

TESTIMONY BY:

JADE T. BUTAY DIRECTOR

Deputy Directors LYNN A.S. ARAKI-REGAN DEREK J. CHOW ROSS M. HIGASHI EDWIN H. SNIFFEN

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 12, 2020 2:05 P.M. State Capitol, Room 325



H.B. 2590, H.D. 1 RELATING TO AUTONOMOUS VEHICLES

House Committee(s) on Judiciary & Consumer Protection and Commerce

The Department of Transportation (DOT) **supports** H.B. 2590 which authorizes automated driving system equipped vehicles on public roads as we believe these types of vehicles will ultimately lead to reducing the severity and number of vehicle crashes, injuries, and fatalities on our roads, as well as reduce pollution levels.

The DOT understands the importance of testing the technology to ensure the public roads are as safe as possible through automated vehicle deployment. The DOT is prepared to be the lead agency in setting rules or providing regulation of the testing and implementation.

Also, we request SECTION 1. 291C-G be revised by adding the following:

(d) The director of transportation shall adopt rules pursuant to chapter 91 as may be necessary to implement this part.

This will provide the DOT the ability to further clarify if necessary requirements, restrictions and limitations for the deployment and use of these vehicles, systems and networks are needed.

Thank you for the opportunity to provide testimony.



STATE OF HAWAI'I

STATE COUNCIL ON DEVELOPMENTAL DISABILITIES

1010 RICHARDS STREET, Room 122 HONOLULU, HAWAI'I 96813 TELEPHONE: (808) 586-8100 FAX: (808) 586-7543

February 12, 2020

The Honorable Representative Chris Lee, Chair House Committee on Judiciary And The Honorable Representative Roy Takumi, Chair House Committee on Consume Protection & Commerce Thirtieth Legislature State Capitol State of Hawai'i Honolulu, Hawai'i 96813



Dear Representative Chris Lee, Representative Roy Takumi and Members of the Committees:

SUBJECT: HB 2590 HD1 – Relating to Autonomous Vehicles

The Hawaii State Council on Developmental Disabilities **STRONGLY SUPPORTS HB 2590 HD1** to establish a two-year autonomous vehicles testing pilot program.

Self-driving cars could revolutionize how people with disabilities get around their communities and even travel far from home. There are people who can't see well or have physical and mental difficulties that prevent them from driving safely or rely on others or local governments or nonprofit agencies to help them get around. Autonomous vehicles could be the answer. They present fundamentally new ways to think about transportation and accessibility, having the potential to change neighborhoods and individuals lives—including people with disabilities, who are often both literally and figuratively left behind. With proper planning and research, autonomous vehicles can provide more people with significant independence in their lives.

Self-driving cars could allow as many as 2 million people with disabilities to work! This was quoted in a recent article in Auto Trader magazine. Currently, the unemployment rate for people with disabilities is at a low of 70%. When people with disabilities have been surveyed about their employment situation the number one reason as to why they can't get employed or stay employed is transportation.

Self-driving cars could be the major disruptor in transportation for people with disabilities. This would give the disability community another viable option. Currently, the on-demand transportation network companies are not accessible, such as your Uber and Lyft companies. The disability community welcomes this opportunity for an autonomous vehicle pilot in Hawaii. As we go down this road in this new venture, we must continually include people with disabilities and the aging community, in these pilot programs to ensure full accessibility for everyone.

Thank you for the opportunity to submit testimony strongly supporting HB2590 HD1.

Sincerely,

Daintry Bartoldus
Executive Administrator

DEPARTMENT OF TRANSPORTATION SERVICES CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR HONOLULU, HAWAII 96813 Phone: (808) 768-8305 • Fax: (808) 768-4730 • web: www.honolulu.gov

KIRK CALDWELL MAYOR



WES FRYSZTACKI DIRECTOR

JON Y. NOUCHI DEPUTY DIRECTOR

TESTIMONY TO THE HOUSE COMMITTEE ON JUDICIARY (JUD) & CONSUMER PROTECTION & COMMERCE (CPC)

FEBRUARY 12, 2020 2:05 PM

IN SUPPORT OF HB 2590, HD 1 – RELATING TO AUTONOMOUS VEHICLES

Chair Aquino, Vice Chair Hashimoto, and Members of the Committee:

The Department of Transportation Services <u>supports</u> this measure as it aligns with our vision of innovative autonomous transportation integrating with our multimodal public transit system.

