

**STATE OF HAWAII  
OFFICE OF PLANNING  
& SUSTAINABLE DEVELOPMENT**

**JOSH GREEN, M.D.**  
GOVERNOR

**SCOTT J. GLENN**  
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawaii'i 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii'i 96804

Telephone: (808) 587-2846  
Fax: (808) 587-2824  
Web: <https://planning.hawaii.gov/>

Statement of  
**SCOTT GLENN, Director**  
before the  
**SENATE COMMITTEE ON WAYS AND MEANS**  
Thursday, March 2, 2023, 10:30 AM  
State Capitol, Conference Room 211

in consideration of  
**SB 965, SD 1**  
**RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE.**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Senate Committee on Ways and Means:

The Office of Planning and Sustainable Development (OPSD) supports the intent of this measure and offers the following comments on SB 965, SD 1. SB 965, SD 1 is generally in alignment with the work of the State Greenhouse Gas Sequestration Task Force and the recommendations of the State of Hawaii'i's decennial climate and sustainability strategic action plan—the Hawaii'i 2050 Sustainability Plan: Charting a Course for the Decade of Action (2020-2030).<sup>1</sup>

OPSD supports the development and expansion of green infrastructure across the state. Specifically, the Hawaii'i 2050 Sustainability Plan recommended to:

Focus Area 4: To advance the development of sustainable and adaptive communities in Hawaii'i

1. "Increase the urban tree canopy and increase dedicated bike lane miles." (Recommended Action #142, Page 103)
2. "Increase public availability of outdoor spaces and provide areas to interact with nature and reduce urban heat island effects." (Recommended Action #144, Page 103)
3. "Study and implement green infrastructure design guidelines and policies." (Recommended Action #158, Page 103)
4. "Support and expand on-site rainwater harvesting and stormwater harvesting." (Recommended Action #159, Page 103)
5. "Expand and integrate permeable pavement and concrete opportunities." (Recommended Action #160, Page 103)

Focus Area 7: To preserve Hawaii'i's natural environment:

1. "Evaluate the use of green infrastructure along Hawaii'i's shoreline, and throughout the coastal zone, with the dual-benefit of controlling erosion and other shoreline processes

---

<sup>1</sup> The Hawaii'i 2050 Sustainability Plan was published in 2021 by the Office of Planning & Sustainable Development, and officially serves as the State of Hawaii'i's climate adaptation and sustainability strategic action plan, pursuant to Hawaii'i Revised Statutes §226-65 and the Hawaii'i State Planning Act. Available online: <https://hawaii2050.hawaii.gov>

- while mitigating the impacts of land-based pollution and inland flooding.”  
(Recommended Action #216, Page 106)
2. “Sponsor symposia and trainings on green infrastructure installation and maintenance for professionals, property owners, and advocates.” (Recommended Action #217, Page 106)
  3. “Identify adaptations needed to implement green infrastructure successfully in Hawai‘i’s unique conditions (topography, climate, soils, and development patterns.”  
(Recommended Action #218, Page 106)
  4. “Study the efficacy, cost, and lifespan of green infrastructure and traditional water management techniques compared to ‘grey’ infrastructure currently utilized in Hawai‘i.”  
(Recommended Action #219, Page 106)

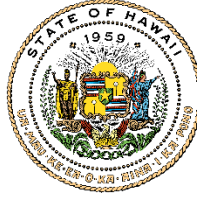
The Greenhouse Gas Sequestration Task Force organized a Permitted Interaction Group on Urban Green Infrastructure, which included the Department of Transportation and the Department of Land and Natural Resources and produced a report identifying various forms of green infrastructure.

The OPSD supports the goals and responsibilities directed in the proposed “Green Infrastructure Task Force” which tasks OPSD to serve as a task force member. OPSD supports the need to examine, evaluate, and develop best practices to guide the design, implementation, and maintenance of green transportation infrastructure to advance Hawai‘i’s sustainable and climate resilient transition. The OPSD defers to the appropriate agencies on the administrative requirements of the bill.

