



November 7, 2019
TAC Agenda Item 7.5
Continued From: New

Action Requested: **INFORMATION**

NAPA VALLEY TRANSPORTATION AUTHORITY TAC Agenda Letter

TO: Technical Advisory Committee
FROM: Kate Miller, Executive Director
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SUBJECT: First Mile/Last Mile Connections to Transit-Pilot Discussion

RECOMMENDATION

Information only. TAC members are being asked to discuss interest in First Mile/Last Mile Connections to Transit.

EXECUTIVE SUMMARY

Municipalities across the nation are grappling with solutions to managing an influx of micromobility transportation devices in their communities. These devices are quickly becoming the preferred alternative transportation option for users to access transit hubs from home or work and to make short trips during the day. Micromobility devices, such as e-bike and e-scooter share, help extend walking trips, reduce congestion, reduce parking needs, and provide an environmentally friendly transportation solution for FMLM connections to transit.

Discussion topics for TAC:

1. Interest in shared micromobility pilot for FMLM connections to transit and system preference
 - a. Docked shared system
 - b. Dockless
2. Ordinance/Policy
 - a. Operating requirements
 - b. Education and safety
 - i. Helmets
 - ii. Devices speed/weight limits
3. Release Request for Interest to Micromobility companies?

FISCAL IMPACT

Is there a Fiscal Impact? No

BACKGROUND AND DISCUSSION

Many transit trips include making a connecting trip from home or work to a transit hub. These trips are known as First Mile/Last Mile (FMLM) connections to transit. The typically short distance of a FMLM trip is ideal for using shared “micromobility” devices, such as e-scooters and e-bikes as an alternative to driving. These devices can be part of a publicly accessible docked shared system (higher cost) with stations located throughout municipalities, or part of a more versatile dockless shared system (lower cost), allowing access through mobile device application technology to locate devices.

Many shared mobility devices are in use worldwide, either through private ownership or through public shared-use systems. There is growing support for use of these shared micromobility devices as a solution to FMLM connections to transit.

Most jurisdictions in Napa County have municipal codes that address the use of bicycles and skateboards, but not micromobility devices such as e-bikes, e-scooters, land-boards, e-unicycles etc. The California Vehicle Code has specific regulations for the operation of e-bikes (Attachment 1) and motorized scooters (Attachment 2) but does not specifically address shared micromobility systems or other small-motorized devices. The introduction of these devices as transportation alternatives in communities raises many questions about how to manage their use.

Some municipalities, such as Santa Monica are implementing pilot projects to test micromobility transportation options in their communities (Attachment 3). Pilot projects can help:

- Understand real-time conditions for operation
- Develop a new area of policy, regulation and enforcement through firsthand experience
- Move quickly to adapt to a rapidly changing industry, but leave room to learn and adjust as appropriate
- Explore partnership models with private companies
- Explore possibilities for data capture, structures and utilization
- Allow time to test management tools like shared mobility device drop zones

SUPPORTING DOCUMENTS

Attachment(s): (1) CA e-bike Regulation AB 1096
(2) CVC motorized scooters
(3) Santa Monica Pilot

AB 1096: Electric Bicycles (eBike)

This is the law that defines electric bicycles as those with fully operable pedals and an electric motor of less than 750 watts. It also creates three classes of electric bicycles based on their motor speed and level of electric assist. Electric bikes subsequently fell into classes 1, 2, and 3.

Important note: CA State AB1096 established a default framework – where a local jurisdiction (city, county, etc.) had not put any form of ordinance in place for electric bikes. A local jurisdiction (city, county, etc.) may enact an ordinance to allow or restrict electric bike usage for their area that may differ from the State default.

Class 1 eBike:

A **Class 1 eBike**, or low-speed pedal-assisted electric bicycles, is equipped with a motor that provides assistance only when the rider is pedaling and that stops providing assistance when the bicycle reaches 20 mph. These e-bikes are legal on any paved surface that a regular bike is allowed to operate.

Class 2 eBike:

Class 2 eBikes, or low-speed throttle-assisted electric bicycle, are equipped with motors that can exclusively propel the bicycle, but that cannot provide assistance when the bike reaches 20 mph. These e-bikes are legal on any paved surface that a regular bike is allowed to operate.

Class 3 eBike:

A **Class 3 eBike**, or speed pedal-assisted electric bicycle, is equipped with a motor that provides assistance only when the rider is pedaling and stops providing assistance when the bicycle reaches 28 mph. Operators of Class 3 e-bikes must be 16 or older and wear a helmet. Class 3 e-bikes are prohibited from Class I multi-use bike paths unless specifically authorized by a local ordinance.

