



Micromobility Devices Overview

**Active Transportation Advisory Committee Monday,
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Presented by:

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What is a Micromobility Device?

Micromobility encompasses a range of compact, energy-efficient vehicles that are either entirely or partially propelled by human power. These include bicycles, scooters, skateboards, roller skates, self-balancing vehicles and other wheeled devices.

Powered micromobility refers specifically to lower-speed, motorized devices. These devices are most commonly electric (e.g., e-bikes, and e-scooters)

Examples of Micromobility



Ever since the invention of the wheel...



Examples of Micromobility



Most common types:



Examples of Micromobility



Less common types:



Examples of Micromobility



Adaptive:



Examples of Micromobility



Powered:



Examples of Micromobility



Powered:



Where is Micromobility allowed to operate?



CVC Division 11. Rules of the Road, Articles 4-7

Vehicle Type	Operation on Roadway Facility	California Vehicle Code (CVC)	Local Prohibitions/Restrictions?
Bikes and E-Bikes (all classifications, including adaptive)	All Roadways and designated bike facilities (with or without bicycle infrastructure) Exception: Freeways	21200-21213	Yes-No operation on sidewalks in commercial areas (St. Helena, Napa) Prohibition on All sidewalks-(Calistoga)
E-Scooters	Roads 35 mph or less or Multiuse path (drivers license required for operation or roads)	21235 (motorized-age 16 or older with drivers license)	City of Napa-Prohibited on roadway (10.32.090) (e-scooters-see CVC) County of Napa –Vine Trail: Prohibited
Roller skates and Roller blades	On sidewalks unless prohibited by local ordinance	N/A	City of Napa-Prohibited on roadway(10.32.090)
Segways	Roads 35 mph or less or Multiuse paths-on sidewalks unless prohibited by local ordinance	21281.5	County of Napa-Vine Trail: Prohibited
Skateboards, scooters or similar devices	Roads 35 mph or less or Multiuse path-on sidewalks unless prohibited by local ordinance	21291 (motorized-age 16 or older with drivers license)	City of Napa-Prohibited on roadway(10.32.090)
Electric Personal Assistive Mobility Devices (EPAMD)	Roads 35 mph or less or Multiuse path	21280-21282	Segways and e-scooters prohibited on Vine Trail in County sections only

- Innovations in EMBs, combined with state policy goals to reduce greenhouse gas emissions and develop a more "multi-modal transportation network, led to proposed legislation to exempt EMBs from Section 21968 CVC.
- **Assembly Bill 604 defined the term "electrically motorized board"** and exempted EMBs from Section 21968(a) CVC.
- Assembly Bill 604 also enacted regulations for the safe operation of EMBs. The statutes went into effect January 1, 2016.
- Section 2129~ CVC, added by AB 604, requires the California Highway Patrol (CHP) to submit a report to the Legislature, on or before January 1, 2021, to assist in determining the effect the . use of EMBs has on traffic safety.



What is Shared Micromobility?

Shared Micromobility encompasses all shared-use fleets of small, fully or partially human-powered vehicles such as bikes, e-bikes, and e-scooters.



Station-based bike share
(including e-bikes)



Dockless bike share
(including e-bikes)



Scooter share

Source: NACTO

Section 21294(a) An electrically motorized board shall only operate upon a highway designated with a speed limit of 35 miles per hour or less, unless the electrically motorized board is operated entirely within a designated Class II or Class IV bikeway.**

- (b) A person shall not operate an electrically motorized board upon a highway, bikeway, or any other public bicycle path, sidewalk, or trail, at a speed in excess of 15 miles per hour.
- (c) Notwithstanding subdivision (b), a person shall not operate an electrically motorized board at a speed greater than is reasonable or prudent, having due regard for weather, visibility, pedestrian and vehicular traffic, and the surface and width of the highway, bikeway, public bicycle path, sidewalk, or trail, and in no event at a speed that endangers the safety of any person or property.
- *(Amended by Stats. 2016, Ch. 86, Sec. 302. (SB 1171) Effective January 1, 2017.)*

