

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL
MAYOR



MICHAEL D. FORMBY
DIRECTOR

MARK N. GARRITY, AICP
DEPUTY DIRECTOR

March 4, 2015

The Honorable Karl Rhoads, Chair
and Members of the Committee on Transportation
House of Representatives
State Capitol, Room 302
Honolulu, Hawaii 96813

Dear Chair Rhoads and Members of the Committee:

Subject: House Bill No. 715 Relating to Low-Speed Electric Bicycles

The Department of Transportation Services supports the intent of House Bill No. 715, which would include electric bicycles in the definition of a bicycle. However, we have some concerns regarding the use of electric bicycles as the speed of these vehicles poses a potential safety hazard. Currently, bicycles are allowed on sidewalks in many areas where there are pedestrians and other non-motorized users. This bill would allow electric bicycles, traveling up to twenty miles per hour, to ride on some sidewalks which could create a potentially dangerous situation.

We would support a change to the bill that would ban electric bicycles from all sidewalks. This change could be made in Section 291C-148 (b), which regulates the use of bicycles on sidewalks.

Thank you for the opportunity to testify on House Bill No. 715.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael D. Formby".

for Michael D. Formby
Director

Rep. Karl Rhoads, Chair
Rep. Joy A. San Buenaventura, Vice Chair

Aloha Representatives. Karl Rhodes and Joy A. San Buenaventura

I am writing you to show my strong **support** for House Bill 715 relating to “Low Speed Electric Bicycles.”

HB715 identifies the definition change of a “Bicycle” under Hawaii Revised Statute Section 286-2 to include the “Low Speed Electric Bicycle” as defined under 15USC section 285 which states:

For the purpose of this section, the term “low speed electric bicycle” means a two- or three wheeled vehicle with fully operable pedals and an electric motor of less than 750 watts (1 h.p.), whose maximum speed on a paved level surface, when powered solely by such a motor while ridden by an operator who weighs 170 pounds, is less than 20 mph.

Preemption

This section shall supersede any State law or requirement with respect to low-speed electric bicycles to the extent that such State law or requirement is more stringent than the Federal law or requirements referred to in subsection (a) of this section.

Electric Bikes provide the conveniences of a car with the advantages of a Bicycle

What are Electric Bikes?

Electric Bicycles are becoming more and more popular across nation and throughout the world.

“Electric Bikes consist of a modified or custom bicycle frame with pedals but include an electric motor, usually in the form of a hub motor, mid-drive motor or belt drive connected to the rear wheel. They allow a rider to either pedal the bike or leverage the power of a battery and motor drive system.”

The **benefits** of electric bikes “E-Bikes” are many and often go unrealized by car and scooter owners.

- With an electric bike you have the ability to get around quickly with little to no sweat if you choose. This can be handy for being able to wear your normal work clothes to work, or run errands around town without being drenched in sweat.
- E-bikes have helped people with disabilities, poor physical fitness, and/or concerns with keeping up with family/friends in order to enjoy riding a bicycle again.
- Electric bikes make it much easier to haul heavier loads like kids (in a trailer or kids seat), groceries, the stuff that you take to work, your beach towel and some refreshments, etc.
- An electric bike can really make hills and head winds a non-issue.
- E-Bikes are lighter, cleaner and more reliable than gas powered vehicles.
- Less expensive than gas powered vehicles, especially over the long term when using electricity vs. gasoline or other fuel source
- Environmentally friendly, no exhaust created on site for the user to inhale. Easily use locally produced solar or wind power to charge
- Efficient and affordable parking options, fits on any normal bike rack or to a pole/railing
- Easy to use with public transportation like busses, trains and light rail systems
- Provides an opportunity to exercise and practice balance
- Social opportunity to get in touch with your community and become more social
- Relaxing and focusing because you cannot use your cell phone or eat at the same time as you would while driving an automobile.

Hawaii needs to bring the E-Bike into conformity with Federal Statutes as E-Bikes serve a purpose as an alternative form of transportation.

Please accept my comments and accept the intelligent changes proposed under this bill.

