

TO: PARKS AND RECREATION COMMISSION

FROM: DAREN ANDERSON DEPARTMENT: COMMUNITY SERVICES

DATE: OCTOBER 25, 2022

SUBJECT: OPEN SPACE AND PARKS ELECTRIC BICYCLE AND ELECTRIC CONVEYANCES POLICY

RECOMMENDATION

Staff recommends that the Parks and Recreation Commission (PRC) review and provide feedback on the draft Open Space and Parks Electric Bicycle and Electric Conveyances Policy ([Attachment A](#)).

BACKGROUND

When electric bicycles (e-bikes) were introduced, most municipal and regional park and open space agencies, including the City of Palo Alto ([Park and Open Space Regulation R1-37 E](#)) Midpeninsula Regional Open Space District and Federal land management agencies (i.e. National Park System, National Wildlife Refuge System, Bureau of Land Management) categorized them as motorized vehicles and prohibited them on trails, along with traditional motorized vehicles and devices like scooters and motorcycles. In 2016, the State of California adopted a new classification system that no longer categorizes e-bikes as a motorized device.

E-Bike Description

Section 312.5 of the California Vehicle Code (CVC) defines an e-bike as having fully operable pedals and an electric motor of less than 750 watts. American e-bike manufacturers created a classification system that designates three categories of e-bikes: class 1, class 2, and class 3. This classification system and model legislation has been adopted by 22 states, including California. Below are descriptions for each class of e-bike.

- 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.
- 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.
- 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, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour, and equipped with a speedometer.

CVC section 21207.5 (b) prohibits the use of class 3 e-bikes on recreational trails and paths unless the public agency with jurisdiction chooses to permit them and provides that a public agency may prohibit class 1 and 2 e-bikes on trails within the agency’s jurisdiction.

Trail Definition

"Trail" means any established public way within city open space nature preserves and parks which appear on current city maps, city open space nature preserve maps, planning documents, trail guides and/or those trails marked with city directional signs. Trails include, but are not limited to fire roads, service roads, paths, pathways and levees.

E-Bike Sales Trends

Sales of e-bikes has grown steadily over the last few years. In general, the overall e-bike category in the U.S. has grown about 450% since 2013, with year-over-year growth averaging around 50%. Sales data reflect that most e-bikes sold are in the class 1 category. The only difference between class 1 and class 2 is that with a class 2, the electric motor can be used exclusively to power the bicycle using a throttle (pedaling is not required).

DISCUSSION

In response to the change in the State of California e-bike classification, the increase in the use of e-bikes and other electric powered mobility devices (skateboards, scooters, one-wheels, hoverboards, segways, and other similar devices that are powered or power-assisted by an electric motor), and the growing popularity and sale of e-bikes and other electric powered mobility devices, staff and the PRC included this topic in the 2022-2023 [PRC Workplan](#). Starting in April 2022, the PRC Electric Conveyances Policy Ad Hoc Committee (Ad Hoc) met numerous times to discuss and prepare a draft Open Space and Parks Electric Bicycle and Electric Conveyances Policy (Policy).

The Ad Hoc identified several important factors to consider while developing the Policy:

- Environmental and ecological impacts
- Safety
- Public access
- Equity
- Recreation
- Enforceability
- Clarity & simplicity
- Compatibility with regional policies
- Public demand and opposition
- Bicycle transportation corridors

On September 22, 2022, staff and the Ad Hoc met with Transportation staff to discuss and collect their feedback on the draft Policy. Transportation staff explained that they have observed a significant growth in the use of e-bikes and child carrying cargo e-bikes. They are increasingly seeing e-bikes on school campuses. Transportation staff noted that the proposed restriction of class 3 bikes from Open Space and park trails seemed appropriate. Transportation staff highlighted the importance of ensuring that the draft policy allow for students who travel on some park trails to get to school on e-bikes. They noted that student use of e-bikes is happening now and will likely continue to grow. The draft policy allows the use of Class 1 and 2 e-bikes and other electric powered mobility devices on park trails (paved and unpaved).

