



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

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Director, OPSD

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

**Before the House Committees on
TRANSPORTATION
AND
ENERGY & ENVIRONMENTAL PROTECTION**

**Tuesday, March 21, 2023
11:30 AM
State Capitol, Via Videoconference, Conference Room 325**

**In consideration of
SENATE BILL 965 SENATE DRAFT 21
RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE**

Senate Bill 965 SD21 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.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. 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.

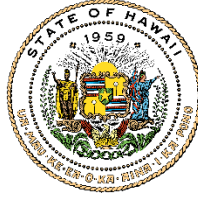
Mahalo for the opportunity to testify in support of this measure.

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.

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

P.O. BOX 621
HONOLULU, HAWAII 96809

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

**Before the House Committees on
TRANSPORTATION
and
ENERGY & ENVIRONMENTAL PROTECTION**

**Tuesday, March 21, 2023
11:30 AM
State Capitol, Conference Room 325**

**In consideration of
SENATE BILL 965, SENATE DRAFT 2
RELATING TO GREEN INFRASTRUCTURE**

Senate Bill 965, Senate Draft 2 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.



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Transportation
House Committee on Energy & Environmental Protection
Tuesday, March 21, 2023 at 11:30 a.m.

By
Denise Eby Konan, Ph.D., Dean
College of Social Science

And
Michael Bruno, Provost
University of Hawai'i at Mānoa

SB 965 SD2 – RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

Chairs Todd and Lowen, Vice Chairs Kila and Cochran, and Members of the Committees:

The University of Hawai'i supports the intent of SB 965 SD2, which aims to improve the quality of life in Hawai'i by establishing objectives and policies for transportation systems, infrastructure, and projects that incorporate green infrastructure.

The College of Social Science supports this bill and agrees that a representative from the Department of Urban and Regional Planning (DURP) be included on the Green Transportation Infrastructure Task Force. DURP faculty members have expertise on transportation planning, sustainable cities, landscaping, and climate change, and are willing to work with the Task Force for the benefit of Hawai'i.

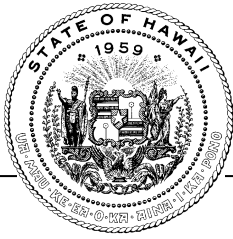
Incorporating sustainable design concepts and green infrastructure in transportation systems can have a positive impact on the environment and quality of life in Hawai'i, and it is essential to take steps to address the effects of climate change and promote sustainability in our communities.

The benefits of green infrastructure are many. Environmentally, Green infrastructure can improve water quality, reduce flooding, buffer climate change impacts, expand wildlife habitat, and enhance biodiversity. Socially, Green infrastructure can improve community well-being and public health by lowering rates of respiratory illness and improving mental health. Economically, green Infrastructure can reduce the stress on traditional gray infrastructure increasing its lifespan and reducing the long-term costs of their maintenance and operation. Moreover, by enhancing a community's aesthetic character, green infrastructure can bolster a neighborhood's economic productivity multiplying the investments made by business owners and community members. In summary, we support SB 965 SD2 because the benefits of green infrastructure far outweigh its costs and would provide immediate benefits to the residents and visitors to

the State of Hawai'i. By incorporating live foliage, trees, and green infrastructure, we can create a visual and sound barrier between vehicles and other modes of pedestrian, bicycle, and multi-modal transit to enhance the quality of transportation. Furthermore, research has shown that green infrastructure could produce significant improvements to mental health and have positive psychological benefits in a community.

We are particularly pleased to see that this bill includes the establishment of a diverse green transportation infrastructure task force, which will examine, evaluate, and develop best practices for the Department of Transportation to guide, design, implement, and maintain green transportation infrastructure in transportation systems and projects. It is important to have experts who can provide insights into how we can incorporate green infrastructure into our transportation systems to minimize stormwater runoff, reduce the urban heat island effect, and encourage the removal, sequestration, and storage of pollutants and greenhouse gas emissions.

Thank you for the opportunity to provide testimony in support of SB 965 SD2.



