operational design domain.
- 2) Reduction in operational design domain (e.g., geographic area of operation, road type, weather, etc.).
- 3) Reduction in hours of operation.
- 4) Requirement that an autonomous vehicle test driver or support personnel be present in the vehicle under certain conditions.

The manufacturer is permitted to request lifting the operational restriction by submitting data to the department describing how the deficiencies precipitating the restrictions have been addressed.

In addition, DMV can take action against an AV manufacturer for failing to respond to a preliminary information request, the United States Department of Transportation places the vehicle on the list of Out-of-Service orders, the motor carrier permit has been suspended, the federal transit administration issues a directive, restriction, or prohibition related to the manufacturer's subject AV; or for any other reason giving the department good cause to find the conduct of AV testing on public roads by the manufacturer poses an unreasonable risk of accident, death, injury, or exacerbating injury.

These changes to enforcement tools available to DMV mirror the voluntary actions DMV took against Cruise Automation prior to them ultimately having their permit suspended, including reducing their fleet by 50% after several crashes and blocking incidents.

Allowing heavier vehicles to operate using advanced driving systems (ADS)

Prior AV regulations prohibited vehicles with a GVWR of over 10,001 pounds from operating on public roads, or motorcycles, or vehicles transporting hazardous materials. Under the new regulations, vehicles with a GVWR over 10,001 pounds will be eligible for a testing and deployment permit and are defined as “autonomous heavy-duty commercial motor vehicles” (heavy-duty AVs). These vehicles will be permitted to operate without a human operator.

The following heavy-duty AVs are still prohibited: Vehicles carrying hazardous materials, vehicles used by household movers, vehicles used to transport oversized loads, vehicles used to transport bulk liquids, or vehicles designed to transport passengers unless they are under 14,001 pounds and designed to carry 15 or fewer passengers.

Mileage requirements

Prior regulations did not require a graduated approach for a vehicle to go from a drivered testing permit to a driverless testing permit to a deployment permit. Under new regulations, vehicles have to be tested for a certain number of miles before they can graduate to the next permit.

The number of miles that must be driven depends on the weight of the vehicle or if the vehicle is a low-speed vehicle (i.e., travels at speeds less than 25 mph). A low-speed vehicle will need 10,000 drivered miles before it can get a driverless testing permit or a deployment permit. A vehicle with a GVWR under 10,000 pounds needs to have driven 50,000 miles on a drivered test permit before it can receive a driverless test permit or deployment permit.

A heavy-duty AV (a vehicle with a GVWR greater than 10,000 pounds). Will need to have driven 500,000 miles with a drivered test permit (only 100,000 miles need to be within the state of California). To get a deployment permit, the AV manufacturer must have tested the vehicle an additional 500,000 miles without a driver; only 100,000 miles need to be within the state.

Restrictions on where heavy-duty AVs can operate

Manufacturers of heavy-duty AVs are limited to conducting driverless testing and deployment within an operational design domain that allows operation on specified routes legal for the size, weight, and loading of the vehicle. Operation on local roads with a posted speed limit of 25 miles per hour (mph) or less is prohibited unless those roads fall within a

direct route between hubs, motor carrier and shipper facilities, distribution centers, fueling or charging stations, maintenance facilities or terminals, or other non-residential facilities, and the roads utilized permit travel by that vehicle weight class. These restrictions do not apply to heavy-duty AVs carrying passengers as permitted. Heavy-duty AVs are allowed to travel on these roads if directed by first responders or when a designated detour or other limited circumstances.

Changes in data collection

Under the 2018 regulations, AVs were only required to provide crash reporting and disengagement reports to DMV for vehicles under a testing permit. AV companies with a deployment permit were not required to provide crash data or disengagement reports to DMV (crash data was still reported to DMV despite this, and under federal regulations, AV companies were also required to report crash data regardless of the state permit type). Under the new regulations, crash data is required to be submitted to DMV regardless of the permit type and in the same format as required by the federal government. If the federal government revokes its requirement to report crash data, AV companies will still be required to submit the crash report using the same format.

AVs will no longer be required to report disengagement reports. “Disengagement” meant a deactivation of the autonomous mode when a failure of the autonomous technology is detected or when the safe operation of the vehicle requires that the autonomous vehicle test driver disengage the autonomous mode and take immediate manual control of the vehicle, or in the case of driverless vehicles, when the safety of the vehicle, the occupants of the vehicle, or the public requires that the autonomous technology be deactivated.

Instead of disengagement reports, AVs will now be required to report vehicle immobilization data, braking events, dynamic driving task performance system failures, and total vehicle miles traveled. These reports will be required for vehicles with a testing or deployment permit, except for the braking events, which must only be reported for vehicles with a testing permit.