Mahalo;

Lee Chamberlain



March 3, 2015

The Honorable Karl Rhoads
Chair, House Committee on Judiciary
Hawaii State Capitol
415 South Beretania St., Room 302
Honolulu, HI 96813

Dear Representative Rhoads:

Ebikes Hawaii, the Bicycle Product Suppliers Association (BPSA), and PeopleForBikes are writing this letter to express our support for House Bill 715, a bill that would incorporate electric bicycles into Hawaii's laws, and offer suggestions for several technical changes that we believe would improve this legislation. Ebikes Hawaii is a local retailer of electric bicycles, with locations in Honolulu and the Joint base Pearl Harbor-Hickam Air Force. The BPSA is the national trade association of companies that manufacture and distribute bicycles and related accessories. PeopleForBikes is a national advocacy organization with over one million members, including more than 3,000 members in Hawaii, that promotes the safe use and enjoyment of bicycles.

We are pleased to see legislation being introduced that incorporates electric bicycles into Hawaii's traffic laws. Electric bicycles (Ebikes) are becoming an increasingly important form of transportation and a more significant component of the bicycle industry. The correct and uniform classification of Ebikes as bicycles under state laws is important to the Ebike industry, particularly because Ebikes are already classified as bicycles and designed, tested and manufactured like bicycles in accordance with federal law. Bills such as H.B. 715 are thus an important step in regulating Ebikes at the state level.

We have carefully reviewed this legislation, and we have a few suggestions that we think would improve the bill and further its primary purpose. Below are our comments:

1. **“Low-speed electric bicycles” should be excluded from the definition of a “motor vehicle” in Chapters 286 and 291C.** Pursuant to the current versions of H.R.S. §§ 286-2 and 291C-1, a “motor vehicle” includes vehicles that are “self-propelled,” or “propelled by electric power” and not operated on rails. “Mopeds” are explicitly excluded from the definition of a “motor vehicle.” Therefore bicycles and mopeds are not “motor vehicles” for the purposes of either chapters 286 or 291C. However, “low-speed electric bicycles” do contain an electric motor and might be considered “self-propelled.” Thus, they might be interpreted as meeting the definition of a “motor vehicle” under both of these chapters even though bicycles and mopeds are excluded. An exclusion of “low-speed electric bicycles” from the definition of “motor vehicle” should be added to both sections 286-2 and 291C-1 to clarify that electric bicycles are not motor vehicles.



2. **“Low-speed electric bicycles” should be excluded from the definition of a “vehicle” in Chapter 286.** Existing Hawaii law specifically excludes “devices moved by human power” and “mopeds” from the definition of a “vehicle” in section 286-2. Thus both bicycles and mopeds are not “vehicles” for the purposes of chapter 286. However, “low-speed electric bicycles” are not mopeds, and they may not be considered “devices moved by human power” because they have electric motors. Thus electric bicycles might inadvertently be considered “vehicles” under chapter 286, even though both bicycles and mopeds are not. An explicit exclusion for “low-speed electric bicycles” from the definition of a “vehicle” in section 286-2 would fix this issue.
3. **“Low-speed electric bicycles” should be excluded from the definition of a “moped” in Chapters 286 and 291C.** This bill does not have language excluding “low-speed electric bicycles” from the definition of “moped” in H.R.S. §§ 286-2 or 291C-1. Because the definition of moped is fairly broad, “low-speed electric bicycles” might inadvertently be viewed as a sub-class of mopeds. Several states have used explicit exclusions to clarify this issue (e.g., Colorado, Maryland, Minnesota, Nevada, and Oregon).
4. **“Low-speed electric bicycles” should be incorporated into Chapter 249.** This bill does not have provisions amending chapter 249 of the Hawaii statutes. Section 249-14 governs the registration requirements for bicycles and mopeds. By not incorporating the new definitions of “bicycle” and “low-speed electric bicycle” into chapter 249, the registration requirement for electric bicycles is unclear. The definitions in this chapter should be amended so that electric bicycles are regulated like bicycles for registration purposes, and to ensure consistency throughout the Hawaii statutes.

These amendments would help ensure that the status of electric bicycles under Hawaii law is as clear as possible, and would support the primary objective of the bill. We have included proposed statutory changes in Appendix A to this letter. Thank you for taking the time to consider this important subject, and please do not hesitate to contact us with any additional questions.

Sincerely,

John Cho
President
Ebikes Hawaii Corp.
3318 Campbell Avenue
Honolulu, HI 96815
ebikeshi@gmail.com
(808) 223-7038



Larry Pizzi
Chair, Electric Bicycle Committee, BPSA
President, Currie Technologies
3850A Royal Avenue
Simi Valley, CA. 93063
lpizzi@currietechnology.com
(805) 915-4900, ext. 401

Alex Logemann
State & Local Policy Analyst
PeopleForBikes
P.O. Box 2359
Boulder, CO 80306
alex@peopleforbikes.org
(720) 256-3646



Appendix A
(Deletions in strikethrough, additions bolded and underlined)

SECTION 1. Section 249-1, Hawaii Revised Statutes, is amended by amending the definitions of “bicycle,” “moped,” “motor vehicle,” and “vehicle” to read as follows:

“Bicycle” means every [~~device~~]:

(1) Device propelled solely by human power upon which any person may ride, having two tandem wheels sixteen inches in diameter or greater, and including any device generally recognized as a bicycle though equipped with two front or two rear wheels[-]; **or**

(2) A low-speed electric bicycle, as defined under 15 U.S.C. section 2085.

“Moped” means a device upon which a person may ride which has two or three wheels in contact with the ground, a motor having a maximum power output capability measured at the motor output shaft, in accordance with the Society of Automotive Engineers standards, of two horsepower (one thousand four hundred ninety-two watts) or less and, if it is a combustion engine, a maximum piston or rotor displacement of 3.05 cubic inches (fifty cubic centimeters) and which will propel the device, unassisted, on a level surface at a maximum speed no greater than thirty miles per hour; and a direct or automatic power drive system which requires no clutch or gear shift operation by the moped driver after the drive system is engaged with the power unit. **The term “moped” excludes low-speed electric bicycles.**

“Motor vehicle” means every vehicle which is self-propelled and every vehicle which is propelled by electric power but which is not operated upon rails, but excludes **low-speed electric bicycles and mopeds.**

“Vehicle” means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, but excludes devices moved by human power or devices used exclusively upon stationary rails or tracks, **low-speed electric bicycles,** and mopeds.

SECTION 2. Section 286-2, Hawaii Revised Statutes, is amended by amending the definitions of “bicycle,” “moped,” “motor vehicle,” and “vehicle” to read as follows:

“Bicycle” means every [~~device~~]:

(1) Device propelled solely by human power upon which any person may ride, having two tandem wheels sixteen inches in diameter or greater, and including any device generally recognized as a bicycle though equipped with two front or two rear wheels[-]; **or**

(2) A low-speed electric bicycle, as defined under 15 U.S.C. section 2085.

“Moped” means a device upon which a person may ride which has two or three wheels in contact with the ground, a motor having a maximum power output capability measured at the motor



output shaft, in accordance with the Society of Automotive Engineers standards, of two horsepower (one thousand four hundred ninety-two watts) or less and, if it is a combustion engine, a maximum piston or rotor displacement of 3.05 cubic inches (fifty cubic centimeters) and which will propel the moped, unassisted, on a level surface at a maximum speed no greater than thirty miles per hour; and a direct or automatic power drive system which requires no clutch or gear shift operation by the moped driver after the drive system is engaged with the power unit. **The term “moped” excludes low-speed electric bicycles.**

“Motor vehicle” means every vehicle which is self-propelled and every vehicle which is propelled by electric power but which is not operated upon rails, but excludes a **low-speed electric bicycle and** moped.

“Vehicle” means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, but excludes devices moved by human power or devices used exclusively upon stationary rails or tracks, **low-speed electric bicycles,** and mopeds.

SECTION 3. Section 291C-1, Hawaii Revised Statutes, is amended by amending the definitions of “bicycle,” “moped,” and “motor vehicle” to read as follows:

“Bicycle” means every [~~vehicle~~]:

(1) Vehicle propelled solely by human power upon which any person may ride, having two tandem wheels, and including any vehicle generally recognized as a bicycle though equipped with two front or two rear wheels except a toy bicycle[-]; **or**

(2) A low-speed electric bicycle, as defined under 15 U.S.C. section 2085.

