

June 6, 2024

Terra Curtis, Director
Consumer Protection and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3214

Re: Comments in Support of Draft Resolution TL-19150

Dear Director Curtis,

I am writing to express my strong support for Draft Resolution TL-19150, which affirmed the March 1, 2024 approval of Waymo's Advice Letter 0002 by the Commission's Consumer Protection and Enforcement Division. Previously, I expressed my support in March 2024 when the Consumer Protection and Enforcement Division (CPED) approved Waymo's Advice Letter 0002. I want to reiterate my support for these autonomous vehicles' ride-hailing operations in California.

Autonomous vehicles (AVs) are a critical component of our transportation future. As a University of San Francisco (USF) Professor, an expert in the transportation industry, and Director of the Autonomous Vehicles & the City Initiative, I have studied the sustainability, economic, and equity impacts of AVs. It is clear that they provide a vital, accessible, and safe transportation solution, and can provide key connections to transit, particularly in areas that have traditionally been underserved. Our work shows that the technology can fill crucial service gaps when traditional transit options are limited,¹ and that AVs hold great promise for historically marginalized communities, including individuals with disabilities.^{2,3}

¹ W. Riggs, N. Schrage, S. Shukla, and S. Mark, "The Trip Characteristics of a Pilot Autonomous Vehicle Rider Program: Revealing Late Night Service Needs and Desired Increases in Service Quality, Reliability and Safety," in *Road Vehicle Automation 10*, G. Meyer and S. Beiker, Eds., in *Lecture Notes in Mobility*. Cham: Springer Nature Switzerland, 2023, pp. 93–107. doi: 10.1007/978-3-031-34757-3_9.

² W. Riggs and A. Pande, "On-demand microtransit and paratransit service using autonomous vehicles: Gaps and opportunities in accessibility policy," *Transport Policy*, vol. 127, pp. 171–178, Oct. 2022, doi: 10.1016/j.tranpol.2022.07.024.

³ W. Riggs and A. Pande, "Gaps and Opportunities in Accessibility Policy for Autonomous Vehicles," Mineta Transportation Institute, 2106, Aug. 2021. Accessed: Sep. 07, 2021. [Online]. Available: <https://transweb.sjsu.edu/research/2106-Accessibility-Policy-Autonomous-Vehicles>

This research has been triangulated by other academics globally who have found that the public will experience distinct mobility⁴ and economic benefits⁵ from AV deployments.⁶ It has also been reiterated by individuals such as Sharon Giovinazzo, CEO of LightHouse for the Blind and Visually Impaired, who, in a recent keynote address, described her struggle of losing her vision and having to give up the independence of driving, saying:

For individuals with disabilities, seniors, and marginalized communities, AVs represent more than just a means of getting from point A to point B; they embody the promise of freedom and independence. According to the U.S. Census Bureau, approximately 20 percent of Americans aged 18 and over do not have a driver's license. Individuals with disabilities often face significant challenges accessing public transportation, this only adds to issues of isolation, limited mobility, and high unemployment rates. In the United States, approximately one in every five people, or more than 57 million people, have a disability.

The most recent government transport survey indicated that 6 million individuals with a disability have difficulty accessing the transportation they need. Mitigating transportation-related obstacles for individuals with disabilities could enable new employment opportunities for approximately 2 million individuals with disabilities and potentially save \$19 billion annually in healthcare expenditures from missed medical appointments, not to mention the quality of life when one has access to the proper medical care. With the broader impacts AVs offer there could be a minimum of \$1.3 trillion in additional savings from productivity gains, fuel costs, and reduced accidents.

In this context, autonomous vehicles offer a ray of hope—a transformative technology capable of revolutionizing mobility for individuals with disabilities, seniors, and underserved communities.⁷

⁴ C. D. Harper, C. T. Hendrickson, S. Mangones, and C. Samaras, “Estimating potential increases in travel with autonomous vehicles for the non-driving, elderly and people with travel-restrictive medical conditions,” *Transportation Research Part C: Emerging Technologies*, vol. 72, pp. 1–9, Nov. 2016, doi: 10.1016/j.trc.2016.09.003.

⁵ J. Lee and K. M. Kockelman, “Access Benefits of Shared Autonomous Vehicle Fleets: Focus on Vulnerable Populations,” *Transportation Research Record*, vol. 2676, no. 11, pp. 568–582, Nov. 2022, doi: 10.1177/03611981221094305.

⁶ For example, peer reviewed work shows that individuals with medical conditions could achieve a 2.6% increase in mobility nationwide, and potential financial benefit to increase in access with a value ranging from \$0.16 to \$0.33 per trip.

⁷ H. Cornet, “Sharon Giovinazzo’s Vision for Autonomous Vehicles in the City | LinkedIn,” LinkedIn Article. Accessed: Jun. 05, 2024. [Online]. Available: <https://www.linkedin.com/pulse/sharon-giovinazzos-vision-autonomous-vehicles-city-henriette-cornet-qe8ce/>



CHANGE THE WORLD FROM HERE

In, over the last few years, Waymo has a demonstrated record of safety and service in our communities. They continue to be careful stewards of their technology and to demonstrate their commitment to partner with cities and first responders. Without a doubt I believe that innovative AV technology like theirs will contribute to realizing a safer, more accessible transportation ecosystem for residents of greater Los Angeles and the San Francisco Bay Area.

I kindly request that the Commission validate the CPED approval with the unanimous approval of the Draft Resolution at the upcoming Commission meeting on June 20, 2024.

Sincerely,

A handwritten signature in black ink, appearing to read "WRiggs", written in a cursive style.

William (Billy) Riggs, PhD, AICP, LEED AP
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