

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking on
Regulations Relating to Passenger
Carriers, Ridesharing, and New
Online-Enabled Transportation
Services.

R.12-12-011
(Filed December 20, 2020)

**REPLY COMMENTS OF THE SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY AND THE SAN
FRANCISCO COUNTY TRANSPORTATION AUTHORITY ON THE PROPOSED DECISION AUTHORIZING
DEPLOYMENT OF DRIVERED AND DRIVERLESS AUTONOMOUS VEHICLE PASSENGER SERVICE**

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I. Introduction

The San Francisco Municipal Transportation Agency (“SFMTA”) and the San Francisco County Transportation Agency (“SFCTA”) (together the “City and County”) submit these joint Reply Comments on the Proposed Decision Authorizing Deployment of Drivered and Driverless AV Passenger Services (“AVPS”) (the “Proposed Decision” or “PD”).

The PD and Opening Comments reflect a range of statements about the maturity of the AVPS industry. On one hand, the industry is portrayed as ‘nascent’, ‘emerging’ and ‘pioneering.’¹ On the other hand, the industry is portrayed as poised and ready to flex extraordinary power to resolve major social, economic, and environmental problems: dramatically reducing traffic injuries and fatalities, reducing congestion, reducing GHG and air quality contaminants, and offering new transportation services to everyone, among others.²

None of us can know which description is more accurate, but they are offered to support the same argument: the Commission should adopt a ministerial permitting process that favors AVPS speed-to-market over many other high values, such as: public input on a profoundly transformative technology, thoughtful analysis of the potential positive *and negative* impacts of driving automation, thoughtful analysis of how to *maximize* positive effects and *minimize* negative impacts, and ensuring equitable access to service by people with disabilities and people in disadvantaged communities.³

The Commission should not yield to this pressure. The Proposed Decision characterizes the testing program as “at an inflection point where fared service is an appropriate next step. . . to expand the public’s understanding of the service.”⁴ But even in its current form, the PD could do far more than expand public understanding; it could authorize virtually unlimited deployment of commercial AVPS. In light of the global climate catastrophe and the fact that driving automation, by itself, *is not a climate solution*,⁵ the Commission must maintain a cautious course that provides for *incremental*

¹ See Lyft PD Opening Comments (PDOC), p 2; Zoox PDOC, p 3; Waymo PDOC, p 1; Aurora PDOC, p 9.

² “This program will increase access to AVs for all, reduce congestion, lower greenhouse gas emissions, and provide communities across California with an affordable transportation option.” (Cruise PDOC, p.1); Aurora “strongly believes that self-driving technology has the potential to transform how diverse communities access transportation.” (Aurora OC, Q 2-8, p 4); and NextSF predicts “...autonomous vehicles have the potential to provide the boost small businesses desperately need amid the pandemic.” (NextSF PDOC, p 1).

³ See, e.g., Lyft PDOC, p 2; SVLG PDOC, p. 5; and Waymo PDOC, p. 9.

⁴ PD, p. 15.

⁵ See, e.g., sources cited at SFMTA and SFCTA PDOC, p. 13, footnote 18.

rollout of AVPS service and their impacts.⁶ Incremental deployment should be guided by discretionary analysis of each applicant’s plans in relation to Commission goals, as well as development of regulatory metrics and targets *before unlimited deployment*. In other words, in addition to the improvements addressed in the City and County’s Opening Comments, the Commission should: 1) retain the Tier 3 Advice Letter process recommended in the PD, and 2) reject proposed modifications to the PD that would narrow or limit industry obligations to *demonstrate* that AVPS both *can and will be offered* in ways that serve, rather than undermine, critical California and Commission policy goals.

II. Discussion

1. The Commission should retain the PD’s permitting process that features a Tier 3 Advice Letter, public input, and AVPS permit decisions approved by the full Commission.

The Commission should retain a Tier 3 Advice Letter process that permits public review and comment and that requires full Commission approval of each application for authority to offer AVPS. The PD recognizes that AVPS applicants may propose to use automated driving technologies in very different ODDs and for very different use cases.⁷ The impacts associated with an application to offer a low speed automated shuttle serving a planned development are very different from those associated with an application to offer ubiquitous ride service in an urban environment.⁸ The PD recognizes the value of public participation in its discussion of the required Public Safety Plan.⁹ Public

⁶ Industry commenters urge the Commission to ensure that developers holding a Class A certificate under the existing pilot programs are able to convert quickly to a deployment permit. See, e.g., Cruise PDOC, p. 8; and Aurora PDOC, p. 9. This could reduce transparency by making AVPS authorizations transferrable. The Commission should ensure that AVPS authorizations are *not transferable*.