The City and County of Honolulu is planning for a comprehensive system of first/last mile connections to the fully automated electric rail system and to expand access to job opportunities across Oahu. Our office is currently working to integrate low-speed autonomous shuttles into this network, and aims to serve certain rail stations with dedicated pathways for autonomous vehicles. This legislation supports our ongoing efforts.

Thank you for consideration of this measure and for the opportunity to provide this testimony.



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The House Committees on Judiciary; and Consumer Protection & Commerce

From: Brodie Lockard, Founder, 350Hawaii.org Date: Wednesday, February 12, 2020, 2:05 pm

Support for HB 2590 HD1

Dear Chairs Lee and Takumi, and members:

350Hawaii supports HB 2590, with an amendment.

In 2019, HCR 220 HD1 SD1 formed an Autonomous Vehicle Legal Preparation Task Force to report on "the legal and regulatory implications of transitioning to autonomous vehicles."

As requested, the Task Force submitted the preliminary report of its findings and recommendations to the Legislature on December 1, 2019. The report makes three recommendations.

On page 6, it says, "consistent implementation of standards and recommendations from the U.S. Department of Transportation's Manual of Uniform Traffic Control Devices is essential to the safe operation of self-driving vehicles."

On pages 77-79, it recommends that all Autonomous Vehicles (AVs) in Hawaii be electric, and shared:

By combining the emissions reduction potential of electric powertrain technologies with the added benefit of small, shared AVs, and assuming a future low-carbon grid as planned for Hawaii, GHG emissions could be reduced by about 90% when compared with today's vehicles.

The transportation sector contributes more to the Climate Crisis than any other sector in Hawaii. More than two-thirds of the fossil fuel imported into the State is used for transportation. The thorough adoption of electric vehicles (EVs) in Hawaii would reduce our greenhouse gas emissions enormously.

Most auto industry watchers predict that AVs will be adopted surprisingly quickly and eventually replace a huge percentage of traditional vehicles.

McKinsey says, "We expect Level 4 autonomy—operating within virtual geographic boundaries—to be disruptive and available between 2020 and 2022" [1].

Gartner forecasts that by 2023, worldwide net additions of vehicles equipped with hardware that could enable autonomous driving without human supervision will reach 745,705 units [2].

HCR 220 says, "current autonomous vehicle industry trends suggest overwhelmingly that all autonomous vehicles will be electric, which could contribute significantly to Hawaii's clean energy goals."

But several AV manufacturers are converting gas-burning cars into their prototype AVs. This is trying to fit tomorrow's driving technology into yesterday's vehicles. Gasburning cars should be going extinct, not promoted to the future of transportation.

HCR 220 says, "autonomous vehicles benefit society by ... lessening greenhouse gas emissions [and] easing traffic congestion."

With the introduction of AVs to Hawaii comes a tremendous opportunity to help retire gas-burning cars, and increase our adoption of EVs.

HB 2590 should seize the opportunity to move Hawaii farther into a world of EVs. From the very start, it should allow only electric AVs from manufacturers who want to test and sell here.

350Hawaii requests the following amendment to SECTION 1 (d):

(d) The department shall determine which entities shall be permitted to engage in the testing of autonomous vehicles in the State, <u>provided that any such vehicle is powered only by electricity</u>.

350Hawaii strongly urges the committee to add language to this effect to HB 2590. Missing this chance to mothball gas cars and promote EVs would be a tragic oversight.

