



April 24, 2017

Consumer Watchdog comments on DMV Autonomous Vehicle regulations: Amend and expand testing rules; delay deployment regulations until safety standards exist

Current California Department of Motor Vehicles regulations covering autonomous vehicles have set the standard for the nation by promoting innovation while protecting the safety of our highways. Developers of autonomous vehicles have claimed that regulations thwart development of the technology, but that is clearly not the case when 30 companies have obtained permits to test their robot cars here and the state is the center of AV activity.

Current AV regulations recognize the importance of safely monitoring testing activities and require a licensed driver behind a steering wheel and pedals, who is capable of taking control of the robot car when necessary. Because the testing is done on public roads, there is an emphasis on transparency. People have a right to know what is happening when public roads are being used as private laboratories. Current regulations require reports of any crashes and annual disengagement reports detailing instances when the robot technology failed and the human driver intervened. Both reports are now posted to the DMV's website, enabling the public to have an understanding of the testing being done on our public roads.

Two years after the current regulations were enacted, the DMV has formally proposed rules that would cover testing of driverless autonomous vehicles as well as the ultimate deployment of self-driving vehicles, including robot cars with no provision for a human driver to take control. The proposed regulations come after two draft versions of the regulations and several public workshops where the drafts were discussed.

The DMV's proposed regulations are fundamentally flawed because they rely on the federal government to set safety enforceable safety standards for autonomous vehicles. However,

as the DMV's Initial Statement of Reasons notes, "NHTSA has not adopted any regulations governing the testing or operation of automated, or self-driving, vehicles on public roads, streets, and highways.¹" In the National Highway Traffic Safety Administration's *Federal Automated Vehicles Policy*, the agency calls for manufacturers to voluntarily file a 15-point safety assessment letter that outlines how they are dealing with 15 self-driving policy issues. However, as the DMV notes, "NHTSA has not yet finalized the safety assessment process."²

So, there is no federal safety standard specifically governing autonomous technology and NHTSA's policy amounts to asking automakers voluntarily to please drop a letter in the mail that says, "yes, we thought about these issues." The status of federal policy is now even murkier with the Trump Administration's uncertain approach to the issue. As yet President Trump has not even bothered to nominate a NHTSA administrator.

Anchoring California's autonomous vehicle policy to such ephemeral federal policies – actual standards don't even exist – cannot possibly provide adequate protection for the public. Without Federal Motor Vehicle Safety Standards (FMVSS) that apply to autonomous vehicles, California must enact its own safety standards. The DMV's original autonomous vehicle regulations put safety first, while still allowing responsible innovation. It is imperative that the Department maintain those high standards, continuing to put public safety first, as it proposes new regulations.

The formal proposed regulations make a substantial improvement in form over the previous draft versions in their organization. Previously the drafts proposed enacting the new regulations simply by amending Article 3.7 of Title 13, Division 1, Chapter 1 of the Motor Vehicle Code, to include language covering testing driverless vehicles and deployment of autonomous vehicles. Instead, the formal proposed regulations -- correctly in Consumer Watchdog's view -- would amend Article 3.7 to cover testing of all autonomous vehicles, including those with no driver and add Article 3.8 regulating

¹ Initial Statement of Reasons, Page 3

² Initial Statement of Reasons, Page 3

deployment of all robot cars. Despite this important change in the form of the proposed regulations, Consumer Watchdog believes the DMV has fallen victim to the siren song of the robot car developers over the last two years and the substance of the proposed regulations no longer puts the public's safety first.

The new form of autonomous vehicle regulations, with one article devoted to testing and one to deployment, would allow the department to enact Article 3.7 covering testing while delaying implementation of the deployment rules in Article 3.8 until they are amended to adequately protect public safety, which they currently do not.

Autonomous vehicle testing, as has been demonstrated with the current regulations, can be conducted without enforceable FMVSS or their equivalent so long as there is adequate monitoring by a human driver. Deployment requires enforceable FMVSS or their state equivalent if the federal government does not act.

Consumer Watchdog calls on the Department to focus on Article 3.7 at this time. Action on most of Article 3.8 and deployment of robot cars must be deferred until the federal government acts or the state sets safety standards.

Article 3.7

Many of the amendments to this article are welcome improvements. For instance, Section 225.02 Definitions (b) now makes it clear that an autonomous test vehicle is one equipped with AV technology with or without a person monitoring it. This would clearly preclude outrageous claims from companies like Uber and its subsidiary Otto that they aren't testing autonomous technology because a human was monitoring its activity.

Section 227.26 Prohibitions on Operation on Public Roads (f) is an important amendment that precludes companies testing robot cars from carrying passengers for a fee. This is a step in the right direction. Testing should be about evaluating the self-driving system and certainly not about revenue. Passengers not affiliated with the company should be

precluded as much as possible, because they likely would distract a driver who is supposed to be monitoring the self-driving tests.

Consumer Watchdog has serious concerns about the proposed regulations covering testing of vehicles designed to operate without a driver in the vehicle. They do not yet adequately protect public safety.