Thank you for the opportunity to testify on this measure.

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
HONOLULU, HAWAII 96809

**DAWN N.S. CHANG**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

**LAURA H.E. KAAKUA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**Testimony of  
DAWN N. S. CHANG  
Chairperson**

**Before the Senate Committee on  
WAYS AND MEANS**

**Thursday, March 2, 2023  
10:30 AM  
State Capitol, Conference Room 211**

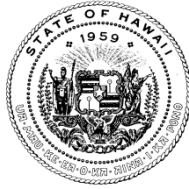
**In consideration of  
SENATE BILL 965, SENATE DRAFT 1  
RELATING TO GREEN INFRASTRUCTURE**

Senate Bill 965, Senate Draft 1 proposes to establish green infrastructure objectives and policies for transportation systems, infrastructure, and projects, and establishes the Green Transportation Infrastructure Task Force to examine, evaluate, and develop policies for the design, implementation, and maintenance of green transportation infrastructure. **The Department of Land and Natural Resources (Department) supports this measure.**

This measure is aligned with the mission of the Department's Kaulunani Urban and Community Forestry Program. The Kaulunani Program builds capacity in our communities to plan for, establish, manage, and protect green infrastructure including street-trees, urban forests, green spaces, bioswales and related natural areas where we live, work, and play. The urban tree canopy is declining, and with it, the benefits provided by urban green infrastructure as stated in the bill. This measure would help reverse that trend.

Mahalo for the opportunity to provide testimony in support of this measure.

JOSH GREEN, M.D.  
GOVERNOR



**TESTIMONY BY:**

EDWIN H. SNIFFEN  
DIRECTOR

Deputy Directors  
DREANALEE K. KALILI  
TAMMY L. LEE  
ROBIN K. SHISHIDO  
JAMES KUNANE TOKIOKA

**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

March 2, 2023  
10:30 A.M.

State Capitol, Conference Room 211 & Videoconference

**S.B. 965 SD1**  
**RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE**

Senate Committee on Ways and Means

---

The Department of Transportation (DOT) **supports** this bill which establishes green infrastructure objectives and policies for transportation systems, infrastructure, and projects. The DOT appreciates the provision to allow director's discretion to exempt projects based on safety and other detrimental concerns.

Thank you for the opportunity to provide testimony.



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

**Co-Chairs:**  
Chair, DLNR  
Director, OPSD

**Commissioners:**  
Chair, Senate AEN  
Chair, Senate WTL  
Chair, House EEP  
Chair, House WAL  
Chairperson, HTA  
Chairperson, DOA  
CEO, OHA  
Chairperson, DHHL  
Director, DBEDT  
Director, DOT  
Director, DOH  
Chairperson, DOE  
Director, C+C DPP  
Director, Maui DP  
Director, Hawai'i DP  
Director, Kaua'i DP  
The Adjutant General  
Manager, CZM

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

**Before the Senate Committee on  
WAYS AND MEANS**

**Thursday, March 2, 2023  
10:30 AM**

**State Capitol, Via Videoconference, Conference Room 211**

**In consideration of  
SENATE BILL 965 SENATE DRAFT 1  
RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE**

Senate Bill 965 SD1 establishes green infrastructure objectives and policies for transportation systems, infrastructure, and projects. Establishes the Green Transportation Infrastructure Task Force to examine, evaluate, and develop policies for the design, implementation, and maintenance of green transportation infrastructure. **The Climate Change Mitigation and Adaptation Commission (Commission) supports this bill.**