“Moped” means a device upon which a person may ride which has two or three wheels in contact with the ground, a motor having a maximum power output capability measured at the motor output shaft, in accordance with the Society of Automotive Engineers standards, of two horsepower (one thousand four hundred ninety-two watts) or less and, if it is a combustion engine, a maximum piston or rotor displacement of 3.05 cubic inches (fifty cubic centimeters) and which will propel the device unassisted, on a level surface at a maximum speed no greater than thirty miles per hour; and a direct or automatic power drive system which requires no clutch or gear shift operation by the moped driver after the drive system is engaged with the power unit. **The term “moped” excludes low-speed electric bicycles.**

“Motor vehicle” means every vehicle which is self-propelled and every vehicle which is propelled by electric power but not operated upon rails but excludes a **low-speed electric bicycle and** moped.

DAVID Y. IGE
GOVERNOR

LATE



Testimony of
FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

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

March 5, 2015
2:00 p.m.
State Capitol, Room 325

H.B. 715
RELATING TO LOW SPEED ELECTRIC BICYCLES

House Committee on Judiciary

The Department of Transportation (DOT) **supports** this bill with recommended amendments.

Sections 249-1 and 286-2, HRS, contain the definition of a bicycle, so the definition of an electric bicycle should also be included in these sections.

Since the bill proposes that electric bicycles be registered as a bicycle in 249-14, HRS, it is recommended that Section 249-14, HRS, be amended by adding electric bicycles to Sections 249-14 (a) and (b), HRS.

It may also be prudent to require helmet use for electric bicycle riders under the age of 18 under Section 291C-150, HRS.

Other sections that may warrant consideration for electric bicycles are: Sections 293-1; 293-2; and 291C-141 through 149, HRS.

Mixing a motorized vehicle with non-motorized traffic on shared-use paths or sidewalks will create a safety issue similar to Segways on sidewalks and mopeds on bicycle paths. In addition, revising the definition of "bicycle" would make it inconsistent with the definition in the National Uniform Vehicle Code, Manual on Uniform Traffic Control Devices (MUTCD), and American Association on State Highway and Transportation Officials (AASHTO) publications. These publications guide the design of our bicycle facilities which is based on a design vehicle (bicycle) that is human-powered with typical paved level terrain speeds of 8-15 mph. It is recommended that the speed of the electric bicycles be required to match the human powered bicycles.

Another concern is that the bill does not address how these electric bicycles would be regulated to keep them at the required maximum speed and not bring about a similar problem we have with mopeds that are modified to exceed 30 mph. It is recommended that a penalty for modifying an electric bicycle so it travels faster be added.

Finally, there is concern that the bill does not prevent children from riding electric bicycles. Since these vehicles can weigh 100 pounds, it is recommended that a minimum age for use be added.

Thank you for the opportunity to provide testimony.



PHONE
808-735-5756



FAX 808-735-7989
EMAIL bicycle@hbl.org

February 17, 2015
Representative Henry Aquino,
Chair Transportation Committee

Testimony Supporting HB715

Aloha,
Hawaii Bicycling League **supports HB715**. Electrical bicycles are in a regulatory limbo; it is time that they are clearly defined and regulated.

Under federal law, 15 U.S.C section 2085 has established a definition for electrical bicycles; this has, in turn, shaped E-bike state-level regulations across the country and E-bike manufacturing. We support using the federal law as the basis for the Hawaii law; as HB715 does.

People for Bikes recently contacted us to discuss HB715. They have national expertise and are interest in making the Hawaii law as clear as possible and consistent with federal law. Our understanding is that they have submitted testimony for this hearing; we urge the committee to consider their comments. Of particular concern, is the needed to include the E-bike definition in HRS 249-14, which provides the rules for bicycle and moped registration.

Thank you very much for considering the comments of the Hawaii Bicycling League. If you have any questions or would like to discuss further, please contact Chad Taniguchi (808-735-5756, chad@hbl.org) or Daniel Alexander (808-275-6717, Daniel@hbl.org).

Ride and Drive Aloha,

Chad Taniguchi
Executive Director
Hawaii Bicycling League

Daniel Alexander
Advocacy Director
Hawaii Bicycling League