

CITY OF BOULDER CITY COUNCIL AGENDA ITEM

MEETING DATE: May 4, 2023

AGENDA TITLE

First reading and consideration of motion to order published by title only the following ordinances that would amend the Boulder Revised Code (BRC) to allow e-biking on open space trails.

Staff recommended ordinance:

1. Introduction, first reading and consideration of a motion to order published by title only, Ordinance 8575 to Allow Electric Assisted Bicycles on Certain Recreational Paths or Trails on Open Space Land by Amending Definitions in Sections 1-2-1 and 7-1-1; Repealing Section 7-5-25, "No Electric Assisted Bicycles on Open Space;" Amending Section 8-3-6, "Vehicle Regulation"; and adding a new Section 8-8-12, "Electric Assisted Bicycles on Open Space," B.R.C. 1981; and setting forth related details.

OR

OSBT recommended ordinance:

2. Introduction, first reading and consideration of a motion to order published by title only, Ordinance 8576 to Allow Electric Assisted Bicycles on Certain Recreational Paths or Trails on Open Space Land by Amending Definitions in Sections 1-2-1 and 7-1-1; Amending Sections 7-5-25, "No Electric Assisted Bicycles on Open Space," and 8-3-6, Vehicle Regulation," B.R.C. 1981; and setting forth related details.

PRESENTERS

Nuria Rivera-Vandermyde, City Manager Teresa Tate, City Attorney Sandra Llanes, Deputy City Attorney Erin Poe, Deputy City Attorney Janet Michels, Senior Counsel Dan Burke, Director, Open Space and Mountain Parks Kacey French, Planning and Design Senior Manager Marni Ratzel, Principal Planner

EXECUTIVE SUMMARY

The purpose of this item is for City Council to consider an ordinance that would amend the Boulder Revised Code (BRC) to allow e-biking on open space trails. Currently, e-bikes are prohibited on all OSMP-managed trails. Disposal of open space is required to allow e-biking on Open Space and Mountain Parks (OSMP) managed trails.

The staff recommendation is to amend the BRC to allow e-biking on open space trails through Ordinance 8575 and for council to make a legislative finding that e-biking is a passive recreational use of open space land. It would allow class 1 and class 2 e-bikes on trails, as designated and signed by OSMP per Charter Section 171, "Functions of the Department." Ordinance 8575 is provided as **Attachment A.** The staff preferred alternative to implement this policy would include approximately 34 miles of city open space trails, which is about 22% of the 154 miles of the OSMP trail network, as depicted in <u>Alternative B</u> and provided in **Attachment C**.

Staff also prepared an alternative ordinance option in support of motions approved by the Open Space Board of Trustees (OSBT). Ordinance 8576 would not allow e-bikes except to enable connectivity and contiguity where a multijurisdictional regional trail requires access to a segment of city open space trail, and special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals. Ordinance 8576 is provided as **Attachment B.** At cursory glance, staff thinks this approach may include approximately 4.5 miles of city open space trails, which is about 3% of the 154 miles of the OSMP trail network, as estimated and shown in the map provided in **Attachment C**. However, staff would need to conduct additional analysis to confirm which trails meet the intent of the board recommended approach.

In spring 2022, OSMP began an evaluation to consider e-biking on city open space trails. An <u>April 6, 2023 City Council Information Item memo</u> provided background information on the evaluation of e-biking on open space.

Staff identified three alternatives to consider where the department would manage e-biking if the current condition/status quo of no e-bikes on open space were to be changed.

Alternative A All trails that allow biking
Alternative B Plains trails located east of **B**roadway that allow biking, and the Boulder Canyon Trail
Alternative C Inter-Connected multi-use trails that allow biking

Community input gathered during an engagement window over summer 2022 indicates there is majority support for e-biking on some city open space trails. There also is support for the staff preferred alternative of managing e-bikes on plains trails and the Boulder Canyon Trail identified in Alternative B.

Primary objectives to allowing e-biking on open space trails are to improve access for community members of more ages and abilities to enjoy open space trails, provide consistent visitor experiences across interconnected trails where e-bike regulations currently differ, provide more adaptive management approaches by considering alternatives to disposal of open space-managed lands, and support broader city climate goals by reducing the number of vehicle miles traveled to reach local trails, which would in turn help to preserve the ecosystems and habitats that make up city open space land.

The OSBT considered several motions on February 8, 2023. Each resulted in a split vote. The motion that passed did not support the staff recommendation as presented. Instead, it recommended that council make a finding that operation of an e-bike is not a passive recreational use of open space land, but that e-biking would be allowed only on open space trails to enable connectivity and contiguity where a multijurisdictional regional trail requires access to a segment of OSMP-managed trail, and trail characteristics are appropriate for e-biking activity. Other jurisdictions and city departments that manage trails that connect with OSMP-managed trails include Boulder County Parks and Open Space (BCPOS), US Fish and Wildlife Service / Rocky Flats National Wildlife Refuge, and the City of Boulder Transportation and Mobility Department. These other jurisdictions and departments all allow e-bikes on their managed trails.

STAFF RECOMMENDATION

Suggested Motion Language:

Staff requests council consideration of this matter and action in the form of the following motion:

Introduction, first reading and consideration of a motion to order published by title only, Ordinance 8575 to Allow Electric Assisted Bicycles on Certain Recreational Paths or Trails on Open Space Land by Amending Definitions in Sections 1-2-1 and 7-1-1; Repealing Section 7-5-25, "No Electric Assisted Bicycles on Open Space;" Amending Section 8-3-6, "Vehicle Regulation"; and adding a new Section 8-8-12, "Electric Assisted Bicycles on Open Space," B.R.C. 1981; and setting forth related details.

OSMP also welcomes City Council input on the staff preferred alternative to designate and manage e-biking on trails identified in Alterative B - plains trails located east of Broadway that allow biking, and the Boulder Canyon Trail. Alternative B includes approximately 34 miles of city open space trails, which is about 22% of the 154 miles of the OSMP trail network.

BACKGROUND

An <u>April 6, 2023 City Council Information Item memo</u> provided background information on the evaluation of e-biking on open space. Additionally, OSMP provided updates to the OSBT at key milestones during the evaluation of e-biking. The following materials are available for reference.

- The May 2022 OSBT e-bike memo presented a written information item to inform the OSBT about the assessment and planning process.
- A <u>presentation</u> given at the July 2022 OSBT meeting that shared the staff analysis of e-biking alternatives under consideration and that the community engagement window was underway to gather public feedback.
- The Nov. 2022 OSBT meeting memo and Dec. 2022 OSBT meeting memo provide background information, including the community input results and the staff analysis used to develop the staff recommendation and additional information requested by the OSBT.
- The <u>Feb. 2023 OSBT meeting memo</u> provides additional information requested by the OSBT.

E-biking is an activity where participants are propelled by human power and low-powered electric-assist power. In 2017, amendments to state law changed the definition of e-bikes to no longer classify them as motor vehicles. (CRS § 42-1-102(58)). State law (CRS § 42-4-1412) allows class 1 and class 2 e-bike use on all multi-use paths and trails unless not allowed by local regulation.

The state law change did not impact the city's regulations because the city went through a designation process in 2013 to allow e-bikes on certain hard-surface multi-use paths and prohibit them on city open space lands by local ordinance. However, it prompted neighboring land management agencies and partners who had not gone through a process to conduct e-biking evaluations, which resulted in local regulation changes in those jurisdictions allowing e-bikes on their neighboring open space trails. Some of those trails connect with or are segments of trails on city open space land.

As a result, OSMP rangers have observed increased e-bike use on city open space trails that connect with Boulder County Parks & Open Space (BCPOS) and city greenway trails. Rangers also acknowledge that e-bikes are becoming harder to detect as they are designed to function more like a recreational mountain bike, which raises enforcement complications. Community inquiries requesting a review of e-bike use on open space land also increased since agency partners approved e-bike use on their land. Many of the community inquiries are more generally related to the increasing popularity of e-biking

for recreational purposes by an aging population of visitors interested in continued access to open space trails.

Peer Agencies that allow e-bikes on open space		
COB – Transportation/Greenways		
Boulder County – Plains trails	√	
Colorado Parks & Wildlife	√	
US Fish & Wildlife Service ¹	√	
Jefferson County, ²	√	
Other Boulder County municipalities ³	√	
City & County of Broomfield	V	
City & County of Denver	√	

¹ Class 2 only on RFNWR roads, ² Class 2 only on paved trails.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- **Economic** Bicyclists tend to shop local and invest in the local economy. A local survey estimates the direct economic benefit of the bicycling industry in Boulder to be \$52 million. The OSMP program provides the physical context for diverse and vibrant economic systems. The land system and quality of life it represents attract visitors and help businesses to recruit and retain quality employees.
- Environmental Given that e-bikes are very similar to analog bikes in terms of noise, trail impact, and speed, it is anticipated that their impact on wildlife and habitats would be like other non-motorized bicycles. Bikers and e-bikers generally stay on trail, which tends to minimize possible negative effects on natural resources. Most research suggests that e-bikes won't have greater negative impacts on trails or wildlife than analog bikes. Allowing e-bikes on select OSMP trails could increase the percent of visitors who arrive to open space trails by bike. Allowing e-biking on open space trails may shift trips away from single occupant vehicles, which may contribute to a reduction in greenhouse gas emissions typically caused by motor vehicles.
- Social OSMP regulations that don't allow e-biking are a potential barrier for Boulder's aging population who may not identify their physical limitations as a disability or are uncomfortable using an e-bike where regulations otherwise prohibit their use. Allowing e-bikes on select OSMP trails could improve access for more ages and physical abilities. OSMP does not anticipate a significant increase in visitation or that a change in visitor displacement would result from allowing e-biking on select OSMP trails.

OTHER IMPACTS

• **Fiscal** – The budget impacts associated with allowing e-biking as a passive recreational activity are supported by and within the existing OSMP funding in the

³ Follows the state model traffic code

- city's budget. Implementation costs are limited to minor infrastructure improvements such as updating regulatory and educational signs.
- Staff time No impacts to staffing or additional resources are needed as a result of allowing e-biking on select OSMP trails. OSMP has integrated the staff time into annual work planning.

BOARD FEEDBACK

On Feb. 8, 2023, the OSBT made a recommendation to the City Council regarding e-bikes on city-managed OSMP trails. While several motions were considered, the OSBT did not pass a motion in support of the staff recommendation of including e-biking as a passive recreational use of open space lands and allowing e-bikes on all the plains trails and Boulder Canyon Trail where bikes are currently permitted. Instead, the board passed a motion not in support of e-biking as a passive recreational use of open space lands and to not allow e-bikes except to enable connectivity and contiguity where a multijurisdictional regional trail requires access to a segment of OSMP-managed trail, and special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals.

A total of five motions were considered, each resulting in a split vote. The first two motions introduced failed 2 to 3 while the last three passed 3 to 2. The Feb. 8 OSBT meeting minutes, provided as Attachment D, document each motion with an outcome of the vote, and a brief explanation of the reasons by those who supported and dissented on the motion, where applicable. These explanations were recorded in response to an expressed desire by board members to provide City Council with a summary of their positions on each motion. The motions considered and as approved in the Feb. 8 meeting minutes are as follows:

- 1. Jon Carroll moved the Open Space Board of Trustees to recommend the Boulder City Council to allow class 1 and class 2 e-biking as a passive recreational activity permissible on open space on trails where designated by the City Manager.
 - Michelle Estrella seconded. This motion did not pass; Caroline Miller, Dave Kuntz and Karen Hollweg dissented. (2:22:00)
- 2. Michelle Estrella moved the Open Space Board of Trustees to recommend that the OSMP Department proceed with the staff preferred alternative to implement this policy by designating and managing the trails in Alternative B plains trails located east of Broadway that allow biking, and the Boulder Canyon Trail for e-biking with the addition of Chapman Drive Trail and Foothills South Trail.
 - Jon Carroll seconded. This motion did not pass; Caroline Miller, Dave Kuntz and Karen Hollweg dissented. (2:38:00)
- 3. Dave Kuntz moved the Open Space Board of Trustees to recommend to City Council that language in the current code B.R.C. 7-5-25, titled No Electric Assisted Bicycles

on Open Space – 'no person shall activate the motor of an electric assisted bicycle on any recreational path or trail on open space land as defined in the City Charter Section 170 except where the path or trail has been transferred to a city department pursuant to Charter Section 177, "Disposal of Open Space Land" or section 8-8-11 "Transfer of Open Space Lands," B.R.C. 1981. Ordinance Nos. 7941 (2013); 7965 (2014); 8007 (2014); 8447 (2021) – be repealed and removed from all applicable city ordinances".

