



## MEMORANDUM

**TO:** Mayor and City Council

**FROM:** Ashley Perl, Climate Action Manager

**THROUGH:** Barry Crook, Assistant City Manager

**DATE OF MEMO:** December 8, 2017

**MEETING DATE:** December 12, 2017

**RE:** Aspen Mobility Lab

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### SUMMARY:

This past summer, Mayor Skadron introduced the idea that the City of Aspen should conduct a large-scale, bold experiment that would increase mobility options while decreasing the reliance on the personal automobile in the Aspen community. After further consideration, City Council directed staff to create a project plan and scope. Since then, City of Aspen staff have partnered with consultants and regional groups to create a plan for the Aspen Mobility Lab. Staff is prepared to present a comprehensive plan for the Lab that will deliver transportation options that are competitive with the ease and speed of personal vehicles to all members of the Aspen community, revolutionizing the way people move within the boundary of the Intercept Lot to east of Aspen in June, July and August 2018. The Lab will be a community-wide initiative to increase convenient mobility options, environmental sustainability, safety and quality of life in the upper Roaring Fork Valley without a focus on adding lanes or parking spaces.

### REQUEST OF COUNCIL:

Staff is presenting a detailed plan and scope for the Lab and requesting City Council's feedback.

### BACKGROUND:

Aspen and the Roaring Fork Valley have a long history of leading the way with innovative transportation measures. These accomplishments and the services that are offered to the community are renowned across the country, particularly for a community as small as Aspen. Despite these aggressive actions, the community continues to be greatly impacted by traffic congestion and the absence of mobility services that are adequate to serve the unique needs of locals, commuters and visitors. Data and evidence from the community shows that the current mobility options are not convenient, inexpensive, or attractive enough for community members to leave their personal automobile and choose another way. There is a need for new approaches to Aspen's transportation landscape, and those approaches must be innovative, creative and competitive. The Aspen Mobility Lab will provide a demonstration ground for the concepts that were put forward by the Community Forum on Transportation.

## **DISCUSSION:**

The mission of the Aspen Mobility Lab is to provide community members, commuters and visitors with an improved quality of life and experience by delivering convenient alternatives to driving alone. If the Lab is successful, those who no longer desire to sit in traffic in their personal automobile will abandon their private vehicle for another way. The Lab will draw on lessons from select pilot programs in over 25 cities worldwide, and will be the most advanced community-wide pilot program executed to date. The lessons learned from the Lab will be actively disseminated to national partners, municipal leaders, and transportation directors across the US. The City of Aspen will seek out unique ways to share insights with others, starting with design and implementation, and concluding with a Summit in November 2018 to provide all interested parties an opportunity to connect and recap the Lab. Most importantly, the City of Aspen and regional partners will learn what modes are accepted and used by the community to inform responsible future investments and planning.

The Lab will include four key elements: increased transit options, increased support for bicyclists, incentives to drive behavior change, and outreach to the community.

### **Aspen Mobility Lab Guiding Principles:**

- Provide new transportation modes to encourage new users. The Lab will prioritize funding and resources towards deploying new technologies and new transportation modes over existing modes. The Lab seeks to change the behaviors of those who currently drive alone, and secondarily, to improve the experience for those already using mobility services.
- Deliver a comprehensive mobility system. If full funding and support is not realized and Aspen decides to pursue a scaled-down Lab, all elements including new mobility, bike support, incentives, disincentives, and outreach must be included.
- Provide real solutions to positively impact the local community. The Lab will first and foremost support the practical needs of locals, commuters and visitors and must inform the future of local transportation investment. It will favor these solutions over glitzy high-tech options that are not yet available in the market or that do not enhance the Aspen lifestyle.

**Opportunities:** The Aspen Mobility Lab will provide ample opportunities to businesses, commuters, locals, visitors, and transportation planners. These opportunities may include:

- Impacting real change in commuting patterns and modes
- Creating new opportunities for existing businesses to attract customers
- Increasing the vitality and connectedness of downtown
- Supporting the goals of sustainability, quality of life, mobility and innovation
- Improved convenience and experience

**Proposed Project:** The Aspen Mobility Lab is proposed to run from approximately June 1-August 31, 2018 and would create a testing ground for addressing transportation and mobility needs in Aspen. This section details the specific components of the Lab.