Brodie Lockard Founder, 350Hawaii.org

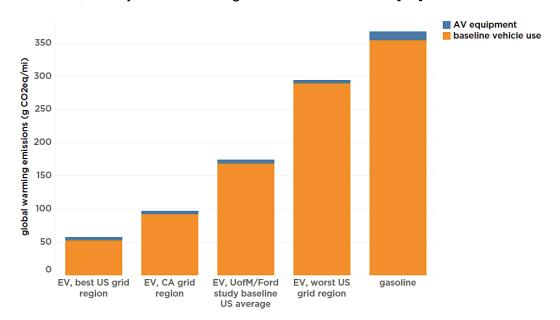
- [1] https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/overview/autonomous-driving
- [2] https://www.gartner.com/en/newsroom/press-releases/2019-11-14-gartner-forecasts-more-than-740000-autonomous-ready-vehicles-to-be-added-to-global-market-in-2023

From the PRELIMINARY REPORT OF THE HAWAII AUTONOMOUS VEHICLES LEGAL PREPARATION TASK FORCE:

- Successfully deploying a combination of automated vehicles, shared mobility systems, and electric/zero emission vehicles could reduce energy consumption and related emissions by 60% over the next 30 years with other benefits in safety and greater access to opportunity for non-drivers.
- Conversely, a combination of automated vehicles, zero-occupancy vehicles, increased VMT, access for new user groups, and continued reliance on fossil fuels could increase energy consumption and related emissions by up to 200% over this same time period. [29]

Make them electric

As discussed previously, the most important determinant for direct emissions from AVs is their fuel source. The figure below shows the difference in emissions between an EV powered from a grid fed by renewable resources and a vehicle powered by gasoline, including technology and fuel variations in between, clearly demonstrating how electric matters. [30]



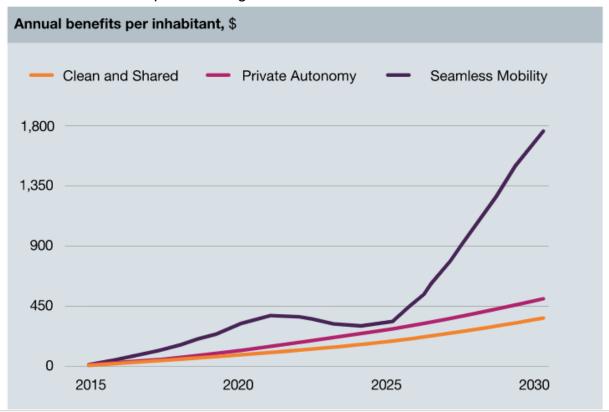
It should not be assumed that all autonomous vehicles of the future will operate on electric powertrains. While GM and Waymo invest in zero-emission autonomous vehicles, other companies like Uber and Ford are piloting AV technology on gasoline-powered vehicles. Boston University's Institute for Sustainability argues that one important way to shape this future is to demand that electric (battery or hydrogen) AVs be part of testing fleets. As companies want to expand testing to new cities, cities have the ability to demand the types of vehicles operated on their roads. [31]

Make them shared

One of the critical concerns with AVs is that they will dramatically increase vehicle miles travelled. What used to be one trip (you going to work) is now two trips (one trip to pick you up via ridehail and then another to get you to your destination). With AVs, those miles driven increase even more as the vehicle circles aimlessly until you are ready to leave your destination. Early estimates suggest that 40% of trips will be of the cruising variety—driving with no passengers. [32] This means that there must be a push from policymakers to make them shared to avoid increased congestion and energy use. Using AV technology for public transit vehicles and microtransit is a key opportunity and will help to ensure that AVs complement pubic transit rather than displace it. It is also important to provide incentives for shared options, which may

encourage fleets or AV transportation services rather than individual ownership.

Individually these elements are critical, but collectively they can be even more powerful. McKinsey assessed three potential scenarios for the future of mobility – private autonomy, clean and shared, and then seamless mobility. Seamless mobility is a future in which clean and shared vehicles are deployed within an urban framework to provide the greatest



individual and societal benefit. [33]

By combining the emissions reduction potential of electric powertrain technologies with the added benefit of small, shared AVs, and assuming a future low-carbon grid as planned for Hawaii, GHG emissions could be reduced by about 90% when compared with today's vehicles. [34]