Karen Hollweg seconded. Passed three to two. Jon Carroll and Michelle Estrella dissented. (3:18:00)

4. Dave Kuntz moved the Open Space Board of Trustees to recommend that the following language be inserted into B.R.C. 7-5-25, titled 'No Electric Assisted Bicycles on Open Space": Electric assisted bicycles are prohibited on open space lands as defined in City Charter section 170. Operation of an electric assisted bicycle is not defined as a passive recreational use in Article 12, Sec. 176 (c) of the City Charter.

Caroline Miller seconded. This motion passed three to two; Jon Carroll and Michelle Estrella dissented. (3:27:00)

- 5. Dave Kuntz moved the Open Space Board of Trustees to recommend to City Council revised language for section 8-3-6. of the BRC Vehicle Regulation:
 - a. No person, other than persons authorized by the city manager, shall:
 - (7) operate an electric assisted bicycle or other mechanized power assisted vehicle on any Open Space lands as defined in City Charter section 170, except where a multijurisdictional regional trail requiring access to a segment of open space trail to enable connectivity and contiguity and where special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals.

Caroline Miller seconded. This motion passed three to two; Jon Carroll and Michelle Estrella dissented. (4:42:00)

The motions and the discussions that ensued indicated that some trustees think the City Charter would need to be amended to allow e-biking as a passive recreational use. Other trustees recognized that passive recreation is not defined in the charter and support the staff recommendation to allow e-bikes as passive recreational use. More information on the charter, passive recreation, and approach for allowing e-biking is detailed below in the Analysis section of the memo.

An alternative ordinance that supports the Board recommendation is provided as **Attachment B.**

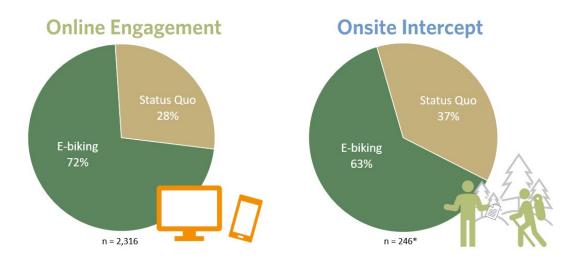
An OSBT representative(s) will attend the June 1 public hearing scheduled as part of second reading to be available if council wishes to hear from OSBT on their supporting and dissenting opinions.

PUBLIC FEEDBACK

During summer 2022, OSMP gathered community input on whether and where to allow e-biking on open space trails. A Be Heard Boulder online engagement questionnaire provided community members with an open participation opportunity to give feedback. Over 2,330 responses to the online engagement questionnaire were submitted, making it the most popular online engagement questionnaire to date on the city's preferred platform for community engagement.

Additionally, OSMP staff conducted an onsite intercept survey at a subset of open space trails to gather a representative sample of current OSMP visitor attitudes, preferences, and concerns regarding allowing e-bikes on open space. A total of 431 visitors completed an on-site intercept survey at OSMP locations.

The public input indicates there is majority support for allowing e-biking on some open space trails.



About the Data: Distinctions and Results of the Online and Onsite Community Input An objective of both the online engagement questionnaire and onsite intercept survey was to gather opinions and preferences regarding allowing e-biking on open space trails. The two survey instruments and their modes of administration (online and onsite) were designed to support complimentary, though not identical, datasets to help understand community sentiment toward e-bikes. Distinctions between the two survey tools and the results gathered from each are provided in **Attachment E.**

Community Input Conclusions

- There is support for allowing e-biking on some open space trails by a majority of respondents from both the online engagement questionnaire (72%) and onsite intercept survey (63%).
- For the online engagement questionnaire, of the 72% who supported an e-bike alternative, 44% indicated support for the staff preferred Alternative B, 22% supported Alternative A and just 7% selected Alternative C.
- For the onsite intercept survey, when asked which management alternative the 63% in support of e-biking preferred, a slight majority of 26% indicated a preference for Alternative A. An additional 18% preferred Alternative B and 20% selected Alternative C for where to allow e-bikes on open space trails.
- E-bike speed and concern for user conflict among activities emerged as themes across both surveys to consider in developing an approach for managing trails for e-biking use if it is allowed.
- For the onsite survey, potential negative impacts to trail conditions emerged as the second issue of highest concern, after speed.

Attachment F provides a summary of <u>Community Input Comparison and Key Findings</u>. The <u>Compendium of Community Comments</u> has been updated to include e-mails received through April 1, 2023. It will continue to be updated monthly.

ANALYSIS

Staff recommended policy approach

The recommended steps related to changing the policy to allow e-biking on open space land include:

- 1. A legislative finding that e-biking is a passive recreational use of open space land,
- 2. Repealing ordinance 7-5-25, "No Electric Assisted Bicycles on Open Space",
- 3. Amending Section 8-3-6, "Vehicle Regulation",
- 4. Adding Section 8-8-12 to allow class 1 and 2 e-bikes on open space trails, and
- 5. Implementing e-bike policy as delegated by Charter section 171.
- 1. <u>Legislative Finding that e-biking is a passive recreational use of open space land:</u> The approach recommended by staff is for City Council to make a legislative finding that e-biking is a passive recreational use of open space land, and therefore an open space purpose as defined in the City Charter section <u>176</u>. This policy change would allow e-biking on certain designated open space trails without requiring disposal pf OSMP-managed lands pursuant to Charter section <u>177</u>, "Disposal of Open Space Land" or section <u>8-8-11</u>, "Transfer of Open Space Lands," B.R.C. 1981.

Charter section <u>176</u> states that open space land shall be used only for certain purposes, one of which is passive recreation. However, the charter does not define "passive recreation." The 2005 Visitor Master Plan (VMP), a council-approved policy document, includes a definition of passive recreation as non-motorized activities that achieve the following set of criteria also established in the VMP to ensure that passive recreational activities are compatible with other open space uses and resource values, as follows:

- Offer constructive, restorative, and pleasurable human benefits that foster an appreciation and understanding of Open Space [and Mountain Parks] and its purposes.
- Do not significantly impact natural, cultural, scientific, or agricultural values.
- Occur in an Open Space and Mountain Parks setting, which is an integral part of the experience.
- Require only minimal facilities and services directly related to safety and minimizing passive recreational impacts.
- Are compatible with other passive recreational activities.

The VMP includes an activity assessment process to guide decisions on what activities are appropriate on open space land, and what conditions should be placed on these activities to minimize their impacts to manage visitor use and natural resources. The activity assessment identifies the following set of considerations: 1) compatibility with other recreational activities, 2) compatibility with resource protection, 3) compatibility with existing facilities and services, and 4) their relationship to the natural setting.

An activity assessment of e-biking conducted by staff determined that there are no significant differences between how the department would manage or maintain facilities and trails for e-bikes verses analog bikes, or that e-biking differs from biking in relation to the VMP criteria for passive recreation. While the "non-motorized" component of the passive recreation definition could be interpreted more narrowly to prohibit gas-powered recreational activities such as ATVs and motorcycles others may interpret it more broadly. In order to address this component of the VMP definition, staff recommends City Council make a legislative finding that e-biking is a passive recreational activity allowed on open space trails.

The intention of the legislative finding is for council to specifically find that e-biking is a passive recreational use of open space that aligns with city policies, meaning it meets the criteria identified in the VMP. The benefit of this approach is that it explicitly draws the connection between allowing e-biking to the City Charter which identifies passive recreation as an open space use and the VMP which defines passive recreational uses.

2. Repealing the existing ordinance in section 7-5-25, "No Electric Assisted Bicycles on Open Space":

The existing ordinance in section 7-5-25, "No Electric Assisted Bicycles on Open Space" prohibits e-bikes on open space land and requires disposal to allow e-biking on OSMP-managed trails by transferring the trail to another city department. Additionally, the current ordinance is located in title 7, which is the Boulder Traffic Ordinance. Chapter 8-3, "Parks and Recreation – Open Space and Mountain Parks" and chapter 8-8, "Management of Open Space Lands" focus on open space management. For that reason, staff recommends the amended e-bike regulations on open space be located in Title 8.

3. Amending existing section 8-3-6, "Vehicle Regulation":

Section 8-3-6 currently regulates motor vehicles and analog bicycles on open space lands. Staff recommends amending it to include regulation of e-bikes and non-motorized vehicles on open space.

4. Adding a new ordinance 8-8-12, "Electric Assisted Bicycles on Open Space": Staff recommends adding a new ordinance 8-8-12 in chapter 8-8, "Management of Open Space Lands," B.R.C. 1981. This new ordinance would contain the legislative findings, including that e-biking is a passive recreational use of open space land. It also would allow class 1 and class 2 e-bikes on city open space where designated and posted, and as set forth in section 8-3-6.

5. Implement policy as delegated by Charter section 171:

The supervision, administration, preservation and maintenance of all open space land and programs is already delegated to OSMP in charter sections 171(a) and (b). The proposed ordinance leverages this delegation to identify that OSMP will determine which trails are appropriate for e-biking. OSMP would continue the long-standing departmental practice of seeking OSBT and public input on trail decisions as part of the implementation process.

Staff Preferred Alternative for trails that allow e-biking

The department's preferred alternative for managing e-bikes on open space is <u>Alternative</u> <u>B</u> – *Plains trails located east of Broadway that allow biking* and *the Boulder Canyon Trail*. As part of the evaluation of e-biking on open space, OSMP identified three management alternatives to consider in how the department would manage this activity as a passive recreational use:

Alternative A All trails that allow biking
Alternative B Plains trails east of Broadway that allow biking, and the Boulder Canyon Trail
Alternative C Inter-Connected multi-use trails that allow biking

In Spring 2022, staff evaluated the alternatives and status quo of not allowing e-biking to inform the selection of a preliminary proposal. The E-biking Alternatives Evaluation is a matrix detailing the criteria and considerations and ratings for each alternative. While the preliminary evaluation indicated there were similar benefits between Alternative A and B, staff selected Alternative B as the alternative that had the most advantages. It was shared as the preliminary staff proposal during the summer engagement window. As presented in the Public Feedback section of this memo, community input indicated significant support for Alternative B. Thus, staff identified Alternative B as the preferred management alternative because it best reflects community input and the findings of the alternatives analysis, including:

• It would provide a consistent visitor experience across interconnected trails with Boulder County and other city trails managed by Transportation and Mobility where e-bike use is allowed rather than having trail segments crossing city open space where e-bikes are prohibited.

- In terms of regulations, a boundary of east of CO 93/Broadway/North Foothills as the dividing line between "foothills" and "plains" trails is a relatively simple geographic boundary that is generally easily understood and therefor likely to be complied with by most community members.
- It increases opportunities for visitors experiencing disabilities, those with mobility challenges and our aging population to experience much of Boulder's open space bicycling network.
- The OSMP-supported literature review by BCPOS in 2019 as well as results from other agencies indicate minimal impacts to natural resources, visitor experiences, visitor safety, and the trail system.
- E-biking on open space trails could increase the percent of visitors who arrive to those trails by bicycle and may contribute to a reduction in greenhouse gas emissions typically caused by motor vehicles.

OSMP staff would implement a holistic approach to manage e-biking, like biking, as a passive recreational activity on open space trails. Management of use would include the following strategies, which are described in greater detail in **Attachment G**:

- <u>Trail Design and Maintenance</u> employ trail design best practices to mitigate speed and conflict potential on multi-use trails.
- Education and Outreach Raise awareness and support visitors through a combination of signage and programming focused on courtesy and rules for sharing multi-use trails among recreational activity groups.
- Ranger Patrol and Enforcement continue to focus on highly visited areas, prioritize weekend time on patrols, and introduce targeted patrols where e-biking would be allowed.
- <u>Monitoring</u> Add e-biking activity in visitor surveys to track trends and changes in public sentiment over time.

OSBT recommended policy approach

While the OSBT recommendation is like the staff recommendation in that it supports a change from the status quo, both the policy/regulatory approach and management approach are different. Staff have identified a few concerns about both the policy/regulatory and management approach of the OSBT recommendation, which are discussed below.