Mobility options. The Lab will provide new and expanded ways for people to move into and out of town from the Brush Creek Intercept Lot, the Buttermilk Parking Lot, and Aspen's

neighborhoods, as well as improved options for in-town movement. To do this, the City will partner with local and national mobility providers to bring new technologies to the community while expanding and supporting the existing modes.

A Request for Proposals was recently released in the following categories of mobility:

- Bicycles:
  - Dockless bike share program
  - Electric bike share program
  - Specialty bike share program (cargo bikes, etc.)
  - Electric bike lease program
  - Specialty bike lease program
  - Discounted electric bike sales program
- Transit:
  - On-demand transit services
  - Specialty fixed route services
  - Microtransit services

Incentives. To support the use of the new and existing mobility options, the Lab will provide incentives for those who participate. Some of those incentives may include:

- Discounts at local businesses
- Coupons or gift certificates to be used at local businesses
- Prizes and rewards for long-term behavior changes
- Recognition programs

In addition, the City will strive to make as many services as possible free or inexpensive to the user.

Parking Lots. One goal of the Lab is to encourage 600-800 drivers to park at the Brush Creek Intercept Lot instead of driving into town. To do this, the City will submit a permit to Pitkin County requesting permission to host a coffee cart at the Intercept Lot, as well as higher quality portable toilets and temporary improved seating to enhance the experience. Additionally, the City will encourage parking at the Buttermilk parking lot for those who wish to park and bike into town. The City will provide amenities to support bike commuting and will work with local bike shops to make Buttermilk a hub for bike commuting.

Mobility Support. To support new users of mobility, the City must alter the downtown landscape to provide safer conditions for pedestrians, bicyclists and mobility technologies. To improve safety and wayfinding for bicyclists, the City will install protected bike ways on Hopkins, Galena and Cooper Streets. These bike lanes will allow bicyclists a safe and designated way to move about town while reducing bike/pedestrian and bike/car interactions. Although downtown Aspen currently supports biking through the use of ‘sharrows’ painted on the streets, a significant number of community members do not bike because of safety concerns. Data from the Bicycle and Pedestrian Master Plan shows that designated and protected bike lanes would decrease the barrier to biking for much of the community, leading to an increased number of new bicyclists in Aspen, which is one of the goals of the Lab. It is anticipated that electric bikes will be a critical component of the Lab because e-bikes remove barriers for bike commuting and travel and could lead to a significant number of new bikers.

In addition to protected bike lanes, the Lab will support new mobility by providing twelve designated locations for ride-shares, shuttles and others to drop off and pick up passengers, as well as increased valet services.

Outreach. The key to successful behavior change is education, outreach and marketing to different community groups. It is also critical to provide messaging and program design that is uniquely designed to speak to each group's values and address their challenges. A Request for Proposals has been issued to find a strategic outreach and marketing firm to oversee these aspects of the Lab and to ensure that the Lab is inclusive and equitable.

**Work accomplished to-date:**

The Mobility Lab project team is organized into working groups. Below is an update on recent accomplishments by each group.

**Fundraising Working Group**

- Created funding materials and funder communications
- Developed list of possible funders
- Facilitated initial meetings with funders
- Currently: Conducting follow up meetings

**Downtown Design Working Group**

- Established parameters for downtown mobility support
- Created detailed plan for bike routes, activation areas, bike storage, drop-off zones and parking
- Developed initial plan for Brush Creek Intercept Lot and Buttermilk Parking Lot

**Bike Working Group**

- Identified existing barriers to biking
- Recommended improvements to support biking
- Conducted initial outreach to local bike shops to solicit involvement

**Data Working Group**

- Identified data currently available
- Identified key measures of success
- Established an approach to communicate data to the public through a dashboard
- Created a data quality checklist and guidelines

**Outreach Working Group**

- Identified 20+ audiences and user groups
- Developed and issued RFP for comprehensive outreach, education, promotion and incentive program
- Finalized branding system

**Mobility Provider Group**

- Identified mobility services required
- Assessed capacity of local providers
- Issued RFI to solicit initial interest
- Issued RFPs in two categories: Bikes and Transit

**Regional cooperation:** The Mobility Lab has the support of the Aspen Community Foundation, the Aspen Community Forum, Core, Rocky Mountain Institute, SkiCo, the Association of



Colorado Ski Towns, and CDOT's RoadX, which supports the most innovative transportation projects in the state. There has been significant outreach to Pitkin County and Snowmass.

