

Parks and Recreation Commission Meeting

May 11, 2023
Item 4

SUBJECT: PROVIDE RECOMMENDATION TO THE CITY COUNCIL REGARDING REGULATIONS FOR E-BIKES ON TRAILS AND IN PARKS

SUMMARY

With the growing popularity of electronic bicycles (“e-bikes”), Assembly Bill 1909 was approved by the state legislature in 2022 and is set to go into effect on January 1, 2024. Current state law prohibits the operation of motorized bicycles and e-bikes on bicycle paths and recreational trails. Once in effect, AB 1909 will remove that prohibition restricting e-bikes from these bike paths. In its place, AB 1909 authorizes the City of Pleasanton to institute its own restrictions on Class 1 and Class 2 e-bikes by ordinance. For Class 3 e-bikes and motorized bicycles, AB 1909 partially removes the prohibition: Class 3 e-bikes and motorized bicycles are still prohibited on City bike paths unless the path is within or adjacent to a roadway; or the City may permit Class 3 e-bikes on City bike paths by ordinance.

The City currently prohibits the operation of motorized bicycles in any park and recreational facility unless the area is specifically designated for these types of bicycles, or unless written permission is given. Given the increased popularity and use of motorized bicycles and e-bikes, it now lies with the City to determine how to regulate the operation of motorized bicycles and e-bikes beginning in 2024.

RECOMMENDATION

Staff recommends allowing all classes of e-bikes on City bike paths, bike lanes, trails, and within City parks with the restriction that e-bike users not exceed 15 miles per hour, or slower if necessary to safely operate the e-bike based on the conditions.

On April 24, 2023, the City’s Bicycle, Pedestrian, and Trails Committee voted to approve staff’s recommendation.

BACKGROUND

E-bike definition and classification

An e-bike is defined as a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts. There are three classifications of e-bikes, each class differs from the other based on how the electric motor assists the rider (pedal assist vs throttle assist) and the maximum speed of the e-bike.¹ Each class is defined as follows:

- Class 1: a bicycle equipped with a motor that provides assistance only when the rider is pedaling (pedal assist), and ceases to assist the operator when the bicycle reaches 20 miles per hour
- Class 2: a bicycle equipped with a motor that may be used exclusively to propel the bicycle without the need for the operator to pedal (throttle assist) and is not capable of providing assistance when the bicycle reaches 20 miles per hour.
- Class 3: a bicycle equipped with a motor that provides assistance only when the rider is pedaling, ceases to assist when the operator when the bicycle reaches 28 miles per hour, and is equipped with a speedometer.



CLASS 1

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



CLASS 2

A "Class 2 electric bicycle," or "low-speed throttle-assisted electric bicycle," is a bicycle 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 the speed of 20 miles per hour.



CLASS 3

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

Current law

The City currently prohibits the operation of "motorized bicycles" in any park and recreational facility under Municipal Code Section 13.08.150. The City's municipal code relies on the California Vehicle Code's definition of "motorized bicycle," which is any two-wheeled or three-wheeled device that has an automatic transmission and motor capable of propelling the bicycle to a maximum speed of 30 miles per hour, or a bicycle equipped with an electric motor with a maximum output of 1,000 watts and is capable of propelling the bicycle with a maximum speed of 20 miles per hour.

Under current law, e-bikes would be considered a "motorized bicycle."

¹ California Vehicle Code (CVC) §312.5

Current City Bike Paths/Lanes

The City's Bicycle and Pedestrian Master Plan classifies existing bicycle infrastructure according to three classes:

1. Class I Bikeway (Bicycle Path or Multi-Use Path) provide a completely separate right of way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. The City has a variety of paved and unpaved multi-use paths. Approximately 13 miles of paved bicycle paths exist in the City.
2. Class II Bikeway (Bicycle Lanes) provide a restricted right-of-way and are designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally at least five feet wide. Vehicle/pedestrian cross-flow is permitted as required. Where these conflict zones occur, the bicyclist path of travel can be highlighted with green paint similar to what the City installed at Sunol Boulevard. Approximately 40 miles of Class II bicycle lanes exist in the City.
3. Class III Bikeways (Signed Bicycle Route) are designated by signs or pavement markings for shared use with motor vehicles. A sharrow is typically marked on a Class III route to show the suggested path of travel for bicyclists. This is often done when the route has on-street parking to encourage bicyclists to ride a safe distance away from the parked vehicles' "door zone" and/or show the recommended path of travel for bicyclists. Sharrows also inform drivers that the bicyclists should be expected on the street and give sufficient room. Approximately 7 miles of Class III bikeways exist in the City.