The Hawai'i Climate Change Mitigation and Adaptation Commission consists of a multi-jurisdictional effort between 20 different departments, committees, and counties. 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. While several nature-based solutions have the ability to innately adapt to rising sea levels, commonly used man-made or "gray" strategies to protect coastal infrastructure that rely on hardening shorelines may not be adaptable or must be specifically designed to adapt to rising sea levels, which can be costly. Gray solutions can also have unintended consequences, such as increased erosion or deposition, along other parts of the coastline. Nature-based solutions that rely on existing or enhanced landscapes help improve roadway resiliency by reducing impacts to coastal roads from hazards such as rising sea level, storm surge, and "nuisance" flooding (such as high tide or windblown flooding). 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. In addition, 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.<sup>1</sup> Another study found that placing trees and planters in urban arterial roadsides reduced mid-block crashes

by 5% to 20%.<sup>ii</sup> Increasing tree canopy can reduce heat island effect, provide shade to encourage walking and biking, and provide storm water mitigation and sequester carbon. Recent instances such as the HDOT lighting project along sections of the Moanalua Fwy, which removed *Nerium Oleander* plantings on sections of the Moanalua Fwy in Halawa indicate that this has not been a priority. Restoration of native coastal plants along shorelines makes those shorelines less susceptible to erosion from high storm waves. The native plant root systems hold the sand and soil in place, and plants such as naupaka, hala, pohuehue, and anapanapa are able to withstand vigorous wave action without breaking and separating from their roots. Intensive native coastal plant restoration makai of coastal roads may extend road longevity. Creating a strategy to increase the number of nature-based solutions and green infrastructure including trees and native plant restoration would support the State's ability to both mitigate and adapt to climate change.

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

---

<sup>i</sup> 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.

<sup>ii</sup> 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.



**UNIVERSITY OF HAWAII SYSTEM**

**‘ŌNAEHANA KULANUI O HAWAII**

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

**LATE**

Testimony Presented Before the  
Senate Committee on Ways and Means  
Thursday, March 2, 2023 (10:30 am)  
Conference Room 211  
Thursday, March 2, 2023

By

Tom Dinell, Professor Emeritus  
Department of Urban and Regional Planning, School of Social Sciences,  
University of Hawai'i at Manoa College

And

Michael Bruno, Provost  
University of Hawai'i at Mānoa

## **SB965 SD1 RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE**

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee on Ways & Means:

My name is Tom Dinell, Professor Emeritus, Department of Urban and Regional Planning, University of Hawai'i at Manoa and President Emeritus Trees for Honolulu's Future. I am submitting this testimony on behalf of the University of Hawai'i's Department of Urban and Regional Planning ("DURP"), College of Social Sciences.

DURP supports the above-referenced Bill, which establishes green infrastructure objectives and policies for transportation systems, infrastructure, and projects. It also establishes the Green Transportation Infrastructure Task Force ("Task Force") to examine, evaluate, and develop best practices for the department of transportation to further guide, design, implement, and maintain green transportation infrastructure in transportation systems and projects. One representative from DURP will be named to the Task Force.

Climate Change and how we adapt and mitigate the impacts thereof, is the greatest existential threat of our time. Jurisdictions around the country and world have myriad solutions around green infrastructure and smart, forward-thinking, green transportation. Some solutions are natural, like trees, others are actions like reflective pavement.

We urge this Committee to strongly direct the State Department of Transportation to not just explore known, effective, mitigation approaches, but to bring to the fore that perspective in every transportation project planning/action it undertakes. This bill provides help to do just that.

Aloha Nui Loa,

A handwritten signature in black ink that reads 'Tom Dinell'.

Tom Dinell  
[dinell@hawaii.edu](mailto:dinell@hawaii.edu)



Written Testimony before the

SENATE COMMITTEE ON WAYS & MEANS

Thursday, March 2, 2023 (10:30 am)

Conference Room 211

Thursday, March 2, 2023

**RE: SB965 SD1 RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE**

Chair Dela Cruz, Vice Chair Keith-Agaran, Members of the Committee on Ways & Means:

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 strongly support the above-referenced Bill, which establishes green infrastructure objectives and policies for transportation systems, infrastructure, and projects as well as the Green Transportation Infrastructure Task Force ("Task Force"). **Note below, a requested amendment and elaboration in the committee report.**

This Bill has an important accountability aspect by requiring the Task Force, to submit reports to the legislature making recommendations for implementing the green infrastructure objectives, policies, and priority guidelines established by this measure prior to disbanding. There is a typo in Section 4, item 4(e) since the prior line requires reports for the 2024 and 2025 regular sessions, wouldn't dissolution logically occur no sooner than June 2025?

Further, in reviewing the State DOT testimony on this measure at the subject matter Committee, we hope WAM includes in its Committee report, or perhaps the bill itself, encouragement for the department to take to heart this statement from the Federal Highway Commission: **"For nature-based solutions, an appropriate strategy will also depend on the hazard and site characteristics."** This bill does not advocate for green infrastructure everywhere. It's saying, *where appropriate*. Green Infrastructure does not work at cross purposes to safety. Blanket statements like that in previous DOT testimony that *"state right-of-way along highways are limited in size and cannot accommodate rows of trees"* is just wrong. Sure, some ROW are too narrow, but all? For all species? For all types of green infrastructure? There are countless small parcels of ROW appropriate for intervention. Please watch this 83-second video ([https://youtu.be/vazcFnJ3g\\_4](https://youtu.be/vazcFnJ3g_4)) on small scale community-action with the City DTS that the State DOT should emulate, not discount. We need to change our thinking yesterday if we are to positively address the crises of today and tomorrow.

TFHF is confident that if transportation planning focuses on green infrastructure actions as much as "traditional" infrastructure, the policies/actions outlined in this Bill will help to mitigate climate change and have positive impacts for Hawaii. TFHF believes that trees create multiple benefits well documented by research and noted in this Bill's preamble.

We urge this Committee to amend the Bill as noted above, reinforce the policy direction of the Senate as it relates to green infrastructure, and send it to full Senate and crossover to the House.

Thank you.

Daniel Dinell, President

HONOLULU is HOT TREES are COOL

Visit us: [www.TreesForHonolulu.org](http://www.TreesForHonolulu.org) Contact us: [info@TreesForHonolulu.org](mailto:info@TreesForHonolulu.org) Voice/Fax/Text: 808-707-6353

P.O. Box 12051, Honolulu, Hawaii 96828





**International Union of Painters and Allied Trades  
District Council 50**

**TO THE SENATE COMMITTEE ON WAYS AND MEANS  
REGULAR SESSION OF 2023**

**TIME/DATE: THURSDAY, MARCH 2, 2023, 10:30 A.M., ROOM 211**

**TESTIMONY IN SUPPORT OF SENATE BILL 965, SD1 – “RELATING TO GREEN  
TRANSPORTATION INFRASTRATURE.”**

**TO CHAIR DELA CRUZ AND MEMBERS OF THE SENATE COMMITTEE ON  
WAYS AND MEANS:**

The International Union of Painters and Allied Trades, District Council 50, Painters Local Union 1791, appreciates the opportunity to testify in SUPPORT to Senate Bill No. 965, SD1 – “RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE.” My name is Lorna Woo, Director of Government Affairs, District Council 50.

This measure establishes green infrastructure objectives and policies for transportation system, infrastructure and projects; and it establishes the Green Transportation Infrastructure Task Force. We appreciate the importance of incorporating green strategies into existing structures such as highways, buildings, concrete barriers, etc., which not only helps the environment, but dramatically enhances the natural esthetics of our communities. These green strategies will visually improve the urban core and surrounding areas and will also preserve and protect the environment.

For these reasons, we strongly urge the committees to support the proposals in Senate Bill No. 965, SD1. Thank you for the opportunity to testify in support of this measure.

