

**CITY OF BOULDER
TRANSPORTATION ADVISORY BOARD AGENDA ITEM**

MEETING DATE: October 12, 2020

INFORMATION ITEM:

Staff briefing and TAB feedback regarding Regulation of Human and Electric-Powered Devices on Streets, Paths and Sidewalks

STAFF:

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EXECUTIVE SUMMARY

The purpose of this memo is to examine where human and electric-powered mobility devices can be legally operated on sidewalks, streets, and multi-use paths. The micromobility devices under review include devices, such as e-scooters, e-skateboards, hoverboards, one-wheels, skateboards, bicycles, and rollerblades. The review of our current ordinances is necessary to reassess our current dismount zones on sidewalks ordinance and to also take proactive stance due of the proliferation of electric-powered mobility devices and the plan to introduce new devices to the city’s Shared Micromobility Program.

Based on research, internal coordination and input from the community engagement process, staff is exploring several potential changes to ordinances including allowing electric-powered devices to be operated on multi-use paths and on sidewalks, except in dismount zones, and allowing skateboards, rollerblades, and electric-powered devices to be used in the street.

Staff is seeking TAB’s input on the facility types where specific devices, both privately-owned and shared, should be allowed to legally operate.

BACKGROUND

Smaller-scale, personal micromobility devices, such as e-bikes and e-scooters, can help reduce single-occupant vehicle trips, provide more travel choices, and fill in gaps in our transportation network – all goals of Boulder’s Transportation Master Plan. But their increased use also means more devices sharing the same space.

To reflect the growing use of micromobility devices and create safe, shared spaces for all users, the city is reviewing its ordinances where human-powered and electric-powered devices can be

legally ridden in Boulder, looking at three areas in particular: sidewalks, multi-use paths and streets.

Sidewalks

Currently, dismount zones for human-powered devices, such as bikes and e-bikes, are based on land use zoning. However, the city is proposing to designate dismount zones based on the boundaries of the city’s general improvement districts, which correlate to the downtown, University Hill, and Boulder Junction areas. This modification would make it legal to ride human-powered devices on more sidewalks throughout Boulder, while maintaining the dismount zones in high pedestrian volume areas. Here is a link to the [current dismount zone map](#) and **Attachment A** provides an updated proposed dismount zone map.

Currently, electric-powered devices, such as e-scooters, e-skateboards, and one-wheels, are not allowed on sidewalks. The city is also exploring allowing their use on sidewalks inside the boundaries of the general improvement districts, except for high pedestrian volume areas.

Sidewalks				
	Human-Powered		Electric-Powered	
	Bicycles and Electric Assist Bicycles (“E-bikes”)	Skateboards and Rollerblades	E-scooters	One-Wheels, Hoverboards, etc.
Current Regulations	Allowed* <i>*Except in dismount zones defined by adjacent land use zoning</i>		Not Allowed	
Staff is Exploring	Allowed* <i>*Except in dismount zones defined by General Improvement District (GID) boundaries</i>			

Multi-Use Paths

Currently, only human-powered devices (bikes, e-bikes, skateboards) are allowed on multi-use paths. Staff is exploring also allowing the use of lightweight electric-powered devices such as e-scooters, e-skateboards, and one-wheels on multi-use paths.

Multi-Use Paths				
	Human-Powered		Electric-Powered	
	Bicycles and Electric Assist Bicycles (“E-bikes”)	Skateboards and Rollerblades	E-scooters	One-Wheels, Hoverboards, etc.
Current Regulations	Allowed		Not Allowed	
Staff is Exploring	Allowed			

Streets/Bike Lanes

Currently, both human-powered and electric-powered skateboards and rollerblades are not allowed to be used on streets. The city is exploring allowing their use on residential streets and only in the bike lane on non-residential streets.

E-scooters are currently allowed via state regulation to operate on residential streets and only in the bike lane on other streets. Staff is exploring whether to allow other electric-powered devices, such as e-skateboards, one-wheels, and e-unicycles to operate in a similar manner.

The following table provides a summary of local ordinances as it pertains to human and electric powered devices.

Streets/Bike Lanes				
	Human-Powered		Electric-Powered	
	Bicycles and Electric Assist Bicycles ("E-bikes")	Skateboards and Rollerblades	E-scooters	One-Wheels, Hoverboards, etc.
Current Regulations	Allowed	Not Allowed	Allowed	Not Allowed
Staff is Exploring	Allowed			

ANALYSIS

Staff has been coordinating internally with other city work groups within the Transportation and Mobility Department and the Boulder Police Department to identify several considerations regarding use of different human and electric powered devices on different types of facilities.

