A BILL FOR AN ACT

RELATING TO TRANSPORTATION.

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

- 1 SECTION 1. Electric bicycles have become widely available
- 2 for personal transportation and are popular among citizens of
- 3 all ages. In March 2023, there were five thousand three hundred
- 4 registered electric bicycles. This figure is potentially higher
- 5 considering that many owners do not register their bikes,
- 6 especially if they are purchased online.
- 7 Hawaii's law defines electric bicycles as a "low-speed
- 8 bicycle" with an assisted maximum speed of less than twenty
- 9 miles per hour. While electric bicycles are more convenient and
- 10 affordable than automobiles, they are a safety hazard when
- 11 ridden on sidewalks and in the middle of traffic lanes. Riders
- 12 often make modifications to electric bicycles with an
- 13 aftermarket delimiter allowing them to reach speeds of over
- 14 thirty miles per hour, which is nearly ten times faster than the
- 15 average walking speed of a person. Currently, persons under the
- 16 age of fifteen cannot operate an electric bicycle by law; yet

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- 1 most e-bikes are ridden by adolescents between the ages of
- 2 twelve and seventeen.
- 3 In December of 2023, the department of transportation
- 4 reported nine bicyclist fatalities, the highest recorded number
- 5 of deaths among bicyclists in Hawaii to date. Furthermore,
- 6 electric bicycles can seriously injure pedestrians in a
- 7 collision and operators are at risk from motorists who do not
- 8 expect a small, silent, and motorized device riding near them.
- 9 The legislature finds, in the wake of a recent surge in
- 10 ridership accidents, it is critical to address this issue with a
- 11 comprehensive approach of public outreach in combination with
- 12 educational campaigns and stricter enforcement against the
- 13 unlawful use of electric bicycles.
- 14 The purpose of this Act is to:
- 15 (1) Categorize electric bicycles into three classes based
- on speed and operation;
- 17 (2) Establish more stringent regulations for electric
- 18 bicycles;
- 19 (3) Require electric bicycle manufacturers and
- distributors to apply a label to each electric bicycle

1	specifying the classification number, top assisted
2	speed, and motor wattage of the electric bicycle; and
3	(4) Impose a requirement that counties inform individuals
4	of the applicable traffic code, safety information,
5	and penalties for violations at the time of
6	registering a bicycle.
7	SECTION 2. Chapter 291C-143.5, Hawaii Revised Statutes, is
8	amended to read as follows:
9	"[+]§291C-143.5[+] [Low-speed electric] Electric
10	bicycles[; operator age]. (a) This section shall apply
11	whenever an electric bicycle is operated upon any highway,
12	street, roadway, or other designated public area set aside for
13	the use of electric bicycles.
14	(b) No person under the age of fifteen shall operate $[\frac{1}{4}]$
15	low-speed] an electric bicycle [as defined under title 15 United
16	States Code section 2085. on a highway, street, roadway, or any
17	other public property in the State.
18	(c) No person shall operate an electric bicycle that is
19	carrying any other person, nor shall any person other than the
20	operator ride upon an electric bicycle.

1	(d) No person operating an electric bicycle shall carry
2	any package, bundle, or article which prevents the use of both
3	hands in the control and operation of the bicycle. A person
4	operating an electric bicycle shall keep at least one hand on
5	the handlebars at all times.
6	(e) Any person who operates an electric bicycle recklessly
7	in disregard of the safety of persons or property shall be
8	assessed penalties as set forth in section 291C-161(b).
9	(f) No person shall operate an electric bicycle at a speed
10	other than is reasonable and prudent and having regard to the
11	actual and potential hazards and conditions then existing;
12	provided that no person shall operate an electric bicycle at a
13	speed greater than twenty-eight miles per hour.
14	(g) Any electric bicycle shall meet the specifications of
15	and requirements for lamps and other equipment on bicycles as
16	set out in section 291C-147; provided that in lieu of the
17	requirement of section 291C-147(b), every electric bicycle shall
18	be equipped with a lighted lamp that is visible from the rear.
19	(h) No person shall operate an electric bicycle unless the
20	person wears a safety helmet securely fastened with a chin
21	strap. The safety helmet shall meet the specifications of and