The OSBT recommended steps related to changing the policy to allow e-biking on open space lands include:

- 1. Amending the existing ordinance in Section 7-5-25, "No Electric Assisted Bicycles on Open Space",
- 2. Amending existing Section 8-3-6, "Vehicle Regulation", and
- 3. Designating trails for e-biking by the OSMP department as the tool for implementation.
- 1. <u>Amending the existing ordinance in Section 7-5-25 "No Electric Assisted Bicycles on Open Space"</u>:

The existing ordinance, section 7-5-25 "No Electric Assisted Bicycles on Open Space," prohibits e-bikes on open space land and requires disposal to allow e-biking on OSMP-managed trails by transferring the trail to another city department. A primary purpose of the OSBT approved motion is to eliminate the "disposal of open space" requirement from the ordinance. This component of the OSBT recommendation aligns with the staff recommended approach.

The OSBT also approved a motion in support of amending the regulation to codify that ebiking is not a passive recreational use and is prohibited on city open space lands. Board members who supported this recommendation expressed their opinion that passive recreation is defined in the Charter and limited to non-motorized uses of open space land. Staff have concerns with this approach. A code provision explicitly stating that e-biking is not a passive recreational use would conflict with Charter section 176. That Charter section restricts the use of open space land to those purposes identified therein. If council finds e-biking is not an open space purpose, then e-biking is prohibited on open space land. An ordinance cannot allow what the charter prohibits. To support the intent of the OSBT motion to allow e-biking by exception (#2, below) council could remain silent on whether e-biking is a passive recreational use. If City Council would like to purse the OSBT motion (Attachment B – Ordinance 8576), section 7-5-25 would need to be repealed rather than amended, and section 8-3-6 would need to be amended as described in #2 below.

2. Amending existing Section 8-3-6, "Vehicle Regulation":

The purpose of the OSBT approved motion to amend section 8-3-6, differs significantly from the staff recommended approach. The board's suggested code change would prohibit the operation of electric assisted bicycles on open space property except when certain conditions are present. It would allow e-bikes by exception similar to regulations for fishing and biking, which are prohibited *except where* designated (biking - section 8-3-6 (a)(6),; fishing - section 8-8-5, "Fishing Prohibited Except Where Posted"). However, fishing and biking not only meet the VMP definition of passive recreation; they also are also clearly non-motorized. An ordinance change alone can allow e-biking without a legislative finding. However, without the 'passive recreation finding' the city is authorizing an activity on open space without describing how it relates to OSMP's council-approved policies guiding allowed activities.

3. <u>Designating trails for e-biking by the OSMP department as the tool for implementation:</u>

The OSBT expressed support for implementing the policy by the OSMP department designating trails for e-biking use. However, they passed a motion (3-2) to not allow e-bikes "except to enable connectivity and contiguity where a multijurisdictional regional trail that allows e-bikes requires access to a segment of open space trail, and special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals." Trustees who supported the motion also identified additional characteristics to only allow e-bikes on fairly wide trails that can accommodate multiple uses; and to only allow e-bikes on appropriate trail surfaces, with a distinction between paved and unpaved

surfaces. It was acknowledged that crushed rock fines and natural surfaces may be appropriate if designed to withstand the intended use.

In terms of implementation of the OSBT approved recommendation, staff's understanding the objective of this motion is to only allow e-bikes on a select few sub-set of trails that are multijurisdictional regional trails, and also to evaluate open space trails on an individual, case-by-case bases. At cursory glance, staff thinks that this approach would include a subset of trails depicted in <u>Alternative C</u> such as the Boulder Canyon Trail, Coalton Trail, and open space segments along the Lobo Trail. As detailed on the map included in **Attachment C**, this approach may include approximately 4.5 miles of city open space trails, which is about 3% of the 154 miles of the OSMP trail network. However, staff would need to conduct additional analysis to confirm which trails meet the intent of the board recommended approach.

Upon evaluating the OSBT recommended approach, staff has identified concerns about the management implications of the implementation approach recommended by the OSBT. The E-biking Alternatives Evaluation is a matrix detailing the criteria and considerations and ratings for the staff identified alternatives. With the intent of allowing e-bikes on a sub-set of trails identified in Alternative C some of the ratings and considerations for Alternative C and the status quo are relevant to the board recommended implementation approach.

In staff's estimation, implementation of the OSBT motions would provide the least increase in equitable access to open space, only nominally more than the status quo. There also would be inconsistent regulations on OSMP plains trails with allowing e-bikes on some and restricting use on most plains trails. The OSBT approach is not consistent with BCPOS regulation of e-bikes on plains trails. It does not have a simple geographic boundary to simplify rules, i.e., Broadway. Both of these considerations will decrease the ability to raise public awareness and compliance by OMSP visitors. Regulating e-bike use trail by trail would be more complex, more difficult to message and raise awareness and will increase the need for education, outreach, and enforcement. OSMP staff values community input and a significant percentage of respondents to both the online engagement and onsite intercept survey expressed a preference for allowing e-bikes on trails identified in staff preferred Alternative B or Alternative A, which would allow e-bikes on all trails that permit bikes currently.

OSBT members in support of the motion to not allow e-bikes except in limited circumstances expressed concerns for e-biker speed and potential for increased user conflict on more-narrow trails and displacement of other trail users. However, based in part on the experience of Boulder County and Jefferson County, that both have approved the operation of e-bikes on their open space, staff does not anticipate e-biking will result in a change in conflicts or concerns beyond what is typical for trails that allow biking. Additionally, the activity assessment of e-biking conducted by staff determined that there are no significant differences between how the department would manage or maintain facilities and trails for e-bikes versus analog bikes.

Biking is an approved passive recreational activity and is currently allowed on approximately 54 miles of designated OSMP trails, about 35% of the total trail system. Overall average daily conflict between visitors on OSMP trails has ranged between 5-7% for close to two decades (2016-2017 Visitor Survey). Of all respondents to the 2016-2017 survey, 6% (on average) reported conflict with other users on the day of the survey, with a third of these indicating conflict was with a biker. This means, on average, 2% of visitors reported conflict with a biker on the day of the survey while 98% did no. There is very little difference in average daily conflict between trails that allow biking and trails that do not.

A 95% majority of encounters between bikers and other users on open space trails are positive (69%) or neutral (26%) (2016-2017 Visitor Survey). During the 2016-2017 Visitor Survey, 14% of respondents reported being displaced. Of those 14%, ten percent reported biking as a reason why they no longer visit an area. This means 1% of visitors reported displacement due to biking and 99% did not. The two primary areas no longer visited because of bicycle activity were Marshall Mesa and Doudy Draw. Of the 14% of respondents that reported displacement, the two most frequently mentioned OSMP areas that respondents no longer visit are Chautauqua (22%) and Sanitas (22%), due to perceived crowding, dogs, and parking issues (not bikes).

Additionally, OSMP trails that allow bikes are overall in better condition than trails that do not allow bikes. Trails that allow bikes have an average condition index of 71. Trails that prohibit bikes have an average condition index of 53. The trail condition index is updated systemwide every 5 years on a 100-point scale, 100 meaning the trail is in perfect condition.

If City Council should choose to explore the OSBT approach it would be beneficial to revise the phrase "multijurisdictional trails" in the proposed amendment adding section 8-8-6(a)(7), to ensure that city transportation- and greenways-managed trails interconnected with OSMP-managed trails would be included in those trails that allow e-bikes. Typically, the term "multijurisdictional" refers to more than one jurisdiction. City transportation and greenway trails are within the jurisdiction of the city, not multiple jurisdictions. If allowing e-bikes on multijurisdictional trails did not include city transportation and greenway trails, there would continue to be inconsistent regulations between interconnected trails managed by OSMP and those managed by the city's Public Works department. In order to achieve the OSBT approach, staff would propose alternate language that does not exclude city transportation- and greenways-managed trails from those trails where e-biking would be allowed: (a) No person, other than persons authorized by the city manager, shall:

(7) Operate an electric assisted bicycle or other mechanized power-assisted vehicle on any open space lands as defined in Charter Section 170, except where a city-managed trail or a multi-jurisdictional trail requiring access to a segment of open space trail to enable connectivity and contiguity and where special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals.

Other implementation alternatives considered

Rulemaking by the City Manager:

OSMP considered using rulemaking by the City Manager as the tool designating trails for e-biking and to implement the policy of allowing e-biking on open space trails. The rulemaking process, as outlined in chapter 1-4, "Rulemaking," B.R.C. 1981, would entail OSMP staff identifying trails appropriate for e-biking and proposing a City Manager rule. If the City Manager were to support OSMP's designation, the manager would adopt a rule that designates open space trails for e-biking. Staff initially proposed this process because it provides assurances of transparency through the requirement to publish the proposed rule and consider public comment before the rule becomes final.

Rulemaking was included in the staff recommendation presented to the OSBT. Staff did not hear that requiring rulemaking provided much benefit. In response, OSMP refined the staff recommendation to City Council to exercise the already delegated responsibility to the OSMP department outlined in Section 171 as the method for designating trails for ebiking.

Other Management Alternatives considered:

At the Feb. 8 meeting, some OSBT members supported expanding Alternative B to designate Chapman Drive Trail and Wonderland Lake / Foothills Trail for e-biking activity. While this alternative would increase access for e-bikes relative to the staff preferred alternative, enforcement and compliance are concerns. Regulating e-bikes trail by trail would be more complex. It would be more difficult to raise community awareness through messaging, and would increase the need for more education, outreach, and enforcement. OSMP anticipates that a defined geographic boundary, i.e. Broadway would improve the ability to use messaging to raise awareness.

NEXT STEPS

A second reading of the proposed ordinance and public hearing are scheduled for the City Council meeting on June 1.

ATTACHMENTS

- A Ordinance 8575 in support of OSMP department recommendation
- B Ordinance 8576 in support of OSBT recommendation
- C Maps of proposed implementation alternatives
- D Feb. 8, 2023 OSBT meeting minutes
- E About the Data: Distinctions and Results of the Online and Onsite Community Input
- F Community Input Comparison and Key Findings
- G Management Approach

ORDINANCE 8575 1 2 3 AN ORDINANCE TO ALLOW ELECTRIC ASSISTED BICYCLES ON CERTAIN RECREATIONAL PATHS OR 4 TRAILS ON OPEN SPACE LAND BY AMENDING DEFINITIONS IN SECTIONS 1-2-1 AND 7-1-1; REPEALING 5 SECTION 7-5-25, "NO ELECTRIC ASSISTED BICYCLES ON OPEN SPACE," AMENDING SECTION 8-3-6, "VEHICLE 6 REGULATION," AND ADDING A NEW SECTION 8-8-12, "ELECTRIC ASSISTED BICYCLES ON OPEN SPACE," B.R.C. 7 1981; AND SETTING FORTH RELATED DETAILS 8 9 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, 10 COLORADO: 11 Section 1. Section 1-2-1, "Definitions," B.R.C. 1981, is amended to read as follows: 12 The definitions in this chapter apply throughout this code unless a term is defined (a) 13 differently in a specific title, chapter or section. 14 (b) The following words used in this code and other ordinances of the cCity have the 15 following meanings unless the context clearly indicates otherwise: 16 Electric assisted bicycle means a vehicle having two tandem wheels or two parallel 17 wheels and one forward wheel, fully operable pedals, and an electric motor not exceeding 750 watts of power. Electric assisted bicycles are further required to conform to one of two classes 18 as follows: 19 Class 1 electric assisted bicycle means an electric assisted bicycle equipped with (1) an electric motor that provides assistance only when the rider is pedaling and that 20 ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour. 21 22 (2) Class 2 electric assisted bicycle means an electric assisted bicycle equipped with an electric motor that provides assistance regardless of whether the rider is 23 pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour. 24

