



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON WAYS AND MEANS

Wednesday, February 22, 2023
9:30 AM
State Capitol, Conference Room 211 and Videoconference

In SUPPORT of
SB 1191, SD1

RELATING TO TRANSIT-ORIENTED DEVELOPMENT.

Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the committee, the Hawai'i State Energy Office (HSEO) supports SB 1191, SD1, which appropriates funds for statewide planning and coordination for transit-oriented development (TOD) projects identified in the state strategic plan for transit-oriented development. HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

Ground transportation is responsible for about 25 percent of Hawaii's greenhouse gas emissions,¹ and vehicle miles traveled (VMT), a metric that correlates with GHG emissions from ground transportation, has increased by over 30% since 2000.² For Hawaii to meet its statutory target "to sequester more greenhouse gases than emitted as soon as practicable but no later than 2045", significant reductions in emissions from ground transportation will need to be made in the near to medium term. SB 1191, SD1, will provide funds for fiscal year 2023—2024 to maintain and enhance capacity to support planning of state and county transit-oriented development projects,

¹ https://health.hawaii.gov/cab/files/2021/04/2017-Inventory_Final-Report_April-2021.pdf

² <https://dbedt.hawaii.gov/economic/databook/db2021/>

which will reduce the energy intensity of the transportation system and associated emissions.

The duties of the Chief Energy Officer per HRS 196-72 to support the clean energy initiative include providing technical assistance to state and county agencies to assess and implement programs related to clean transportation; evaluating, recommending, and participating in the development of programs that encourage clean transportation; and advocating for the State's energy and decarbonization goals at departments to ensure that state energy policies and regulations align with the state strategic goals and are data-driven.

SB 1191, SD1, may be particularly impactful in reducing the energy intensity of the transportation system because it supports the planning and implementation of TOD and smart growth. TOD and smart growth focus on compact development built around a transit station or within easy walking distance (typically a half-mile) of a station and contains a mix of land uses such as housing, offices, shops, restaurants, and entertainment. As a result, it becomes easier for people to meet many of their daily needs by foot, bike, and/or transit, rather than by personal vehicle.³

Multiple studies have quantified the relationship between public transportation, land use, and reduction in travel. Studies show that for every additional passenger mile traveled on public transportation, auto travel declines by 1.4 to 9 miles.⁴ In other words, in areas served by public transportation, even non-transit users drive less because destinations are closer together. One study used modeling to isolate the effect of public transportation on driving patterns (rather than that effect combined with denser land use creating a need for improved public transportation).⁵ That study, conducted by consulting firm ICF and funded through the Transit Cooperative Research Program (TCRP), found that each mile traveled

³ Smart Growth and Transportation | US EPA

⁴ Public Transportation's Role in Reducing Greenhouse Gas Emissions (January 2010) (dot.gov)

⁵ Public Transportation's Role in Reducing Greenhouse Gas Emissions (January 2010) (dot.gov)

on U.S. public transportation reduced driving by 1.9 miles.⁶ It concluded that public transportation reduces U.S. travel by an estimated 102.2 billion vehicle miles traveled each year, or 3.4% of annual U.S. VMT.⁷ Similarly, a study published by the Urban Land Institute found that within areas of compact development, driving is reduced 20% to 40% compared to average U.S. development patterns.⁸

In addition, TOD and smart growth can help lower household transportation costs, boost public transit ridership, spur economic development, and make housing more affordable by reducing developer expenditures on parking and allowing higher-density zoning.⁹

Thank you for the opportunity to testify.

⁶ Public Transportation's Role in Reducing Greenhouse Gas Emissions (January 2010) (dot.gov)

⁷ Public Transportation's Role in Reducing Greenhouse Gas Emissions (January 2010) (dot.gov)

⁸ Public Transportation's Role in Reducing Greenhouse Gas Emissions (January 2010) (dot.gov)

⁹ Smart Growth and Transportation | US EPA