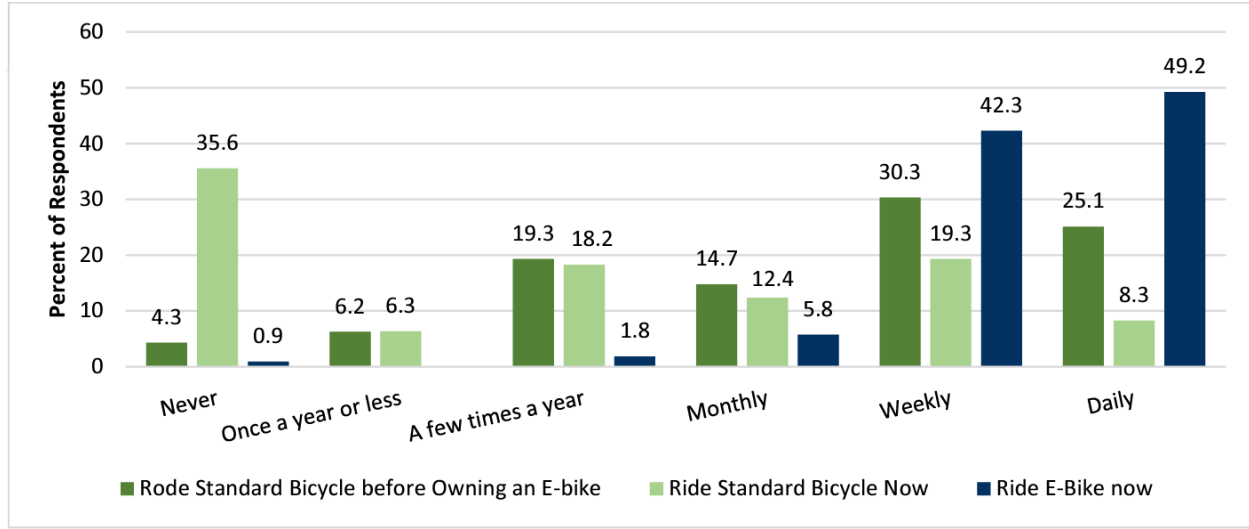
The Pleasanton Trails Master Plan understands a "trail" to denote a wide range of facilities for **non-motorized** travel that excludes sidewalks, bike lanes, and bike boulevards. Because "trails" are intended for non-motorized travel, it does not appear e-bike operation was contemplated in the Pleasanton Trails Master Plan. This would be consistent with the City's current prohibition of all motorized bicycles on park and recreational facilities.

DISCUSSION

Increases in E-bike use

In the United States, e-bike sales grew by 240% in the 12 months leading up to July of 2021.² This is likely due to what has been known as the COVID "bike boom" and the trend is expected to continue with 49% of e-bike owners reporting daily use of e-bikes:

² <https://www.npd.com/news/blog/2021/the-cycling-market-pedals-ahead-in-2021/>



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Consistency with the City’s goals in its Climate Action Plan 2.0

Adopting e-bike regulations permitting their use would be consistent with the City’s Climate Action Plan (CAP) 2.0, adopted by the City Council in February of 2022. CAP 2.0 recognizes that “the primary pathway to reduce transportation emission is to take advantage of zero-emissions electricity to electrify vehicles and buildings...to further reduce emissions from remaining gas-powered vehicles, provide viable travel alternatives, and support healthy lifestyles.”⁴ CAP 2.0 also incentivizes and encourages e-bike usage to reduce vehicle miles traveled for K-12 activities.

E-bike regulations of neighboring jurisdictions

Many of the bike paths within the City continue into neighboring jurisdictions. Included below are the existing regulations of our neighbors. Because AB 1909 is still new law, not every neighboring jurisdiction has adopted their own regulations regarding e-bike operation. Nonetheless, the below information can be used to harmonize the City’s regulations with those of our neighbors.

