The following are responses to the proposed ordinance amendments provided by Bill Sellin, Founder of the Bicycle Club of Irvine, member of the Infrastructure Review Committee of the Orange County Bicycle Coalition, and District Liaison for the California Association of Bicycle Organizations.

Having just received word that the first reading of these municipal code amendments is being presented to the Irvine City Council on July 11<sup>th</sup> 2023, (4 day notice) the following initial response to the Executive Summary was drafted July 8<sup>th</sup>.

A further reading of the actual text of the proposed amendments and more detailed responses were completed July 9<sup>th</sup> (beginning on page 5 as a 'Deeper dive')

These responses are those of the author for consideration by the City of Irvine.

Distribution includes the local Irvine Bicycle Advocates, and the Boards of the BCI, OCBC and CABO.

Some of those individuals may wish to "reply all" or submit their own responses and support of Irvine's effort to codify the current status of bicycles, including electric bicycles, and clarification of what a motorized bicycle is in contrast.

Respectfully submitted,

Bill Sellin wasellin@gmail.com

Initial responses and comments

The suggested changes are summarized in the below section:

- Update the Municipal Code to include a definition of an e-bike and identify their individual classes
  Why create a local definition when the State has done, and may be revising it in the future? State law covers Irvine, and if changes, would require a local ordinance revision to match in the future. IPD can already enforce the State law.
- Update the definition of a "highway" in order to coincide with the California Vehicle Code
   Why create a local definition if the State has already done so.
   Just reference highway definition in State code.
- Preclude e-bike owners from tampering with or modifying

their e-bike in order to change the speed capability of the bicycle

Has the State not already done so?

Do we need this to enforce operation of out-of-class 'off street' electric bicycles as unregistered motorized bicycles or as off road dirt bikes already prohibited from any highways in California?

• Set a speed limit for e-bikes on the highway (28 mph) and a separate speed limit for all bicyclists and e-bike operators on bike paths and trails in Irvine (20 mph)

There is a basic speed law and a posted speed limit on a highway. If a cyclist can ride (or coast down a hill) faster than the 28 mph limit on a street posted over 28 mph this ordinance selectively discriminates against cyclists' right to travel with the same rights as motorists.

There are times when there are no pedestrians and a bike path is designed with the standard 30 mph design standards where it is perfectly safe to ride over 20 mph. At other times, and places where design was compromised where 20 mph is too fast. Not every cyclist has a speedometer, nor are they required on a pedal bicycle. 20 mph is as arbitrary as 5 or 10 or 15, and will not be obeyed, and will not be enforceable. A local ordinance stating the the State's "Basic Speed Law" applies to bike paths, shared use paths and trails in Irvine where cycling is allowed, would require all cyclists to slow down when conditions limit the safe operation speed of their bicycle could be rational and support claims of responsibility.

 Require all bicycle and e-bike operators to yield the right-ofway to all pedestrians and vehicles when entering a highway from an alley, driveway, bicycle path, or sidewalk Mandate all bicyclists, e-bike, electric scooter, and electric skateboard operators to travel in the same direction as vehicles are required to be driven upon the roadway; regardless of whether or not the operator is on a highway or in a bike lane. This section would also apply to all sidewalks less than 8 feet in width or wherever posted signs prohibit traveling in the opposite direction as vehicular traffic

This has merit as there is some debate on if a side walk is part of a highway under California law. It certainly addresses the most common crash contributed to cyclist behavior – wrong way riding on street and sidewalks. (The City needs to take steps to highlight the many standard pedestrian crosswalks and driveways on sidepath sidewalks that are over 8 feet wide and are designated as 2 way bike paths to alert motorists and sidepath users of the potential wrong-way rider conflicts created.)

- Require all bicycle and e-bike passengers to have their own separate seat
  - CVC already covers this well for highways: Irvine may need to extend it to sidewalks, walkways and bikeways.
  - Riding a Bicycle—Section 21204
  - (a) No person operating a bicycle upon a highway shall ride other than upon or astride a permanent and regular seat attached thereto.
  - (b) No operator shall allow a person riding as a passenger, and no person shall ride as a passenger, on a bicycle upon a highway other than upon or astride a separate seat attached thereto. If the passenger is four years of age or younger, or weighs 40 pounds or less, the seat shall have adequate provision for retaining the passenger in place and for protecting the passenger from the moving parts of the bicycle.
- Remove all bicycle licensing requirements in order to align with California Assembly Bill (AB) 1909
   This supports IPD's current policy of not processing or enforcing licenses and referring registration to the Project 529 database

Disallow the operation of e-bikes in the Open Space Area (as defined in IMC 3-4-128)
 This has to clarify they ARE ALLOWED on existing PAVED Class I bikeways that cross open space and not allowed on trails that pedal bicycles are allowed to use or share with pedestrians. At no time are any cyclists allowed to deviate from the trails or paths into open space habitat.