“Vehicle immobilization” means a stop on a public road in an active travel lane when the autonomous vehicle operating in a driverless configuration cannot continue the dynamic driving task and must be retrieved or requires the vehicle to be driven by a human driver at the scene or a remote driver. Vehicle immobilization has become common amongst AV operators, though DMV was only aware of the incidents through social media and news reports.

For example, In December of 2025 a massive power outage in San Francisco resulted in Waymo vehicles stopped on roads because of traffic signals going out (Waymo vehicles ultimately completed their trips and returned to their depot and have since received an update to help them better understand blackout traffic signal conditions). Other immobilizations were intentionally caused by activists in 2023 that were placing traffic cones on the hoods of AVs to immobilize them.

Immobilization reports are required to include the speed limit of the roadway where the immobilization occurred, the length of time in minutes the vehicle was stopped before it was driven by a human driver at the scene or a remote driver, the types of efforts to move a vehicle before manual intervention, whether the vehicle was blocking an active emergency vehicle or first responder, whether the vehicle was interfering with the scene of an active emergency, whether the vehicle stopped on rail tracks, and whether the immobilization involved multiple AVs of the same manufacturer simultaneously.

According to *Analysis of pre-crash scenarios and contributing factors for autonomous vehicle crashes at intersections, Accident Analysis & Prevention*, 58% of AV crashes reported to California DMV from 2018 to 2022 were rear end collisions. In 2023 NHTSA opened an investigation against Cruise after receiving complaints of vehicles engaging in inappropriate hard braking after several rear end collisions were caused as a result. In August of 2024, NHTSA closed the investigation after a software recall was issued to fix the miscalculations. Rear end collisions contribute to a disproportionate number of AV crashes.

Under the new regulations, AVs will also have to report braking events that produce a speed decrease of 3 m/s or more from braking at a deceleration rate that exceeds 5 m/s/s for at least 0.5 seconds during the operation of an autonomous vehicle in autonomous mode on a public road with a posted speed limit of 35 miles per hour or higher. The report needs to include the location of the event, the type of objects perceived to trigger the braking action, and the magnitude of speed reduction produced by the braking event.

Manufacturers are required to report each instance in which a vehicle test driver took over performance of the dynamic driving task fallback in response to a system failure. "Dynamic driving task performance relevant system failure" is a malfunction in an automated driving system and/or other vehicle system that prevents the automated driving system from reliably performing its portion of the dynamic driving task on a sustained basis, including the complete dynamic driving task that it would otherwise perform. Dynamic driving task performance-relevant system failures include, but are not limited to, situations in which the automated driving system's performance of the dynamic driving task is degraded or inhibited.

Manufacturers are now required to describe how the ADS achieves a minimal risk condition, and how the vehicle uses a failure mitigation strategy to bring the vehicle to a controlled stop in the event of a system failure, in which the ADS is unable to perform the dynamic driving task fallback and achieve a minimal risk condition if the vehicle lacks a driver.

Notice of noncompliance

Starting January 1, 2026, peace officers who observe an alleged violation of the Vehicle Code or local traffic ordinance may issue a notice of noncompliance against an AV manufacturer. Peace officers are required to place the notice where the registration and insurance documents are kept. Manufacturers have 72 hours to turn over a notice of noncompliance to DMV. A peace officer may indicate the need for priority review on the form if an officer observes that the AV exhibited driving behavior that reasonably led the officer to believe that the operation presented a clear and potential danger of injury to others. In this instance, the manufacturer must turn over the notice to DMV within 24 hours of its receipt.

The notice is required to include confirmation that autonomous technology was engaged, the alleged violation, the AV license plate number, and the date, time, and location of the incident.

DMV is permitted to request video data recorded during the initiation of the stop, and data including the plots of the distance and speed difference relative to the relevant targets in the collision path, the speed and acceleration of the subject vehicle, and the acceleration, braking, and steering commands that were used. Law enforcement is not required to provide DMV with a copy of the notice of noncompliance, nor is it clear how law enforcement could contact DMV to make sure the notice of noncompliance was properly submitted to DMV. There are no specified penalties for a notice of noncompliance, and it is unclear what, if any, actions DMV may take if a notice of noncompliance is given. A traffic ticket given to a person comes with financial penalties and, after a certain number of violations, a suspension of the person's license to operate a motor vehicle.

First responder interaction plan

AV manufacturers have been required to provide a first responder interaction plan since 2018. 2026 changes require these reports to be significantly more detailed. The new requirements include a description of the operational design domain, a description of remote operations support, a telephone number dedicated for emergency response officials

and how to use the two-way voice communication link enabling communications between emergency responders officials and remote operations support personnel (per AB 1777), a description and pictures of the vehicles or other means to identify them, instructions on how to safety approach the vehicle and determine if it is in AV mode, how to immobilize the AV when equipped with an override system, instructions for accessing registration, permit, and proof of insurance; instructions of the vehicle's electrical power source and how to disconnect it, instructions on how to independently or in concert with remote operations drive or safely remove the AV.