### **Next Steps:**

The primary focus through the remainder of 2017 and into the first part of 2018 is fundraising. Staff will return to City Council on January 23<sup>rd</sup> to provide an update on funds raised. At that meeting, it is expected that the City will have soft funding commitments, but not contracts for funding or services. Depending on the success of fundraising efforts, staff will provide City Council with different levels of project design and scope and will ask City Council to determine a final direction and scope for the Lab.

### **FINANCIAL/BUDGET IMPACTS:**

Bringing a truly innovative and comprehensive lab to Aspen will require funding most likely between \$5 and \$7 million. The City of Aspen cannot provide this level of funding and must create new partnerships and build upon existing ones to make the Mobility Lab a reality. It is expected that the City of Aspen will need to fund a percentage of the overall project, but the goal is to minimize the City's contribution.

### **Fundraising Developments:**

- 1) Automotive, technology and telecom companies are proving to be the most likely partners and funders of the Lab. Additional meetings are scheduled between December 15 and January 15.
- 2) The City of Aspen is supported by mobility fundraising experts and specialists.
- 3) The Mobility Lab and the Aspen story has received positive responses so far. Some of the unique attractions to the sponsors include: the Aspen brand, the City's strong commitment, and the controlled environment for testing interaction between innovative options and real people.
- 4) Extrapolating from the first 10 meetings, there is adequate interest from funders to meet the City's fundraising goals, however timing is the biggest challenge.

### **Fundraising Challenges**

- 1) The funding timeline has always been the biggest challenge in making the Lab a reality.
- 2) The fundraising goal has increased from \$1.5mm to over \$5.5mm, significantly increasing the challenge.
- 3) Companies are wary of short-term labs and experiments without ongoing opportunities to create a clear ROI for their investment. Staff is working on how to make the Lab attractive from an ROI perspective.

City Council has approved \$350,000 for use in 2017 and for the first part of 2018. Those funds are being used as follows:

- Contract with Design Workshop for downtown and parking lot design
- Contract with Fehr and Peers for mobility consulting
- Contract with Alta Planning and Design for construction and engineering assistance
- Project management and administration staff and consultant
- Fundraising consultants and activities
- Branding
- App research and creation

### **ENVIRONMENTAL IMPACTS:**

The Aspen Mobility Lab positively impacts numerous measures from City Council's Sustainability Dashboard including: Air Quality (PM levels, ozone levels); Greenhouse Gas Emissions; Castle Creek Bridge Counts; Acres of Trails; Mass Transit Use; Walkability and Bike-ability Rating; Health and Well Being; and Community Connections

# Aspen, Basalt first in country to offer free bike sharing

January 31, 2018

The town of Basalt is joining the city of Aspen as the first municipalities in the country to take their bike-sharing programs to a no-fare system.

When the 190 bikes roll out this spring as part of WE-cycle, the first 30 minutes will be free to users. That's thanks to the city of Aspen, which is contributing \$145,000 to cover the costs for the Aspen service and \$45,000 each from the town of Basalt and Eagle County for the Basalt service. However, \$15,000 of Basalt's contribution is for capital expansions.

Mirte Mallory, executive director and founder of WE-cycle, said the free bike service aligns with the city of Aspen's other non-fare transportation systems — the Downtowner transit service and a half-dozen fixed bus routes.

"It was fair to bring WE-cycle into the no-fare paradigm," Mallory said. "It's going to be an exciting summer."

Once a user has gone over the 30 minutes, they will pay a steep "overtime fee" per minute, although that price has not been set yet. The idea is that if people want to use a WE-cycle bike for a longer period of time, they should rent one at a bike shop, Mallory said.

The average length of a ride for a WE-cycle customer is 8.8 minutes.

While she anticipates more ridership because of the 30 minutes free, Mallory doesn't plan to add to her existing fleet of bikes. In Aspen, there are 110 bikes and 20 stations. In Basalt, there are 80 bikes and 23 stations.