Deeper dive:

Sec. 3-4-138. - Vehicles.

Unless specifically authorized, no person shall drive or propel any automobile, truck, dune buggy, <u>electric bike</u>, motorcycle, motor scooter, ATV or any other motor powered vehicle within the open space area.

Adding "electric bike" is not appropriate nomenclature. Under California law, Electric Bicycles are Bicycles, NOT vehicles. Electric bicycles are allowed to travel on paths and trails that allow bicycles across the open space area and that should be preserved.

"motorized bicycles (gas or electric)" would better capture the vehicles (registered or not) that are over the 20 mph throttle limit and over the 750 watt power limit. "motor driven cycles (gas or electric)" would better capture the vehicles (registered or not) that have no pedals but are less power than a motorcycle.

Consider replacing <u>electric bike</u> with <u>motorized bicycles, motor driven cycles (gas or electric)</u> (consistent with California DMV)

Sec. 4-7-102. - Definitions.

Bicycle path <u>or bicycle trail</u>: A path that provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

A path is paved. A trail is not. Adding this without defining the travel surface confuses what we have in Irvine. Some dirt trails are shared use with pedestrians. Some trails are not appropriate for bicycles. Some bike paths in Irvine have adjacent pedestrian trails to provide separation.

Bicycle route or bicycle trail: A suggested route of travel for bicycle riders. A "bicycle route" may offer no physical protection to the bike rider and is normally defined for the bicycle rider only by a sign indicating "bike route," which defines a suggested route element of a bicycle system and provides a certain awareness for the motorist that bicycle riders are sharing the roadway.

This is an appropriate correction. A Class III bike route is a designated roadway where cyclist are to be expected.



This MUTCD compliant D11-1 indicates a shared use road – and should not be used on a Class I bikeway, shared-use bike path or bike trail. (The City needs to replace D11-1s currently on bike paths with appropriate MUTCD compliant R44A Bike Path and way-finding signs at various locations)

Electric Bicycle: An electric bicycle, or "e-bike", is a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts, and is categorized by the following:

Do not use <u>or "e-bike"</u>, Many dealers and manufacturers sell "emotor bikes" which are out of these current legal classifications and are not street legal (without registration as a motorized bicycle or motor driven cycle) and are illegal to be driven by unlicensed minors. This casual misnomer **promotes** the current confusion on what is an electric bicycle versus the e-bikes most frequently now seen operating illegally and out of the legal classifications.

Class 1 electric bicycle is equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches a speed of 20 miles per hour.

Class 2 electric bicycle is equipped with a motor that may be used

exclusively to propel the bicycle, and that is not capable of providing assistance when the bicycle reaches a speed of 20 miles per hour.

Class 3 electric bicycle is equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches a speed of 28 miles per hour. This bicycle is equipped with a speedometer.

Add HERE – A rider must be 16 years of age or older to operate a Class 3 electric bicycle.

Add HERE – All people operating or riding as a passenger upon a Class 3 electric bicycle shall comply with Section 21213 of the California Vehicle Code regarding the wearing of a properly fitted and fastened bicycle helmet.

A person riding an electric bicycle is subject to the same provisions as a person riding a bicycle, as described in Article 4 of Chapter 1 of Division 11, commencing with Section 21200 of the California Vehicle Code.

Add HERE – A person under the age of 18 must wear a properly fitted and fastened bicycle helmet when riding or as a passenger on an electric bike on a public roadway, bikeway, bicycle path, bicycle trail, or bicycle route

A rider must be 16 years of age or older to operate a Class 3 electric bicycle.

Move up under Class 3 definition

A person under the age of 18 must wear a properly fitted and fastened bicycle helmet when riding an electric bike on a public roadway, bikeway, bicycle path, bicycle trail, or bicycle route regardless of E-bike class.