1	requirements for a bicycle helmet as set out in section 291C-
2	<u>150.</u>
3	(i) No electric bicycle shall be operated on a sidewalk,
4	sidewalk area, pedestrian overpass, or pedestrian underpass,
5	except as may be authorized by ordinances or rules adopted by
6	the county.
7	(j) No person shall tamper with or modify an electric
8	bicycle so as to change the motor-powered speed capability or
9	engagement of an electric bicycle, or the label indicating the
10	classification number.
11	(k) No person shall operate an electric bicycle after
12	January 1, 2029 unless the electric bicycle has affixed thereto
13	in a prominent location, a manufacturer's label providing the
14	classification number, top assisted speed, and motor wattage of
15	the electric bicycle.
16	(1) The counties by ordinance may impose restrictions and
17	conditions for the regulation and safe operation of electric
18	bicycles with regard to, but not limited to, the following:
19	(1) Operations in or upon roadways, bikeways, bicycle
20	paths, and sidewalks;

(2) Restrictions on maximum speed;

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- 1 (3) Safety considerations; and
- 2 (4) Hours of operation.
- 3 SECTION 3. Chapter 293, Hawaii Revised Statutes, is
- 4 amended by adding a new section to be appropriately designated
- 5 and to read as follows:
- 6 "<u>\$293-</u> <u>Electric bicycle manufacturers and distributors;</u>
- 7 label required. On and after January 1, 2027, manufacturers and
- 8 distributors of electric bicycles shall apply a label that is
- 9 permanently affixed, in a prominent location, to each electric
- 10 bicycle. The label shall contain the classification number, top
- 11 assisted speed, and motor wattage of the electric bicycle. The
- 12 label must be printed in Arial font of at least nine-point type.
- 13 By January 1, 2027, manufacturer and distributors shall
- 14 establish a process by which an owner of an electric bicycle may
- 15 request and obtain a manufacturer's label applicable to the
- 16 electric bicycle purchased prior to January 1, 2027."
- 17 SECTION 4. Section 291C-1, Hawaii Revised Statutes, is
- 18 amended as follows:
- 1. By amending the definition of "bicycle" to read:
- ""Bicycle" means:

(.	⊥)	A venicle properted solery by numan 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	2)	[A low-speed] An electric bicycle[, as defined under
		title 15 United States Code section 2085]."
2	2.	By amending the definition of "moped" to read:
FT 1	"Mop	ed" means a device upon which a person may ride that
has:		
(2	1)	Two or three wheels in contact with the ground;
(2	2)	A motor having a maximum power output capability
		measured at the motor output shaft, in accordance with
		SAE International 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 that will propel the device,
		unassisted, on a level surface at a maximum speed no
		greater than thirty miles per hour; and
	has:	(2) 2. ""Mop has: (1) (2)

1	(3)	A direct or automatic power drive system that requires				
2		no clutch or gear shift operation by the moped driver				
3		after the drive system is engaged with the power unit.				
4	"Moped" d	oes not include an electric foot scooter or electric				
5	bicycle."					
6	3.	By adding a new definition to be appropriately inserted				
7	and to re	ad:				
8	" <u>"El</u>	ectric bicycle" means a bicycle equipped with fully				
9	operable	pedals, a saddle or seat for the rider, and an electric				
10	motor of seven hundred fifty watts or less that meets the					
11	requirements of one of the following three classes:					
12	(1)	Class one electric bicycle, which is an electric				
13		bicycle equipped with a motor that provides assistance				
14		only when the rider is pedaling, and that ceases to				
15		provide assistance when the bicycle reaches the speed				
16		of twenty miles per hour;				
17	(2)	Class two electric bicycle, which is an electric				
18		bicycle equipped with a motor that may be used				
19		exclusively to propel the bicycle, and that is not				
20		capable of providing assistance when the bicycle				
21		reaches the speed of twenty miles per hour; or				

