### A BILL FOR AN ACT

RELATING TO HIGHWAY SAFETY.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that vehicles designed to
- 2 provide the desirable benefits of reducing harmful pollutants
- 3 and operating with greater fuel efficiency include
- 4 gasoline-electric hybrid and electric-only vehicles, and in the
- 5 foreseeable future may include hydrogen fuel cell and other
- 6 engine designs that rely on fuels and technologies other than
- 7 the gasoline-powered internal combustion engine. All of these
- 8 vehicle engine designs operate or are likely to operate with
- 9 virtually no sound being produced by the vehicle.
- 10 The total number of hybrid vehicles sold per year is
- 11 growing dramatically, and although the present number of hybrid
- 12 vehicles constitutes a small overall percentage of vehicles, if
- 13 this rate of growth persists, the number of hybrid vehicles on
- 14 Hawaii's roads will become a significant factor in the near
- 15 future.
- 16 The legislature further finds that because blind
- 17 pedestrians cannot locate and evaluate traffic using their

2008-0690 SB SMA.doc

1

# S.B. NO. 2550

- 1 vision, they must listen to traffic to discern its speed,
- 2 direction, and other attributes in order to travel safely and
- 3 independently. Other people, including pedestrians who are not
- 4 blind, bicyclists, runners, and small children, also benefit
- 5 from multi-sensory information available from vehicle traffic,
- 6 including the sound of vehicle engines.
- 7 Hybrid vehicles, due to their quiet engines, often cannot
- 8 be heard by blind people and others, rendering such vehicles
- 9 extremely dangerous. This is a particular concern at
- 10 crosswalks, when vehicles emerge from driveways or move through
- 11 parking lots, and in other situations where pedestrians and
- 12 vehicles come into proximity with each other.
- 13 Amid growing concern for pedestrian safety throughout the
- 14 State, the issue of the quiet nature of hybrid vehicles is an
- 15 additional concern to be addressed.
- 16 The purpose of this Act is to require the department of
- 17 transportation to establish minimum sound level standards for
- 18 all phases of vehicle operation, which shall be applicable to
- 19 every new vehicle sold in this State and licensed for use on its
- 20 public streets, roadways, or highways.
- 21 SECTION 2. (a) The department of transportation shall
- 22 establish minimum sound standards applicable to vehicles sold in



## S.B. NO. 2550

- 1 and licensed to travel the public streets, roads, or highways of
- 2 this State. For the purposes of this Act, "vehicle" shall have
- 3 the same meaning as defined in section 291C-1, Hawaii Revised
- 4 Statutes. In determining the standards, the department shall
- 5 consider requirements that:
- 6 (1) In all phases of operation, including times when the
- 7 vehicle is at a full stop, the vehicle shall emit an
- 8 omni-directional sound with similar spectral
- 9 characteristics to those of a modern internal
- 10 combustion engine; and
- 11 (2) The sound shall vary in a way that is consistent with
- 12 the sound of vehicles with combustion engines
- indicating that the vehicle is idling, maintaining a
- 14 constant speed, accelerating, or decelerating;
- 15 provided that the standards need not prescribe the
- apparatus, technology, or method to be used by vehicle
- manufacturers to achieve the required minimum sound
- 18 level.
- 19 (b) When determining a minimum sound level, the department
- 20 shall:
- 21 (1) Review all available research regarding the effect of
- traffic sounds on pedestrian safety; and

1 (2) Consult consumer groups representing individuals who are blind, other pedestrians, cyclists, and advocates 2 for the safety of children. 3 The department shall report to the legislature 4 SECTION 3. no later than twenty days prior to the convening of the regular 5 6 session of 2009 on its findings and recommendations to establish minimum sound level standards pursuant to section 2 of this Act, 7 either through amendments to the Hawaii Revised Statutes, or by 8 rule pursuant to chapter 91, Hawaii Revised Statutes; provided 9 10 that beginning January 1, , any minimum sound standards for 11 vehicles shall apply to all new vehicles sold in this State and 12 licensed for use on the public streets, roads, or highways. 13 SECTION 4. This Act shall take effect upon its approval. Will bezow
Franke Chun Caldand
Clarence & markine

Ja Claren 14

INTRODUCED BY:

### Report Title:

Highway Safety; Hybrid Vehicles; Minimum Sound Level Standards

### Description:

Requires the DOT to establish minimum sound level standards for all phases of hybrid vehicle operation, applicable to every new vehicle sold in this State and licensed for use on its public streets, roadways, or highways; report to 2009 legislature on findings.