Add to "A Person riding..." paragraph above

All people operating or riding as a passenger upon a Class 3 electric bicycle shall comply with Section 21213 of the California Vehicle Code regarding the wearing of a properly fitted and fastened bicycle helmet.

Move up under Class 3 definition

Highway: A way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street.

Motorized bicycle: Any two-wheeled or three-wheeled device having fully operative pedals for propulsion by human power, or having no pedals if powered solely by electrical energy, and an automatic transmission and a motor which produces less than two four gross brake horsepower and is capable of propelling the device at a maximum speed of not more than 30 miles per hour on level ground. A driver license with an M-1 or M-2 endorsement, vehicle insurance, and a Department of Transportation (DOT) compliant helmet is required when operating a motorized bicycle. Motorized bicycles shall be operated in accordance with all applicable provisions of the California Vehicle Code and are not permitted on any bicycle path, trail, playground, park, school ground, or open space area (as defined by Irvine Municipal Code section 3-4-128) in the City. A motorized bicycle is also a device that has fully operative pedals for propulsion by human power and has an electric motor that meets all the following requirements: (1) has a power output of not more than 1,000 watts, (2) is incapable of propelling the device at a speed of more than 20 miles per hour on ground level, and (3) is incapable of further increasing the speed of the device when human power is used to propel the motorized bicycle faster than 20 miles per hour.

This is an appropriate correction that clarifies what California considers a Motorized Bicycle (Moped) as a vehicle, and removes

the incorrect older terminology describing electric bicycles as motorized bicycles.

Sec. 4-7-103. - Enforcement.

## D. An electric bike shall meet the following criteria:

1. Comply with the equipment and manufacturing requirements for bicycles adopted by the United States Consumer Product Safety Commission (16 C.F.R. 1512.1, et seq.).

There is some concern that the USCPSC does not CURRENTLY accept having oversight of Class 3 electric bicycles. see <a href="https://www.bicycleretailer.com/industry-news/2023/03/01/cpsc-3-class-e-bike-framework-not-part-our-statutes">https://www.bicycleretailer.com/industry-news/2023/03/01/cpsc-3-class-e-bike-framework-not-part-our-statutes</a>

"Consumer Product Safety Commission Chair Alex Hoehn-Saric told BRAIN the agency doesn't recognize the industry's three e-bike classes but instead treats the regulation of e-bikes on a case-by-case basis.

When asked about regulating Class 3 e-bikes..., Hoehn-Saric said ... "I know there have been questions and confusion around jurisdiction of these products, so I want to take this opportunity to provide some clarity about where CPSC stands. First of all, the Class 1, Class 2, Class 3 framework is not part of CPSC's statutes, so any assertion about our jurisdiction over an entire category is not accurate."

. . .

Hoehn-Saric, the CPSC chair since 2021, cited Section 3 of the Consumer Product Safety Act regarding all product definitions, and Section 38, which addresses the "low speed electric bicycle":

Class 3 are not "low speed" electric bicycles – they are "speed" electric bicycles, The State of California may have accepted the industry's classification system, but at a Federal level this may not yet have been resolved.

2. Operate in a manner so that the electric motor is disengaged or ceases to function when the brakes are applied, or operate in a manner such that the motor is engaged through a switch or mechanism that, when released or activated, will cause the electric motor to disengage or cease to function.

Note that some modification kits to make regular bicycles into electric bicycles (add on battery, motors and controls) may not have this brake cut-off safety feature, even if they comply with the <750 watt and 20 mph maximum throttle rules. This ordinance will make those existing bicycles illegal.

3. A person shall not tamper with or modify an electric bicycle so as to change the speed capability of the bicycle, unless he or she appropriately replaces the label indicating the classification.

Changing the label from a Class 1 pedal assist to Class 3 when modified may be fine, but only as long as the assist speed is not over 28 mph, and the wattage does not exceed the 750 watt limit. If a Class 2 is modified to throttle over 20 mph is not a simple "label change" to a motorized bicycle, it is a registration as a motorized bicycle with the DMV. Why even suggest "unless he or she appropriately replaces the label"

"They" is more inclusive than he or she as well by the way...

Sec. 4-7-205. - Speed.