On October 3, 2022, staff and the Ad Hoc met with the Chair and Vice Chair of the Palo Alto Pedestrian and Bicycle Advisory Committee (PABAC) to collect their feedback on the draft Policy. The PABAC Chair and Vice Chair provided the following feedback:

- PABAC is working on updating the Bicycle and Pedestrian Transportation Plan, which will address e-bikes.
- Recommend having this topic on a PABAC meeting agenda to collect feedback from the full Committee.
 - This has been scheduled for November 1, 2022.
- Mentioned the importance of allowing students to use e-bikes on park trails (paved and unpaved) to get to school.
- Recommend adding the term “Type” in addition to “Class” to describe the different classes of e-bikes.
 - The California Vehicle Code uses the term “Class”. The definition section of the draft Policy has been updated to explain that Calbike.org uses the term “Type”.
- Bike parking is difficult to find in most parks, and the draft Policy should treat e-bike parking requirements the same way as regular bikes.
 - The draft policy has been updated to note that e-bikes (and regular bikes) should be parked in designated bike parking locations, where bike parking is available.
- Recommend that the draft Policy allow Class 3 bikes in the same places that motorcycles are allowed (paved roads)
 - The draft policy has been updated to clarify that Class 3 bikes are prohibited from trails in Open Space and Parks. They are not prohibited from paved roads.
- Recommend that the draft Policy be changed to allow e-bike access on unpaved trails at the Baylands Nature Preserve. While they agreed that e-bikes shouldn’t be allowed on trails at Foothills Nature Preserve (regular bikes are also not allowed on Foothills trails) and Pearson-Arastradero Preserve, they noted that the Baylands should allow e-bikes on paved and unpaved trails. They noted that the Bay Trail, which includes paved and unpaved portions in the Baylands, is often used by people commuting to work and should be accessible to people with e-bikes.
 - Open Space staff have observed that most of the bicycle commuting appears to occur on the paved section of the Bay Trail. Staff has not conducted a survey to confirm this.
 - The Ad Hoc noted that access on the unpaved Baylands trails is primarily for recreational access, and that e-bikes could travel on paved trails in the Baylands from the Friendship Bridge to Shoreline Park (See [Baylands Nature Preserve Trail Map](#)).
 - An additional concern about allowing e-bikes on the unpaved trails at the Baylands is the potential to encourage an increase in fast moving, commuter cycling in sensitive areas of the Baylands and impact.

- A compelling argument against this is the confusion regarding access to unpaved trails at adjacent Byxbee Park.
- It is desirable to be consistent with neighboring agencies (Midpeninsula Regional Open Space District's Ravenswood Preserve to the north of the Baylands and City of Mountain View's Shoreline Park to the south of the Baylands). The City of Mountain View allows e-bikes in their parks, however, the section of Bay Trail in Shoreline Park is paved.

Regional Policies

Locally, there is mixed support for e-bike use, with varying restrictions. Many restrictions have not been updated since the CVC updated the definition of e-bikes and are based on laws and definitions of motorized vehicles or devices. One of the local agencies which has done a significant amount of work on updating e-bike policy is Midpeninsula Regional Open Space District (District). On November 20, 2019, the District Board of Directors directed the General Manager to evaluate potential electric bicycle (e-bike) access in District preserves.

Part of the District analysis included various surveys and studies related to a one-year pilot program of Class 1 and Class 2 e-bike use on paved, multi-use trails within Rancho San Antonio and Ravenswood Preserve and intercept surveys on Santa Clara County Parks unpaved, multi-use trails where e-bikes are currently allowed. Additionally, H. T. Harvey and Associates completed an e-bike noise study, focused on potential impacts to birds and bats, and the District Science Advisory Panel (SAP) conducted a literature review of the impacts and benefits of e-bikes. The Ad Hoc and staff found the District's analysis ([Staff Report/Study](#)) informative.

On July 10, 2022, the District voted 4-2 in favor of continuing to prohibit e-bikes in its preserves, with the exception of the paved trails where successful pilots were conducted. They opted to not conduct a new unpaved pilot.

Draft Policy

The Ad Hoc and staff attempted to create a draft Policy that is easily understood, compatible with regional policies, consistent with City sustainability goals, and strikes a balance between accessibility and environmental protection and stewardship.