"It's a managed system and we can anticipate our ridership and the growth," Mallory said, adding that has been the approach since WE-cycle's inception in 2013.

Only 10 bikes and seven stations have been added to the Aspen service area in the past five years even though the usage has quadrupled. "What's so extraordinary is that 110 bikes can serve so many people," Mallory said.

And there's room for even more growth — it's just a matter of making sure there are bikes available at various locations throughout town.

On a daily basis, an average of 193 people use WE-cycle, but during peak times that number can swell to between 500 and 600.

WE-cycle operates in Aspen from October to May; in Basalt the service goes until November.

Mallory reported to Aspen City Council last fall that there were 34,100 rides in Aspen in 2017 and more than 42,000 rides system wide.

And in Aspen, 87 percent of the riders were season-pass holders and only 13 percent were nonresidents.

The city of Aspen was one of WE-cycle's first founding partners, and Mallory's goal is to find more public-private partnerships and multi-year commitments from local entities. She was recently able to do that with the Elected Officials Transportation Committee, which is comprised of the city, Pitkin County and Snowmass Village. They committed to \$100,000 this year and in 2019.

The 2018 budget for the Aspen system is \$275,000. Another \$30,000 will be realized in private sponsorships.

When WE-cycle first started, there were fewer than 30 bike-share programs in the country; now there are 100. And WE-cycle has one of the highest adoption rates in the country with some of the highest ridership per capita, according to Mallory.

"Our goal collectively is to get more people to ride bikes and reduce the number of cars on the road," she said, adding WE-cycle has passholders stretching from Parachute to Minturn. "The impact is well beyond our city limits."

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# Big debate coming this spring on use of electronic bikes on Aspen-area trails

March 3, 2018

Multiple jurisdictions in the Roaring Fork Valley are going to determine this spring if they can get on the same path regarding use of electric bikes on paved trails.

There is a hodgepodge of management currently on the Rio Grande Trail, the heavily used route down the spine of the valley. Roaring Fork Transportation Authority and Glenwood Springs allow use of e-bikes as does Aspen. Pitkin County Open Space and Trails prohibits them.

RFTA manages the Rio Grande from Glenwood to the Emma schoolhouse. Pitkin County manages the trail from Emma to Aspen.

"It's going to be impossible for us to govern them without a consistent policy," said Angela Henderson, RFTA assistant director, project management and facilities operations.

The RFTA board of directors voted, 6-2, last fall to allow (<https://www.aspentimes.com/news/rfta-to-allow-e-bikes-on-rio-grande-trail/>) class I and class II e-bikes. They said they would revisit the issue in 2018.

Class I e-bikes engage an electric motor when the rider is peddling and the motor stops when the speed hits 20 mph. A class II bike provides electric power regardless of whether the rider is peddling. It stops when the speed hits 20 mph.

Colo. Gov. John Hickenlooper signed into law last year a bill that makes Colorado trails that are authorized for bicycle use open by default to e-bikes unless a local jurisdiction took specific action prohibiting them. Pitkin County prohibited them but said it would reconsider after it could weigh public opinion.

Class III bikes, which are capable of higher speeds without pedal-assist, weren't automatically allowed by the state law.

Trail users will be able to express their opinions in processes that will be held by RFTA and Pitkin County. Gary Tennenbaum, director of Pitkin County Open Space and Trails, said the agency and RFTA hired a public process consultant to help coordinate the meetings.

"The goal is to get a consistent policy," he said.

Tennenbaum stressed that the open space program will only consider e-bike use for hard surface trails such as the Rio Grande, Owl Creek Trail and Brush Creek Trail where they are in its jurisdiction.

No e-bike use will be considered this year for dirt routes overseen by open space, including the popular routes in Sky Mountain Park. The policy is consistent with the U.S. Forest Service's stance, which considers e-bikes a motorized vehicle, he said.

E-bikes are allowed on forest and county routes open to motorized uses.

Tennenbaum said every jurisdiction from Aspen to New Castle will have a chance to be part of the public process this spring.