³ <https://www.calbike.org/wp-content/uploads/2019/02/A-North-American-Survey-of-Electric-Bicycle-Owners.pdf>

⁴ https://cap.cityofpleasantonca.gov/CAP/PleasantonCAP_FINAL%20Adopted%202023.02.21.pdf?_t=1677537710,

Jurisdiction	E-Bike Regulations
East Bay Regional Park District (EBRPD)	<p>Allows Class I or Class II electric bicycles on the specific paved trails: Alameda Creek Trail (paved side only), Big Break Trail, Contra Costa Canal Trail, Delta De Anza Trail, George Miller Trail, Iron Horse Trail, Lafayette Moraga Trail, and Marsh Creek Trail.</p> <p>General rule against excessive speeds / require safe operation</p> <p>15 mph speed limit (posted bicycle speed limits on some trails may be lower)</p>
Dublin	None
Livermore	None
Livermore Area Recreation and Park District (LARPD)	<p>Allows Class 1 e-bikes to operate at 15 mph or less on paved trails (except prohibited in Sycamore Grove)</p> <p>General rule for operation at safe speed for conditions</p>
San Ramon	None
National Park Service, Interior	<p>Allows Class I, Class II, and Class III electric bicycles on roads, parking areas, administrative roads and trails that are open to traditional bicycles; subject to change by a superintendent.</p> <p>All classes of electric bicycles prohibited in designated wilderness areas.</p>

There may be concern that e-bike users would be subject to conflicting obligations when operating their e-bikes on trails the City shares with neighboring jurisdictions. For example, the East Bay Regional Park District only allows Class I and Class II e-bikes on specified trails and appears to prohibit Class III e-bikes on all of their trails.⁵ For those City trails that tie directly to EBRPD trails, several options may be available to avoid imposing competing obligations on e-bike users. Signage could be erected at trailhead entrances to notify e-bike users that Class III e-bikes may not be allowed on all trails, such as those under EBRPD jurisdiction. In the alternative, the City could restrict Class III e-bikes from those specific trails that tie directly to EBPRD trails.

Staff recommendations based on practical challenges, mobility benefits, and public safety

⁵ See East Bay Regional Parks District Ordinance 38 – Rules and Regulations, Sections 902. Operation of Motor Vehicles; Off-Road Vehicles and 902.3 Exceptions, subsection (e)

Staff considered the practical challenges of regulating e-bike use based on the Class of e-bike, the mobility that e-bikes provide to City residents, and public safety in arriving at its recommendation to permit all classes of e-bike use in the City, subject to speed limitations and safe operation requirements.

Staff's recommendation takes into consideration the difficulties of enforcing regulation based on an e-bikes class due to the difficulty in visually determining the class of e-bike during operation.⁶ The visual profile of an e-bike, regardless of whether the e-bike utilizes pedal or throttle assistance, remains the same while in use. For Class 1 and Class 3 e-bikes, the motor resides on the pedals of the bicycle; whereas for Class 2 e-bikes, the motor resides on the rear hub of the bicycle. See Exhibit A. Unless the rider is stopped and the e-bike examined, there are few visual indicators differentiating one class of e-bike from another. Though an e-bike's electric motor will cease providing assistance to the rider when the maximum speed is reached, depending on the class of e-bike; it remains difficult to visually determine the class of e-bike when an e-bike travels below the maximum speed of its respective motor.

Staff's recommendation takes into consideration the mobility aspects that e-bikes provide to City residents. E-bikes, by their nature, provide propulsion assistance to the operator. This assistance has several mobility benefits for a wide variety of City residents. For those City residents who have been reluctant to engage in cycling due to the physical demands of operating a traditional bicycle, e-bikes provide a viable mobility option both for recreation and for commuter travel. For those City residents who already engage in cycling, e-bikes provide a means for cyclists to continue to engage in this activity as residents' physical abilities decline. Lastly, e-bikes provide an alternative to motor vehicles for those City residents that do not use motor vehicles as their primary mode of transportation:

⁶ Typically, the design of pedal-assisted e-bikes places the electric motor on the drive train of the bicycle: this is the area of the bicycle where the "transmission" of the bicycle resides and where "crank arms" of the pedals attach to the bottom bracket on the frame of the bicycle. Class 1 and Class 3 e-bikes fall under this design because these two classes are pedal-assisted e-bikes. For Class 1 and Class 3 e-bikes, the electric motor is engaged when the rider is pedaling.

In throttle-assisted e-bikes, such as Class 2 e-bikes, the electric motor is typically placed on the rear wheel of bicycle's frame where the rear wheel attaches to the frame. For Class 2 e-bikes, the electric motor is engaged when the throttle is activated. The throttle can range from a crank-type throttle located on the grip of the front handle bar, to a button-type throttle located on the gear shift on the front handle bar. See Exhibit A.

For all classes of e-bikes, the electric motor will cease providing assistance when the maximum speed limit is reached.

