



TESTIMONY BY:

EDWIN H. SNIFFEN
DIRECTOR
KA LUNA HO'OKELE

Deputy Directors
Nā Hope Luna Ho'okele
DREANALEE K. KALILI
TAMMY L. LEE
ROBIN K. SHISHIDO

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF TRANSPORTATION | KA 'OIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

February 1, 2024
3:00 P.M.

State Capitol, Conference Room 224 & Videoconference

S.B. 2742
RELATING TO THE DEPARTMENT OF TRANSPORTATION

Senate Committee on Transportation and Culture and the Arts

The Department of Transportation (DOT) **supports the intent** of this bill which seeks to establish the greener highway corridors pilot project to improve the H-1 freeway corridor with greenery and provides the following comments.

Although greenery can have beneficial effects on the environment, the section of H-1 affected by this bill (through Kalihi and downtown Honolulu) generally has very little additional rights-of-way beyond the freeway footprint, which would limit the amount of greenery that could be planted.

Providing room for the number of plantings necessary to meet the intent of this bill may require significant rights-of-way acquisition which would be costly, time-consuming and would have a major impact on residents and businesses adjacent to the freeway.

The DOT will need to consider greenery on a case-by-case basis to ensure visibility, clear zones for storm and maintenance conditions, and infrastructure for watering.

While the DOT agrees that increasing Hawaii's tree canopy is important, the DOT has committed to adding 1000 trees per year on lands managed by DOT or the Department of Land and Natural Resources in locations that are appropriate.

Thank you for the opportunity to provide testimony.



LATE

**STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809**

**Testimony of
Leah Laramee
Coordinator, Hawai'i Climate Change Mitigation and Adaptation Commission**

**Before the Senate Committee on
TRANSPORTATION AND CULTURE AND THE ARTS**

**Thursday February 1, 2024
3:00 PM
State Capitol, Via Videoconference, Conference Room 224**

**In support of
SENATE Bill 2742
RELATING TO THE DEPARTMENT OF TRANSPORTATION**

Senate Bill 2742 establishes the greener highway corridors pilot project to improve the H-1 freeway corridor with greenery and appropriates funds. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

The Commission is a multi-jurisdictional effort between 20 different State and county departments, and Legislative committees. According to the Intergovernmental Panel on Climate Change's 2022 report, nature-based or "green" infrastructure and ecosystem services provide significant benefits when installed in urban and infrastructure systems. Often these "green" strategies are both more effective and less costly than traditional engineering or gray solutions on their own.

Nature-based solutions also provide a natural aesthetic and other benefits. Research suggests that trees may improve driving safety. One study found a 46% decrease in crash rates across urban arterial and highway sites after landscape improvements were installed.ⁱ Another study found that placing trees and planters in urban arterial roadsides reduced mid-block crashes by 5% to 20%.ⁱⁱ Increasing tree canopy can reduce heat island effect, provide shade to encourage walking and biking, and provide storm water mitigation and sequester carbon.

Mahalo for the opportunity to testify in support of this measure.

ⁱ Lee, J., and F. Mannering. 1999 (December). *Analysis of Roadside Accident Frequency and Severity and Roadside Safety Management*. Washington State Department of Transportation, Olympia, WA, 137 pp.

ⁱⁱ Naderi, J.R. 2003. Landscape Design in the Clear Zone: Effect of Landscape Variables on Pedestrian Health and Driver Safety. *Transportation Research Record* 1851:119-130.

BOARD OF DIRECTORS

Diane Harding
President

Maureen Murphy
Vice President

Denise Soderholm
Treasurer

Whitney Bosel
Secretary

Cheryl Langton
Branch Representative

Directors:

Gordon Aoyagi

Kathleen Bryan

Mimi Bornhorst Gaddis

Joan Gossett

Stan Oka

Paula Ress

Jonathan Sudler

Scott Wilson

BRANCHES

Hawai'i

East Hawai'i

Kona

Waikoloa Village

Waimea

Kaua'i

O'ahu

East Honolulu

Lani-Kailua

Mānoa

North Shore

Greater Waikiki

STAFF

Winston Welch
Executive Director

Jacqueline Wah
Operations Director

Myles Ritchie
Programs Director

Helping to keep Hawai'i
clean, green, beautiful,
livable and sustainable
since 1912



LATE

February 1, 2024

RE: Outdoor Circle strong support for SB2742

Dear Senators,

The Outdoor Circle applauds and fully supports the passage of SB2742 to create a pilot project to improve the H1 freeway with greenery.