Mark Gould, CEO of Gould Construction, is a proponent of e-bikes on paved trails after experimenting with them last fall (<https://www.aspentimes.com/news/rfta-delays-decision-on-e-bikes-during-glenwood-springs-bridge-detour/>) to get workers between Glenwood Springs and company headquarters behind Thunder River Market south of Glenwood. The company purchased about 30 bikes for employees to use for commuting.

"It worked the way it was supposed to," he said.

The company will sell some of the bikes but it is keeping a handful because they are a convenient way to buzz into Glenwood via the Rio Grande Trail for business meetings, Gould said.

He also believes the bikes converted some of his employees into cyclists.

"It's great exercise," Gould said. "We had a couple of guys who lost a lot of weight."

He understands the restrictions of the heavy bikes from narrow, dirt mountain bike trails.

"This is not about getting on the mountain bike (routes)," Gould said. "This is about the 50- to 60-year-old getting out on the paved trail.

"It's, No. 1, commuters and, No. 2, people who otherwise wouldn't be on a bike."

He also supports requiring use of bikes that made the rider do some of the work.

"You totally missed the point if it's not pedal-assist," Gould said.

Some people have opposed adding e-bikes on the Rio Grande Trail in the upper valley because it could introduce people who aren't familiar with trail etiquette and safety onto the route — at a fairly fast speed.

"You have the conflicts of adding another user group to a very busy trail system," Tennenbaum said.

Others scoff at the concern, noting that road bikes already zoom along the route at high speeds.

It's a debate occurring around Colorado.

Jefferson County Open Space approved a one-year experiment last week to allow class I e-bikes on its extensive network of natural surface trails west of Denver. It will allow class I and class II e-bikes on paved trails. The experiment will be evaluated at the end of the year.

In the Roaring Fork Valley, Pitkin County will host public meetings and conduct an electronic survey. RFTA will hold a broader public outreach process in late March and April that seeks public comment on the additional amenities people would like to see along the Rio Grande Trail, desired trail connections and current uses, including e-bikes.

RFTA is planning two meetings each in Glenwood Springs, Carbondale, Basalt-El Jebel and Aspen. The goal is to take the results to the RFTA board in May.

RFTA and open space said the public meetings would include e-bike demos at trailheads to help people learn more about them firsthand.

Henderson said RFTA's one meeting last fall showed mixed opinions.

"It is kind of a 50-50 split in the valley on e-bikes," she said.

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**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE: OCTOBER 1, 2013**

**AGENDA TITLE:** Introduction, first reading and consideration of a motion to order published by title only an ordinance creating a pilot project allowing electric assisted bicycles on certain hard surfaced multi-use paths by amending Definitions in Sections 1-2-1- and 7-1-1 and amending Sections 7-4-16, 7-5-5 and 7-5-9 and adding Section 7-5-26 authorizing electric assisted bicycles where permitted by rule adopted by the City Manager, establishing a sunset date of December 31, 2014.

**PRESENTER/S**

Jane S. Brautigam, City Manager  
Paul J. Fetherston, Deputy City Manager  
Bob Eichem, Chief Financial Officer  
Maureen Rait, Executive Director of Public Works  
Tracy Winfree, Director of Public Works for Transportation  
Michael Gardner-Sweeney, Transportation Planning and Operations Coordinator  
Kathleen Bracke, GO Boulder Program Manager  
Jeff Haley, Parks Planner, Parks and Recreation Department  
Dean Paschall, Communication & Public Process Manager, Open Space and Mountain Parks  
Carey Weinheimer, Traffic Commander, Boulder Police Department  
Molly Winter, Executive Director of Downtown, University Hill and Parking Services  
Marni Ratzel, Senior Transportation Planner

**EXECUTIVE SUMMARY**

Currently city regulations allow electric-assist bicycles (e-bikes) to operate on the road and use bike lanes, but prohibit e-bikes on multi-use paths and sidewalks. As directed by council, the City of Boulder is considering a potential pilot project to test e-bike use on hard-surface, multi-use paths maintained to a transportation standard. The pilot would evaluate behavior of e-bike users to determine whether these vehicles can co-exist with current users on multi-use paths. The proposed ordinance is included as **Attachment A**.