⁷ In addressing equity and environmental goals, the PD states that “[c]ompanies will operate under different business models and at different scales.” PD, p. 46. These differences will continue into the future and call for future development of targets that *account for* differences in AVPS ODDs and markets. Uniform high level goals do not dictate uniform targets across a wide range of ODDs and markets.

⁸ The PD suggests that the ‘stage’ of industry development will dictate ‘uniform, informed and effective targets.’ (PD, 50; see also 29). But into the foreseeable future, it is likely that targets may need to be informed as much or more by ODD; they cannot await an unlikely future in which expectations relevant to one environment are relevant to another. For example, it may be necessary to tolerate low occupancy VMT in order for AVPS to address real mobility needs in rural areas, whereas comparable empty or low occupancy VMT may be entirely avoidable and impermissible in urban areas and/or disadvantaged communities where other mobility options have lesser negative effects in terms of both GHG and air quality hazards.

⁹ “Public review of each applicant’s Passenger Safety Plan will allow for the careful critique and assessment of the adequacy of each applicant’s plan by stakeholders, providing opportunity for suggestions that could further promote passenger safety” (PD, p 19) “Requiring applicants to provide a detailed Passenger Safety Plan tailored to their technology and business model, and making that plan available for public review and comment, will enable parties to lend their expertise, ensure transparency in decision-making, and establish a public document against which the applicant’s actions will be compared” (PD, p 36).

review of an entire application (except portions raising a legitimate claim of trade secret) will provide exactly the same benefit: insight from community members and a variety of transportation planning, climate and equity experts, on the different impacts that may arise in different ODDs and use cases. Such review is also consistent with the Commission’s goal to expand public inclusion in CPUC decision-making and improve services to targeted communities.¹⁰

Industry commenters argue that the Tier 3 Advice Letter should be eliminated because there should be a level playing field between TNCs and AVPS.¹¹ If TNC deployment had been consistent with the goals the PD now proposes to adopt for regulation of AVPS, and if TNC deployment had been successful in achieving the promises TNCs offered the Commission, this argument might be sensible. But neither occurred. TNC services were promoted to the Commission as a climate *solution*¹² but in the absence of regulation, they actually increased low efficiency vehicle miles travelled on California roads and increased GHG emissions.¹³ They also increased congestion, increased risks for pedestrians and cyclists and reduced mobility options for some people with disabilities.¹⁴ In order to achieve a better result from AVPS, the Commission must require higher performance.

Industry commenters argue that the Tier 3 Advice Letter process will be too slow. The PD calls for a workshop on next steps in AVPS regulation, including possible setting of prescriptive targets for each of the Commission goals, within a year of the issuance of the current decision. The City and County suggest the Commission accelerate this time for next steps and, in an early workshop, consider possible development of AVPS-specific provisions of GO 96-B that may improve timeliness while retaining Commission ability to make well informed permitting decisions.¹⁵

Industry commenters argue that the Advice Letter process will interfere with competition and state that “even the fact of a filing is competitively sensitive as an indicator

¹⁰ See Goal 5 of CPUC Environment and Social Justice Action Plan, p 17.

¹¹ See, e.g., Cruise PDOC, p 5; Aurora PDOC, p 6; SVLG PDOC, p 2; SAFE PDOC, p 6.

¹² See Lyft, Inc. comments Re: Assigned Commissioner’s Ruling on The Concept of Personal Vehicles and Raiser-CA, LLC comments on Impact of PUC 5401 on Ridesharing Features Offered by TNCs. (Dec 20, 2012)

¹³ CARB SB 1014 Clean Miles Standard 2018 Base-year Emissions Inventory Report, Dec. 2019, p. 42.

¹⁴ In Decision 13-09-045, the CPUC found that “Because TNCs are in their infancy we cannot determine at this point whether equal access is being hampered.” Instead of adopting an outcome based regulation, the CPUC chose to simply collect information “to determine what, if any, changes need to be made to the regulations in order to ensure that TNCs are accessible to, and do not discriminate against, persons with disabilities.” This approach was ineffective, and the CPUC made no changes to address the problem until approval of SB1376 required action.

¹⁵ PD, p. 27. While we reject as erroneous Lyft’s characterization of the Advice Letter process in R.19-02-012 (Lyft PDOC, p 4), such a workshop could consider grounds for protest and other procedural issues.

of technological readiness.”¹⁶ The Commission should reject this red herring. California protects from disclosure trade secret information contained in permit applications. We note that AV developers wishing to introduce vehicles into commerce that lack human controls are required to obtain an exemption from federal motor vehicle safety standards (FMVSS). The USDOT process for exemption petitions requires documenting *in detail* how an exempt vehicle will achieve an overall safety level at least equal to the overall safety level of a non-exempt vehicle. A significant amount of AV developer information is required for such a petition, and the petition itself indicates the state of a petitioner’s readiness to operate an exempt vehicle.¹⁷ NHTSA makes such petitions publicly available on its website and solicits comment *from any member of the public* before assessing the merits of the petition. The Commission should maintain the Tier 3 Advice Letter process and reject the industry suggestion to actively deny the people of California information about requests for authority to commercially deploy on public roads a technology that is still under development.