No person shall operate a bicycle <u>or electric bicycle</u> at a speed greater than is reasonable and prudent under the conditions then existing, and in no event at a speed which endangers the safety of persons or property. <u>No electric bicycle operator shall travel over 28 miles per hour on a public highway.</u>

Good description of basic speed law, and clarifies inclusion of electric bicycles, but any bicycle CAN be pedaled (or coast downhill) over 28 mph safely.

Requiring that a cyclist must slow to 28 mph regardless of the posted speed limit or traffic speeds is not acceptable.

No one on a bicycle should be required to reduce the efficiency and efficacy of travel with an arbitrary limit.

In some traffic situations it can be dangerous to slow down to obstruct vehicle traffic that is moving over 28 mph.

Electric bicycles are limited to 20 mph throttle and 28 mph pedal assist.

Cyclists on electric bicycles should not be expected to stop their pedal effort once they reach 28 mph. They won't do it and this law, if enforced, would be challenged.

Sec. 4-7-207. - Emerging from, entering alley, driveway, bicycle path, etc.

The operator of a bicycle or electric bicycle emerging from an alley

Clarifies inclusion of electric bicycles as bicycles under current law.

Not sure why it is needed as an operator of a bicycle already is required to comply with the vehicle code and yield to a pedestrian...

Sec. 4-7-210. - Riding on sidewalks, playgrounds, etc.

A. Riding of bicycles <u>and electric bicycles</u> on any sidewalk, <u>bicycle path, bicycle trail</u>, or roadway is permitted unless prohibited by appropriate signs authorized pursuant to the terms of this division.

Good to include electric bicycles as bicycles, and add paths & trails. Not clear what 'terms of this division' would lead to authorization of 'prohibition by appropriate signs'

- B. Whenever any person is riding a bicycle or <u>electric bicycle</u> upon a sidewalk, <u>bicycle path</u>, <u>or bicycle trail</u>, such person shall yield the right-of- way to any pedestrian and shall give an audible signal before overtaking and passing pedestrians.
- C. No person shall ride or operate a bicycle <u>or electric bicycle</u> upon any playground, park or school ground not designated as a bicycle path or route, where children are playing, without first having secured the permission of the persons having supervision of the playground, park or school ground.

Good to include electric bicycles as bicycles, and add paths & trails.

Not sure it is practical to expect cyclists to seek prior approval to ride a bicycle across a city park or school ground that has children playing...(The City may need to post appropriate way-finding signs to designate existing paths across parks that are bicycle paths ie: the paths that crosses Deerfield Elementary School and Deerfield Community Park)

D. No person shall operate a bicycle or electric bicycle on a bicycle path or bicycle trail at a speed greater than 20 miles per hour, and in no event at a speed greater than is reasonable or prudent under the conditions then existing, or at a speed which endangers the safety of persons or property.

There are times when there are no pedestrians and a bike path is built with the standard 30 mph design standards where it is perfectly safe to ride over 20 mph. At other times, and places where design was compromised, 20 mph is too fast. Not every cyclist has a speedometer, they only required on

Not every cyclist has a speedometer, they only required on Class 3 electric bicycles.

20 mph is as arbitrary as 3, 5, 10 or 15 mph, and will not be obeyed, and will not be enforceable.

A local ordinance stating the the State's "Basic Speed Law"

applies to bike paths, shared use paths and trails in Irvine where cycling is allowed, would require all cyclists to slow down when conditions limit the safe operation speed of their bicycle could be rational and support claims of responsibility.

E. The operator of a bicycle, electric bicycle, electric scooter, or electric skateboard shall travel in the same direction as vehicles are required to be driven upon the roadway; regardless of whether or not the operator is in the roadway or in a bike lane. This section also applies to any sidewalk less than 8 feet in width, unless there is no accompanying sidewalk on the opposite side of the street, or wherever posted signs prohibit such behavior.

This inclusion of sidewalks has merit, as there is some debate on if a sidewalk is part of a highway under California law. It certainly addresses the most common crash contributed to cyclist behavior – wrong way riding on street and sidewalks. In order to get compliance, signage will be required to convince cyclists to ride on the appropriate side of the road or on sidewalks. (The City needs to take steps to highlight the many standard pedestrian crosswalks and driveways on sidepath sidewalks that are over 8 feet wide and are designated as 2 way bike paths to alert motorists and sidepath users of the potential wrong-way rider conflicts created.)