Revised Dismount Zone for Human-Powered Devices

The city is supportive of revising the current dismount zones for human powered devices on sidewalks. Staff recognizes that there are many areas of the city where cycling and skateboarding is prohibited on the sidewalk, and in some locations, bike facilities may not exist. Sometimes, bike lanes on arterial streets can produce a high level of traffic stress for people riding and they may choose to ride on the sidewalks because they feel safer. The revised dismount zones will expand the sidewalk locations in the city where bicycling will be allowed. It will also be easier for community members to discern where cycling is allowed and more feasible for staff to appropriately sign and mark, as well as educate users on the limits of the dismount zones.

It is important to note, that crashes involving turning vehicles and pedestrians and cyclists on sidewalks and multi-use paths adjacent to roadways continues to occur throughout Boulder on a sporadic basis. Crash data does identify locations where crashes between cyclists and pedestrians have occurred and staff is working to mitigate those crashes.

As part of this dismount zone revision, Boulder Police Department has requested that staff perform a proactive review of intersection locations that have certain characteristics to determine the potentiality for future crashes. Once identified and evaluated, staff would apply the appropriate mitigation tactics to proactively prevent future crashes, where feasible.

The Use of Electric-Powered Devices on Sidewalks Outside the Revised Dismount Zone

For the same reason people choose to ride bikes on sidewalks, people may also choose to ride their electric-powered devices on sidewalks. The primary concern about sharing sidewalks with these devices is speed. Many of these devices can travel at up to 20 MPH and have the potential to cause severe injury crashes with other sidewalk users. These electric-powered devices can also travel quickly through intersections along sidewalks or multi-use paths and encounter a turning vehicle whose driver may not be able to react in time. Current ordinances require cyclists to slow down to 8 MPH when crossing in crosswalks and to activate pedestrian crossing signals when present. If the use of electric-powered devices is allowed on sidewalks outside the dismount zones, these ordinances should be modified to also address these devices.

The Use of Electric-Powered Devices on Multi-Use Paths

Staff recognizes that many people travel the multi-use path system on these devices today. The Boulder Police Department believes that multi-use paths are the most appropriate facility for these types of devices. The devices vary in braking and lighting equipment, but generally provide a method for regulating their speed. Staff does have concerns regarding the interaction with other multi-use paths and if they are allowed on multi-use paths, an ordinance should address their proper use, e.g., speed limit of 15mph, riding at night with lights, using audible signals when passing, and yielding to pedestrians and slower moving traffic.

The Use of Human-Powered Devices on Residential Streets (local roadways) and Streets with Bike Lanes (Skateboards, Kick-scooters, and Rollerblades)

Typically, these human powered devices do not have adequate breaks or lights. When in the street, they can travel fast and sporadically. Skateboards for example require the user to carve back and forth within the entire street width to regulate their speed. There are also concerns regarding unpredictability and visibility by drivers of motor vehicles. If allowed on streets, the ordinance should govern their safe and proper use to not cause crashes to occur. An example of this would be to ride at night with lights, to stay in one travel lane or within the bike lane and follow the rules of the road (similar to bikes).

The Use of Electric-Powered Devices on Residential Streets (local roadways) and Streets with Bike Lanes (E-Scooters, One-Wheels, E-Unicycles)

Per the state statute, e-scooters are currently allowed to be ridden in the street. Other devices classified as “lightweight electric-powered devices” are currently defined as “toy vehicles” per state statute. If these devices are allowed on residential streets or streets with bike lanes, the ordinance should govern their proper use similar to human powered devices on streets.

COMMUNITY ENGAGEMENT

Be Heard Boulder – Staff is primarily utilizing the Be Heard Boulder platform to garner public input. Staff is asking questionnaire respondents what their top concerns are for the use of the different types of human and electric powered devices on sidewalks, paths, and streets. Each question includes a set of multiple-choice responses, plus the option to include an open-ended response. [Here is a link](#) to the questionnaire. Staff will bring the preliminary results of the questionnaire to TAB at the October 12 meeting.

Parks and Recreation Advisory Board (PRAB) – Earlier this year, staff checked in with Parks and Recreation Advisory Board (PRAB) regarding the use of electric powered devices, primarily e-scooters. The safety of users, pedestrians, and people with disabilities, particularly when devices are being ridden on sidewalks, multi-use paths and within parks are of concern. Many people, including senior citizens already feel intimidated and concerned when walking sections of the multi-use path network. From a shared mobility standpoint, they are concerned that vehicles parked (when not in use) along the multi-use paths and in city parks will have an impact on maintenance operations, such as sweeping and snow removal.

NEXT STEPS

On October 27, staff will visit with council as part of a study session to discuss the regulation of human and electric powered vehicles on streets, multi-use paths and sidewalks.