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1	Section 2. Section 7-1-1, "Definitions," B.R.C. 1981, is amended to read as follows:
2	(a) The following words and phrases used in this title have the following meanings unless the context clearly indicates otherwise:
3	·
4	Electric assisted bicycle means a vehicle having two tandem wheels or two parallel
5	wheels and one forward wheel, fully operable pedals, <u>and</u> an electric motor not exceeding 750 watts of power rating, and a top motor-powered speed of twenty miles per hour. <u>Electric</u>
6	assisted bicycles are further required to conform to one of two classes as follows:
7	(1) Class 1 electric assisted bicycle means an electric assisted bicycle equipped
8	with an electric motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty
9	miles per hour.
10	(2) Class 2 electric assisted bicycle means an electric assisted bicycle equipped with an electric motor that provides assistance regardless of whether the rider is
11	pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.
12	twenty mines per nour.
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14	<i>Traffic</i> means pedestrians, ridden or herded animals, and vehicles, either singly or together, which using any street, trail, or path for purposes of travel.
15	
16	Traffic control device means any traffic control sign, signal, marking or device, not
17	inconsistent with this title-, placed or displayed by authority of the traffic engineer or of any public official or public body having authority over a street, drive, way, trail, path, or parking
18	area for the purpose of regulating, warning, or guiding traffic or the parking of vehicles. Where this title does not prescribe the meaning of a device, it has the meaning ascribed to it by the state
19	traffic control manual, and where no such meaning is given, it has the meaning a reasonable person would give it.
20	person would give it.
21	
22	Traffic control sign means sign on above, or adjacent to a street, trail, or path placed by a public authority to regulate, warn, or guide traffic.
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1		Section 3. Section 7-5-25, "No Electric Assisted Bicycles on Open Space," B.R.C. 1981,
2	is here	by repealed:
3	7-5-25	. – No Electric Assisted Bicycles on Open Space <u>REPEALED</u> .
4		No mouse shall estivate the motor of an electric against divivale on any magnetical
5	*	No person shall activate the motor of an electric assisted bicycle on any recreational retrail on open space land as defined in the City Charter Section 170 except where the retrail has been transferred to a city department pursuant to Charter Section 177
6	"Dispo	r trail has been transferred to a city department pursuant to Charter Section 177, osal of Open Space Land" or section 8-8-11 "Transfer of Open Space Lands," B.R.C.
7	1981.	
8		Section 4. Section 8-3-6, "Vehicle Regulation," B.R.C. 1981, is amended to read as
9	follow	s:
10	(a)	No person, other than persons authorized by the city manager, shall:
11		(1) Fail or refuse to comply with any lawful order or direction of any park patrol officer authorized and instructed to direct traffic in any park, parkway, recreation
12		area, or open space and on the public roads and parkways therein;
13		(2) Fail to comply with any traffic control device in a park, parkway, recreation area, or open space regulating the operation of motor vehicles <u>and nonmotorized</u>
14		vehicles; (3) Drive a motor vehicle within any park, parkway, recreation area, or open space in
15		excess of the posted speed limit. If no speed limit is posted, then no person shall drive a motor vehicle in a park, recreation area, or open space in excess of twenty
16		fifteen miles per hour; (4) Drive a motor vehicle within or upon any part of a park, parkway, recreation area,
17		or open space, except on designated roadways, <u>trails</u> , <u>paths</u> , parking areas, or areas that the city manager designates as temporary parking areas;
18		(5) Remove or relocate any barricade, barrier, or other device erected to control motor vehicle traffic in a park, parkway, recreation area, or open space; or
19		(6) Drive a nonmotorized vehicle or electric assisted bicycle upon any area in
20		mountain parks or open space property except a trail or roadway designated and posted for that use by the city manager or a paved or graveled roadway open to
21		motorized vehicles.
22		
23		Section 5. A new Section 8-8-12, "Electric Assisted Bicycles on Open Space," B.R.C.
24	1981, i	is added to read as follows:
25	<u>8-8-12</u>	. – Electric Assisted Bicycles on Open Space.

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1	<u>(a)</u>	The fo	ollowing are legislative findings of fact:
2		(1)	Electric assisted bicycles improve access for community members of more ages
3		<u>(2)</u>	and abilities to enjoy open space paths. The operation of electric assisted bicycles on certain open space trails provides a
4		(3)	consistent visitor experience across interconnected paths. The operation of electric assisted bicycles on designated open space paths
5		(3)	supports broader city climate goals by reducing the number of vehicle miles traveled to reach local paths, helping preserve the ecosystems and habitats that
6		(4)	make up open space.
7		(4)	Operating a Class 1 or Class 2 electric assisted bicycle as defined in this code is a passive recreational use of designated open space recreational paths.
8	<u>(b)</u>		ss 1 or Class 2 electric assisted bicycle may be operated on recreational paths on
9			space land as defined in Charter Section 170 where designated and posted by the ment of Open Space and Mountain Parks as set forth in subsection 8-3-6 (a)(6),
10		_	. 1981.
11		Section	n 6. This ordinance is necessary to protect the public health, safety, and welfare of
12	the residents of the city, and covers matters of local concern.		
13		Section	n 7. The city council deems it appropriate that this ordinance be published by title
14	only and orders that copies of this ordinance be made available in the office of the city clerk for		
15	public	inspect	tion and acquisition.
16		INTRO	ODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY
17			
18	TITLE	ONLY	T this 4th day of May 2023.
19			
20			A array Dragleatt
21			Aaron Brockett, Mayor
22	Attest:		
23			
24	Elesha City C	Johnso lerk	on,
25	- 117		

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1	READ ON SECOND READING, PAS	SED AND ADOPTED this 1st day of June 2023.
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4		Aaron Brockett,
5		Mayor
6	Attest:	
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8	Elesha Johnson, City Clerk	
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1	ORDINANCE 8576
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3	AN ORDINANCE TO ALLOW ELECTRIC ASSISTED
4	BICYCLES ON CERTAIN RECREATIONAL PATHS OR TRAILS ON OPEN SPACE LAND BY AMENDING
5	DEFINITIONS IN SECTIONS 1-2-1 AND 7-1-1; AMENDING SECTIONS 7-5-25, "NO ELECTRIC ASSISTED BICYCLES ON
6	OPEN SPACE," AND 8-3-6, "VEHICLE REGULATION," B.R.C. 1981; AND SETTING FORTH RELATED DETAILS
7	
8	BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER
9	COLORADO:
10	
1	Section 1. Section 1-2-1, "Definitions," B.R.C. 1981, is amended to read as follows:
2	(a) The definitions in this chapter apply throughout this code unless a term is defined differently in a specific title, chapter or section.
13	(b) The following words used in this code and other ordinances of the <u>c</u> City have the following meanings unless the context clearly indicates otherwise:
15 16 17	Electric assisted bicycle means a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, and an electric motor not exceeding 750 watts of power. Electric assisted bicycles are further required to conform to one of two classes as follows:
18	(1) Class 1 electric assisted bicycle means an electric assisted bicycle equipped
19	with an electric motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty
20	miles per hour.
21	(2) Class 2 electric assisted bicycle means an electric assisted bicycle equipped with an electric motor that provides assistance regardless of whether the rider is
22	pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.
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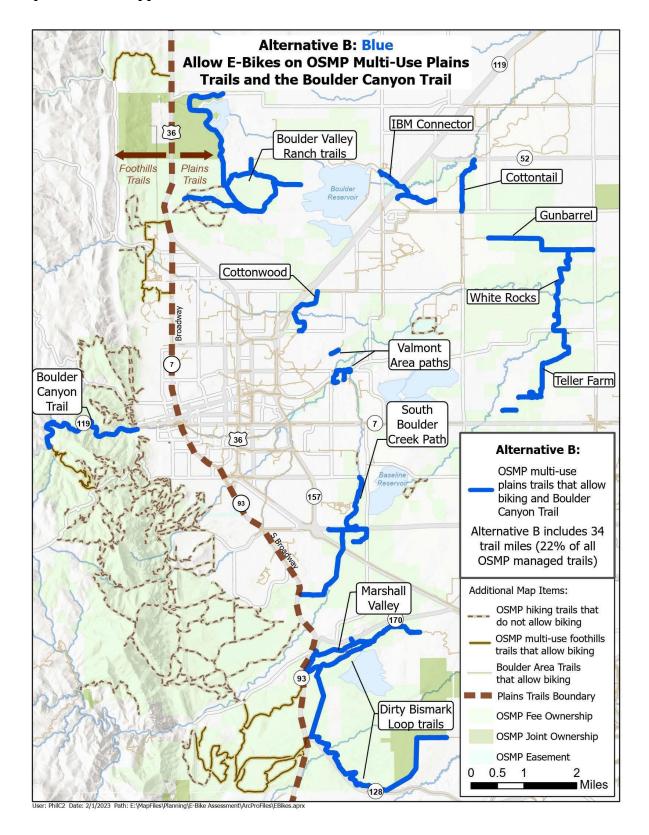
1	Section 2. Section 7-1-1, "Definitions," B.R.C. 1981, is amended to read as follows:
2	(a) The following words and phrases used in this title have the following meanings unless the context clearly indicates otherwise:
3	
4	
5	Electric assisted bicycle means a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, and an electric motor not exceeding 750
6	watts of power rating, and a top motor-powered speed of twenty miles per hour. <u>Electric</u> assisted bicycles are further required to conform to one of two classes as follows:
7	(1) Class 1 electric assisted bicycle means an electric assisted bicycle equipped
8	with an electric motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty
9	miles per hour.
10	(2) Class 2 electric assisted bicycle means an electric assisted bicycle equipped with an electric motor that provides assistance regardless of whether the rider is
11	pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.
12	
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14	Traffic means pedestrians, ridden or herded animals, and vehicles, either singly or together, which using any street, trail, or path for purposes of travel.
15	
16	Traffic control device means any traffic control sign, signal, marking or device, not
17	inconsistent with this title-, placed or displayed by authority of the traffic engineer or of any public official or public body having authority over a street, drive, way, trail, path, or parking
18	area for the purpose of regulating, warning, or guiding traffic or the parking of vehicles. Where this title does not prescribe the meaning of a device, it has the meaning ascribed to it by the state
19	traffic control manual, and where no such meaning is given, it has the meaning a reasonable person would give it.
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21	
22	Traffic control sign means sign on above, or adjacent to a street, trail, or path placed by a public authority to regulate, warn, or guide traffic.
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Section 3. Section 7-5-25, "No Electric Assisted Bicycles on Open Space," B.R.C. 1981, 1 2 is amended to read as follows: 3 Electric assisted bicycles are prohibited on open space lands as defined in Charter Section 170. Operation of an electric assisted bicycle is not defined as a passive recreational use in Charter Section 176(c)No person shall activate the motor of an electric assisted bicycle 4 on any recreational path or trail on open space land as defined in the City Charter Section 5 170 except where the path or trail has been transferred to a city department pursuant to Charter Section 177, "Disposal of Open Space Land" or section 8-8-11 "Transfer of Open 6 Space Lands," B.R.C. 1981. 7 <u>Section 4.</u> Section 8-3-6, "Vehicle Regulation," B.R.C. 1981, is amended to read as 8 follows: 9 (a) No person, other than persons authorized by the city manager, shall: 10 **(1)** Fail or refuse to comply with any lawful order or direction of any park patrol officer authorized and instructed to direct traffic in any park, parkway, recreation 11 area, or open space and on the public roads and parkways therein; 12 Fail to comply with any traffic control device in a park, parkway, recreation area, (2) or open space regulating the operation of motor vehicles and nonmotorized 13 vehicles: Drive a motor vehicle within any park, parkway, recreation area, or open space in (3) 14 excess of the posted speed limit. If no speed limit is posted, then no person shall drive a motor vehicle in a park, recreation area, or open space in excess of twenty 15 fifteen miles per hour; (4) Drive a motor vehicle within or upon any part of a park, parkway, recreation area, 16 or open space, except on designated roadways, trails, paths, parking areas, or areas that the city manager designates as temporary parking areas; 17 Remove or relocate any barricade, barrier, or other device erected to control (5) motor vehicle traffic in a park, parkway, recreation area, or open space; or 18 Drive a nonmotorized vehicle or electric assisted bicycle upon any area in (6) 19 mountain parks or open space property except a trail or roadway designated and posted for that use by the city manager or a paved or graveled roadway open to 20 motorized vehicles;- or Operate an electric assisted bicycle or other mechanized power-assisted vehicle <u>(7)</u> 21 on any open space lands as defined in Charter Section 170, except where a multijurisdictional regional trail-requiring access to a segment of open space trail to 22 enable connectivity and contiguity and where special designation and enforcement requirements are posted and have been determined necessary to meet 23 land protection, natural resource and visitor management goals. 24 25

1	Section 5. This ordinance is necessary to protect the public health, safety, and welfare of		
2	the residents of the city, and covers matters of local concern.		
3	Section 6. The city council deems it appropriate that this ordinance be published by title		
4	only and orders that copies of this ordinance be made available in the office of the city clerk for		
5	public inspection and acquisition.		
6			
7	INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY		
8	TITLE ONLY this 4th day of May 2023.		
9			
10	Aaron Brockett,		
11	Mayor		
12	Attest:		
13			
14	Elesha Johnson,		
15	City Clerk		
16			
17	READ ON SECOND READING, PASSED AND ADOPTED this 1st day of June 2023.		
18			
19			
20	Aaron Brockett,		
21	Mayor		
22	Attest:		
23			
24	Elesha Johnson,		
25	City Clerk		

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Implementation Approach Alternatives



Implementation Approach Alternatives



Approved as Amended 3/8/23

OPEN SPACE BOARD OF TRUSTEES

Action Minutes Meeting Date February 8, 2023

Record of this meeting can be found here: https://bouldercolorado.gov/government/watch-board-meetings (video start times are listed below next to each agenda item).