F. A bicycle or electric bicycle operator shall not allow a person riding as a passenger, and a person shall not ride as a passenger, on a bicycle or electric bicycle upon a highway other than upon or astride a separate seat attached thereto. The section does not apply to any type of bicycle with an original factory seat designed to collectively accommodate the operator and passenger. If the passenger is four years of age or younger, or weighs 40 pounds or less, the seat shall

have adequate provision for retaining the passenger in place and for protecting the passenger from the moving parts of the bicycle.

This inclusion is good to clarify passenger safety, but does not include trailers, or reiterate the requirement of helmets.

Sec. 4-7-213. - Motorized bicycles, operation Reserved.

DO NOT delete this section! It is important to show the rules for motorized bicycles now that they have been clarified as different than electric bicycles.

A. Riding of motorized bicycles, as defined by California Vehicle Code § 406(b), on a bicycle path or trail is permitted unless prohibited by appropriate signs authorized pursuant to this division.

KEEP part A - Do clarifify that Riding of motorized bicycles, as defined by California Vehicle Code § 406(b), on a bicycle path or trail is permitted unless prohibited by appropriate signs authorized pursuant to this division.



This standard MUTCD compliant R44A sign, to be posted at any entrance of a bike path, prohibits Vehicles including Motorized Bicycles. Delete permitted unless

B- When ever a person is riding a motorized bicycle on a bicycle trail or path, such person shall yield the right-of-way

to any pedestrian and shall give an audible signal before overtaking or passing pedestrians.

Prohibited on paths & trails so yes – delete this part.

C- No person shall operate a motorized bicycle on a bicycle path or trail at a speed greater than 20 miles per hour, and in no event at a speed greater than is reasonable or prudent under the conditions then existing, or at a speed which endangers the safety of persons or property.

Prohibited on paths & trails so yes – delete this part.

D - No person shall ride or operate a motorized bicycle on any playground, park, or school ground not designated as a bicycle path or route, where children are playing without first having secured the permission of the persons having supervision of the playground, park or school ground.

KEEP this as part B.

E- Motorized bicycles shall be operated in accordance with all other applicable provisions of the Vehicle Code.

KEEP this part as part C.

## Sec. 4-7-401. - Required Bicycle License.

No resident of the City shall operate a bicycle on any street, road, highway or other public property within the City unless such bicycle is licensed under the provisions of this chapter and bears a current bicycle plate attached thereto in accordance with this chapter. Nonresidents of the City are not bound by this section.

Residents of the City are encouraged to register their bicycle with the City because it assists Public Safety in identifying the rightful owner of a bicycle if/when a bicycle is believed to be lost or stolen.

<mark>Sec. 4-7-409. - Renewal Reserved</mark>.

A. Bicycle licenses shall be renewed uniformly throughout the State at periods designated by the Department of Motor Vehicles in accordance with Vehicle Code § 39001.

B. Renewal of the bicycle license shall be indicated by a supplementary adhesive device affixed parallel to and above or below the license plate with expiration date plainly visible.

Appropriate update to current policy on bicycle licensing

Sec. 4-7-411. - Transfer of Ownership.

Whenever any person sells, trades, disposes of, or transfers any bicycle licensed pursuant to the provisions of this chapter, he or she shall endorse upon the license receipt previously issued for such bicycle a written transfer of same, setting forth the name, address and telephone number of the transferee, the date of transfer, the signature of the transferor, and shall deliver the registration certificate so endorsed, to the Director of Public Safety/Chief of Police or his or her duly authorized representative within 10 days. The transferee shall, within 10 days after such transfer, apply to the Director of Public Safety/Chief of Police for a transfer of the license receipt. The fee to be charged for said transfer of ownership shall be as established by resolution of the City Council, which may be amended from time-to-time, but shall not exceed the amount established under Vehicle Code § 39004.

Why not also delete and reserve this entire section if licenses are no longer provided?

Sec. 4-7-414. - Rental agencies Reserved.

A rental agency shall not rent or offer any bicycle for rent unless the bicycle is licensed and a bicycle plate is attached thereto, as provided by this chapter, and the bicycle is equipped with the equipment required by this division.

Appropriate update to current policy on bicycle licensing

Sec. 4-7-416. - Motorized bicycles, licensing requirements Reserved.

The provisions of this chapter are applicable to motorized bicycles.

Appropriate update to current policy on bicycle licensing. Motorized bicycles are now well defined and registration (licensing) is handled by the DMV, not a bicycle license