2240 Young Street  
Honolulu, HI 96826

Phone  
808.941.0991

Fax  
808.955.9091

Email  
info@dc50.org

Website  
www.dc50.org

PAINTERS  
808.941.0991

GLAZIERS,  
ARCHITECTURAL  
METAL AND  
GLASSWORKERS  
808.946.3329

CARPET, LINOLEUM  
AND SOFT TILE  
808.942.3988

DRYWALL TAPERS,  
FINISHERS  
808.946.6621



200 South High Street  
Wailuku, HI 96793  
[www.mauiμπο.org](http://www.mauiμπο.org)

February 28, 2023

Testimony of Pamela Eaton  
Maui MPO Executive Director  
On behalf of Maui MPO Policy Board

Before the Senate Committee on Ways and Means

March 2, 2023 at 10:30 a.m.  
Conference Room 211

SB 965 S.D. 1  
Honorable Donovan M. Dela Cruz, Chair  
Honorable Gilbert Keith-Agaran, Vice Chair  
Honorable Members of the Senate Committee on Ways and Means

The Maui Metropolitan Planning Organization **supports** SB 965. This measure will support our efforts to reduce the impacts of climate change by incorporating green vegetation, foliage and trees into transportation infrastructure reducing the urban heat effect and carbon emissions. Incorporating green vegetation along our roads and highways will capture water to not only replenish the water table, but also help to mitigate stormwater flooding plaguing many of our community roadways in South, West and Central Maui. Creating a lush green environment will enhance shade and reduce heat, providing a cooler transit for many of our pedestrians, bicycle users and micro-mobility users. The incorporation of green vegetation, foliage and trees also provide a sound and visual barrier between vehicles and surrounding communities to enhance a sense of safety, comfort and quality of life.

Thank you for the opportunity to provide testimony in **SUPPORT** of SB 965, S.D. 1.

Sincerely,

*Pamela Eaton*

Pamela Eaton  
Executive Director, Maui MPO  
On behalf of the Maui MPO Policy Board



# Environmental Caucus of The Democratic Party of Hawai'i

---

March 1, 2023

To: The Honorable Donovan M. Dela Cruz, Chair.  
The Honorable Gilbert S.C. Keith-Agaran, Vice Chair, and Members of the  
Senate Committee on Ways and Means  
Senate, Hawaii State Legislature

Re: **SB 965 – Relating to Green Transportation Infrastructure**

Hearing: Thursday, March 1, 2023, 10:30 am, Room 211 & videoconference

Position: **Strong support**

Aloha, Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee Members:

The Environmental Caucus of the Democratic Party of Hawai'i has an enrolled membership of more than 2,000 voting residents here in Hawai'i. We **strongly support** SB 965 which would establish green infrastructure objectives and policies for transportation systems, infrastructure, and projects. It would create a Green Transportation Infrastructure Task Force to examine, evaluate, and develop policies for the design, implementation, and maintenance of green transportation infrastructure.

The hideous Honolulu Rail disaster has blighted our landscape with a worthless monstrosity that cannot meet its proposed goals and will bankrupt the City at a cost of about \$20 billion if it ever gets “completed.” Honolulu’s Rail is a poster-child demonstration of how NOT to develop transportation infrastructure – starting with the falsehoods by which it was “sold” to an unsuspecting public; the powers who made the decisions; the process; the values and political pressures that dictated the design; the horrendously ugly design itself, with massive amounts of concrete; the route that runs through landfill; a failure to secure a station at Ala Moana Center; the idea that “somebody else will ride the rail so I can continue to drive on the freeway”. All of these are not the way to develop transportation infrastructure. We definitely need to change the direction of transportation projects in Hawai'i by making them environmentally friendly and better adapted to human needs.

It is inspiring indeed to read the introduction of this bill, which states, in part: “Hawaii is world-renowned for its lush vegetation and citizens and tourists actively seek out green spaces. Increasing the number of parks and green spaces in Honolulu’s urban core will increase the quality of life of residents and visitors.”

And we are very pleased that the bill transforms these broad goals into very specific and well-focused plans to make those goals actually happen. The bill requires projects to incorporate green infrastructure to achieve climate and sustainability design objectives. Those objectives include: (1) Minimizing stormwater runoff and [**maximizing**] replenishment of the water table; (2) Reducing the urban heat island effect by providing shade that reduces heat absorption over



Environmental Caucus of  
The Democratic Party of Hawai'i

Testimony for the Senate Committee on Ways and Means  
SB 965 – relating to Green Transportation Infrastructure  
Hearing: Thursday, March 2, 2023, 10:30 am, Room 211  
Page 2

hardened surfaces; (3) Providing cooler shaded transit for pedestrians, bicycle users, and micro-mobility users; and (4) Encouraging the removal, sequestration, and storage of pollutants and greenhouse gas emissions.