1	<u>(3)</u>	class three electric bicycle, which is an electric
2		bicycle equipped with a motor that provides assistance
3		only when the rider is pedaling, and that ceases to
4		provide assistance when the bicycle reaches the speed
5		of twenty-eight miles per hour."
6	SECT	TION 5. Section 249-1, Hawaii Revised Statutes, is
7	amended a	as follows:
8	1.	By amending the definition of "bicycle" to read:
9	"" Bi	cycle" means:
10	(1)	A vehicle propelled solely by human power upon which
11		any person may ride, having two tandem wheels, and
12		including any vehicle generally recognized as a
13		bicycle though equipped with two front or two rear
14		wheels except a toy bicycle; or
15	(2)	[A low-speed] An electric bicycle[, as defined under
16		title 15 United States Code section 2085]."
17	2.	By amending the definition of "moped" to read:
18	""Mo	ped" means a device upon which a person may ride that
19	has:	
20	(1)	Two or three wheels in contact with the ground;

1	(2)	A motor having a maximum power output capability
2		measured at the motor output shaft, in accordance with
3		SAE International standards, of two horsepower (one
4		thousand four hundred ninety-two watts) or less and,
5		if it is a combustion engine, a maximum piston or
6		rotor displacement of 3.05 cubic inches (fifty cubic
7		centimeters) and that will propel the device,
8		unassisted, on a level surface at a maximum speed no
9		greater than thirty miles per hour; and
10	(3)	A direct or automatic power drive system that requires
11		no clutch or gear shift operation by the moped driver
12		after the drive system is engaged with the power unit.
13	"Moped" d	oes not include an electric foot scooter or electric
14	bicycle."	
15	3.	By adding a new definition to be appropriately inserted
16	and to re	ad:
17	" <u>"</u> El	ectric bicycle" means a bicycle equipped with fully
18	operable	pedals, a saddle or seat for the rider, and an electric
19	motor of	seven hundred fifty watts or less that meets the
20	requireme	nts of one of the following three classes:



1	(1)	Class one electric bicycle, which is an electric
2		bicycle equipped with a motor that provides assistance
3		only when the rider is pedaling, and that ceases to
4		provide assistance when the bicycle reaches the speed
5		of twenty miles per hour;
6	(2)	Class two electric bicycle, which is an electric
7	•	bicycle equipped with a motor that may be used
8		exclusively to propel the bicycle, and that is not
9		capable of providing assistance when the bicycle
10		reaches the speed of twenty miles per hour; or
11	(3)	Class three electric bicycle, which is an electric
12		bicycle equipped with a motor that provides assistance
13		only when the rider is pedaling, and that ceases to
14		provide assistance when the bicycle reaches the speed
15		of twenty-eight miles per hour."
16	SECT	ION 6. Section 249-14, Hawaii Revised Statutes, is
17	amended by	y amending subsection (b) to read as follows:
18	"(b)	[A low-speed] An electric bicycle[, as defined under
19	title 15 (United States Code section 2085, shall be required to
20	be registe	ered, and shall be subject to a permanent registration



1	fee of \$3	0, to be paid by the owners thereof to the director of					
2	finance."						
3	SECT	SECTION 7. Section 286-2, Hawaii Revised Statutes, is					
4	amended a	s follows:					
5	1.	By amending the definition of "bicycle" to read:					
6	""Bi	cycle" means:					
7	(1)	A vehicle propelled solely by human power upon which					
8		any person may ride, having two tandem wheels, and					
9		including any vehicle generally recognized as a					
10		bicycle though equipped with two front or two rear					
11		wheels except a toy bicycle; or					
12	(2)	[A low-speed] An electric bicycle[, as defined under					
13		title 15 United States Code section 2085]."					
14	2.	By amending the definition of "moped" to read:					
15	""Mo	ped" means a device upon which a person may ride that					
16	has:						
17	(1)	Two or three wheels in contact with the ground;					
18	(2)	A motor having a maximum power output capability					
19		measured at the motor output shaft, in accordance with					
20		SAE International standards, of two horsepower (one					
21		thousand four hundred ninety-two watts) or less and,					