The ordinance enables the City Manager, under rulemaking authority, to regulate the hard-surface paths where a person may activate the motor of an e-bike and establishes a sunset date of Dec. 31, 2014. The pilot project would begin 30 days after council approval of the ordinance. The pilot project duration allows for data collection, evaluation, community input, and quarterly updates to the City Council on the pilot findings.

The pilot would not include use on facilities that are pedestrian-only or intended to preserve the natural environment. Specifically, the proposed ordinance states that e-bike use would continue to be prohibited on sidewalks and the soft-surface trails in the Open Space and Mountain Park (OSMP) system surrounding Boulder. The pilot would be focused in the urban service area where there is a network of hard-surface, off-street multi-use paths.

**Attachment C** shows several hard-surface multi-use paths on OSMP fee-property that are integral to the greenway system within the City of Boulder. E-bikes may be in conflict with the Open Space and Mountain Parks Charter values that serve passive recreation and prohibit motorized vehicles on OSMP land.

On Sept. 25, the Open Space Board of Trustees (OSBT) held a public hearing and made a recommendation on whether OSMP hard-surface multi-use paths are appropriate to include in the e-bikes pilot project. The board's motion indicated that the use of e-bikes on OSMP paths is not appropriate under the Charter. Additionally, the OSBT recommended that staff begin investigating possible disposal of those identified multi-use paths on OSMP land have historically served a transportation function. The motion passed 4 to 1.

### **STAFF RECOMMENDATION**

As detailed in the 'options' section of this memo, staff considered several alternatives for defining and regulating e-bikes in the City of Boulder. The staff recommended option for an e-bike definition is Option 2. Accordingly, staff also recommends Option 2 for regulating the use of e-bikes, with the amendment to allow e-bike use on hard surface multi-use paths on OSMP fee-property identified as serving primarily a transportation function. These options propose to amend the definition of an e-bike to be consistent with state law and allow a pilot project to test e-bike use on hard-surface, multi-use paths in the City of Boulder that are maintained to a transportation standard.

Transportation and OSMP staff will work in partnership to identify the paths on OSMP property recommended for disposal as a transfer to transportation. A process and timeline will be outlined to negotiate the disposal of OSMP fee-owned property and future management by the Transportation Division. The e-bike pilot project will begin as planned, in November 2013. E-bike use on OSMP property will be prohibited until the disposal of property process is completed, anticipated by the end of 2013. Paved paths on OSMP fee-property identified to remain as OSMP property will be excluded from the e-bike pilot project.

**Suggested Motion Language:**

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

Motion to introduce and order published by title only an ordinance creating a pilot project allowing electric assisted bicycles on certain hard surfaced multi-use paths by amending Definitions in Sections 1-2-1- and 7-1-1 and amending Sections 7-4-16, 7-5-5 and 7-5-9 and adding Section 7-5-26 authorizing electric assisted bicycles where permitted by rule adopted by the City Manager, establishing a sunset date of December 31, 2014.

**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.
- **Environmental:** E-bikes are an efficient zero emission transportation option, reducing green house gas and vehicle miles traveled. An estimated 40 percent of all car trips are less than two miles away. Reducing the number of trips made by cars reduces congestion and frees up road space for essential motor vehicle trips. E-bikes expand the distance a bicyclist is willing and able to ride, which increases the potential to shift single occupant vehicle trips to e-bike trips.
- **Social:** Testing the use of e-bikes on multi-use paths as a pilot program supports a complete transportation system. E-bikes expand modal choice and helps aging generations stay active and healthy. It is an active transportation mode that addresses health problems related to sedentary behavior.

**OTHER IMPACTS**

- **Fiscal** – The budget impacts associated with implementing and evaluating a pilot program are supported by existing transportation funding in the city's 2013 and 2014 budgets. Any voluntary overtime employed to conduct enforcement also would be absorbed by the transportation budget.
- **Staff time** – Enforcement activities could be scheduled as part of normal shift work. This may limit the Boulder Police Department's capacity for extended enforcement due to the need to respond to emergency calls. Voluntary overtime also could be employed to conduct enforcement. The anticipated cost is \$55 per officer hour with a minimum of two officers for at least three hours per scheduled overtime event.