2. The Commission should preserve the PD reporting requirements and disregard industry recommended modifications that would weaken AVPS public accountability.

Industry commenters argue for a variety of changes to the PD reporting and accountability requirements. Most of these suggestions would undermine the Commission’s ability to effectively monitor a critical period in industry development – the period of initial commercial AVPS. The Commission should disregard most of the suggestions for reducing AVPS accountability.¹⁸

Data Frequency: Several commenters urged the Commission to modify the PD to reduce the frequency of quarterly reporting.¹⁹ Close analysis and monitoring of industry impacts – positive and negative – is essential to the next stages of Commission work on AVPS regulations. For example, in a little over a year, testing under CPUC pilot permits grew from five vehicles and less than a hundred miles of passenger service in one quarter to more than a hundred vehicles and over 300,000 miles of passenger service in the last full quarter before the COVID-19 pandemic. This significant growth occurred notwithstanding industry claims that the pilot requirements inhibit growth. Authorizing

¹⁶ Waymo, PDOC, p. 3.

¹⁷ See, e.g., GM petition at www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/gm_petition.pdf.

¹⁸ We see no reason to entertain the requested limitation or elimination of reporting information on EV charging, complaints and incidents.

¹⁹ See, e.g., Aurora PDOC, p. 9; Waymo PDOC, pp. 9-10; Cal Chamber Coalition PDOC, pp.7-8. Zoox, however, agrees with the PD that “quarterly data reporting will help inform the public about the benefits of AV technology” Zoox PDOC, pp. 3-4.

fared service will certainly accelerate this growth rate, and the launch of commercial service is a critical transition period during which the Commission must understand rapidly occurring developments as well as where the industry is achieving slower progress.²⁰ The Commission should reject industry arguments to eliminate any quarterly data reporting.²¹

Geographic Data: Industry parties offer several recommendations for modifying geographic data requirements.²² The City and County agree that there is limited value in aggregating trip start and end locations by *both* zip code and census tract. We disagree with the Waymo proposal to use zip codes. Census tracts are superior to zip codes because the U.S. Census Bureau normalizes census tracts to reflect an optimum size of 4000 people (in both urban and rural contexts) to protect individual privacy.²³ When shifts in population cause census tract boundaries to change over time, the Census Bureau publishes detailed documentation to support researchers seeking to track validated data over time. Further, unlike zip codes, the Census Bureau provides demographic data by census tract; this data will be of great value in analyzing both demand for, and supply of, AVPS.

III. Conclusion

As reflected in the City and County Opening and Reply Comments, the Commission should modify the PD to add a goal calling for equivalent service for people with disabilities, should document compliance with CEQA, should preserve the Tier 3 Advice Letter process, should amend the PD to improve the data reporting as recommended by the City and County Opening Comments, and should avoid modifications to the PD that reduce AVPS accountability.

²⁰ Regarding accessibility reporting, Aurora argues “The nascent status of the technology and passenger carrier service makes it unlikely that any AV company will have meaningful updates to provide to the Commission on a quarterly basis.” (Aurora PDOC, p. 9).

²¹ The City and County would not object to temporal “binning” of trip information into 15-minute periods. Such binning would still enable meaningful analysis of service delivery by time of day.

²² Waymo “recommends deleting the requirement to report trip data by census tract and, instead, use standard five-digit zip codes” (Waymo PDOC, p 12); Cruise requests to “rely solely on census tract reporting” and “exempt geolocation data reporting from trips that originate or end in census tracts with a population below 3,000.” (Cruise PDOC, p. 11); Aurora requests to “provide aggregated and deidentified information, rather than individual trip-level data” (Aurora PDOC, p 8).

²³ The Commission should reject the Cruise suggestion that geolocation data be excluded entirely as to trips that originate or end in census tracts with a population below 3000. The Census Bureau sets a minimum census tract population of 1200 persons to ensure privacy. An arbitrarily higher threshold would result in incomplete and biased datasets that would be useless to support analysis of service in relation to CPUC. Implementing the Cruise proposal would result in omission of data about trips starting and ending in large sections of San Francisco, including Downtown, the Mission, Potrero Hill and growing Eastern neighborhoods.

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Respectfully submitted,

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