
A BILL FOR AN ACT

RELATING TO VISUALLY IMPAIRED PERSONS.

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

1 SECTION 1. The legislature finds that gasoline-electric
2 hybrid vehicles and electric vehicles provide less air pollution
3 and greater fuel efficiency. It is expected that more advanced
4 alternative fuel vehicles, including hydrogen fuel cell
5 vehicles, will be widely available in coming years. The total
6 number of hybrid vehicles sold per year in the State is growing
7 dramatically, and although the present number of hybrid vehicles
8 currently constitutes a small percentage of vehicles, the number
9 of hybrid vehicles may soon equal or exceed the number of
10 traditional vehicles in the State.

11 The legislature notes, however, that a significant
12 difference between these vehicles and traditional internal
13 combustion fuel vehicles is that the new technology makes
14 virtually no sound at all. Because blind pedestrians cannot
15 locate and evaluate traffic using their vision, they must listen
16 to traffic to discern its speed, direction, and other attributes
17 in order to travel safely and independently. Other persons,
18 including pedestrians who are not blind, bicyclists, runners,



1 and small children, benefit from multi-sensory information
2 emitted by vehicle traffic, including the sound of vehicle
3 engines.

4 The legislature finds that hybrid vehicles, when operating
5 on their electric engines, cannot be heard by blind persons and
6 others, making these vehicles extremely dangerous to persons
7 crossing streets, moving through parking lots, or in other
8 situations where pedestrians and vehicles come into close
9 proximity. The legislature further finds that action should be
10 taken to ensure that blind pedestrians can hear hybrid and other
11 silent vehicles in all phases of their operation. Vehicle
12 designs that take into account the multi-sensory nature of
13 traffic detection by emitting a minimum level of sound will
14 alert all pedestrians, especially blind pedestrians, and help
15 them avoid injury.

16 The purpose of this Act is to establish a minimum sound
17 level standard for motor vehicles so that hybrid and electric
18 vehicles are easier for visually impaired pedestrians and others
19 to detect and thereby avoid accidents and fatalities.

20 SECTION 2. (a) No later than January 1, 2010, the
21 department of transportation shall adopt rules, pursuant to
22 chapter 91, that establish a minimum sound standard applicable



1 to all motor vehicles, including hybrid vehicles, registered in
2 the State.

3 (b) Rules adopted under this section, at a minimum, shall:

4 (1) Require all motor vehicles registered in the State to
5 emit at all times when operational an omni-directional
6 sound with similar spectral characteristics to those
7 of a modern internal combustion engine;

8 (2) Require the sound emitted by motor vehicles to be
9 consistent with the sound of motor vehicles with
10 internal combustion engines in that it indicates
11 whether the motor vehicle is idling, maintaining a
12 constant speed, accelerating, or decelerating; and

13 (3) Require motor vehicle safety inspections to include
14 verification of the existence of a properly
15 functioning sound emitter.

16 Rules adopted pursuant this section need not prescribe the
17 apparatus, technology, or method to be used by vehicle
18 manufacturers or vehicle owners to achieve the minimum sound
19 level required by this Act.

20 (c) In adopting rules pursuant to this Act, the department
21 of transportation shall:



- 1 (1) Review all pertinent research regarding the effect of
2 traffic sounds on pedestrian safety; and
3 (2) Consult consumer groups representing the visually
4 impaired, pedestrians, cyclists, and advocates for the
5 safety of children.

6 SECTION 3. This Act shall take effect upon its approval.

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INTRODUCED BY:

Cindy Evans

JAN 18 2008



Report Title:

Visually Impaired Persons; Motor Vehicles

Description:

Directs the department of transportation to adopt rules that require motor vehicles registered in the State to emit an omnidirectional sound that may be easily heard by visually impaired persons.