## **BOARD AND COMMISSION FEEDBACK**

On Sept. 23, 2013 the Transportation Advisory Board (TAB) held a public hearing to consider the e-bike pilot project. The Board unanimously passed two motions. The first motion was in support of the proposed ordinance. The second motion recommended Option 2 (option details below) for regulating e-bike use on multi-use paths during the pilot with the amendment to allow e-bike use on hard surface multi-use paths on OSMP fee-property.

During the public hearing, TAB members expressed the desire to work in partnership with OSMP staff and the OSBT to allow e-bikes on segments of multi-use paths that are integral to the greenway system and on OSMP-fee property. They also stated that if concerns arise, staff should revisit the scope of the pilot project. Board members also encouraged staff to explore opportunities to redesign segments of the path system impacted by recent flooding to provide better separation between bicyclists and pedestrians.

Other affected boards include the Downtown Management Commission (DMC), OSBT, University Hill Commercial Area Management Commission (UHMC), and Parks and Recreation Advisory Board (PRAB). In early September, these boards received a staff memorandum with information on the options under consideration and the public process forums for the community to provide input. Each board discussed the item at their respective September meetings.

The OSBT first discussed the e-bike pilot at its meeting on Sept. 11, 2013. Conversation focused on safety concerns and conflict with the OSMP Charter values to serve passive recreation and prohibit motorized vehicles on OSMP land. The OSBT also expressed concerns regarding the need to address corridors where there are holdings on OSMP land that function in another way such as hard surface paths serving a transportation purpose. On Sept. 25, the OSBT held a public hearing to consider the e-bike pilot project on hard surface paths on OSMP property. The board's motion indicated that the use of e-bikes on OSMP paths is not appropriate under the Charter. In addition, the OSBT recommended that staff begin investigating possible disposal of those identified multi-use paths on OSMP land have historically served a transportation function. The motion passed 4 to 1.

During the public hearing, the board expressed a general consensus that most of the paved multi-use paths on OSMP land (as identified in Attachment C) serve as a better transportation function than an open space purpose. These paths are typically on the periphery of the OSMP land and connect with other transportation managed paths. Two segments of the South Boulder Creek path were identified as fundamental to directly serving open space trails. These are the Bobolink trail south of Baseline Road and the trail around KOA Lake and extending southward from the lake along South Boulder Creek. The board also tasked OSMP staff with returning at a future meeting with details on how the disposal would be implemented.

On Sept. 23, the PRAB discussed the e-bike pilot and was supportive of the project. The only concerns raised were related to determining a way to keep e-bike speed at a minimum and congestion on the Boulder Creek Path and other popular corridors. Additionally, one board member would prefer to not have e-bikes on any multi-use paths.

The UHMC is scheduled to discuss the e-bike pilot on Oct. 1, 2013. The meeting was postponed from the regular meeting date of Sept. 18, 2013.

On Sept. 9, the DMC made a motion in support of Option 3 (detailed descriptions below) as the Commission does not want to allow e-bikes on the section of the Boulder Creek Path from Scott Carpenter Park to Eben G. Fine Park. The DMC does not support Option 2 because of the potential of pedestrian and bicycle conflicts. The vote was unanimous.

### **PUBLIC FEEDBACK**

A summary of public input on the options considered for an e-bike pilot project is included in **Attachment B**. Also detailed is a summary of the public engagement process, which included several forums for community input, including two public meetings, an online survey and social media. An intercept survey of multi-use path users scheduled for the week of Sept. 16 was postponed until further notice. Staff also scheduled opportunities for community members to learn more about and test ride e-bikes, including the city-sponsored Boulder Green Streets event that was scheduled for Sunday, Sept. 22. This event has been postponed. A new date is not yet set.

Seven community members also attended the Transportation Advisory Board public hearing on Sept. 23, 2013, to provide testimony during the public hearing. All but one expressed support for a pilot project to test e-bike use on multi-use paths.

To date, comments from more than 250 community members have been received expressing an opinion on the proposed options for a pilot project to test e-bike use on paths. A majority (approximately two-thirds) are supportive of a pilot project. The most common reasons cited were that e-bikes help aging generations stay active and healthy, make longer commutes viable by bike and are an economic and non-polluting alternative to automobiles. Approximately 40 percent of comments received were opposed to testing e-bike use on paths. The primary concerns raised include congestion on the paths, speed, and safety. The behavior of existing bicyclists and a lack of enforcement were cited as concerns that would be compounded by e-bike users. Some comments suggested that the multi-use path system needs to separate bicyclists from walkers. Increased awareness through an education and outreach campaign followed up with targeted enforcement was expressed as vital components to consider.