1	i	f it is a combustion engine, a maximum piston or
2	r	otor displacement of 3.05 cubic inches (fifty cubic
3	C	entimeters) and that will propel the moped,
4	u	nassisted, on a level surface at a maximum speed no
5	g	reater than thirty miles per hour; and
6	(3) A	direct or automatic power drive system that requires
7	n	o clutch or gear shift operation by the moped driver
8	a	fter the drive system is engaged with the power unit.
9	"Moped" doe	s not include an electric foot scooter or electric
10	bicycle."	
11	3. By	adding a new definition to be appropriately inserted
12	and to read	:
13	" <u>"</u> Elec	tric bicycle" means a bicycle equipped with fully
14	operable pe	dals, a saddle or seat for the rider, and an electric
15	motor of se	ven hundred fifty watts or less that meets the
16	requirement	s of one of the following three classes:
17	<u>(1)</u> <u>C</u>	lass one electric bicycle, which is an electric
18	<u>b</u>	icycle equipped with a motor that provides assistance
19	<u>0</u>	nly when the rider is pedaling, and that ceases to
20	<u>p</u>	rovide assistance when the bicycle reaches the speed
21	0	f twenty miles per hour;



1	(2)	Class two electric bicycle, which is an electric
2		bicycle equipped with a motor that may be used
3		exclusively to propel the bicycle, and that is not
4		capable of providing assistance when the bicycle
5		reaches the speed of twenty miles per hour; or
6	(3)	Class three electric bicycle, which is an electric
7		bicycle equipped with a motor that provides assistance
8		only when the rider is pedaling, and that ceases to
9		provide assistance when the bicycle reaches the speed
10		of twenty-eight miles per hour."
11	SECT	ION 8. Section 707-700, Hawaii Revised Statutes, is
12	amended b	y amending the definition of "vulnerable user" to read
13	as follow	S:
14	""Vu	lnerable user" means:
15	(1)	A pedestrian legally within a street or public
16		highway;
17	(2)	A roadway worker actually engaged in work upon a
18		street or public highway or in work upon utility
19		facilities along a street or public highway, or
20		engaged in the provision of emergency services within

1		a st	reet or public highway, including but not limited
2		to:	
3		(a)	Construction and maintenance workers; and
4		(b)	Police, fire, and other emergency responders; or
5	(3)	A pe	rson legally operating any of the following within
6		the	street or public highway:
7		(a)	A bicycle;
8		(b)	A moped;
9		(c)	An electric foot scooter;
10		(d)	An electric personal assistive mobility device;
11			or
12		(e)	A wheelchair conveyance or other personal
13			mobility device[+]; or
14		<u>(f)</u>	An electric bicycle."
15	SECT	ION 9	. The department of transportation shall develop
16	statewide	safe	ty and training programs to educate the public
17	about gene	eral	electric bicycle riding safety, rules of the road,
18	and laws p	perta	ining to electric bicycles, no later than twenty
19	days prio	r to	the convening of the regular session of 2026. The
20	safety and	d tra	ining programs shall be developed in collaboration
21	with rele	vant	stakeholders. The department shall inform

- ${f 1}$ individuals of the applicable traffic code, safety information,
- 2 and penalties for violations at the time of registering an
- 3 electric bicycle.
- 4 SECTION 10. This Act does not affect rights and duties
- 5 that matured, penalties that were incurred, and proceedings that
- 6 were begun before its effective date.
- 7 SECTION 11. Statutory material to be repealed is bracketed
- 8 and stricken. New statutory material is underscored.
- 9 SECTION 12. This Act shall take effect on July 1, 2025;
- 10 provided that:
- 11 (1) Section 2(k) shall take effect on January 1, 2029; and
- 12 (2) Section 3 shall take effect on January 1, 2027.

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INTRODUCED BY:

JAN 2'1 2025

Report Title:

Electric Bicycles; Regulation; Classification System

Description:

Categorizes electric bicycles into three classes based on speed and operation. Requires electric bicycle manufacturers and distributors to apply a label to each electric bicycle. Imposes a requirement that counties inform individuals of the applicable traffic code, safety information, and penalties for violations at the time of registering a bicycle.

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