****A Class IV Bikeway (separated bikeway) is a bikeway for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic.**

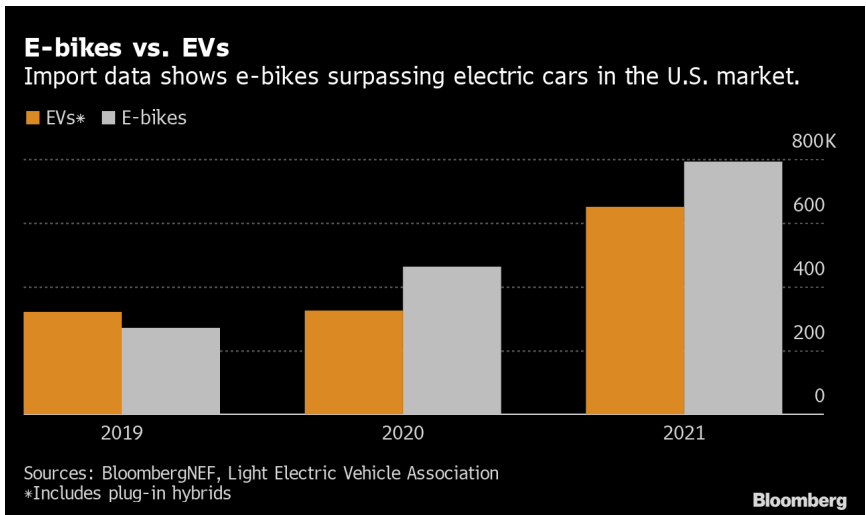
The Commissioner of the California Highway Patrol shall submit a report to the Legislature, on or before January 1, 2021, to assist in determining the effect that the use of electrically motorized boards has on traffic safety. The report shall include detailed statewide traffic collision data involving electrically motorized boards, including property damage only, injury, and fatal traffic collisions. The report shall be submitted in compliance with Section 9795 of the Government Code. Pursuant to Section 10231.5 of the Government Code, this section is repealed on January 1, 2025.

(Added by Stats. 2015, Ch. 777, Sec. 3. (AB 604) Effective January 1, 2016. Repealed as of January 1, 2025, by its own provisions.)

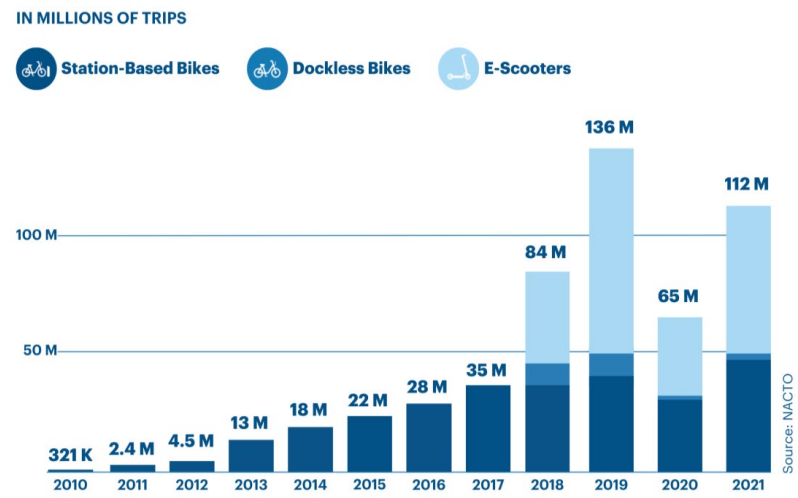
- **Why Allow Powered Micromobility Use?**
- Enable equitable and affordable transportation
- Reduce GHG emissions due to mode shift
- Expand the number and demographic of people who can travel by active transportation
- Improve health outcomes



- E-bike sales in the U.S. three-fold from 2019 to 2021
- E-bike sales electric vehicle (EV) sales in the U.S. in 2020 and 2021
- 112 million shared micromobility trips in 2021

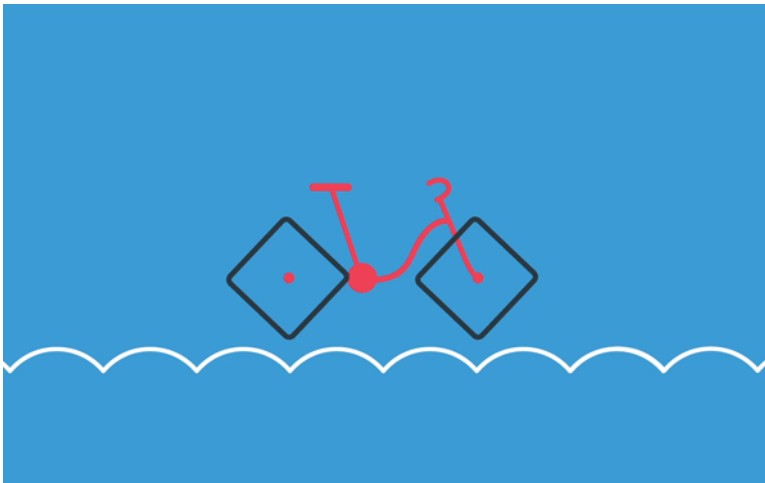


Shared Micromobility Ridership in the U.S. from 2010-2021



Since the introduction of the country's first bike share system in 2010, people in the U.S. have taken half a billion trips total on shared micromobility

Questions?





Thank you!

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