- 29. http://onlinepubs.trb.org/onlinepubs/circulars/ec236.pdf
- 30. https://blog.ucsusa.org/dave-reichmuth/how-important-is-it-for-self-driving-cars-to-be-electric
- 31.Hatch, J. & Halveston, J. (2018, August). Will Autonomous Vehicles be Electric? Boston University Institute for Sustainability. https://www.bu.edu/ise/2018/08/27/will-autonomous-vehicles-be-electric/
- 32. https://www.businessinsider.com/self-driving-cars-traffic-worse-research-2019-2
- 33. https://www.mckinsey.com/business-functions/sustainability/our-

insights/the-futures-of-mobility-how-cities-can-benefit

34. Greenblatt, J.B., & Saxena, S. (2015). Autonomous taxis could greatly reduce greenhouse gas emissions of U.S. light-duty vehicles. *Nature Climate Change*. Doi: 10.1038/nclimate2685 https://www.nature.com/articles/nclimate2685



DATE: February 11, 2020

TO: Representative Chris Lee

Chair, Committee on Judiciary

Representative Roy Takumi

Chair, Committee on Consumer Protection and Commerce

Submitted Via Capitol Website

FROM: Tiffany Yajima

H.B. 2590, H.D.1 – Relating to Autonomous Vehicles

Hearing Date: Wednesday, February 12, 2020 at 2:05p.m.

Conference Room: 325

Dear Chair Lee, Chair Takumi, and Members of the Joint Committees:

We submit these **comments** on behalf of the Alliance for Automotive Innovation ("Alliance").

The Alliance for Automotive Innovation is the singular, authoritative and respected voice of the automotive industry. Focused on creating a safe and transformative path for sustainable industry growth, the Alliance for Automotive Innovation represents the manufacturers producing nearly 99 percent of cars and light trucks sold in the U.S. Members include motor vehicle manufacturers, original equipment suppliers, technology, and other automotive-related companies and trade associations.

H.B. 2590, H.D.1 establishes a two-year autonomous vehicle testing pilot program under the Department of Transportation. It would authorize the use of automated-driving-system ("ADS") equipped vehicles on any public road in the state that has a speed limit of 35 miles per hour or less and would require the physical presence of a conventional driver in the vehicle.

Over many decades, the auto industry has steadily evolved vehicle technologies toward a future when cars will be fully self-driving. Technological advancements continue to improve, and many companies are developing vehicles with higher levels of driving automation. Highly automated vehicles promise to improve road safety while saving consumers time and money. Such systems may also dramatically expand mobility and facilitate better land use in urban settings.

Vehicles on our roads today are more advanced than ever and feature remarkable capabilities with the primary goal of assuring passenger safety and saving lives.

Many driver-assist features are available right now — from automated braking to adaptive cruise control to lane-keeping cameras — and are technologies that bring us closer to the reality of self-driving vehicles. According to the U.S. Department of Transportation, more than 37,000 lives were lost on U.S. roadways by the end of 2017, with human error accounting for more than 94 percent of these fatalities. These fatalities underscore the importance for motor vehicle manufacturers to deliver life-saving automated vehicle technologies.

As automobile manufacturers continue to develop autonomous vehicle technology, it is vital for governments to create open regulatory environments that encourage both autonomous vehicle testing and deployment.

Thank you for the opportunity to submit these comments.



HADA Testimony with COMMENTS on HB2590 HD1
RELATING TO AUTOMOMOUS VEHICLES
Presented to the House Committee on Judiciary and the House
Committee on Consumer Protection & Commerce
at the Public Hearing 2:05 p.m., Wednesday, February 12, 2020
in Room 325 Hawaii State Capitol

by David H. Rolf for members of the Hawaii Automobile Dealers Association, Hawaii's franchised new car dealers, who provide sales, warranty work and other factory-certified maintenance service for Hawaii's privately-owned and fleet-owned cars and light trucks

Chairs Lee and Takumi, Vice chairs San Buenaventura and Ichiyama and members of the committees:

HADA members fully support the testing and deployment of driverless vehicle technology in Hawaii.

We appreciate the opportunity to offer COMMENTS on HB2590 HD1 which proposes to establish within the Department of Transportation a two-year autonomous vehicle testing pilot program, and requires a report to the legislature.