The draft Policy has sections that pertain to Open Space, Parks, and Open Space and Parks.

Open Space Policy

- Class 1 and 2 e-bikes are allowed on paved roads and trails, and are prohibited elsewhere including on unpaved roads and trails.
- Class 3 e-bikes are not allowed on any trails in open space preserves.
- Class 1 and 2 e-bikes are allowed for city staff in open space and parks for maintenance and enforcement purposes, consistent with P.A.M.C. 22.04.150(f).
- Other electric powered mobility devices are allowed on paved roads and trails at the Baylands Nature Preserve and are prohibited in other open space preserves (Pearson-Arastradero Preserve, Foothills Nature Preserve, and Esther Clark Park).

Parks Policy

- Class 1 and 2 e-bikes are allowed on paved and unpaved trails in parks, and are prohibited elsewhere (turf, sports courts, playgrounds, landscaped areas, etc.) in parks.
- Class 3 e-bikes are not allowed in parks.
- Other electric powered mobility devices are allowed on paved and unpaved trails in parks, and are prohibited elsewhere (turf, sports courts, playgrounds, landscaped areas, etc.).

Open Space and Parks Policy

- R1-20. TRAIL USE SPEED LIMIT will apply to e-bikes and other electric powered mobility devices.
- The maximum speed for all trail uses is 15 miles per hour, unless a lesser maximum speed is posted, and no person shall exceed the maximum speed on any trail; however, no person shall operate a bicycle, e-bike, or other electric powered mobility device, or ride a horse or other such animal at a speed greater than is reasonable, prudent, or safe. Bicyclists, e-bike and other electric powered mobility device users, and equestrians are required to slow to 5 miles per hour when passing others or approaching blind turns.
- When not in use, e-bikes and other electric powered mobility devices:
 - Should be parked in designated parking areas when available.
 - May not be left unattended on trails, vegetation, landscaped areas, or vehicle parking areas.
 - Are not allowed to interfere with access or use of any open space and park trail, turf, playground, sports court, facility, or amenity (park bench, picnic table, etc.).

Note: these same guidelines apply to regular bikes.

- The Americans with Disabilities Act (ADA) overlays all city policies and is specific to each individual person who may need an adjustment of city policy or regulation. People may contact Community Services Department staff to make an ADA access request pertaining to this policy.

NEXT STEPS AND TIMELINE

On November 1, 2022, staff and the Ad Hoc will present the draft Open Space and Parks Electric Bicycle and Electric Conveyances Policy to the Palo Alto Pedestrian and Bicycle Advisory Committee (PABAC).

Staff and the Ad Hoc intend to return to PRC in December 2022 with an action recommendation.

Open Space and Parks Electric Bicycle and Electric Conveyances Policy (draft)

Purpose

The purpose of this Chapter is to specify the permitted use of electric powered mobility devices in Palo Alto parks and open space areas.

Definitions

- “Electric powered mobility devices” means bicycles, skateboards, scooters, one-wheels, hoverboards, segways, and other similar devices that are powered or power-assisted by an electric motor.
- “E-bikes” means three classes of electric bicycles, as defined by the California Vehicle Code:
 - 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.
 - 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.
 - 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, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour, and equipped with a speedometer.The operator of a Class 3 electric bicycle:
 - **Must** be 16 years old or older
 - **Must** wear a bicycle safety helmet

Note: Calbike.org uses the term “Type” instead of “Class” to define the three different classes of e-bikes.

- “Trail” means any established public way within city open space nature preserves and parks which appear on current city maps, city open space nature preserve maps, planning documents, trail guides and/or those trails marked with city directional signs. Trails include, but are not limited to fire roads, service roads, paths, pathways and levees.
- “Paved” means any designated road or trail composed of asphalt or concrete, as designated on current city open space preserve maps.
- “Unpaved” means designated road or trail composed of base rock, gravel, decomposed granite, or dirt, as designated on current city open space preserve maps.

Note: Palo Alto open space trail maps illustrate paved and unpaved trails. Examples: Arastradero Creek Trail and Wildhorse Road (Foothills Nature Preserve) are considered unpaved.

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