**STATE OF HAWAI‘I
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SCOTT J. GLENN
DIRECTOR

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Statement of
SCOTT GLENN, Director
before the
**HOUSE COMMITTEES ON TRANSPORTATION AND
ENERGY AND ENVIRONMENTAL PROTECTION**

Tuesday, March 21, 2023, 11:30 AM
State Capitol, Conference Room 325

in consideration of
SB 965, SD 2
RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE.

Chairs Todd and Lowen, Vice Chairs Kila and Cochran, and Members of the House Committees on Transportation and Energy and Environmental Protection:

The Office of Planning and Sustainable Development (OPSD) supports the intent of this measure and offers the following comments on SB 965, SD 2. SB 965, SD 2 is generally in alignment with the work of the State Greenhouse Gas Sequestration Task Force and the recommendations of the State of Hawai‘i’s decennial climate and sustainability strategic action plan—the Hawai‘i 2050 Sustainability Plan: Charting a Course for the Decade of Action (2020-2030).¹

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

Focus Area 4: To advance the development of sustainable and adaptive communities in Hawai‘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 Hawai‘i’s natural environment:

1. “Evaluate the use of green infrastructure along Hawai‘i’s shoreline, and throughout the coastal zone, with the dual-benefit of controlling erosion and other shoreline processes while mitigating the impacts of land-based pollution and inland flooding.” (Recommended Action #216, Page 106)

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

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.



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

March 15, 2023

RE: FULL SUPPORT FOR SB 965 SD 2 Relating to Green Transportation Infrastructure

Dear Senators,

The Outdoor Circle has advocated for beautiful and scenic roads and landscapes for 111 years, and has backed up that advocacy with projects throughout the state that have resulted in many beautiful and treed roadways, parks, schools, military bases and much more.

We strongly agree on the need for SB 965 SD 2 to further our collective goals for all of the benefits listed in the bill preamble and rationale and others not listed but well-known.

We would offer a friendly amendment under Section (b) (5):

“Requiring the Department of Transportation and its contractors to adopt uniform best practices when planting, caring for, and maintaining trees and green infrastructure by following ANSI A300 standards for tree care practices.”

ANSI A300 is a national standard for best tree care practices, but there are some instances where our unique environment may not be in all circumstances be comprehensively covered by ANSI A300 standards completely, so we would suggest a simple change of the last few words of this to read:

“by following ANSI A300 or similar best practice standards appropriate for Hawaii for tree care.”

to allow for local expert arborist flexibility in incorporating best tree care practices.

We would also suggest that this type of green infrastructure legislation be further required of all state agencies, departments, jurisdictions and contractors for such.

Thank you for this opportunity to testify,

Winston Welch
Executive Director



**Maui Metropolitan
Planning Organization**

200 South High Street
Wailuku, HI 96793
www.mauiμπο.org

March 15, 2023

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

Before the House Committee on Transportation, and
House Committee on Energy & Environmental Protection

March 21, 2023 at 11:30 a.m.
Conference Room 325

SB 965, S.D. 2 RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

Honorable Chris Todd, Chair
Honorable Darius K. Kila, Vice Chair
Honorable Members of the House Committee on Transportation

Honorable Nicole E. Lowen, Chair
Honorable Elle Cochran, Vice Chair
Honorable Members of the House Committee on Energy & Environmental Protection

The Maui Metropolitan Planning Organization **supports** SB S.D. 2. This measure will support our efforts to reduce the impacts of climate change by incorporating green vegetation, foliage and trees into transportation infrastructure thereby reducing urban heat effect and carbon emissions. Incorporating green vegetation along our roads and highways, and multi-use pathways will capture water to not only replenish the water table, but to also help mitigate stormwater flooding plaguing many of our community roadways in South, West and Central Maui. Creating a lush green vegetated environment will enhance shade and reduce heat providing a cooler transit for many of our pedestrians, bicycle users and micro-mobility users.

Establishing green infrastructure for transportation systems is consistent with many of Maui's land use and transportation plans such as the *Maui Island Plan*, *West and South Maui Community Plan* updates, *Hele Mai Maui Long Range Transportation Plan* and the *West Maui TOD Community Corridor Action Plan*, in that all of these plans call for the incorporation of green infrastructure in order to increase shade and comfort along our transportation infrastructure, provide flood mitigation from stormwater, and create sound and visual barriers to neighborhoods in order to create a sense of place to enhance safety, comfort and quality of life.

Thank you for the opportunity to testify in **support** of SB 965, S.D. 2.

Sincerely,

Pam Eaton

Pam Eaton
Executive Director, Maui MPO



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

TO THE HOUSE COMMITTEES ON TRANSPORTATION AND
ENERGY & ENVIRONMENTAL PROTECTION
REGULAR SESSION OF 2023

TIME/DATE: TUESDAY, MARCH 21, 2023, 11:30 A.M., ROOM 325

TESTIMONY IN SUPPORT OF SENATE BILL 965, SD2 – “RELATING TO GREEN
TRANSPORTATION INFRASTRATURE.”

TO CHAIRS TODD AND LOWEN AND THE MEMBERS ON THE HOUSE
COMMITTEES ON TRANSPORTATION AND ENVIRONMENTAL PROTECTION:

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, SD2 – “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, SD2. Thank you for the opportunity to testify in support of
this measure.

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Environmental Caucus of
The Democratic Party of Hawai'i

Energy & Climate Action Committee

Tuesday, March 21, 2023, 11:30 am

House Committees on Transportation and on Energy and Environmental Protection

SENATE BILL 965 – RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

Position: Strong Support

Me ke Aloha, Chairs Todd and Lowen, Vice-Chairs Kila and Cochrane, and members of the House Committees on Transportation and on Energy and Environmental Protection:

SB965 establishes objectives, policies, and definitions for “green” infrastructure related to transportation. It establishes a green transportation infrastructure task force to develop policies for the design, implementation, and maintenance of green transportation infrastructure.

The Energy & Climate Action Committee supports greening our urban areas, with new trees, pocket parks, permeable pavement, and associated infrastructure improvements, including a better system for recharging stormwater. SB965 sees to increase the greenery. It seems slightly odd that the construction of roadways would be associated with greenery and called “green infrastructure”, but we support any new greenery.

This need for a refocus to greener infrastructure is plain. Many new developments have adopted suburban style setbacks that go largely unused and could be more attuned to native vegetation. Many trees are being cut down without replacement, while in other developments vegetation has been ignored. Many parking lots are wastelands that could be shaded. Street flooding

One can imagine that one definition of “green” could be the installation of solar panels as shade, to green the energy availability and provide quick-charging stations for shoppers. We hope that incentives will improve the situation climatically and provide a more Hawaiian sense of place.

Mahalo for the opportunity to address this matter.

/s/ Charley Ice & Ted Bohlen, Co-Chairs, Energy and Climate Action Committee
Environmental Caucus of the Democratic Party

SB-965-SD-2

Submitted on: 3/18/2023 3:55:06 PM

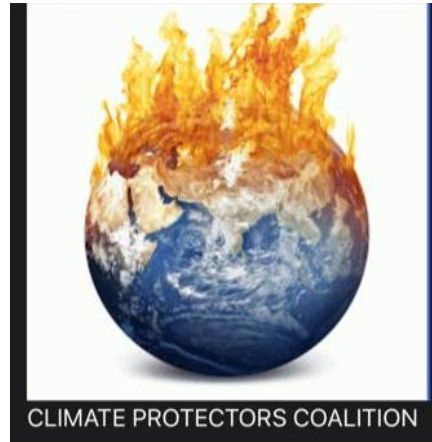
Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
John Latkiewicz	Kauai Climate Action Coalition/Capture the Carbon	Support	Written Testimony Only

Comments:

Policy and planning are a critical step in effective governance. For that reason, I support SB965 which 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.

Thanks for your attention.