BOARD MEMBERS PRESENT

Karen Hollweg Dave Kuntz Caroline Miller Michelle Estrella Jon Carroll

STAFF MEMBERS PRESENT

Dan Burke Jeff Haley Jennelle Freeston Lauren Kilcoyne Leah Case Heather Swanson Brian Anacker Bethany Collins Colin Leslie Ben Verrill Frances Boulding Marni Ratzel Kacey French

GUESTS

Janet Michels, Senior Attorney Brenda Ritenour, Community Engagement Manager

CALL TO ORDER (00:30)

The meeting was called to order at 6:00 p.m.

AGENDA ITEM 1 – Approval of the Minutes (04:05)

Jon Carroll moved the Open Space Board of Trustees to adopt the minutes from January 11, 2023 as amended. Dave Kuntz seconded. This motion passed unanimously.

AGENDA ITEM 2 – Public Participation for Items not Identified for Public Hearing (11:30)

Paula Shuler spoke in support of prairie dog management on irrigated lands being brought in-house.

Elizabeth Black spoke in support of bringing prairie dog management in-house.

Larry MacDonnell, former Open Space Board Trustee Member, spoke about the need to change the Charter by a vote of the people if we were to redefine passive recreation to include e-bikes.

Sandra Laursen spoke in regard to e-bikes on open space trails and her opposition to e-bikes on South Boulder Creek Trail and White Rocks Trail.

Richard Harris spoke on behalf of PLAN-Boulder County and rejects e-bikes on open space as passive recreation.

Bob Whorley spoke in regard to e-bikes and his support for opening trails to the use of e-bikes.

Brad Fountain spoke in regard to e-bikes and that they are classified as a bicycle and not a motorized vehicle.

AGENDA ITEM 3 – Matters from the Board (39:35)

Under the item, "Comments/Questions from Trustees on Written Information memos or public comment", the Board asked several questions on the Chautauqua Access Management Program (CAMP) memo including if a price increase would be considered and specifics on carrying capacity. On the Trailheads Update memo, Dave suggested that in regard to trailhead planting, the focus should be on

restoring native landscapes. On the Boulder Valley Farm (BVF) Water Service Line memo, the Board asked about the water line installation mechanism as well as acquisition and easement specifics.

Brenda Ritenour, Community Engagement Manager, presented the "Diversity, Equity, and Inclusion Initiative for Boards and Commissions" item. The Board asked about equity resources for Boards including on support for language barriers and childcare options. The Board asked if offers for support can be consistent across boards so that members can turn down offerings vs. having to ask for help. The Board asked if staff is looking at the number of meetings and times/length of current meetings as part of this process.

AGENDA ITEM 4 – Consideration of a staff recommendation to the Open Space Board of Trustees on allowing e-biking as a passive recreational use on open space trails (1:30:00)

Kacey French, Planning Supervisor, and Marni Ratzel, Principal Planner, presented this item.

The Board reviewed 2013-2018 motions made by OSBT regarding whether e-bikes on open space are allowed under the City Charter, if e-bikes are passive recreation, and the disposal and transfer of OSMP paved trails to Public Works to enable e-bike use.

Motions:

(2:22:00)

Jon Carroll moved the Open Space Board of Trustees to recommend the Boulder City Council to allow class 1 and class 2 e-biking as a passive recreational activity permissible on open space on trails where designated by the City Manager. Michelle Estrella seconded. This motion did not pass; Caroline Miller, Dave Kuntz and Karen Hollweg dissented.

Caroline, Dave and Karen summarized their reasoning for dissent, including:

- Passive recreation is an allowed use of OSMP in the City Charter and is defined in the Visitor Master Plan (VMP) as non-motorized and reiterated in the 2019 Master Plan.
- Not enough grounds for a legislative finding to make the change in the Charter language.
- Changing the definition of the term "passive recreation" is not a policy decision that is up to council to determine.

Michelle and Jon summarized their support for the motion, including:

- Passive recreative is defined in the VMP and not in the Charter.
- The VMP is now outdated and overdue an update.
- At the time of writing e-bikes were not considered.
- Passive recreation is a policy decision that is up to council to determine.

(2:38:00)

Michelle Estrella moved the Open Space Board of Trustees to recommend that the OSMP

Department proceed with the staff preferred alternative to implement this policy by designating and managing the trails in Alternative B - Plains trails located east of Broadway that allow biking, and the Boulder Canyon Trail for e-biking – with the addition of Chapman Drive Trail and Foothills South Trail. Jon Carroll seconded. This motion did not pass; Caroline Miller, Dave Kuntz and Karen Hollweg dissented.

Caroline, Dave and Karen summarized their reasoning for dissent, including:

• Hiking is enjoyed by 85 percent of OSMP users.

- There are trails that have up to 40-60 percent of bike users (on county trails), and hikers to enjoy those trails is not an option; that level of bike use can provide dangerous conditions for pedestrians and be hazardous for other open space users. At some point the percentage of bikes on trails becomes so high that hikers are displaced.
- City needs to make transportation corridors safe for bicycles. If transportation is too dangerous for bicycles, that is a transportation issue. Open Space should not be seen as an alternative for bicycles.
- Transportation and commuting are not open space purposes in Charter.
- A public vote is necessary to change the allowed uses of open space in the Charter.
- 50 percent of intercept survey respondents said class 2 e-bikes should not be allowed.
- Rocky Flats National Wildlife Refuge only allows class 1 e-bikes.
- In the Intercept Survey, 80 percent were concerned about rider speeds, 56 percent were concerned about e-bikes displacing other visitors.

Michelle and Jon summarized their reasoning for being in favor of the motion, including:

- Overwhelming community support for option A
- Option B seems like a good compromise to try this out on some trails.
- Good balance of allowing commuting on select trails.
- Wonderland Lake trails are an important north south bike route to allow bikers to stay off dangerous streets.
- Chapman Drive is perfect place for e-bikes to allow great loop from city into wilderness.
- Provides community equitable access to open space.
- About to launch e-bike rebate program and hypocritical to not allow on open space trails.
- Need to connect to regional trail systems such as Rocky Mountain Greenway.
- Can't allow fear to prevent us from progressing.
- Meets climate goals as it allows folks to access and use our trailheads without a car.
- Have to take into account community surveys; no survey is perfect but can't discount those who can't afford to live in expensive city limits.
- Should consider difference between actual and perceived conflicts when we take e-biking into account.
- Consider doing a pilot of trails west of 36 (in response to support for Alternative A).
- This proposal would allow for consistency of user experience with neighboring land managers and be easier for users to understand and comply with.

(3:18:00)

Dave Kuntz moved the Open Space Board of Trustees to recommend to City Council that language in the current code B.R.C. 7-5-25, titled No Electric Assisted Bicycles on Open Space – "no person shall activate the motor of an electric assisted bicycle on any recreational path or trail on open space land as defined in the City Charter Section 170 except where the path or trail has been transferred to a city department pursuant to Charter Section 177, "Disposal of Open Space Land or section 8-8-11 "Transfer of Open Space Lands, B.R.C. 1981. Ordinance Nos. 7941 (2013); 7965 (2014); 8007 (2014); 8447 (2021)" – be repealed and removed from all applicable city ordinances. Karen seconded. Passed three to two. Jon Carroll and Michelle Estrella dissented.

(3.27.00)

<u>Dave Kuntz moved the Open Space Board of Trustees to recommend that the following language be inserted into B.R.C. 7-5-25, titled "No Electric Assisted Bicycles on open space":</u>

Electric assisted bicycles are prohibited on Open Space lands as defined in City Charter section 170. Operation of an electric assisted bicycle is not defined as a passive recreational use in Article 12, Sec. 176 (c) of the City Charter.

<u>Caroline Miller seconded. This motion passed three to two; Jon Carroll and Michelle Estrella dissented.</u>

(4:42:00)

<u>Dave Kuntz moved the Open Space Board of Trustees to recommend to City Council revised</u> <u>language for section 8-3-6. of the BRC - Vehicle Regulation:</u>

a. No person, other than persons authorized by the city manager, shall:

(7) operate an electric assisted bicycle or other mechanized power assisted vehicle on any Open Space lands as defined in City Charter section 170, except where a multijurisdictional regional trail requiring access to a segment of open space trail to enable connectivity and contiguity and where special designation and enforcement requirements are posted and have been determined necessary to meet land protection, natural resource and visitor management goals.

<u>Caroline Miller seconded. This motion passed three to two; Jon Carroll and Michelle Estrella dissented.</u>

Janet Michels, Senior Attorney, agreed to review the motion language for compliance with the B.R.C. and the Charter.

Michelle and Jon summarized their reasoning for dissent, including:

- A need to make it clear to the community that we support e-bikes.
- This exception approach is complicated and will make implementation, compliance, and enforcement impossible.
- Need to let neighboring land managers know that we support consistent connectivity; this motion does not do that.

Dave and Karen summarized reasoning for being in favor of the motion, including:

- Support e-bikes on multi-use regional trails; just do not support e-bikes everywhere on open space trails.
- Support consistent regional connectivity and intent of the motion is to contribute to that.
- OSBT cannot agree with neighboring land agencies because of the principles established in the City Charter.
- Without a vote of the public, cannot change the Charter.

Michelle asked whether there is an opportunity for board members to speak to City Council regarding the reasoning for their dissent on motions made. Dan referenced the Rules of Procedure and advised that the Board may delegate members to assist in presenting the Board recommendation which should also include a brief synopsis of any dissent. Janet Michels clarified that the *Guiding Principles for Interactions among Council's Boards, Commissions and Staff* says board members can address council, though should identify themselves as board members and clarify whether they are speaking from a personal position or on behalf of the majority or minority position that the board has taken.

Dave requested staff provide the OSBT with copies of the staff memo and attachments to the council when the matter of e-bikes on open space is on the council meeting agenda.

The Board asked about the involvement of OSMP and agency partners in regional trail planning processes.

AGENDA ITEM 5 – Matters from the Department (5:07:00)

Dan Burke gave an update welcoming Heather Swanson in her interim role as a deputy director.

ADJOURNMENT – The meeting adjourned at 11:23 p.m.

These minutes were prepared by Leah Case

An objective of both the online engagement questionnaire and onsite intercept survey was to gather opinions and preferences regarding allowing e-biking on open space trails. The two survey instruments and their modes of administration (online and on-site) were designed to support complimentary, though not identical, datasets to help understand community sentiment toward e-bikes.

The online engagement questionnaire was administered via the Be Heard Boulder platform. Be Heard Boulder provides an open participation option for any community member who chooses to participate to share their input regarding city projects. This feedback is collated and used to inform the development of strategies, programs and activities, or to gain an insight into community views and opinions. Feedback provided online is intended to be considered in conjunction with other information and data sources when departments consider project recommendations and decisions.

Since the Be Heard Boulder platform allows respondents to self-elect to leave feedback, there is a chance that those who chose to submit a questionnaire feel strongly about the issue of e-biking on open space trails. This method of collecting community feedback is helpful for understanding the range and intensity of e-biking opinions that may exist in the community. Open participation questionnaires may also facilitate higher overall response rates (compared to randomized on-site sampling), particularly when the topic is of strong interest among community members, as e-bikes appears to have been. However, the lack of randomization among participants means that the results cannot be interpreted as directly representative or generalizable to the distribution of sentiment among the broader population of Boulder or to OSMP visitors.

In comparison, the onsite intercept survey was designed to collect a representative and generalizable sample of current OSMP visitor attitudes, preferences, and concerns regarding allowing e-bikes on open space. The on-site survey followed similar design and sampling methods as OSMP's formal visitor survey, where respondents were intercepted on OSMP trails as the end of their visit. In contrast to the online questionnaire where participants self-elected to participate specifically to provide feedback regarding e-bikes, respondents to the on-site survey were intercepted based on their visitation to selected open space trails and not on any predisposition toward e-biking.

The randomized sampling approach of the on-site survey means that this dataset provides a statistically representative assessment of current visitor attitudes toward e-bikes, despite having a lower overall sample size than the online engagement questionnaire. The on-site survey was specifically designed to facilitate the cross-filtering of responses to evaluate how subgroups may differentiate in their attitudes, preferences, and concerns regarding e-bikes. Finally, the on-site survey was purposefully implemented using a sampling design that can be replicated in the future should OSMP wish to conduct any follow-up monitoring regarding e-bike allowance on open space trails.