Governor's Executive Order 17-07 announced that "the Aloha State is open for business for testing and deploying the new driverless vehicle technology;"

Efforts are being made this year to facilitate that testing and deployment of driverless vehicles through HB2590 HD1.

There are 62 companies with permits to do testing in California.

In Hawaii, there has been established a Hawaii connected autonomous vehicle contact in the Office of the Governor, with the intent to provide the highest level of attention and support to companies seeking to test self-driving vehicle technology in Hawaii;

The governor's executive order specifies that the Hawaii Department of Transportation, the Hawaii Department of Public Safety, and the Hawaii Department of Business and Economic Development and Tourism shall take steps to work with companies seeking to do self-driving vehicle testing and development business in Hawaii, through policies and as otherwise needed, in the interests of the public.

Limiting the testing to "any public road in the State under the jurisdiction of the department that has a publicly posted speed limit of thirty-five miles per hour or less," may pose a barrier to companies who need to test their vehicles also at highway speeds.

HADA dealers appreciate the opportunity to provide comments on HB2590 HD1, and we look forward to further discussions on the testing and deployment of autonomous vehicles as this bill, hopefully, continues to move.

Respectfully submitted,

David H. Rolf

For the Members of the Hawaii Automobile Dealers Association

HADA

Making Hawaii Better Together

Submitted on: 2/11/2020 2:41:52 PM

Testimony for JUD on 2/12/2020 2:05:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Big Island EV Association, Hawaii Electric Vehicle Association	Support	No

Comments:

Dear Chairs Lee and Takumi, and members:

I support HB 2590, with an amendment.

Our transportation sector consumes most of our fossil fuel imports and contributes significantly to the climate crisis. The electric vehicles offer Hawaii the opportunity to significantly reduces its fossil fuel dependency, allows us to contribute more aggressively to solving the climate crisis, and offers residents with cleaner, more efficient, and more cost-effective transportation.

The rise of autonomous vehicles is coming faster than expected and is offering us with an even larger opportunity to reduce our energy needs. Self-driving technology is fast-evolving and will soon create disruptions in transportation. These include a reduction in the number of vehicles in circulation, a higher utilization of fewer vehicles, and the rise of 'transportation-as-a-service' models. I envision less congestion, increased ride sharing, reduced consumer costs, and a better quality of life.

HB2590 will allow Hawaii to more promptly transition to a clean transportation future and should be focused on electric vehicles from the start. Please pass with an amendment to enable this pilot only for electric vehicles.

Thanks,

Noel Morin

President - Big Island Electric Vehicle Association, Hawaii Electric Vehicle Association





Email: communications@ulupono.com

HOUSE COMMITTEES ON JUDICIARY AND CONSUMER PROTECTION & COMMERCE Wednesday, February 12, 2020 — 2:05 p.m. — Room 325

Ulupono Initiative supports HB 2590 HD 1, Relating to Autonomous Vehicles

Dear Chair Lee, Chair Takumi, and Members of the Committees:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

Ulupono supports HB 2590 HD 1, which establishes within DOT a 2-year autonomous vehicles (AV) testing pilot program.

AV benefits will not necessarily accrue on their own but require community conversations on not just what AV may provide but should. The Transportation Research Board, one of our national academies of science, outlines two broad ends of the spectrum for the impacts of AVs:

- 1) Successfully deploying a combination of automated vehicles, shared mobility systems, and electric/zero-emission vehicles could reduce energy consumption and related emissions by 60 percent over the next 30 years with other benefits in safety and greater access to opportunity for non-drivers.
- 2) Conversely, a combination of automated vehicles, zero-occupancy vehicles, increased vehicle miles traveled, access for new user groups, and continued reliance on fossil fuels could increase energy consumption and related emissions by up to 200 percent over this same time period.1

As mentioned in the Environment and Energy section of the <u>Preliminary Report of the</u> <u>Hawaii Autonomous Vehicles Legal Preparation Task Force</u>, creating a mechanism for AVs'

1 http://onlinepubs.trb.org/onlinepubs/circulars/ec236.pdf



legality, although necessary, is not sufficient to ensure congestion reduction, energy efficiency, or even improved accessibility for those currently underserved by our transportation system.