To: The Honorable Chairs Chris Todd and Nicole Lowen, the Honorable Vice Chairs Darius Kila and Elle Cochran, and Members of the Committees on Transportation and on Energy and Environmental Protection

From: Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing SB965 SD2 RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

Hearing: Tuesday March 21, 2023, 11:30 a.m., room 325

Aloha Chair Chairs Todd and Lowen, Vice Chairs Kila and Cochran, and Members of the Committees on Transportation and Energy and Environmental Protection:

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and ocean. HIROC is interested in preventing polluted runoff from transportation systems, infrastructure, and projects that harms the reefs and oceans.

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate. We support the use of trees and other design measures that reduce heat, save energy, and reduce the climate impact of transportation systems, infrastructure, and projects.

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i STRONGLY SUPPORT SB965 SD2!

Sustainable design concepts for transportation infrastructure use green vegetation and trees to decrease urban temperatures, reduce carbon emissions and noise, improve air quality, and capture water to replenish the water table. The so-called “green infrastructure” is a range of measures that use plant or soil systems, including trees, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to conserve water and reduce flows to sewer systems or to surface waters. Transportation systems, infrastructure, and projects present important opportunities for implementing green infrastructure planning.

The effects of climate change have made implementing sustainable design concepts more critical, as each passing year has seen increased temperatures and other impacts from climate change.

Studies have found that individuals who live in areas with more trees and green space are less likely to have acute respiratory symptoms and less likely to die of heart disease or respiratory disease. Hawaii is world-renowned for its vegetation. Citizens and tourists alike actively seek out green spaces. Increasing the number of parks and green spaces along Honolulu's roadways and other transportation systems and infrastructure will enhance the quality of life of residents and visitors alike.

This bill would require the incorporation of green infrastructure into transportation systems designs and require the Department of Transportation to endeavor to reduce temperatures and provide for cooler transit. It would establish a green infrastructure task force to develop best practices.

This bill would make our transportation infrastructure more sustainable and save water and energy.

Please pass this bill! Mahalo!

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)



Written Testimony before the

HOUSE COMMITTEE ON TRANSPORTATION and
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Tuesday, March 21, 2023 (11:30 am)
Conference Room 325

RE: SB965 SD2 RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

Chairs Todd and Lowen, Vice Chairs Kila and Cochran, Members of the Joint Committees on Transportation and Energy & Environmental Protection:

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 green infrastructure objectives and policies for transportation systems, infrastructure, and projects as well as the Green Transportation Infrastructure Task Force ("Task Force").

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.

We are 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. Trees create shade and use evapotranspiration to lower temperature. Trees also recharge groundwater and decrease surface runoff protecting our reefs. Trees trap pollutants and store CO2. Trees calm traffic. Sadly though, Honolulu has been losing urban tree canopy over the past years. We need to change the paradigm and act "green" today to change tomorrow for the better.

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

Thank you.

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

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

March 20, 2023

Representative Chris Todd, Chair
House Committee on Transportation

and

Representative Nicole Lowen, Chair
House Committee on Energy & Environmental Protection
415 South Beretania Street
Honolulu, Hawaii 96813

Re: Senate Bill 965, SD2 (Relating To Green Transportation Infrastructure)
Hearing date: March 21, 2023
Time: 11:30 a.m.

Chairs Todd, Lowen and Members of the Committees:

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, SD2. 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 that improves the quality of life in Hawaii, improves its attractiveness as a tourist destination, while benefiting our local economy will be a win-win for all.

Thank you again for this opportunity to voice our **support** for this measure.

SB-965-SD-2

Submitted on: 3/15/2023 11:33:54 AM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Cards Pintor	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this bill.

Mahalo nui,

Cards Pintor

SB-965-SD-2

Submitted on: 3/15/2023 2:47:30 PM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

Please support this important bill. Mahalo.

SB-965-SD-2

Submitted on: 3/15/2023 10:24:48 PM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
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 SD2.

SB-965-SD-2

Submitted on: 3/16/2023 9:38:31 PM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

No such thing as Green Transportation Infrastructure . this is all a lot of Bull Shit!! Look it Up!!!

SB-965-SD-2

Submitted on: 3/17/2023 3:22:50 AM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Spencer Hisatake	Individual	Oppose	Written Testimony Only

Comments:

I believe the plan is un-realistic on the approach and time frame suggested. Before we move forward the people will need to see a detailed plan that makes sense. An honest assessment of what the community of Hawaii will have to endure, pay for, and possibly lose in this process.

Should facts and the admittance from whom ever is attempting to pass this show the community transparency a plan that makes sense!

Most importantly, this bill must be re-written to clearly state that this should be the choice of each individual homeowner and community member that they can opt-in or out, without any bullying and terroristic acts such as penalties fines, or dirty tactics to selfishly and recklessly get your way. Basically, not to use Government overreach to bully the Voting and Tax paying community even if they choose to not to agree. Last time I checked I still remember I fought for a free country.

Until then I do not support this bill!

SB-965-SD-2

Submitted on: 3/18/2023 10:04:56 AM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Members of the Transportation Committee and the Energy and Environmental Protection Committee,

Mahalo for this opportunity to testify.

Care of the land and water are very important to me and our family and that is why I'm in strong support of this bill.

All of the areas included in this bill bring visibility and focus to green infrastructure which has many benefits to the people by improving the health of the flora and fauna through improved air and water quality.

Establishing the Green Transportation Infrastructure Task Force brings groups together who can collaborate and contribute to solutions. I'm in appreciation of the many organizations who testified in support of this bill who will be an integral part of implementing the goals of the bill.

Passing SB965 SD2 is a win for Hawaii.

Virginia Tincher, Oahu

SB-965-SD-2

Submitted on: 3/19/2023 10:49:37 AM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Barbara Best	Individual	Support	Written Testimony Only

Comments:

We've nine years before easing climate change will be too late, so these details are welcome.

SB-965-SD-2

Submitted on: 3/19/2023 12:29:09 PM

Testimony for TRN on 3/21/2023 11:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Helen Cox	Individual	Support	Written Testimony Only

Comments:

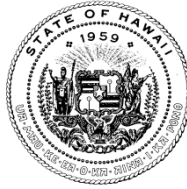
Aloha Committee Chair and Members,

Please pass SB965 which will establish green infrastructure objectives and policies for transportation systems, infrastructure, and projects. We all know we must move to green transportation, and a green transportation infrastructure task force will enable the state to develop policies for the design, implementation, and maintenance of green transportation infrastructure. This should be done as soon as possible, not put off for implementation until years from now. Please pass SB965 with a reasonable implementation date for the sake of our keiki and our aina.

Mahalo,

Helen Cox, Kalaheo, Kauai

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 21, 2023
11:30 A.M.

State Capitol, Conference Room 325 via Videoconference

S.B. 965 SD2
RELATING TO GREEN TRANSPORTATION INFRASTRUCTURE

House Committees on Transportation and Energy & Environmental Protection

The Department of Transportation (DOT) **supports the intent** of 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. However, the DOT has the following comments and concerns.

The DOT uses best management practices to address stormwater runoff. These practices include vegetative swales, plantings, and buffers to reduce runoff and absorb stormwater.

The DOT has a noise policy which evaluates when noise walls are needed. Although thick rows of trees can be a natural sound barrier, the state right-of-way along highways are limited in size and cannot accommodate rows of trees. Road safety is also compromised when trees are close to the roadway as it may infringe on the clear zone and reduce sight distances on curves. Routine watering, tree maintenance, and road repairs from root damage will require an additional \$60,000 per centerline mile, per year. Further, federal funds for sound mitigation are limited.

Visual and sound barriers should not block vehicle, bicycle, and/or pedestrian sight distances at intersections, crossings, and/or merging areas between different modes of travel. Blocking sight distances increases the potential for crashes in addition to more potential crashes involving the barrier.

Thank you for the opportunity to provide testimony.



March 19, 2023

Testimony in Support of SB965 SD2

Aloha,

I wanted to submit testimony in support for Testimony Request for SB965 SD2. This bill is extremely important for Hawaii's current and future economic, social, and environmental prominence 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 was that it "poses a visibility hazard and maintenance concerns" Yet specific, *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). Moreover, 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. 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 SD2 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.