Table 3.11: E-bike Used as Primary Mode by Cyclist Type

	Percent of Respondents Who Selected E-bike as their Primary Mode	
	Seldom/Non-cyclists	Frequent cyclists
Commute	27.2	37.1
Personal errands	19.3	33.2
Visiting friends/family	11.6	21.1
Entertainment	11.5	18.4
Recreation or exercise	52.3	40.9

Note: Bold Indicates significant differences between groups based on a chi-square test ($p < .05$)

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Staff's recommendation takes into account public safety and is cognizant that e-bikes share bike paths with traditional bikes and pedestrians. For context, the City's municipal code currently prohibits traditional bike riders from operating their bikes in a negligent, unsafe, or reckless manner, or in any way that endangers the life, limb, or property of any person. The Pleasanton Municipal Code includes provisions that require bicyclists to operate in a safe manner, as follows (in relevant part, emphasis added):

13.08.200 Bicycles.

A. *No person shall ride or operate a bicycle in any park and recreation facility in a negligent, unsafe or reckless manner or in any way that endangers the life, limb or property of any person. ...*

C. *If a pathway or roadway is designated for bicycle use, a person shall use such pathway or roadway for such use.*

11.52.060 Operation/prohibited areas.

...

B. *The following areas are designated as prohibited areas for riding bicycles:*

1. *Publicly owned tennis courts;*
2. *Publicly owned walls, park and street furniture, steps, railings, public art installations, and fountains;*
3. *Any portion of construction projects, whether or not completed, located on public property.*

C. *No person shall operate a bicycle within the city in a manner which endangers any pedestrian or other bicyclist. ...*

Staff also considered that road conditions, such as weather, congestion, or uneven terrain, may require e-bike operators to slow down in order to safely operate their e-bike.

⁷ <https://www.calbike.org/wp-content/uploads/2019/02/A-North-American-Survey-of-Electric-Bicycle-Owners.pdf>

Staff recommendation

Because of the difficulties of visually discerning e-bikes by class, the mobility benefits e-bikes provide to City residents, and public safety considerations, staff recommends the following subject to input from this Committee: 1) allow all classes of e-bikes on City bike paths, bike lanes, trails, and in public parks; and 2) limit the speed of e-bikes to 15 miles per hour, or slower if conditions require a slower speed for the safe operation of the e-bike.

Bicycle, Pedestrian, and Trails Committee

Staff brought this recommendation to the Bicycle, Pedestrian, and Trails Committee (“BPTC”) to receive their input on April 24, 2023. Eight regular members of the BTPC were present, as well as two members of the public. The BPTC considered restrictions on e-bikes by class; safety concerns of allowing e-bikes on all bike paths and trails, particularly as it relates to children; potential amendments to staff’s recommendation to ensure the e-bikes be limited to their designed use; and enforcement concerns before ultimately voting to approve staff’s recommendation as written.

Pleasanton Municipal Code Updates

The City’s municipal code currently prohibits the use of motorized bicycles in areas not designated for their use, or unless the Library and Recreation director permits their use. Motorized bicycles remain subject to laws provided in the California Vehicle Code.

Currently, e-bikes is considered a “motorized bicycle” and prohibited from areas not designated for their use. If the City Council decides to allow e-bikes, then amendments would be proposed to the Pleasanton Municipal Code to: define e-bikes, differentiate e-bikes from motorized bicycles to allow e-bike use, set a speed limit for e-bikes, and require the safe operation of e-bikes depending on conditions.

Educational programming

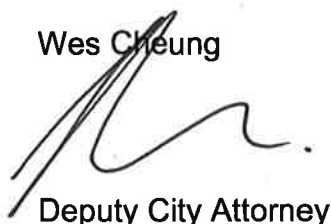
If the Council adopts these changes, the Library and Recreation Department will explore options to provide education programming to the public about the speed limits for e-bikes, what an e-bike user could expect riding on trails shared by neighboring jurisdictions, and any other regulations the Council chooses to adopt.

ACTION

Provide recommendation to the City Council for the regulation for e-bikes on bike paths, bike lanes, trails and in parks.

Submitted by:

Wes Cheung



Deputy City Attorney

Matt Nelson



Associate Traffic Engineer

Exhibit A: Sample photos of Class 1 & 3 e-bike motor, Class 2 e-bike motor and throttle
Exhibit A:

Class 1 & 3 e-bike motor:



Class 2 e-bike motor:



Class 2 e-bike throttle:

