

WORK SESSION ON THE OPERATION OF E-BIKES AND OTHER ELECTRIC DEVICES ON TRAILS AND PATHS

Matt Nichols - Management Analyst
April 4, 2023

Staff Recommendation

Conduct a workshop and, by motion, direct staff to:

1. Draft an ordinance amending the Half Moon Bay Municipal Code to:
 - a. Establish a speed limit of 15 miles per hour with 5 miles per hour when passing on all Half Moon Bay trails.
 - b. Permit Class 1, 2, and 3 e-bikes as well as electric scooters and electric boards on all Half Moon Bay-owned multi-use paths and trails.
2. Create and place "share the trail" signage along Half Moon Bay's multi-use trails.



Outline

- **Background**
- **May 17, 2022, Recap**
- **Summary of adjacent jurisdictions**
- **Summary of public survey**
- **Bicycle Pedestrian Advisory Committee (BPAC) recommendation**
- **Staff recommendation**



Background

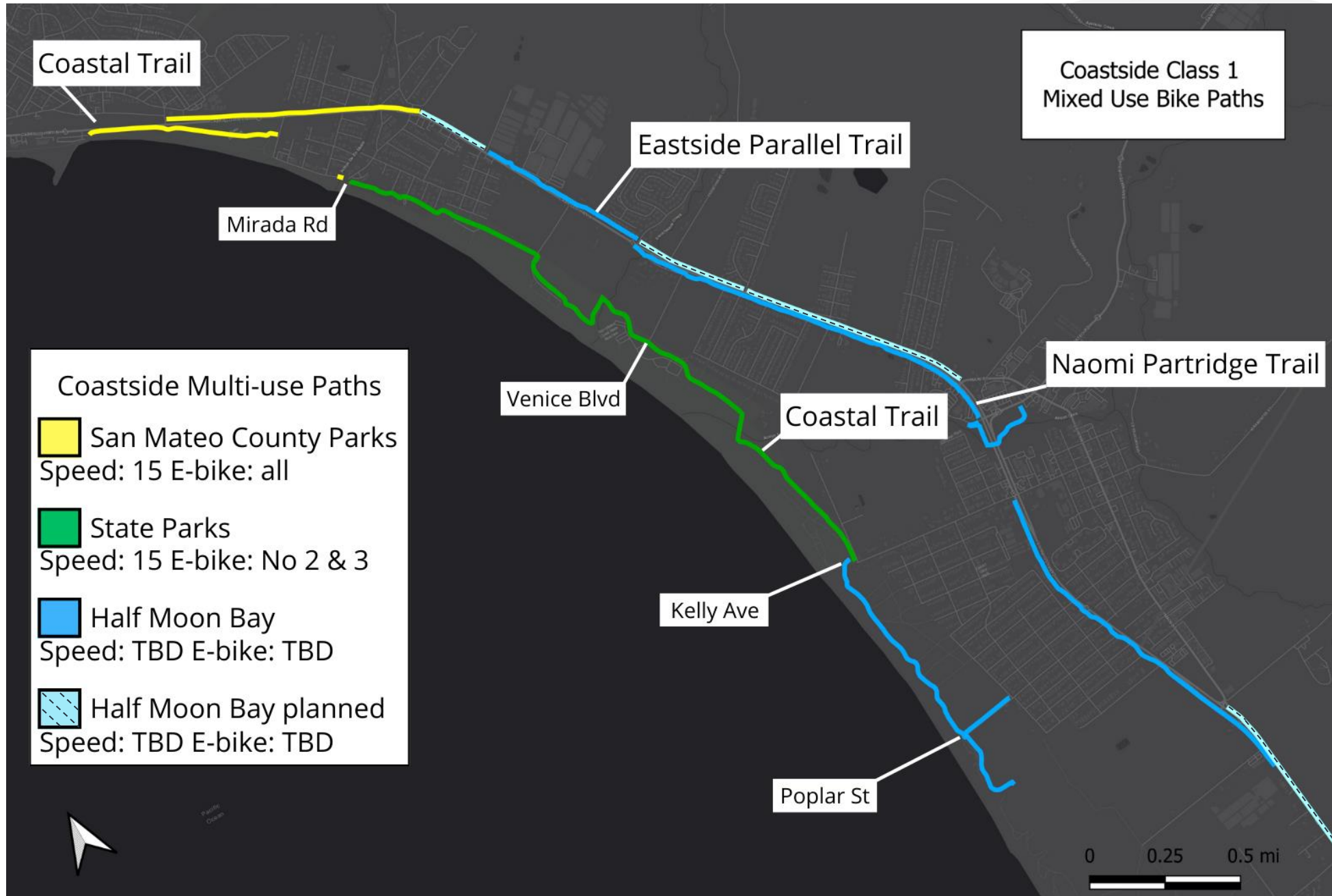
- **1983: City bans motorized vehicles on trails**
- **1999: State sets rules for motorized scooters**
- **2016: State reclassifies e-bikes and e-boards**
- **May 17, 2022, City Council directed staff to:**
 - Research other jurisdiction's e-bike policies
 - Review Midpeninsula Regional Open Space District (MROSD) e-bike pilot project
 - Hold a public survey on e-bikes
 - Solidify BPAC recommendation on class 3 e-bikes, e-boards, and e-scooters



May 17, 2022, Recap

- Many agencies allow e-bikes, so they don't miss out on grant opportunities
- Prohibiting e-bikes might cause issues with the Coastal Commission
- The technology is getting cheaper, lighter, and more attainable
- Many larger jurisdictions have enforcement issues, and some agencies just don't enforce
- Right now, the Coastal trail is the only safe way to commute on a bike





Summary Of Adjacent Jurisdictions

- **State Parks:** 15 MPH with 5 MPH passing (10 MPH in the campground)
- **SMC Parks:** 15 MPH and 5 MPH at trailheads (for 1/8 mile)
- **SMC Harbor District:** No speed limit at this time
- **CLT:** No speed limit at this time
- **MROSD:** 15 MPH with 5 MPH passing



Summary Of Adjacent Jurisdictions

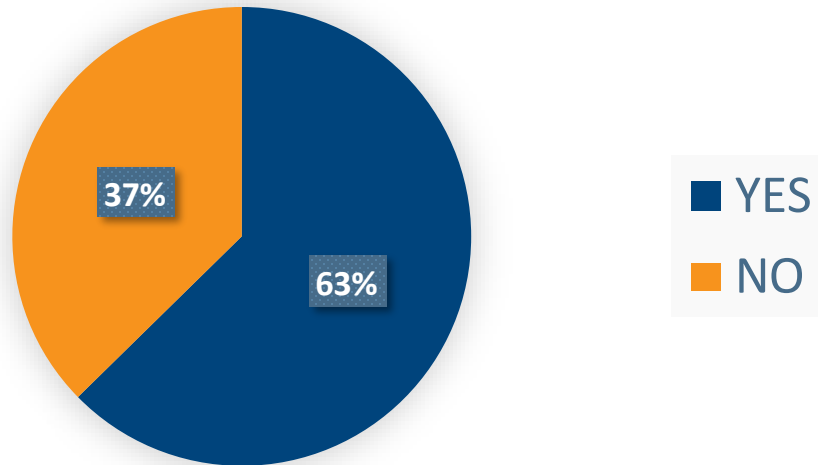
- **State Parks:** Class 1
- **SMC Parks:** Class 1-3 + e-boards and scooters
- **SMC Harbor District:** No ordinance at this time
- **CLT:** ADA purposes only
- **MROSD:** Class 1 and 2*



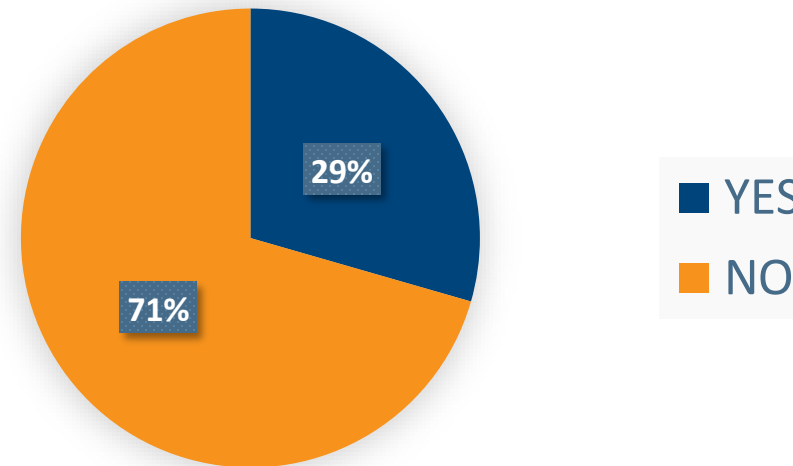
Summary From Public Survey

- August – Mid-September 2022 Duration
- Total of 241 Responses, approximately 12.1 hours of public comment

Are you a resident of the City of Half Moon Bay?