Below is a simple visual infographic for determining what class eBikes falls into:

CALIFORNIA ELECTRIC BICYCLE POLICY											
VEHICLE TYPE		VEHICLE		USER			BIKEWAY ACCESS				
		PEDAL OPERATED	MAXIMUM MOTOR-ASSISTED SPEED (MPH)	MINIMUM AGE (YEARS)	DRIVER'S LICENSE	LICENSE PLATE	HELMET	CLASS I BIKE PATH	CLASS II BIKE LANE	CLASS III BIKE ROUTE	CLASS IV PROTECTED LANE
BICYCLE		YES	N/A	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 1 E-BIKE*		YES	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 2 E-BIKE*		NO	20	N/A	NO	NO	17 AND UNDER	YES	YES	YES	YES
TYPE 3 E-BIKE*		YES	28	16	NO	NO	YES	NO	YES	YES	YES
MOPED		NO	N/A	16	YES	YES	YES	NO	YES	YES	NO

*PENDING AB-1095





Motorized Scooter

A motorized scooter is a two-wheeled device that has handlebars, a floorboard designed to be stood upon when riding, and is powered by a motor.

The Vehicle Code (VC) does not require registration, license plates to be displayed or the scooter to be insured. Local authorities can regulate the registration for these scooters pursuant to VC §21225.

Even though insurance is not required, owners of these scooters should contact their insurance company to determine if coverage is available.

A motorized scooter may be operated on a bicycle path, trail or bikeway, but not on a sidewalk. An individual shall **not operate a motorized scooter**:

- Without wearing a properly fitted and fastened bicycle helmet, if they are under age 18.
- Unless it is equipped with a brake that will enable the operator to make a braked wheel skid on dry, level, clean pavement.
- Without a valid driver's license or instruction permit.
- With any passengers.
- While carrying any package, bundle, or article that prevents the operator from keeping at least one hand upon the handlebars.
- On the highway with the handlebars raised so that the operator must elevate his or her hands above the level of his or her shoulders in order to grasp the normal steering grip area.
- On a highway with a posted speed limit greater than 25 miles per hour (mph) unless it is within a Class II or IV bikeway. However, a local authority may adopt an ordinance or resolution authorizing operation of a motorized scooter on a highway with a posted speed limit of up to 35 mph.

A Class II bikeway provides a striped lane for one-way bike travel on a street or highway. A Class IV bikeway, often referred to as a cycle track or protected bike lane, is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature. The separation may include, but is not limited to, grade separation, flexible posts, inflexible barriers, or on-street parking. Separated bikeways can provide for one-way or two-way travel.

A motorized scooter may not be operated at a speed in excess of 15 mph on all highways, including bikeways, regardless of a higher speed limit applicable to the highway.

Vehicle Code (VC) §21226(d) prohibits alteration of the exhaust system of a motorized scooter.

Proposed Pilot Program Structure

- Total duration of 16 months, through December 2019
- Request for applications in July
- Select up to 3 partner operators
- Launch devices Sept 17
- Minimum Requirements (mandatory)
- Recommended System Elements
- Flexible Administrative Guidelines
- Fees identified for cost-recovery (no-subsidy)



Pilot Program Scope

- Eligible devices include e-bikes, e-scooters and other new devices (no combustion engines)
- Maximum 15mph and 70lbs
- Up to 2,250 total devices with a flexible scale:
 - o Launch: min. 250 - max. 500
 - o Adjustments under 500 max. at any time (up or down)
 - o Increases up to 750 with approval based on documented sustained ridership

Pilot Program Minimum Requirements

- 1. Ensure devices are safe for riding**
 - Durable brakes, head & tail lights
- 2. Educate users about riding safety & regulations**
 - Safety info on device & software; riding & parking rules provided at sign-up
- 3. Protect personal information**
 - Secure financial (PCI compliant)
- 4. Ensure devices do not pose a hazard or obstruct the PROW**
 - Clear ADA paths, entrances, driveways, bus stops, lanes; no operator distribution to Beach lots, Ocean Front Walk, Pier, Promenade or Palisades Park
- 5. Attend to operational issues promptly**
 - Devices maintained safe and clean and broken removed promptly; Customer service and ID number on device, 24-hour emergency contact
- 6. Share trip and device data**
 - Monthly data on fleet utilization; weekly ridership summary
- 7. Maintain valid insurance, permits & licenses**

Pilot Program Recommended Elements

1. **Ensure devices are safe for riding**
 - GPS-connected devices
2. **Educate users about riding safety & regulations**
 - Frequent rules & safety info on device & software; monthly education events; multi-lingual communications; low-income programs
3. **Protect personal information**
 - Encrypted customer protection, customer discretion on data sharing
4. **Ensure devices do not pose a hazard or obstruct the PROW**
 - Devices parked in appropriate PROW locations (parkway, furniture zone); incentives for correct parking; even device distribution and regular balancing; avoid unauthorized private property



Pilot Program Recommended Elements

During the program, work toward & evaluate operator related to: (con't)

4. Attend to operational issues promptly

- 7a-10p on-demand customer service available and device issues remedied in 2 hours; regular maintenance and cleaning; staffing of customer service, balancing and maintenance, max 5 min alarms

5. Share trip and device data

- Real-time data through API; 6-month customer surveys; geo-fencing

6. General Requirements

- Affordable user fees

Proposed Fees & Expenditures

- **Pilot Program Participation Fees – cost recovery**
 - \$20,000 per operator/year
 - \$130/device/year
- **Pilot Program Support – staffing**
 - Program coordinator: data, community comments, problem-solving, communications, and enforcement
 - Enforcement liaison: field tracking and documentation, citations, Police/PW collaboration and impounding, supporting oversight

