



COALITION FOR  
**Reimagined Mobility**

Transportation Policy that Puts People First



**SAFE**

October 14, 2024

California Department of Motor Vehicles  
2415 1st Ave., Mail Station F101  
Sacramento, CA 95818-2606

***RE: Response for Informal Feedback on Proposed Draft Regulatory Language for Autonomous Vehicles***

To the California Department of Motor Vehicles:

The Coalition for Reimagined Mobility (ReMo), a global initiative of the organization SAFE,<sup>1</sup> is focused on the future of transportation and how to advance outcomes that accelerate the deployment and scaling of mobility-enabling technologies to improve how people and goods move. Through research, reports, stakeholder convenings, and policymaker education, ReMo provides specialized knowledge on the integration of advanced vehicle technologies, including electric, connected, and autonomous vehicles (AVs).

Earlier this year, ReMo published a flagship report titled *Unlocking a 21st Century Mobility System: How to Rethink the Future of Mobility and Restore Leadership in Transportation Innovation*,<sup>2</sup> which identifies both the barriers and opportunities to develop and scale advanced transportation technologies while presenting a course of action to tackle system-level change with policies and solutions that address efficiency, safety, national security, and economic competitiveness.

ReMo appreciates the opportunity to provide comments to the California Department of Motor Vehicles (DMV) in its efforts to update the state's regulatory language for the operation of autonomous vehicles, with a specific focus on autonomous heavy-duty vehicles. As AV technology evolves and scales, policymakers must strike a balance to ensure public safety and promote innovation. California plays a pivotal role as both a national and global leader shaping policy. The state's regulations often set a benchmark for other jurisdictions, meaning California's decisions have extensive and lasting impacts.

ReMo believes it is essential for the regulatory framework to differentiate between light-duty vehicles and heavy-duty vehicles. These two classes of vehicles have distinct testing, deployment, and operational requirements, particularly in terms of safety protocols, performance metrics, and use cases. Clear distinctions in regulation will ensure that the unique challenges and opportunities posed by each vehicle type are appropriately addressed. Beyond the suggestion for vehicle class differentiation, the feedback that follows focuses on heavy-duty operational design domains, the phased permitting process, and data reporting requirements.

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<sup>1</sup> The Coalition for Reimagined Mobility is situated within SAFE, a mission-driven, nonprofit focused on enhancing energy security, particularly in the transportation sector, to enhance economic and national security. For more information, visit <https://reimaginedmobility.org> and <https://secureenergy.org>.

<sup>2</sup> Coalition for Reimagined Mobility (2024) *Unlocking a 21st Century Mobility System: How to Rethink the Future of Mobility and Restore Leadership in Transportation Innovation*. Washington, D.C.: SAFE, p. 94. Available at: <https://reimaginedmobility.org/unlocking-21st-century-mobility/>.

By addressing potential gaps and providing guidance in these areas, ReMo aims to contribute to a regulatory framework that fosters safety and the advancement of AV technology in the transportation sector.

The following recommendations to update the state's regulatory language for the operation of autonomous heavy-duty vehicles include:

### **Operation of Autonomous Commercial Motor Vehicles**

The current regulatory language regarding the operational design domain (ODD) for heavy-duty vehicles does not consider the locations of major freight infrastructure. In California, 85% of warehousing and distribution centers are located within 1 mile of the highway.<sup>3</sup> However, airports, seaports, and intermodal terminals—which are integral connection points for the movement of goods—can be situated further away from highways. By restricting ADS-equipped heavy-duty vehicles to roadways with a speed limit of 50 mph or higher and frontage access roads, the current regulation creates a gap in operational coverage, making it impossible for these vehicles to fully operate in autonomous mode from start to finish. In order to maximize the efficiency of AV technology in freight the regulation must account for the distances to access key logistics hubs and delivery locations. ReMo recommends revising the regulatory language around ODD to include operational coverage to logistics facilities that are not located immediately near roadways above 50 mph.

### **Phased Permit Process**

The proposed timelines and mileage requirements for phased permits appear arbitrary, with no clear justification tied to safety outcomes or operational realities. The number of days and miles assigned to each phase—driver testing, driverless testing, and deployment—should be based on industry data, operational feedback, and real-world conditions rather than fixed, generalized benchmarks. ReMo recommends the DMV collaborate with industry stakeholders to define more practical and evidence-based thresholds that will better ensure the safety and efficiency of automated vehicle testing and deployment.

### **Expanded Data Reporting Requirements**

Data reporting metrics that are contextually meaningful and advance the safe and efficient use of emerging transportation technologies are essential. This data should be essential to informing future planning and policy formation. With this in mind, it's crucial to prioritize data that offers the most useful and accurate insights into safety outcomes. This is an especially important consideration when trying to assess the performance of new technology. ReMo encourages the DMV to first evaluate whether disengagements are the most appropriate metric for assessing the safety and performance of autonomous vehicles. Before determining the frequency of reporting, we recommend that the DMV collaborate closely with industry experts to identify a more meaningful indicator of safety performance. By doing so, the data collected will better serve both regulatory objectives and the advancement of AV technologies.

### **Requirements for Autonomous Vehicle Remote Drivers and Remote Assistants**

While holding the proper class of license is important for in-person drivers who operate heavy-duty vehicles, remote operators have a different role that may not necessitate the same type of certification. The current regulatory language for AV Test Drivers<sup>4</sup> and Remote Operators<sup>5</sup> calls for AV companies to maintain a training program for both drivers and remote operators. Further,

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<sup>3</sup> Giuliano, G. and Kang, S. (2017) Spatial Dynamics of Warehousing and Distribution in California. CA-17-2640. California Department of Transportation Division of Research, Innovation and Systems Information (DRISI).

<sup>4</sup> California Department of Motor Vehicles (2022) Testing of Autonomous Vehicles -- Autonomous Vehicle Test Driver Training Program, 3.7.227.36. Available at: <https://www.dmv.ca.gov/portal/file/adopted-regulatory-text-pdf/> (Accessed: 1 October 2024).

<sup>5</sup> California Department of Motor Vehicles (2022) Testing of Autonomous Vehicles -- Manufacturer's Permit to Test Autonomous Vehicles That Do Not Require a Driver, 3.7.227.38. Available at: <https://www.dmv.ca.gov/portal/file/adopted-regulatory-text-pdf/> (Accessed: 1 October 2024).

each company must submit documentation outlining the training programs. Maintaining this approach to remote operator training ensures that operators have the skillset to match the job required. As an alternative to mandating license classes equal to the vehicle class being tested or deployed without a driver, ReMo suggests exploring certification processes tailored to the unique responsibilities of remote operators by reviewing the shared training programs. This ensures the safest and most effective operation of heavy and light duty vehicles with remote operators adequately trained to respond and support when needed.

ReMo's primary goal in submitting these informal comments is to assist the California Department of Motor Vehicles in considering how to update the state's regulatory language for the safe operation of AVs. With a specific focus on autonomous heavy-duty vehicles, it is necessary to ensure a regulatory environment that allows AVs and other advanced transportation technologies to foster and contribute to the state's economic growth.

We hope these comments inform the Department's thinking and we look forward to working with the State of California on this and other topics as they relate to light, medium, and heavy-duty autonomous vehicles.

We welcome the opportunity for further discussion. Please direct questions related to these comments to Avery Ash at [aash@secureenergy.org](mailto:aash@secureenergy.org).

Sincerely,



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