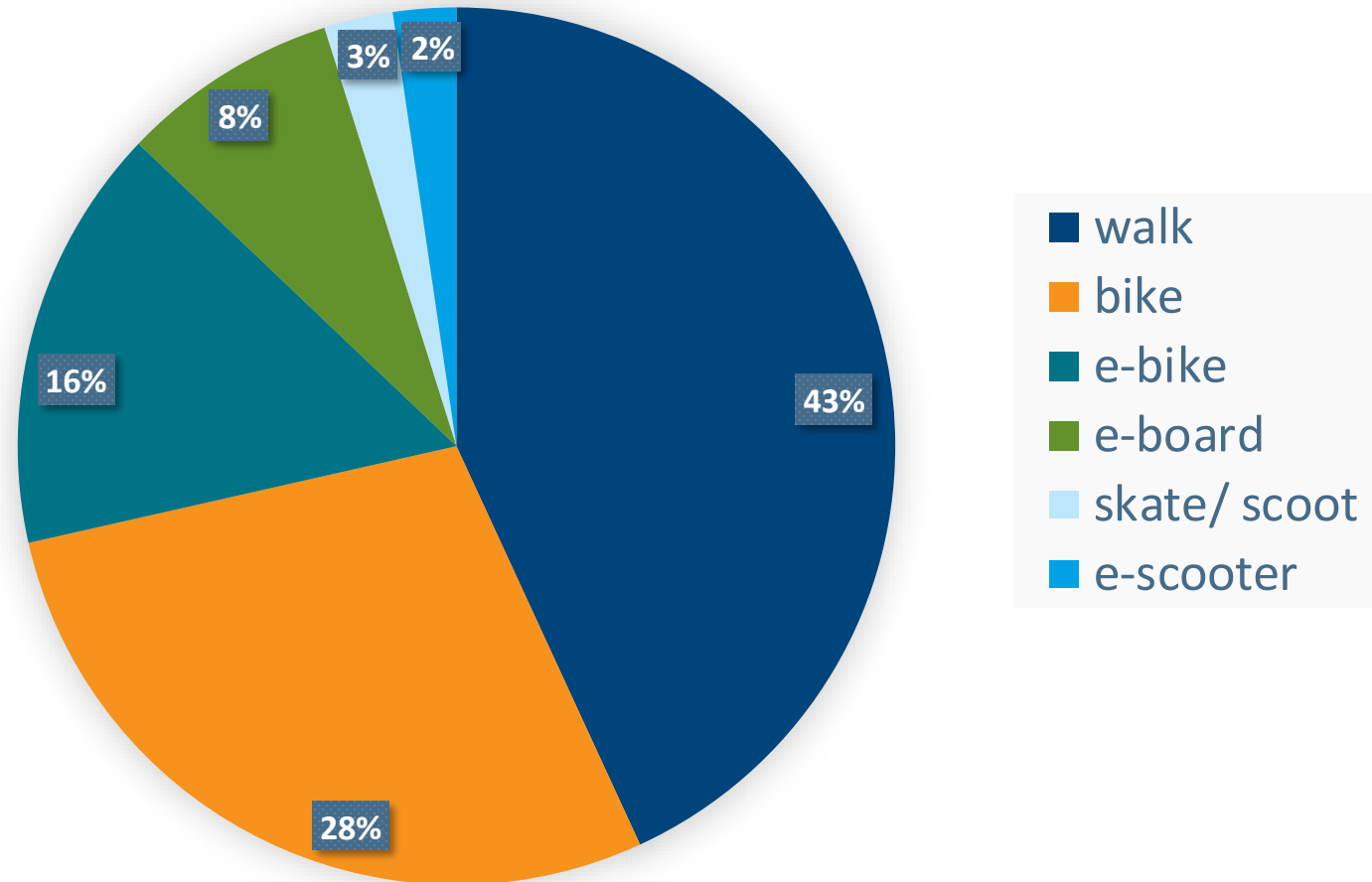


Do you work in Half Moon Bay?



Summary From Public Survey

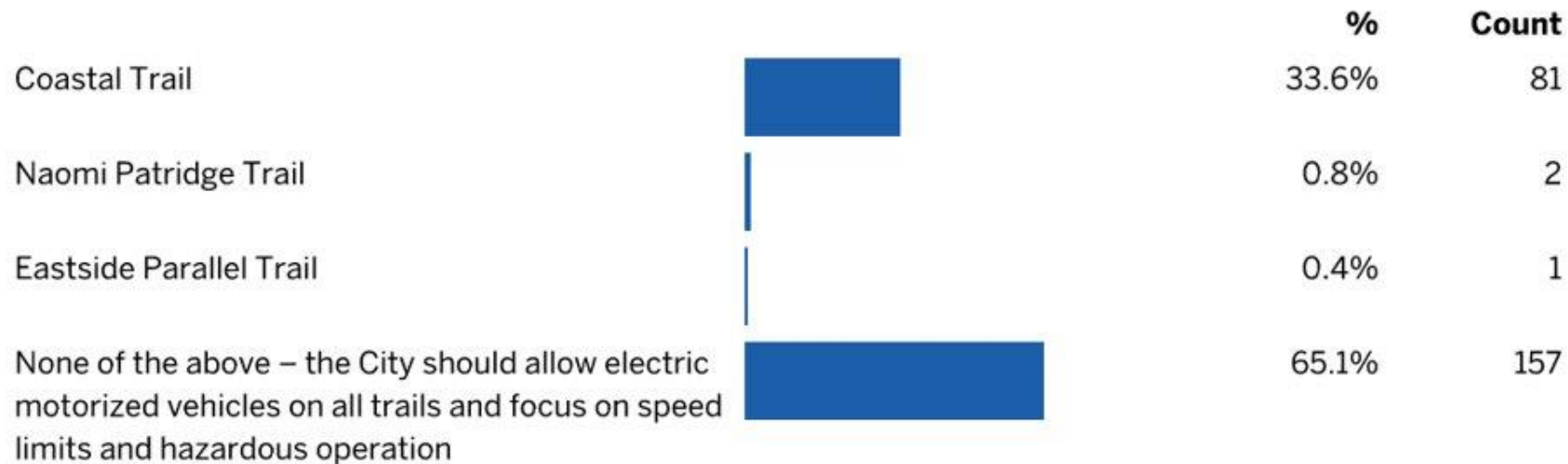
How people use HMB trails



Summary From Public Survey

Do you believe that the City should consider establishing prohibitions on electric motorized vehicles - including e-bikes? (select all that apply):

(Note: for this survey, "electric motorized vehicles" refers only to e-bikes, electric skateboards, electric mono-wheels, and electric scooters)



Summary From Public Survey

Would you support establishing a posted speed limit on the three trails mentioned above even if only periodic enforcement would occur?

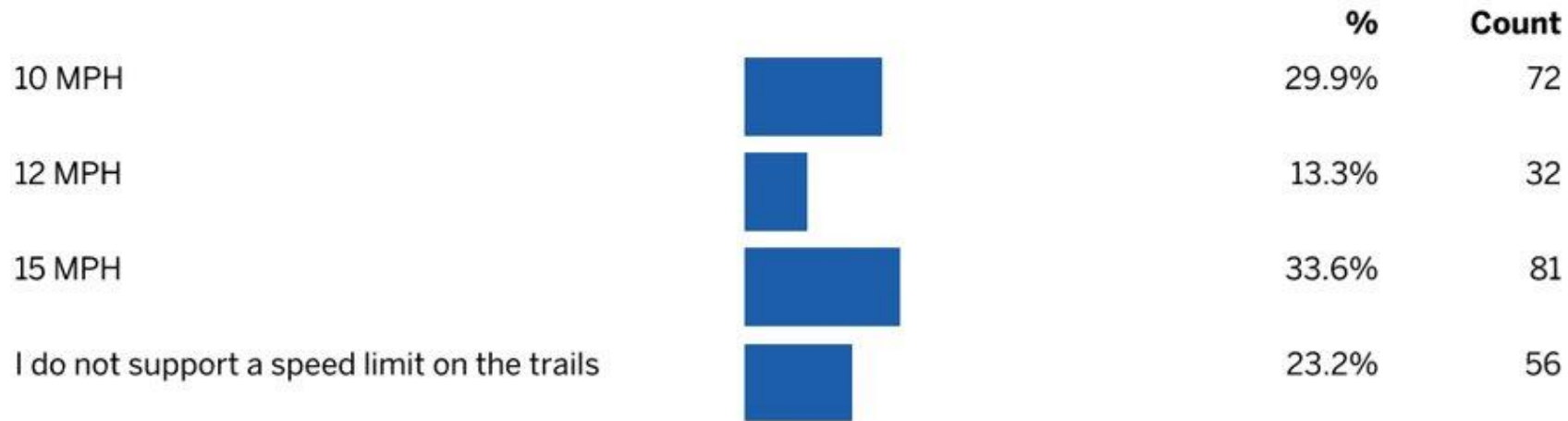


Do you feel that speed represents a safety factor on the trails mentioned above?



Summary From Public Survey

The City Council is considering posting a maximum speed limit for City paths and trails - what speed limit would you feel most comfortable with?



BPAC Recommendation

- Implement a speed limit of 15 MPH on all trails
- Allow class 1-3 e-bikes on all trails
- Allow e-boards and e-scooters on all trails
- Place “share the trail” signage along all trails



≈ 6 Feet from
top of sign to
ground



Staff Recommendation

Conduct a workshop and, by motion, direct staff to:

1. Draft an ordinance amending the Half Moon Bay Municipal Code to:
 - a. Establish a speed limit of 15 miles per hour with 5 miles per hour when passing on all Half Moon Bay trails.
 - b. Permit Class 1, 2, and 3 e-bikes as well as electric scooters and electric boards on all Half Moon Bay-owned multi-use paths and trails.
2. Create and place "share the trail" signage along Half Moon Bay's multi-use trails.





QUESTIONS?

Matt Nichols, Management Analyst
mnichols@hmbcity.com
650-750-2002

Matrix of e-bike policies in neighboring jurisdictions

City/ Agency	Specific Trail	Speed Limit(s)	Prohibitions (E-Bikes)	Prohibitions (Other)	Other Notable info
Half Moon Bay	Coastal Trail	None at present	Class 3	TBD	
	Hw1 1 Parallel Trails	None at present	Class 3	TBD	
San Mateo County Parks	Coastal Trail	15 MPH (5 at trailhead)	None at present	None at present	
	Hw1 1 Parallel Trails	15 MPH (5 at trailhead)	None at present	None at present	
Half Moon Bay State Park	Coastal Trail	15 MPH (10 campground)	Class 2 and class 3	e-Scooters and e-boards	
Princeton Harbor (Harbor District)	Coastal Trail	None at present	None at present	None at present	
Other Jurisdictions					
MROSD	Ravenswood Wooden and paved path	15 MPH (5 MPH passing)	Class 3	None	E-bikes will continue to be allowed in areas where bicycles are permitted as an other power-driven mobility device for visitors with a mobility disability under the Americans with Disabilities Act
	Rancho San Antonio engineered dirt/ paved	15 MPH (5 MPH passing)	Class 3	None	
Carlsbad	All paths and trails	None	None	None	No reckless behavior Provisions
Folsom	All paths and trails	15 MPR (Scooters only)	None	None	No reckless behavior Provisions
Marin County	Bayfront Park	10 MPH	No Class 3	None	N/A
	All paths and trails	15 MPH	No Class 3	None	N/A
Marin golden Gate nat'l Rec Area	All paths and trails	15 MPH (5 MPH passing)	None	None	No use of throttle anywhere in Rec Area
Monterey	Recreation Trail	None	None	No Scooters	No reckless behavior Provisions
Newport Beach	Scenic Trail	15 MPH	None	None	Traffic Engineer to add restrictions
	boardwalk	8 MPH	None	No Scooters	
Pacific Grove	Recreational Trail	12 MPH	No Class 3	No Scooters	N/A
San Clemente	Beach Trail	10 MPH	None	None	N/A
Santa Barbra	All paths and trails	None	No Class 3	None	N/A