More broadly, we believe any AV legislation should work to align with the State's broader goals and therefore promote not just AVs, but A2CES – AVs that are accessible, automated, connected, electric, and shared. As such, we recommend that the bill requires the DOT to require performance measures to assess pilots, such as reducing congestion, increasing safety and accessibility, and utilizing clean energy. These pilots should actively involve community engagement to ensure that the performance measures align with the local and broader state goals.

We look forward to working with our larger community to help realize the benefits of AVs – leveraging the innovations of AVs for a stronger, more resilient Hawai'i.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR Senior Vice President, Communications & External Affairs

<u>HB-2590-HD-1</u> Submitted on: 2/11/2020 1:09:00 AM

Testimony for JUD on 2/12/2020 2:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Gerard Silva	Individual	Oppose	No

Comments:

Wast of Tax Payer Money!!!

Submitted on: 2/11/2020 3:53:35 AM

Testimony for JUD on 2/12/2020 2:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Dear Chairs Lee and Takumi, and members:

I support HB 2590, with an amendment.

The transportation sector contributes more to the Climate Crisis than any other sector in Hawaii. More than two-thirds of the fossil fuel imported into the State is used for transportation. The thorough adoption of electric vehicles (EVs) in Hawaii would reduce our greenhouse gas emissions enormously.

Most auto industry watchers predict that AVs will be adopted surprisingly quickly and eventually replace a huge percentage of traditional vehicles.

McKinsey says, "We expect Level 4 autonomy—operating within virtual geographic boundaries—to be disruptive and available between 2020 and 2022" [1].

Gartner forecasts that by 2023, worldwide net additions of vehicles equipped with hardware that could enable autonomous driving without human supervision will reach 745,705 units [2].

Several AV manufacturers are converting gas-burning cars into their prototype AVs. This is trying to fit tomorrow's driving technology into yesterday's vehicles. Gas-burning cars should be going extinct, not promoted to the future of transportation.

With the introduction of AVs to Hawaii comes a tremendous opportunity to help retire gas-burning cars, and increase our adoption of EVs.

HB 2590 should seize the opportunity to move Hawaii farther into a world of EVs. From the very start, it should allow only electric AVs from manufacturers who want to test and sell here.

I strongly urge the committee to add language to this effect to HB 2590. Missing this chance to mothball gas cars and promote EVs would be a tragic oversight.

me ke aloha 'Ä• ina,

Nanea Lo

Submitted on: 2/11/2020 5:20:09 AM

Testimony for JUD on 2/12/2020 2:05:00 PM

	Submitted By	Organization	Testifier Position	Present at Hearing
Ī	Caroline Kunitake	Individual	Support	No

Comments:

Dear Chair Lee, Chair Takumi and the House Committees on Judiciary; and Consumer Protection and Commerce,

I am writing in support of HB2590.

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I strongly urge the committee to add language to this effect to HB 2590.

Mahalo,

Caroline Kunitake

<u>HB-2590-HD-1</u> Submitted on: 2/11/2020 8:07:56 AM

Testimony for JUD on 2/12/2020 2:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Peg Sullivan-Miller	Individual	Support	No

Comments:

I support us doing more to get away from use of fossil fuel.

Submitted on: 2/11/2020 4:51:02 PM Testimony for JUD on 2/12/2020 2:05:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Nathan A Sparks	Individual	Support	No

Comments:

To: The House Committees on Judiciary; and Consumer Protection & Commerce

From: Nathan Sparks

Date: Wednesday, February 12, 2020, 2:05 pm

Support for HB 2590 HD1

Dear Chairs Lee and Takumi, and members:

I support HB 2590, with an amendment.