Online Engagement Questionnaire

OSMP posted the online questionnaire on the City of Boulder Be Heard Boulder online engagement web page. It provided the opportunity for community members to share their input on whether to allow e-biking on open space trails and three management alternatives under consideration if the status quo where changed. The questionnaire opened on July 11 and closed on Aug. 8. It generated a robust community response. Over 2,330 responses were submitted, making it the most popular online engagement questionnaire to date on BeHeardBoulder.com.

Gathering information on community preferences to guide decisions about the planning and potential management of e-biking on open space was a primary objective of the questionnaire. Staff identified a preliminary proposal of Alternative B, which would allow e-biking on Plains Trails and the Boulder Canyon Trail. Respondents were asked whether they support the preliminary staff proposal and if not whether they support one of the other two alternatives or the status quo of not allowing e-biking on open space trails. The questionnaire next asked respondents to select the top three reasons in support of their response from among a list of potential reasons. The questionnaire also asked participants about their open space visitation history, familiarity with e-bikes, and demographics including age, residence, race and gender. A summary of the Online Engagement Questionnaire Results is posted on the project web page.

Online Engagement Questionnaire Key Findings

- The majority of respondents (72%) supported one of the alternatives allowing e-bikes on open space over the status quo (No-Change).
- About 47% of respondents indicated hiking and 36% indicated biking as their primary activity.
- Approximately 44% own an e-bike and 63% have ridden an e-bike in the last 12 months.
- Familiarity with e-bikes was a strong indicator of support for e-biking, with 95% of those who own an e-bike and 85% who have ridden an e-bike selecting an alternative over the status quo. That said, just over half (53%) of respondents who don't own an e-bike and 48% who have not ridden an e-bike also supported an e-biking alternative.
- Of the 72% of respondents who expressed support for e-bikes, 52% of them indicated a preference for Alternative B.
- Respondents who supported Alternative B selected that it increases access for people with different abilities (62%), and for an aging population (59%) as their top two reasons why.
- Approximately 28% of respondents indicated a preference for the status quo of not allowing e-biking on open space trails. Of the respondents who shared why, 74% expressed e-biker travel speed was the top reason. The second ranked response was "I do not agree that electric-assist is non-motorized" and selected by 49% of those who shared why they chose the status quo.
- Around 58% of respondents thought that they might change their visitation behaviors if e-bikes were allowed on trails. About 54% of these respondents thought they would visit trails more often if e-bikes were allowed.
- The majority of respondents were from Boulder County, with about 60% of all respondents being from the City of Boulder.

Onsite Intercept Survey

The OSMP Human Dimensions team conducted an onsite e-bike intercept survey at select trailheads and access points to engage with open space visitors and obtain their opinions and preferences regarding the potential to allow e-bikes on some trails. Questions were focused on alternative ratings, ownership and use of e-bikes, perceived e-bike concerns and benefits, reasons for alternative rating selections, and the most preferred management alternative, including an option for the status quo (no e-biking on OSMP). Respondents were also asked a series of typical demographic questions.

A total of 431 visitors completed the survey during a 9-week period in summer 2022 at 12 OSMP locations during various daylight hours. The results are presented in an interactive report that allows results to be explored dynamically.

For the on-site survey, respondents were presented with a separate page for each of the three alternatives (A, B, & C). Each page included a written description of the alternative, a map, and a rating scale for respondents to indicate their level of opposition or support for the alternative.

After survey respondents evaluated each of the individual alternatives, they were asked a series of questions about their general disposition across the three alternatives. Questions asked respondents to evaluate the likelihood that allowing e-bikes on open space trail would result in either positive or negative outcomes, the degree to which they were concerned about certain possible impacts, and the degree to which they agreed or disagreed with several statements about e-bike use on open space. After answering questions about the various reasons for their support or opposition to allowing e-bikes on open space, respondents were asked to select their overall most preferred management option, which included each alternative plus an option for the status quo (i.e. No Change).

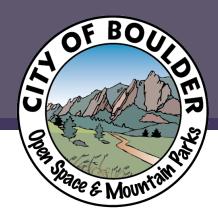
Next, respondents were asked a series of questions about their visitation patterns including their visitation history, their primary activity and primary mode of arrival to open space. Additionally, respondents were asked if their visitation patterns might change if e-bikes are allowed on select OSMP multi-use trails, that currently allow bikes. If the respondent answered yes, they were then asked how they thought their visitation frequency might change, as well as whether they would be likely to ride an e-bike on trails if allowed.

Finally, respondents were asked a series of typical demographic questions. These included age, residence, race, and Hispanic, Latino, or Spanish origin. Results can be compared to other OSMP survey efforts, to discern any demographic differences and similarities between the onsite e-bike intercept survey and other onsite visitor survey respondents. More broadly, results can be compared with Boulder County census data.

A digital Report of the Onsite E-Bike Intercept Survey is available on the project web page.

Onsite Intercept Survey Key Findings

- The majority of respondents (63%) selected one of the alternatives over the status quo (No-Change) as their overall "most preferred option".
- Respondents who overall preferred Alternative A (26%) also supported Alternatives B and C. Many respondents supported all three Alternatives, even if they preferred one specific alternative.
- Approximately 52% of respondents indicated hiking as their primary activity.
- Respondents across all alternatives expressed a range of opinions about the likelihood of different outcomes or concerns about the potential impacts of e-bikes.
 - In general, concerns were lower among those who preferred Alternative A (most permissive for allowing E-Bikes) and highest among those who preferred No-Change.
 - The same pattern was generally observed for the likelihood of outcomes, where those who preferred Alternative A indicated that on average they believed the likelihood of positive outcomes was higher and the likelihood of negative outcomes was lower. This pattern reversed for those respondents who preferred No-Change.
- Around 28% of respondents, or just over one quarter, thought that they might change their visitation behaviors if E-Bikes were allowed on trails.
 - Of the 28% who thought their visitation behaviors might change, most thought they would visit trails that allow e-bikes less often if e-bikes were allowed.
- The majority of respondents were from Boulder County, with just over 50% of all respondents being from the City of Boulder.



Evaluation of E-biking on Open SpaceCommunity Input Comparison and Key Findings



Online Engagement and Onsite Intercept Results

About the datasets

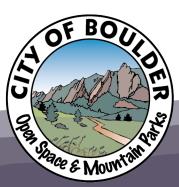
Online Engagement Questionnaire

- 2,331 responses were submitted between July 11 to Aug. 8.
- 1,543 participants provided open ended comments.
- Open participation opportunity to provide input through Be Heard Boulder platform

Onsite Intercept Survey

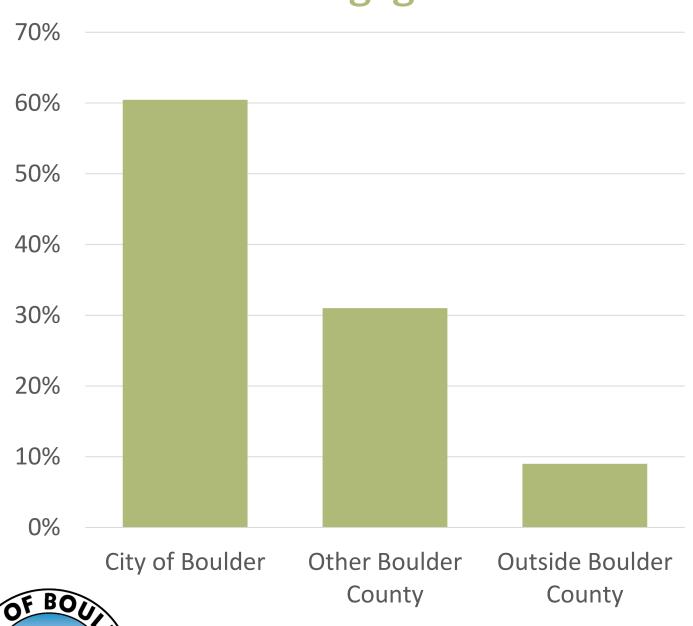
- 431 survey responses were gathered across 9 weeks between July 2nd and August 26th
- 12 OSMP access points/trailheads were surveyed, including 8 multi-use and 4 pedestrian only trails
- Randomized sample size with response rates between 70% and 82% (quite high for intercept surveys)

Consideration	Online Engagement	Onsite Intercept
Generalizable	×	✓
Bias	1	\
Trend Analysis	×	✓
Informs decision-making		