Updated Survey of E-bike Policies of Public Land Management Agencies



Agency	Allow on Paved Trails	Allow on Unpaved Trails
California State Parks^	Yes	Yes
City of East Palo Alto*	Yes	Yes
City of Palo Alto*^	No	No
City of Menlo Park*	Yes	yes
City of San Jose	Yes	Some
East Bay Regional Parks District	Yes	No
Marin County Parks and Open Space^	Yes	No
Marin Municipal Water District^	No	No
San Mateo County Parks *	Yes	No
Santa Clara County Parks*	Yes	Yes
Santa Clara Valley OSA ^	Yes	Yes
Sonoma County Parks	Yes	Yes
CalFire - Soquel State Demonstration Forest	No	No
Bureau of Land Management (BLM) Department of Interior Cotoni-Coast Dairies (North Santa Cruz County coast)	Yes	Yes
Department of Interior - Don Edwards National Wildlife Refuge *	Yes	Yes
* These agencies manage lands with local and regional trail connections to District lands		



2 Feet

3 Feet



THE CITY OF
HALF MOON BAY
CALIFORNIA

Share the Trail

- Keep to the right, pass on the left
- Do not block the trail
- Announce yourself
- Look and listen for traffic



On
your
left!



Pets on leash
6 feet and under





HALF MOON BAY
Open from Sunrise to Sunset
Please Dispose of All Trash & Recycling
All Dogs Must be on a Leash
Please Clean up After Your Animal
No Smoking No Tents
Alcohol, Beverages Prohibited
No Open Containers
No Fire No Firearms No Firearms
No Camping
No Overnight Car Sleep - Safety on Your Own Risk



BIKE PATH
NO MOTOR VEHICLES OR MOTORIZED BICYCLES

NO STOPPING ANY TIME





Timeline

- **1983 Half Moon Bay adopts ordinance 10.48**
- **1999 California introduces SB 441**
- **2016 California introduces AB 1096, AB 604**
- **BPAC meets on 1/21/21 and 3/3/22 to discuss e-bikes**
- **5/17/22 City Council hosts e-bike study session, and requests staff gather more information**
- **Late 2022 staff conducts survey and researches other jurisdictions**
- **BPAC meets on 7/7/22 and 11/3/22 to review the survey and make an updated recommendation**



Summary Of Adjacent Jurisdictions

- **State parks:** class 1 e-bike only, was originally 1 and 2. 15 MPH on Coastal Trail with 5 MPH passing “Regardless of park unit classification, e-bikes may be allowed on paved (asphalt or concrete) bike trails used for local or regional commuting where such designation (e.g., classification of e-bikes allowed) is consistent with e-bike designations of adjoining trails operated by other agencies.”
- **SMC Parks:** class 1-3 e-bikes are allowed on Mirada Surf and the new section of the Eastside parallel trail from Coronado to Mirada Road. County is developing a new ordinance to allow other devices like mono wheel, scooter, skate boards.
- **CLT:** “CLT prohibits the use of motorized recreation on its properties, except to meet ADA (Americans with Disabilities Act) compliance. This prohibition includes, but is not limited to, motorized scooters, dirt bikes, ATVs, radio-controlled model vehicles and aircraft, and drones.”
- **Midpen:** “E-bikes are not allowed on most Midpen trails. Per our Other Power-Driven Mobility Devices Policy, e-bikes can be used by individuals with a mobility disability on trails where bicycles are allowed. Class 1 and Class 2 e-bikes are allowed on limited improved trails at Rancho San Antonio County Park & Open Space Preserve and Ravenswood Open Space Preserve. Please consult preserve maps for trail information..”