According to the DMV's statement of reasons Article 3.7 Sec. 227.38 (a) is meant to ensure that driverless car manufacturers have "coordinated the testing of those vehicles with the local authorities." However, the regulation only requires: "The manufacturer submits to the department a copy of the written notification provided to each jurisdiction where the vehicles will be tested."³ This requirement fails to ensure coordination. All it inadequately requires is that the manufacturers tell a municipality what it plans to do on its streets. There is no requirement for approval by the municipality. A company could simply tell a city that it planned to test Level 4 robot cars on a street running by an elementary school and the city could do nothing about.

An earlier draft proposal had appropriate language that ensured a municipality would approve of a robot car company's test plans. It said, "The manufacturer provides a reference to the ordinance or resolutions from local authorities that specifies the operational design domains within the jurisdiction of the local authorities that vehicles may be operated."⁴

Local authorities must be able to grant permission before a city's public roads are used as private laboratories. Consumer Watchdog calls on the DMV to restore this important language that would ensure testing is truly coordinated with local authorities.

Section 227.38 also fails to require that the self-driving technology that will be tested without a driver who can take control has been shown to operate reasonably safely.

³ Article 3.7, Testing of Autonomous Vehicles, Section 227.38 (a), Page 12

⁴ Autonomous Vehicle Draft Regulations, 9/30/2016, Sec. 227.54 (b), Page 16

Presumably the robot technology that is intended to operate without a driver, would be the same technology that would drive the car if a human test driver were present. Before a manufacturer can apply to receive a permit to test without a driver, the manufacturer should be required to file a disengagement report covering at least one year of testing the technology with a backup human driver.

Section 227.48 Reporting Collisions provides important insight to the public of failures of the self-driving technology being tested. Current DMV practice is to post the crash reports to the department's website. This section should be amended to mandate public posting of the reports. The reports are extremely valuable and the department must be commended for making them available. However, there is additional information that manufacturers should be required to make available to the public. This section should be amended to require that any technical data and video associated with a crash should be provided to the department and posted to the website.

Section 227.50 Reporting Disengagement of Autonomous Mode requires annual disengagement reports, perhaps one of the most useful provisions in ensuring that the public can understand the status of autonomous vehicle testing. Consumer Watchdog strongly supports the proposed amendments, which would "require additional detail on each reported disengagement, including the description of the facts causing the disengagements, the party that initiated the disengagement, whether the disengagement was safety-related or a planned test, and the type of incident that was preempted by the transfer of control to the test driver."⁵ All of this information would give important insight into the status of the technology. In addition, Consumer Watchdog believes the disengagement reports should be more frequent because of the rapidly changing state of autonomous vehicle technology. Section 227.50 should be amended to require that disengagement reports be filed on a quarterly basis, rather than merely annually.

⁵ Initial Statement of Reasons, Page 17

Article 3.8

As discussed above, regulations covering deployment of autonomous vehicles must not be enacted until the federal government clarifies its AV policy and enacts enforceable FMVSS that specifically apply to autonomous vehicles.

If the federal government fails to act in a reasonable amount of time, then the state should enact safety standards that emphasize public safety, just as the initial testing regulations did.

Although enactment of most of Article 3.8 is premature and irresponsible at this time, there is one section that should be enacted as soon as possible. Section 228.30 Statements About Autonomous Technology would prevent manufacturers from using terms to describe a vehicle that would lead people to believe it is autonomous when it is not. The section refers to “the use of terms to describe the performance of a vehicle that is known, or by the exercise of reasonable care should be known, will likely induce a reasonably prudent person to believe a vehicle is autonomous.”⁶

This is an important protection. However, the language in the earlier draft proposal, which gave examples, is much stronger. It said, “Terms such as “self-driving”, “automated”, “auto-pilot”, or other statements made that are likely to induce a reasonably prudent person to believe a vehicle is autonomous ...”⁷

Examples whenever possible are important. Tesla’s “Autopilot” has killed two people who likely thought their Level 2 car was more autonomous than was the case. Consumer Watchdog urges the original draft language be restored. If Article 3.8 is delayed as it should be, this language could be offered as a section of Article 3.7

⁶ Article 3.8, Deployment of Autonomous Vehicles, Section 228.30 (b), Page 33

⁷ Autonomous Vehicle Draft Regulations, 9/30/2016, Sec. 227.90 (b), Page 35

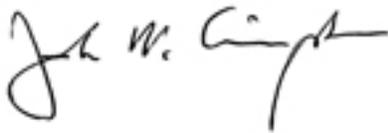
Conclusion

California set the standard for safe testing of autonomous vehicles with the regulations enacted in 2014. Safety was the primary consideration and the DMV recognized the importance of transparency in both the regulation and its implementation.

As the department moves toward enacting regulations covering testing of robot cars without drivers and the deployment of self-driving vehicles, both with and without human drivers, it is appropriate that the new regulations are offered in two separate articles, Article 3.7 and Article 3.8.

Testing regulations with some key amendments as outlined above could be implemented and continue to provide reasonable safeguards for testing.

Deployment of robot cars and enacting Article 3.8 is premature and irresponsible. The proposed regulations rely on federal safety standards. There are none. Regulations that rely on a foundation that simply does not exist are little more than a meaningless house of cards. Consumer Watchdog calls on the Department to withhold Article 3.8.

A handwritten signature in black ink, appearing to read "John M. Simpson". The signature is fluid and cursive, with a long horizontal stroke at the end.

John M. Simpson
Privacy Project Director