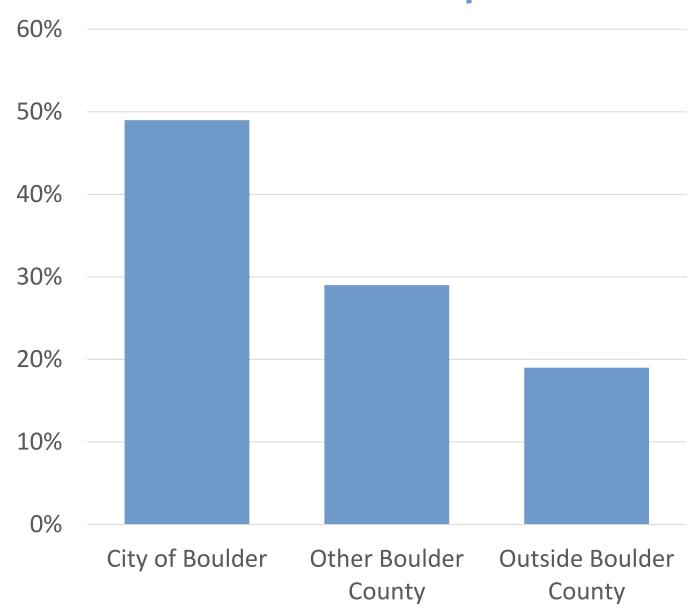


Residence

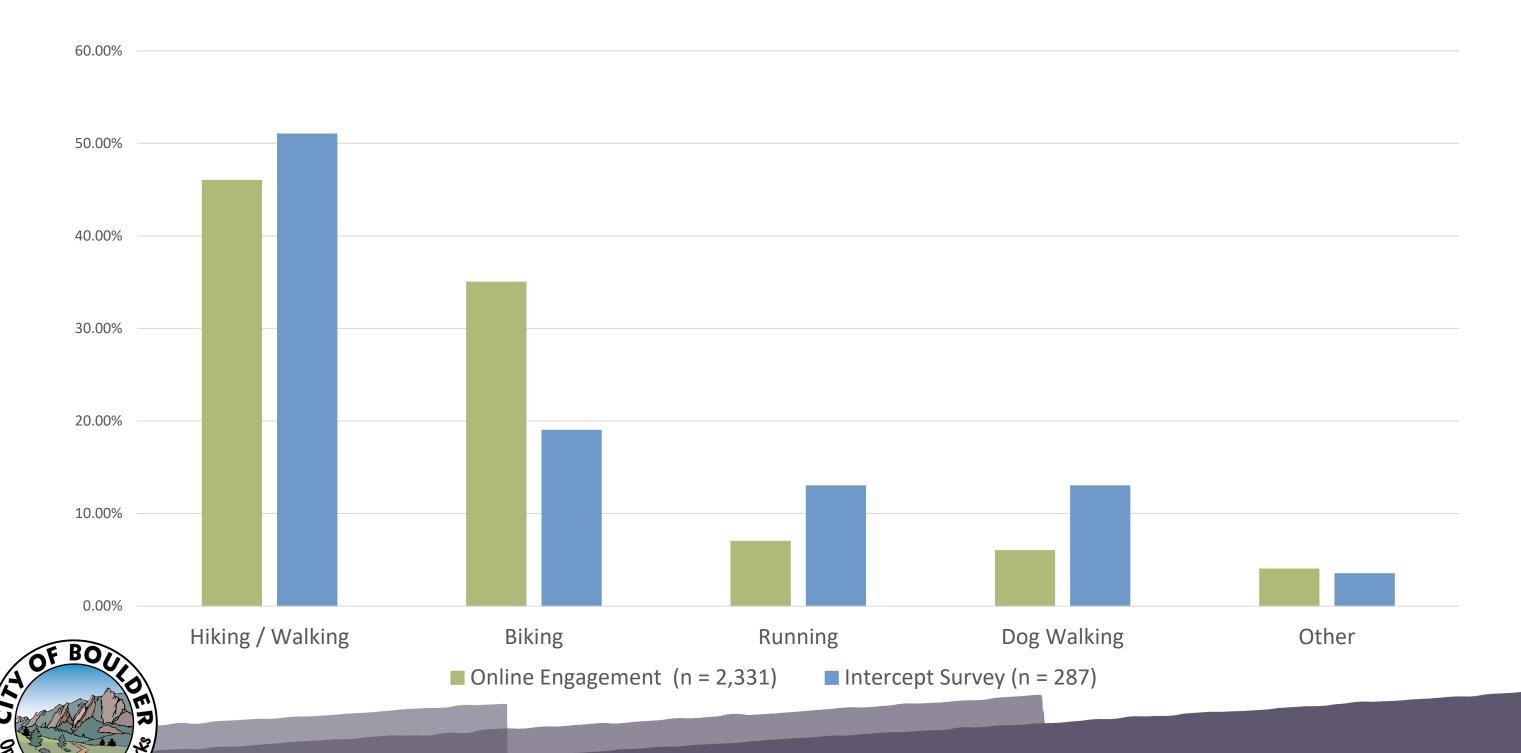
Online Engagement



Onsite Intercept

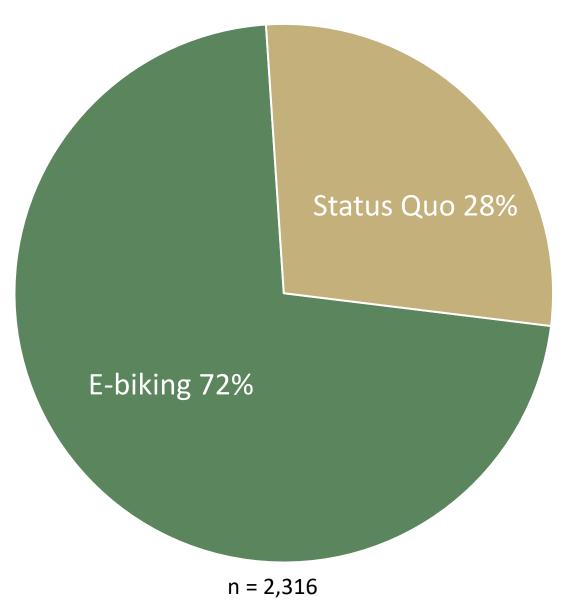


Primary Open Space Activity

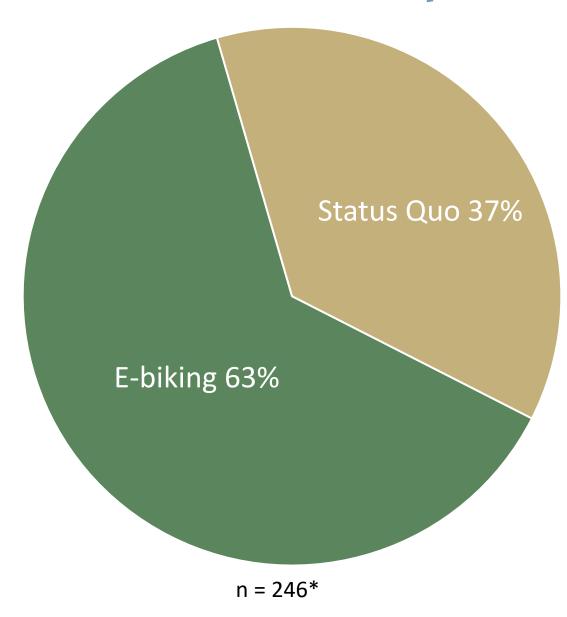


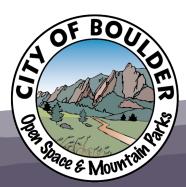
Support for E-bikes on Open Space

Online Engagement



Onsite Intercept



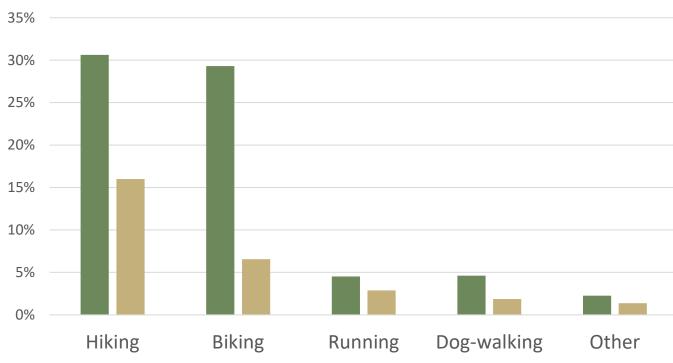


Overall

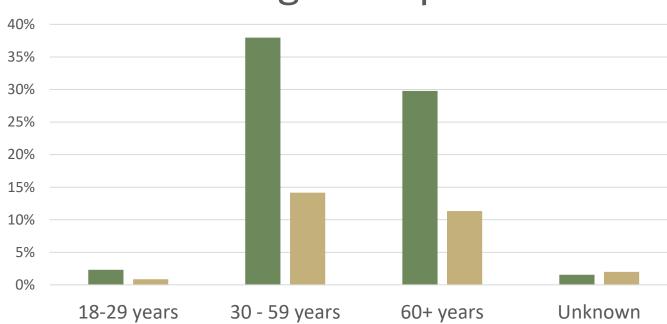
72%

28%

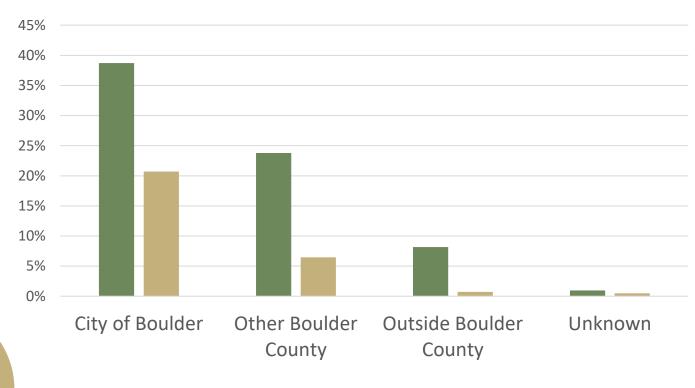
Primary Activity



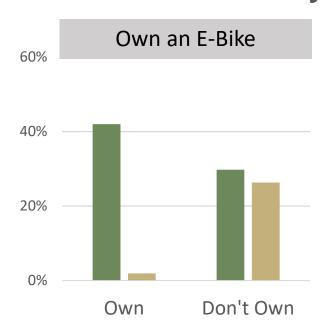
Age Group

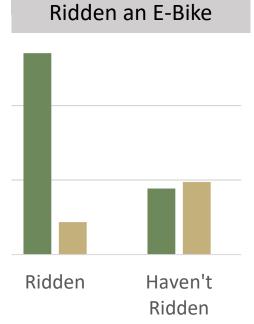


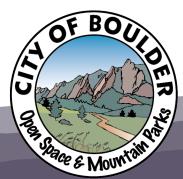
Residence



Familiarity with e-bikes



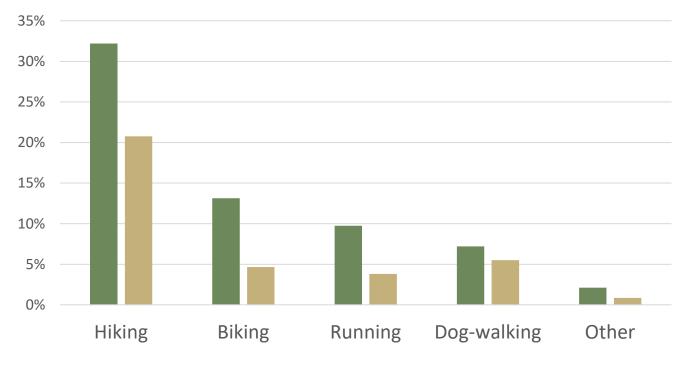




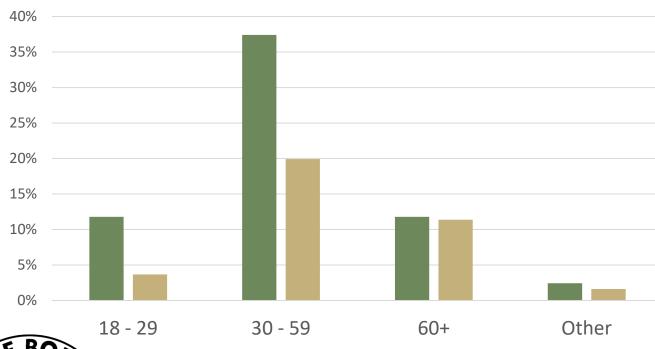
■ E-biking ■ Status Quo

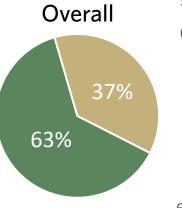
Onsite Intercept

Primary Activity

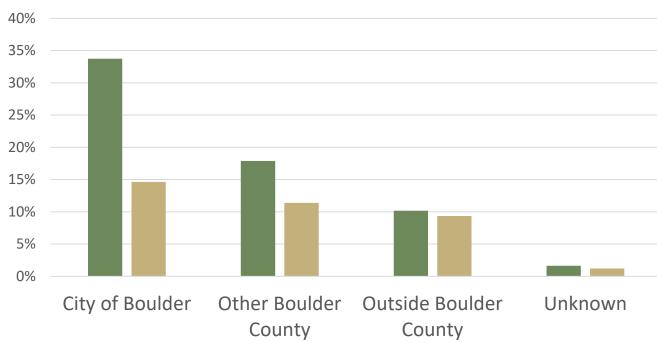




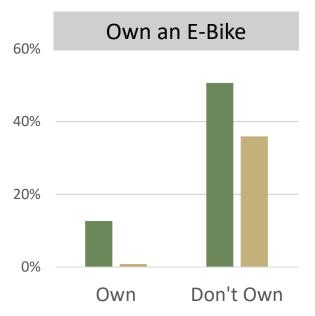


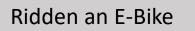


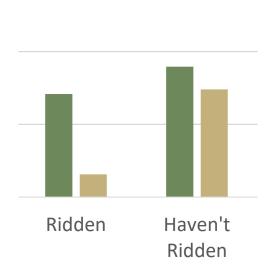
Residence



Familiarity with e-bikes







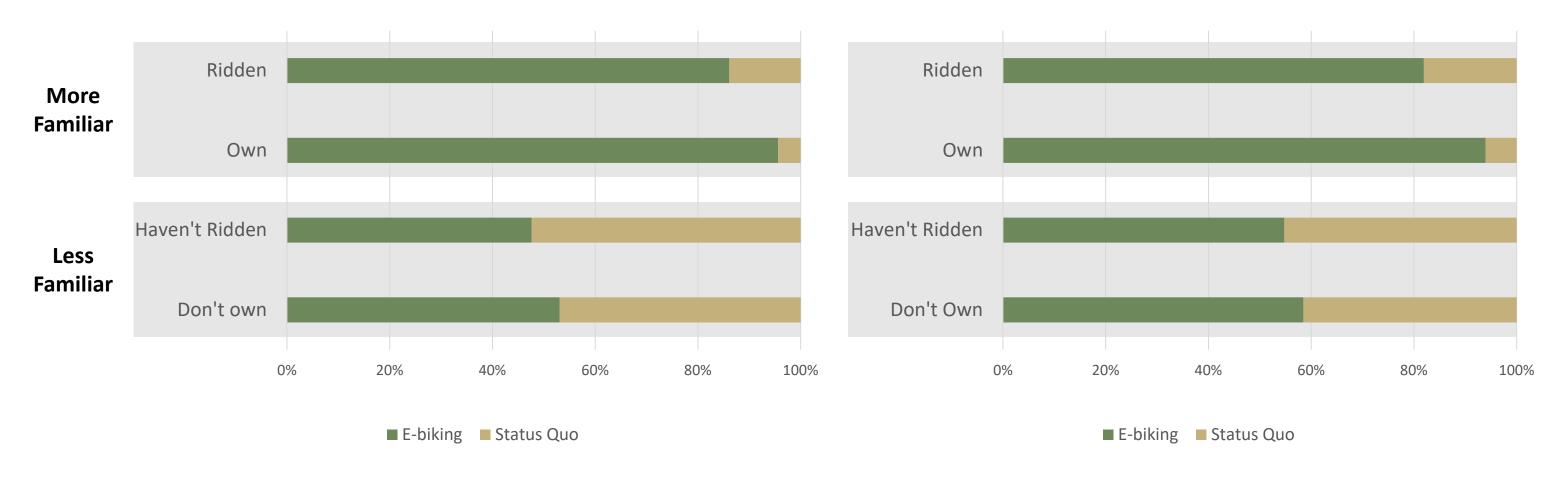
■ E-biking

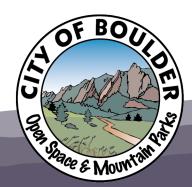
■ Status Quo

Familiarity of E-Bikes

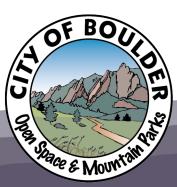
Online Engagement

Onsite Intercept



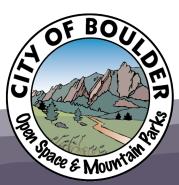


Support by Alternative



Alternatives to the Status Quo

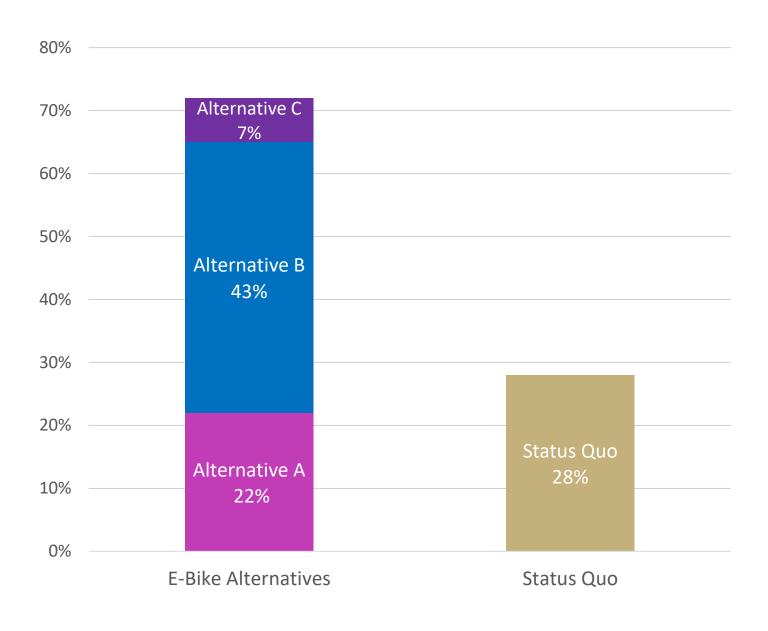
- A. All Trails that allow bikes
- B. Plains trails located east of **B**roadway, and the Boulder Canyon Trail
- C. Inter-Connected Trails that allow bicycling and are part of the regional trail.

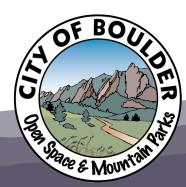


Online Engagement

Support for alternatives or the status quo







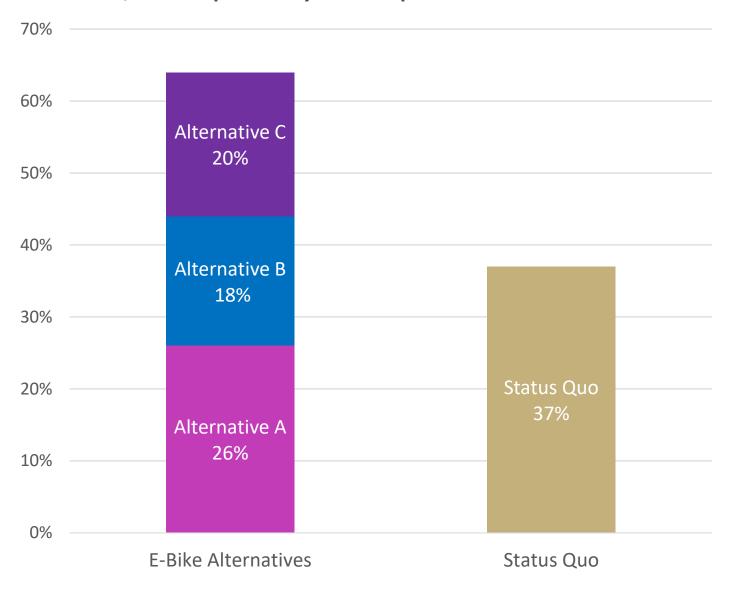
Onsite Intercept

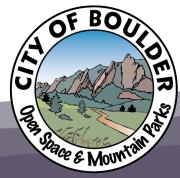
Management alternatives responses

Preference

Overall, which option do you most prefer?







Overall Conclusions from datasets

Overall

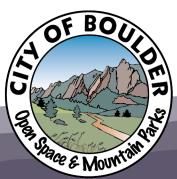
Majority support for e-biking on some trails

Preferences

- Alternative B supported by most online engagement respondents
- Support across all three alternatives by many onsite intercept respondents

Management Considerations

- E-biker speed
- concern for conflict
- Potential impacts to trail conditions



OSMP staff recommends a holistic approach to manage e-biking, like biking, as a passive recreational activity on open space trails. Management of use would include the following strategies:

Trail design and maintenance

There is significant guidance in trail design standards and maintenance that can support speed and conflict mitigation on multi-use trails. Design that incorporates sustainable trail elements of grade reversals tends to have lower and variable grades, helping to minimize speed more effectively than steeper grades. Ensuring open sight lines enables visitors to see one another early and prepare for respectful passing. Other purposeful design and construction techniques are texturized stone paving (rough stone tread), and trail-side anchors, or gateways (stone strategically placed on the side of the trail to create a visual obstacle). These features can support slowing visitors, especially less skilled bikers.

Trail sections that have a higher potential for conflict due to design challenges may also align with maintenance backlog issues. OSMP staff cross-reference concerns with backlogged projects to support strategic prioritization of repairs and subtle trail enhancements that may mitigate conflict and speed concerns. Trail condition monitoring and annual inspection data can also help identify early trail condition concerns that may relate to conflict, aiding in how work is prioritized and the design approach. OSMP visitor surveys will support monitoring conflict rates, which can also guide trail management approaches.

Education and outreach

OSMP uses a sliding scale of education and enforcement levels, from signage and educational interactions to citations, to have the most success at changing visitor behavior. OSMP's Community Connections and Partnerships (CC&P) staff includes POST-certified Rangers, Temporary Rangers (limited commission), Education and Outreach Staff (including Outreach Rangers), Volunteer Services staff, and a variety of volunteers. All staff and volunteers are trained using the "Authority of the Resource" as a guiding principle, but they may also reference a regulation when necessary. They are also trained in natural history, de-escalation skills and more. All Outreach and Volunteer staff are supported by Rangers who help manage enforcement issues and work in concert to apply the appropriate intervention.

Raising awareness and supporting visitors to know the rules is an effective management strategy OSMP would continue and enhance if e-biking is allowed on some multi-use trails. OSMP Education and Outreach (E&O) staff provide a variety of engaging and informative programs, events, and experiences for a diversity of audiences. The primary goal of the E&O group is to welcome visitors at trailheads and on trails throughout the OSMP system. Outreach staff and public facing volunteers contacted an additional 142,348 visitors through trail and trailhead outreach in 2021. Common topics included resource protection, responsible recreation, and visitor safety. To support visitors with knowing which trails are designated for e-biking use and how to share these trails, messaging targeted to e-bikers would be incorporated into existing biker etiquette outreach materials and events. OSMP E&O efforts would focus on staffing a table/booth to share information for pre-ride interactions at trailhead locations with the most bike and e-bike use.

E&O would continue outreach focused on courtesy and rules for sharing multi-use trails among recreational activity groups. Educational materials would be adapted for programming offered for guided mountain biking, etiquette and safety, adaptive mountain biking, and bike repair. In addition to raising public awareness of trails designated for e-biking, OSMP would continue to communicate with the broader population at community events such as the Boulder Famer's Market and Bike to Work Day rest stations, and Ranger Cottage at Chautauqua. OSMP's continued partnerships with volunteers and the Mountain Bike Patrol would augment staff programming regarding e-biking etiquette and rules on open space.