This is the proper way urban planning should move forward. For these reasons, we strongly support this bill. We would propose **one amendment** at this time: Insert “**maximizing**” before “replenishment of the water table” on page 3, line 10 of the bill, as shown in our quotation of this portion of the bill, above. We certainly don’t want to “minimize” replenishment of the water table.

If this bill is enacted into law in its present form, or something close to it, and if it is implemented conscientiously and competently, it has the potential of transforming much of Hawai'i's urban and suburban landscape in a truly beneficial way. We need this transformation. Full stop. Everyone will benefit, even the developers. We would be very pleased to see both of them made into law.

On behalf of the Environmental Caucus, we urge you to PASS SB 965 with one amendment, mentioned above. We thank you very much in advance for your favorable consideration of this bill.

*Alan B. Burdick* and *Melodie Adaja*, co-chairs  
Environmental Caucus of the Democratic Party of Hawai'i

[Burdick808@gmail.com](mailto:Burdick808@gmail.com) 808-927-1500  
[legislativepriorities@gmail.com](mailto:legislativepriorities@gmail.com) 808-258-8889

**SB-965-SD-1**

Submitted on: 2/28/2023 3:30:56 PM

Testimony for WAM on 3/2/2023 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
David Smith	Individual	Support	Written Testimony Only

Comments:

Green infrastructure such as trees makes transportation safer and provides ecosystem benefits.

Painting Industry of Hawaii Labor Management Cooperation Trust Fund

Hawaii Tapers Market Recovery Trust Fund

Hawaii Glaziers, Architectural Metal Glassworkers Local Union 1889  
AFL-CIO Stabilization Trust Fund

and

Carpet, Linoleum and Soft Tile Local Union 1926 Market Recovery Trust Fund

February 28, 2023

Donovan Dela Cruz, Chair  
Senate Committee on Ways and Means  
415 South Beretania Street  
Honolulu, Hawaii 96813

Re: Senate Bill 965, SD1 (Relating To Green Transportation Infrastructure)  
Hearing date: March 2, 2023  
Time: 10:30 a.m.

Dear Chair Dela Cruz and Members of the Committee:

Thank you for this opportunity to submit testimony on behalf of the Painting Industry of Hawaii Labor Management Cooperation Trust Fund, Hawaii Tapers Market Recovery Trust Fund, Hawaii Glaziers, Architectural Metal Glassworkers Local Union 1889 AFL-CIO Stabilization Trust Fund, and Carpet, Linoleum and Soft Tile Local Union 1926 Market Recovery Trust Fund **in support** of Senate Bill 965, SD1. The aforesaid organizations are labor management cooperation funds between the Painters Union, Tapers Union, Glaziers Union, and Carpet and Soft Tile Layers Union and their signatory contractors.

This measure will promote the employment of green strategies and technologies including, among other things, painting infrastructure to blend in with Hawaii's natural environment.

We are particularly excited about the opportunity to contribute our knowledge and expertise toward the preservation and enhancement of Hawaii's scenic beauty through the visual improvements envisioned by the bill. Aesthetic treatment of our state's infrastructure can only improve the quality of life in Hawaii, improve its attractiveness as a tourist destination, and benefit our local economy.

We urge you to pass this measure and thank you again for this opportunity to voice our **support** for the measure.

February 28, 2023

Aloha

I wanted to submit testimony in support for Testimony Request for SB965 SD1. 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 Task Force to examine, evaluate, and develop policies for the design, implementation, and maintenance of green transportation infrastructure.

This bill is extremely important especially given the recent acts of HDOT lighting project along sections of the Moanalua Fwy, with the removal of the *Nerium Oleander* plantings in the Halawa area. The removal of the plants seems to be permanent as they are filling and capping off the medium with cement! With the Governor's, as well as Mayor Blangiardi's focus on combating climate change, and making Oahu, and Hawaii as a whole more resilient to its negative effects, removing these plants and replacing them with concrete seems to be adding to the negative effects of climate change and urbanization in Hawaii instead of countering it.