First Responder communication

The December 20, 2025, blackout in San Francisco resulted in Waymo's fleet stopping 1,593 times for two minutes or more. Dispatchers called Waymo 31 times to get vehicles moved, and one called was left on hold for 53 minutes. San Francisco Mayor Lurie ultimately contacted the CEO of Waymo personally to demand the robotaxis be removed from city streets.

Starting July 1, 2026, autonomous vehicles will be required to have a dedicated emergency response telephone line available for emergency response officials during all hours when the autonomous vehicle is on a public road. The dedicated emergency response telephone line must be equipped and staffed to ensure calls are picked up within 30 seconds by remote operations support personnel who have situational awareness of the autonomous vehicle.

There must be a two-way voice communication device that enables emergency response officials that are near that the vehicle to communicate effectively with remote operations support that have situational awareness. Emergency response must be able to reach the remote operations support personnel within 30 seconds.

The December 20 blackout in San Francisco resulted in Waymo's fleet stopping 1,593 times for two minutes or more. Dispatchers called Waymo 31 times to get vehicles moved, and one called was left on hold for 53 minutes.

Remote Drivers and Remote Assistants

The 2026 regulations add significant new requirements for remote drivers, while also adding new regulations for remote assistants. A remote driver is a natural person who is not physically located in the driver's seat of the vehicle, and who performs real-time performance of part or all of the dynamic driving task.

A remote assistant is a natural person who is not physically located in the driver's seat of the vehicle; is able to provide information or advice to an autonomous vehicle to facilitate trip continuation when the autonomous vehicle encounters a situation it cannot manage, or alerts the automated driving system of the need to fallback to a minimal risk condition, but does not include remote driving; and is able to provide an autonomous vehicle with revised goals and/or tasks.

AV manufacturers must make DMV aware of who their remote assistants are. They must be trained and certified for the assigned remote driving task. They must have the ability to immobilize the AV, follow instructions issued by first responders, and bring the AV to a controlled stop. If the AV is equipped with an override system, it must be able to help first responders use it.

If remote drivers are utilized, AV manufacturers must make DMV aware of these specific remote driving tasks that may be assigned, the circumstances under which remote driving may occur, and the system and policies for assigning people to be available for and engage in remote driving. They must have the ability to immobilize the AV, follow instructions issued by first responders, and bring the AV to a controlled stop. If the AV is equipped with an override system, it must be able to help first responders use it.

Remote drivers for a heavy-duty AV must comply with the hours-of-service regulations (11 hours of driving within a 14-hour consecutive on-duty window). Remote drivers of other AVs have no such requirement. Transportation network company drivers and taxi drivers cannot exceed 12 hours of total accumulated driving time during a 24-hour period without taking a mandatory continuous break of at least 6 hours.

Remote operators and assistants are required to have a valid driver's license. DMV has confirmed with the committee that an out-of-country driver's license is considered valid, allowing remote operations to occur outside of the United States. Remote operators are required to have had a driver's license for three years and have no negligent operator points on their license. They must also have a valid driver's license for the type of vehicle being operated. If they no longer meet these qualifications, they are required to be immediately removed.

Conclusion

Around 40,000 Americans lose their life every year in a vehicle collision. AVs have the potential to significantly reduce collisions. Government failure to properly regulate and oversee these new technologies could result in a collapse in public trust. Consumer confidence in AVs is low. A 2026 poll the Advocates for Highway and Auto Safety

conducted found that 81% of Americans are concerned about sharing the road with driverless cars, 42% of whom are very concerned. 85% are concerned about driverless trucks, including 54% that are very concerned. The survey also found that 61% said their concerns would be addressed if companies had to meet minimum government safety requirements.

The trust is not much higher in areas where AVs have already been deployed and are operating. A UC Berkeley SafeTREC survey found that only 51% of pedestrians and cyclists in San Francisco trust AVs. Only 47% of other drivers trust AVs. Only 72.5% of those riding the AV trust their safety.

The new DMV regulations provide additional oversight tools for AVs, less draconian regulatory actions to address concerns raised by AVs, more detailed first responder interaction plans, notices of noncompliance for AVs breaking the rules of the road, and oversight of remote drivers and assistant drivers. At the same time, the regulations remove prior safety restrictions by allowing heavier-duty AVs to test and deploy on public roads. Properly utilizing the new regulatory scheme could result in increased consumer confidence in this life-saving technology, while failure could result in a public backlash if the technology is not safe and only seen as a job replacement tool.