In partnership with Eldorado Canyon State Park and JCOS, OSMP completed a messaging study around trail courtesy (2022). The objective of the study was to evaluate the effectiveness of trailside signs designed to persuade mountain bikers and trail runners to slow down and announce themselves when approaching hikers on multi-use trails.

The agencies found that mountain bikers passing hikers from behind were three times more likely to slow and announce than when passing hikers head-on. 72% of mountain bikers strongly agreed that they intended to slow down and announce their presence every time when approaching hikers. Approximately 40% of bikers were likely to complete the desired behavior, which is slowing down and communicating before passing somebody else on the trail. (That was an increase from 24% when this sign was not present.) Running behavior however was not influenced by the sign and runners could not recall the persuasive statement. This demonstrated that the intent to do the right thing is present, but more than signs are needed to promote the correct behavior that is required of users.





OSMP intends to integrate lessons learned from this study to inform the creation of our own trailside signs and off-trail outreach materials that includes a behavioral prompt and belief-based message. The aim would be to increase awareness and compliance of the existing yielding requirement through future education and outreach efforts.

Ranger patrol and enforcement

If e-biking is allowed on some open space trails, rangers will continue to focus on highly visited areas and prioritize weekend time on patrols, as outlined in the Ranger Strategic Plan. Targeted patrols are a tool that can be used to address visitor safety concerns or complaints where e-biking would be allowed. Rangers will continue engaging with their respective communities to better understand their unique experiences, concerns, needs and opportunities.

Rangers also address areas of concern when they are personally observed or when they receive calls for service from Boulder Police Dispatch, OSMP staff or volunteers. Penalties for a violation of a regulation can range from an educational opportunity to a citation, depending on the totality of the circumstances. The following behaviors related to biking and e-biking that can be regulatorily addressed are:

- Areas where an activity is currently prohibited, for example E-bikes.
- Failure to yield
- Damaging public property
- Bikers are required to remain on trail
- Protection of trees and plants

OSMP also anticipates that some changes to local regulations are needed. OSMP staff is reviewing the B.R.C. to identify and recommend amendments as appropriate to support the management of e-bikes and related enforcement efforts.

Speed of e-bikers, related to increased conflict, was a commonly expressed concern in public input gathered during the engagement window OSMP conducted this summer. Speed differential currently occurs across many existing user types including equestrians, bikes, runners, and hikers. Drawing from the experience of peer agencies and our own experience with biking as an open space activity, OSMP staff do not anticipate that e-biking will require unique enforcement strategies such as establishing and enforcing a speed limit. OSMP staff does however anticipate that someone on an e-bike may travel uphill slightly faster than someone on a regular bike, in which case that user will be required to yield, communicate and pass safely as required by regulation. If and when an injury occurs related to speed, Rangers will respond immediately to provide medical assistance and enforcement, if appropriate.

Monitoring

Establishing a balance between visitor enjoyment and stewardship of resources is critical. OMSP collects visitation related data on a regular basis to develop a quantitative understanding of system-wide recreation visits to city-managed open space. This data is used to support the department and the public in making informed decisions relating to visitation. The onsite intercept survey conducted as part of this project gathered visitor opinions and preferences regarding e-biking on open space lands. It can be used as a baseline for future visitor studies to track trends and changes in public sentiment over time. Automated trail counters are used to estimate the total number of recreation visits to city-managed open space, evaluate annual, seasonal, monthly, daily, and hourly patterns of visitation, and determine how visitation levels are distributed across sample locations.

If e-biking is allowed on some open space trails, several on-going visitor monitoring studies can be used in the future to inform recreation management discussions and actions. E-biking would be added as a new activity category in future visitor surveys, alongside all other allowed activities, to quantify and detect any change in activity distributions over time as part of systemwide monitoring efforts. This would allow staff to report out changes, if any, that may be related to e-biking. On-site visitor surveys would be used to evaluate visitor encounter and conflict rates, displacement, perceived crowding, and positive experiences with other visitors. Change can be measured and reported on for trails that allow e-biking and those that do not. Visitor surveys also would measure the demographics and transportation mode choice used for getting to open space for those visitors that report e-biking activity. On-going automated trail counters will be used to measure visitation levels on trails that allow e-biking and those that do not.

Results from on-going visitor monitoring studies can inform conversations related to the adaptive management of e-biking as an allowed activity on open space trails. Using the monitoring studies highlighted above, we can quantitatively compare concerns brought forth during the engagement process such as fear of increasing conflict, displacement, perceived crowding, and visitation levels with how those concerns bear out over time. Future results can also be used to quantitatively speak to perceived benefits of e-biking, such as supporting mental health and access for visitors of varied abilities and ages. Collectively, these visitor monitoring studies can speak to any change associated with the addition of e-biking as an allowed activity on open space trails, create a shared understanding of on-the-ground conditions, and objectively inform future adaptive management discussions and decisions.