The result of this study session will likely require a final return to city council in December regarding potential ordinance(s) changes governing the operation of these vehicles.

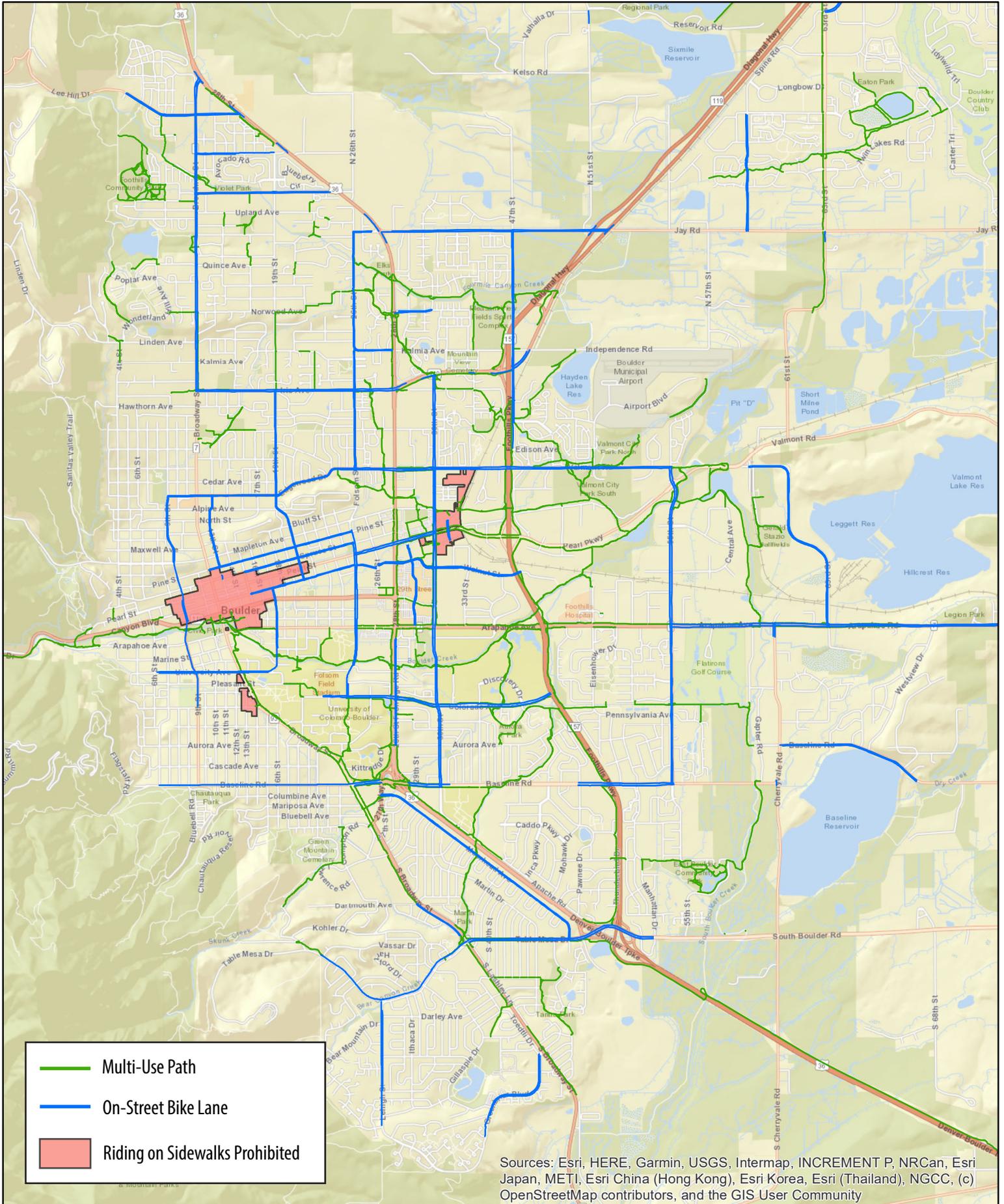
TAB INPUT

- 1) What are your questions and concerns regarding expanding the use of human-powered devices (e.g., bikes, e-bikes, and skateboards) on sidewalks?
- 2) What are your questions and concerns regarding the use of electric-powered devices on multi-use paths?
- 3) What are your questions and concerns regarding the use of human-powered skateboards and electric-powered devices on residential streets in the bike lane other streets?

ATTACHMENTS

A: New Proposed Dismount Zone Map

Boulder Revised Code 7-5-10 Driving Bicycle/Skateboard on Sidewalk Prohibited



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community