Residents and visitors alike would benefit in a myriad of ways from this project with all of the known benefits of trees. Proper planning will ensure that the right trees and greenery will be planted in the right place and receive the right care.

The Outdoor Circle would certainly like to be involved, along with other interested nonprofits in the actual planning and execution of this pilot project, since it is core to our mission of keeping Hawaii clean, green and beautiful.

We fully support passage of this SB2742 and other measures designed to improve our impoverished urban tree canopy and beautify our city.

Thank you for your consideration,

Winston Welch, Executive Director



SIERRA CLUB OF HAWAI'I

LATE

SENATE COMMITTEE ON TRANSPORTATION AND CULTURE AND THE ARTS

February 1, 2024

3:00 PM

Conference Room 224

In SUPPORT of SB2742: Relating to the Department of Transportation

Aloha Chair Lee, Vice Chair Inouye, and Members of the Committee,

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **SUPPORTS** SB2742, which would explore another low-cost approach to mitigate the ongoing and growing impacts of climate destabilization on our built environment.

Climate projections have made it abundantly clear that Hawai'i must ensure that the effects of climate destabilization are accounted for in urban development designs and decisionmaking. Future climate-driven droughts and heat waves, including urban "heat islands" exacerbated by traditional heat-storing concrete and asphalt, will not only require even greater consumption of costly fossil fuels for air conditioning, but may also have profound and deleterious impacts on our kūpuna and most vulnerable community members. It is therefore critical that we look to the implementation of "green corridors," green roofs, and other heat-mitigation strategies in the development and modernization of housing and other infrastructure, including our roads and highways, as immediately as possible.

By establishing a pilot project for "green highway corridors," this measure represents one means by which we can begin to build greater resilience for our islands in the face of climate destabilization.

Accordingly, the Sierra Club respectfully urge the Committee to **PASS** SB2742. Thank you very much for this opportunity to testify.



LATE

Testimony before the

SENATE COMMITTEE ON TRANSPORTATION AND CULTURE AND THE ARTS

Thursday, February 1, 2024 (3:00 pm), Room 224

RE: SB2742 RELATING TO THE DEPARTMENT OF TRANSPORTATION

Chair Lee, Vice Chair Inouye, Members of the Committee on Transportation and Culture & the Arts:

Trees for Honolulu's Future ("TFHF") is a nonprofit organization with a vision for a tree-filled island that preserves and enhances our quality of life, especially in the face of climate change.

We support the above-referenced Bill, which establishes a greener highway corridors pilot project along the busy H-1 freeway corridor and funds the same.

TFHF is confident that if transportation planners focus as much on green infrastructure as "traditional" infrastructure, we will help to mitigate the impact of climate change and have positive impacts for Hawaii's people and environment. TFHF believes that trees create multiple benefits well documented by research and outlined in this Bill's preamble.

We stand ready to work with the Legislature and the State Department of Transportation to effectuate the actions necessary to make vision into reality. Our contact information is below should there be any questions or need for elaboration.

We urge passage of this bill onto the Committee on Ways & Means and ultimate to crossover to the House. Thank you for your good work in ensuring a better future for Hawai'i.

Sincerely,

Daniel Dinell, President

HONOLULU is HOT TREES are COOL

Visit us: www.TreesForHonolulu.org Contact us: info@TreesForHonolulu.org Voice/Fax/Text: 808-707-6353
P.O. Box 12051, Honolulu, Hawaii 96828

February 1, 2024

LATE

Aloha

I wanted to submit testimony in support for SB 2742. This bill is extremely for Hawaii's current and future economic, social, and environmental future in establishing green infrastructure objectives and policies for transportation systems, infrastructure, and projects. Specifically addressing Green Transportation Infrastructure to address and develop policies for the design, implementation, and maintenance of green transportation infrastructure.