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- [1] https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/overview/autonomous-driving
- [2] https://www.gartner.com/en/newsroom/press-releases/2019-11-14-gartner-forecasts-more-than-740000-autonomous-ready-vehicles-to-be-added-to-global-market-in-2023

<u>HB-2590-HD-1</u> Submitted on: 2/11/2020 8:48:16 PM

Testimony for JUD on 2/12/2020 2:05:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:

February 12, 2020

The Honorable Representative Chris Lee, Chair
House Committee on Judiciary
And
The Honorable Representative Roy Takumi, Chair
House Committee on Consumer Protection & Commerce
Thirtieth Legislature
State Capitol
State of Hawai'i
Honolulu, Hawai'i 96813



Dear Representative Chris Lee, Representative Toy Takumi and Members of the Committees:

Subject: HB 2590 HD1 – Relating to Autonomous Vehicles

My name is Tammy Evrard and I STRONGLY SUPPORT HB 2590 HD1 to establish a two-year autonomous vehicles testing pilot program.

I work in the field of intellectual and developmental disabilities and have personal experience on how transportation can limit access and opportunities for people with disabilities. Transportation is a key component in supports necessary for an individual to have meaningful opportunities in the community. Having a viable option to engage in community life allows an individual to secure and maintain employment, socialize with others, meet their medical needs and exercise their right to be a contributing member of society.

Currently, I have seen individuals pass up on opportunities in employment due to lack of transportation options. Those who are employed have transportation through Handi-Van or the bus and spend over 2 hours each way with the stops and pick-ups to reach their destination. This limitation prevents people from becoming self-sufficient and a contributor to our economic growth.

I have also experienced the challenges of Handi-van services as they work to meet the needs of the community. They are impacted with the requests for transportation to medical appointments among other ongoing transportation needs. Because of this, people miss or cancel their appointments and even worse choose not to address their medical needs which then becomes a burden to our health system.

I have also witnessed individuals who lack transportation options retreat from family, friends and social activities leading to isolation and depression. This situation then requires additional supports and services to address their quality of life and re-establish their community engagement and connection to others.

Exploring new transportation options, technology, and a solution with a universal design for all can lead people to have self-determined lives with the right to reach their highest potential in life without barriers and with choices.

Thank you for the opportunity to submit testimony strongly supporting HB2590 HD1.

Sincerely,

Tammy Evrard

95-154 Kauopae Place Mililani, HI 96789

Submitted on: 2/12/2020 9:07:22 AM
Testimony for JUD on 2/12/2020 2:05:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Zoe Malia Ozoa Loos	Individual	Support	No

Comments:

SAMPLE TESTIMONY

To: The House Committees on Judiciary; and Consumer Protection & Commerce

From: **ZOE LOOS**

Date: Wednesday, February 12, 2020, 2:05 pm

Support for HB 2590 HD1

Dear Chairs Lee and Takumi, and members:

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ZOE LOOS

[1] https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/overview/autonomous-driving

[2] https://www.gartner.com/en/newsroom/press-releases/2019-11-14-gartner-forecasts-more-than-740000-autonomous-ready-vehicles-to-be-added-to-global-market-in-2023

ZOE LOOS



Submitted on: 2/12/2020 10:39:16 AM Testimony for JUD on 2/12/2020 2:05:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bhagyedeep Singh	Individual	Support	No

Comments:

I work both in the aging and disability. I am caregiver for someone with a ID. I fully support this testing as a means increasing the ability many people to access community supports and services to live a meaningful and quality life. Not only people with disabilities and the elderly and their families but as means to make road safer but elminating druck and distracted drivers as well as helping parents with children. Living in a rural community makes it difficult to access supports and services when needs. There so many hurdles and restrictions when you are dependent another person or agency for assistance. Plus in the long run, it is my believe that self-driving will have a huge postive impact on the environment and traffic by reducing the need for parking space/lots and make better use of resources by not having cars sitting parking lots 90% pf the time.

Thank you for your time and consideration

Aloha from Maui

Submitted on: 2/12/2020 12:33:53 PM Testimony for JUD on 2/12/2020 2:05:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Sue Berk	Individual	Support	No

Comments:

I **strongly support HB 2590** for a 2 year testing pilot program of autonomous driving vehicles. This would give the disability community a viable option to getting around and accessing the community for work, school, community events or recreation. Thank you for the opportunity to submit testimony.

Sue Berk

Honolulu, 96825