E-Bikes Classification

- E-bikes originally classified as motorized vehicles
- Advocates have sought (and succeeded in California) to re-classify e-bikes:
 - Class 1: “low-speed pedal assisted bicycle” w/ electric motor to aid while peddling up to 20 mph
 - Class 2: “low speed throttle-assisted bicycle” may propel w/o rider peddling up to 20 mph
 - Class 3: “speed pedal-assisted electric bicycle” w/ electric motor to aid while peddling up to 28 mph
 - Electric Mountain Bike (eMTB) are generally classified as Class 1 by manufacturers



Class 1



Class 2



Class 3



E-bike Design Trends



State Regulations (E-Bikes)

- In 2016 the State removed E-Bikes from the Motorized Vehicle classification under the CA Vehicle Code (CVC) and created a distinct new category of electric bikes
- State law revised to include Class 1, 2 and 3 system
- CVC section 21207.5 specifically:
 - **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.



State Regulations (E-Scooters)

- In 2016 the State also removed created a distinct new category of electric scooters in the California Vehicle Code (CVC)
 - Removed electric scooter as a “motorized vehicle”
- CVC Section 21230 states that a motorized scooter **may be operated** on a bicycle path or trail or bikeway, **unless** the local agency **prohibits** this operation by ordinance.

CVC does not classify Electric Personal Assistive Mobility Device (Segway) as an electric scooter. Staff is suggesting specific language on Segways



State Regulations (E-Boards)

CVC 21967.

Except as provided in Section 21968, a local authority **may adopt** rules and regulations by ordinance or resolution prohibiting or restricting persons from riding or propelling skateboards, or electrically motorized boards, on highways, sidewalks, or roadways.

CVC 21968.

(a) A motorized skateboard **shall not** be propelled on any sidewalk, roadway, or any other part of a highway or on any bikeway, bicycle path or trail, equestrian trail, or hiking or recreational trail.

(b) For purposes of this section, an electrically motorized board, as defined in Section 313.5, is not a motorized (gasoline) skateboard.

“CVC Section 313.5 An “electrically motorized board” is any wheeled device that has a floorboard designed to be stood upon when riding that is not greater than 60 inches deep and 18 inches wide, is designed to transport only one person, and has an electric propulsion system averaging less than 1,000 watts, the maximum speed of which, when powered solely by a propulsion system on a paved level surface, is no more than 20 miles per hour. The device may be designed to also be powered by human propulsion.”



Survey Sign Locations Along Trails

- Rousseau Francais/Hwy 1 – East Side of Hwy 1 – on the Eastside Parallel Trail
- North Main/Hwy 1 – West of Hwy 1 – on the Naomi Patridge Trail
- Kelly/Hwy 1 – West of Hwy 1 – on the Naomi Patridge Trail
- Kelly/Coastal Trail on HMB Jurisdiction
- Poplar/Hwy 1 – West of Hwy 1 – on the Naomi Patridge Trail
- Poplar/Coastal Trail





Accidents



- Midpeninsula Regional Open Space Preserves (2 years)
 - 46 bicycle accidents involving regular bikes
 - One e-bike related accident in Sierra Azul, in the last 2 years
- Santa Clara County Parks (2 years)
 - 138 bicycle accidents involving regular bikes
 - 2 bicycle accidents involving e-bikes





Conclusions



- # Public comment received from December of 2020 through January 31 of 2022 was 87% in support for Class I e-bikes use on District preserves.
- # Equestrian outreach resulted in a 70% opposition to e-bikes on District preserves.
- # The Science Advisory Panel (SAP) indicated *potential* impacts from e-bikes.
 - Only noise impacts were exclusive to e-bikes.
 - e-bikes have been found to produce sounds in high-frequency ranges audible to certain bat species and in lower-frequency ranges audible to birds (and other wildlife), both at frequencies that are outside of normal human hearing.
 - The findings also suggest the potential for increased recreational benefits via increased bicycle use in preserves, particularly for people with certain mobility challenges or who seek a less challenging means to travel through the preserve.
 - An increase in use may also increase impacts to natural resources and/or the experience of other user groups if the frequency of bike encounters and/or the interior distance travelled increases with the addition of e-bikes.





Conclusions



Assessing the potential for increased use

- Paved pilot observational data reported 5% of bikes were e-bikes and unpaved study observational data reported 10% of bikes were e-bikes.
- This can be used as an estimate of the maximum increase that e-bikes will have on visitation numbers given the current proportion of e-bike use.
- It is likely that the actual increase in use is much less since without that option they may visit on foot or on regular bicycle.
- The proportion of e-bike use compared to regular bike use may grow over time but if it does it will likely lower regular bike use.