In most parts of the country, transportation departments, along with city and county entities are embracing the incorporation of trees and plants along streets, roads and highways. There have been numerous studies both practical and scientific which show the environmental, aesthetic, and safety improvements of have vegetation along vehicular corridors. The design, installation, and maintenance of these vegetation systems are low cost and are low maintenance when BMP's (Best Management Practices) are followed; ie. proper plant selection and design implantation. For Hawaii, there are numerous tree and shrub species that have low to no maintenance requirements when incorporated properly along transportation corridors.

This SB2742 is extremely important especially given the recent acts of HDOT lighting project along sections of the H1/Moanalua Fwy, with the removal of the *Nerium Oleander* plantings on sections of the Moanalua Fwy in Halawa for the HDOT lighting work. The removal of the plants is permanent as all of the planting medium areas have been filled and capped off with cement! With the Governor's, as well as Mayor' focus on combating climate change, and making Oahu, and Hawaii as a whole more resilient to its effects, removing these plants and replacing them with concrete is adding to the negative effects of climate change and urbanization in Hawaii instead of countering it. Urban transportation corridors such as the H1/ Moanalua Fwy that previously provided vegetation (trees and shrubs) not only added an aesthetic respite for drivers, but included a myriad of environmental benefits from vegetation such as decreasing glare, filtering pollution, aiding in storm water management, and reducing the urban heat island effect.

Additionally, research has indicated that vegetation along roads and highways reduces drivers stress levels and increases alertness, etc. Specifically, roadside vegetation benefits also include ecosystem services such as: improved air quality, temperature regulation, carbon sequestration/storage, pollutant removal, surface water runoff avoidance/water cycling, biodiversity/habitat corridors, bioindicators for the health of the area. Additionally, there are Social/Cultural/Health Benefits: Noise reduction, food supplies, psychological benefits, health benefits, psychological benefits, areas for heritage trees to exist and provide their known benefits, produce a "sense of place" for the area. As well as Economic Benefits: Maintenance savings, improved retention of tourism, greater willingness-to-pay for services that have nearby roadside vegetation, increased property values.

For Hawaii's sustainability, SB 1472, is extremely important, as there needs to be direct policy in addressing Hawaii's current and future economic, social, and environmental future by establishing green infrastructure objectives and policies for transportation systems, infrastructure, and projects.

Mahalo for your consideration,

Andy Kaufman

Andy Kaufman, ASLA, MLA, Ph.D.

LATE

SB-2742

Submitted on: 2/1/2024 10:57:45 AM

Testimony for TCA on 2/1/2024 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Noel Morin	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Lee, Vice Chair Inouye, and committee members,

I support SB2742, a measure that can help us understand the considerations for the 'greening' of our highway infrastructure. As our climate changes, we can expect heating to increase. This will impact energy consumption and increase heat-related health risks. This is especially important in our 'concrete jungles' and highway infrastructure, where vast concrete surfaces act as heat sinks.

The implementation of 'green infrastructure' - well-planned placement of trees, shrubs, and other plants - can allow for heat mitigation. This has been proven in different jurisdictions, e.g., Phoenix, AZ, and Chicago, IL.

SB2742 is a step in helping us understand the considerations associated with place-appropriate green infrastructure as a solution that may allow us to keep our urban areas livable.

Please support SB2742.

Thank you,

Noel Morin

Climate, Sustainability, and Resilience Advocate

Hilo, Hawaii

LATE

SB-2742

Submitted on: 2/1/2024 1:39:03 PM

Testimony for TCA on 2/1/2024 3:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Lee and members of the TCA committee:

I'm writing in support of SB 2742. Pilot programs like these are needed so we can best figure out how to adapt to climate change. Our first actions should be to reduce emissions, but unfortunately, the scientists tell us that some of the negative impacts of climate change are already baked into the system because of all the existing greenhouse gases in the atmosphere. Therefore as we work to reduce our emissions as fast as possible as advocated by the climate scientists, we must also be realistic about the impending changes to our environment.

Mahalo,

Paul Bernstein