I have heard that HDOT's response is that the removal of the plants were that it "*poses a visibility hazard and maintenance concerns*" Yet specifically, *Nerium Oleander* varieties such as 'Dwarf Red', 'White Sands', 'Petite Salmon' and 'Petite Pink,' grow approximately 4 -6' tall and 3-5' wide, unlike the standard varieties, which some of the plants that were removed, which can grow 6-12'tall and as wide. So, incorporating these dwarf, drought tolerant, low maintenance, and extremely aesthetic highway vegetation species should not cause any visibility hazards or maintenance concerns! Of the many urban transportation corridors on Oahu, this strip of the freeway provided not only an aesthetic respite for drivers, but all the environmental benefits of vegetation along roads provide such as decreasing glare, filtering pollution, aiding in storm water management, and reducing the urban heat island effect are now absent in these sections of the freeway.

Additionally, research has indicated that vegetation along roads and highways reduces drivers stress levels and increases alertness, etc. (cited references upon request). Specifically, roadside vegetation benefits also includes: 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. Social/Cultural/Health Benefits: Noise reduction, psychological benefits, health benefits, psychological benefits (aesthetics), are also provided by green infrastructure such as green roofs and living walls in addition to roadside trees and shrubs. Green infrastructure can provide other known benefits, by creating a "sense of place" for the area. Additionally, economic Benefits: maintenance savings, improved retention of tourism, greater willingness-to-pay for services that have nearby urban vegetation, as well as increased property values are also some of the qualities green infrastructure afford.

Recently, driving along the section the Moanalua Fwy in Halawa with the plants now removed, the bright, freshly poured concrete curing in the daytime, along with the headlight glare from oncoming traffic at night, has changed this vegetative vehicular corridor respite into truly a devastating experience on many social/psychological and environmental levels.

For the future, SB965 SD1 is extremely important start for Hawaii, 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.

**SB-965-SD-1**

Submitted on: 3/1/2023 10:12:51 AM

Testimony for WAM on 3/2/2023 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Will Caron	Individual	Support	Written Testimony Only

Comments:

Sustainable design concepts for public infrastructure incorporate green vegetation and trees to decrease urban temperatures, reduce carbon emissions, improve air quality, and capture water to replenish the water table. The effects of climate change have made the implementation of sustainable design concepts more critical, as each passing year has seen increased temperatures and other impacts from climate change.

People who live in areas that have more trees and green space are less likely to develop acute respiratory symptoms and die of heart disease or respiratory disease. Studies have also found that green vegetation, trees, and properly designed and well—maintained infrastructure can also produce significant improvements to mental health and have positive psychological and quality of life benefits in a community. Please support SB965 SD1.



**LATE**

**SB-965-SD-1**

Submitted on: 3/1/2023 12:19:15 PM

Testimony for WAM on 3/2/2023 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

Support

**LATE**

**SB-965-SD-1**

Submitted on: 3/1/2023 12:35:57 PM

Testimony for WAM on 3/2/2023 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Nikos Leverenz	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Committee Members:

I support SB 965, SD1. I've noted that effects of climate change have increased the temperature of urban Honolulu over the course of the past three decades. Public infrastructure that incorporates green vegetation and trees can help reduce what's known as the "urban heat island effect."

It's also critical that public infrastructure projects, including the Honolulu rail, incorporate solar panels in parking lots and overhangs to provide clean renewable energy. These panels can provide a needed shade canopy and increase the supply of power for the facilities and perhaps Honolulu's electrical grid. All parking lots, public and private, should seek to better utilize solar panels to provide shade and power.

Studies have also found that green vegetation, trees, and properly designed and well-maintained infrastructure can also produce significant improvements to mental health and have positive psychological and quality of life benefits in a community.

Mahalo for the opportunity to provide testimony.