In addition to the options being considered by staff, some community members suggested that other options be considered. Most of these were identified at the public meeting held on Sept. 4, 2013. Included were options to define an e-bike based on vehicle weight, vehicle speed or speed/weight based on rider and vehicle. Suggested options to regulate use included allowing e-bikes wherever bikes are allowed (including sidewalks and OSMP trails); allowing e-bikes wherever bikes were allowed except on OSMP natural surface

paths; and restricting e-bike use on some weekends (but, allowing them on other weekends along the Boulder Creek Path to test the difference). A summary of comments from the two public meetings held on Sept. 4 and Aug. 7 also are included in **Attachment B**.

## **BACKGROUND**

Considering a trial period to test the use of e-bikes on off-street, hard-surface multi-use pathways raised council interest due to community support expressed through a petition and testimony provided to the council. Several community members attended the City Council meeting on Tuesday, May 21 to support changing city policy to allow e-bikes on paths. In response, the Transportation Division spearheaded an internal review of e-bike regulations. An interdepartmental team comprised of Parks and Recreation, Open Space and Mountain Parks, the City Attorney's Office (CAO), Police Department and Transportation as well as Downtown University Hill Management & Parking Services was involved in the review.

The city is in the process of updating the Transportation Master Plan (TMP). As part of the TMP update, the Transportation Division is introducing a "Complete Streets Bike and Pedestrian Living Laboratory" to test innovative treatments and programs to see if they are appropriate for Boulder. E-bikes are one bicycle innovation under review by the city as part of the living laboratory. For more information regarding the Transportation Master Plan update and the living laboratory, visit [www.bouldertmp.net](http://www.bouldertmp.net) and select "Complete Streets" or "Living Laboratory".

## **Current Regulations**

Colorado State Law defines an e-bike as a two or three wheeled vehicle with pedals and equipped with an electric motor not exceeding 750 watts of power with a top motor-powered speed of 20 mph. In Colorado, e-bikes may be operated on the road and within bicycle lanes. E-bikes are prohibited from using their motors on bike and pedestrian paths, unless allowed by local ordinance.

The city definition currently differs from state law by further limiting the motor capacity of an e-bike to no more than 400 watts of continuous input power. E-bikes are allowed to use bike lanes. As a motor vehicle, e-bikes are currently prohibited from using multi-use paths and sidewalks, and OSMP trails. A map of multi-use paths that are on OSMP fee property is shown in **Attachment C**. These are maintained to a transportation standard and integrated into the urban fabric of the greenway system.

## **ANALYSIS**

In developing the staff recommendation, the Transportation Division is considering a variety of factors concerning use of e-bikes on multi-use paths, including compatibility with other users, the speed of e-bikes, alignment with goals in the TMP, experience of other communities, use of OSMP paved trails and public input.

## **About e-bikes**

An e-bike is essentially a bicycle that can be propelled by both human power and electric-assist power. It is designed for people interested in completing trips by bike but concerned

about their physical ability to ride longer distances or climb steeper hills. The electric range, speed, and cost of an e-bike are moderate. **Attachment D** provides photos and specifications for some e-bikes, an FAQ and a recent article about e-bikes.

As regulated by the Boulder Revised Code, the speed limit on multi-use paths is 15 mph unless posted otherwise (there are sections where the speed limit is 10 mph). The speed of an e-bike is compatible with this established speed limit. Based on Federal regulations, the speed of an e-bike using only the electric motor or a power assisted option has an upper threshold of 20 mph. Factors such as slope, rider's weight and terrain affect the speed of the bicycle. As the terrain or slope of a bicycle facility becomes more difficult or steep, the speed of the electric power assist will decrease, unless pedal power is used in conjunction with the electric power assist. A more powerful motor will help maintain the maximum power assist speed of 20 mph. Under human power alone, riders of e-bikes (and traditional bikes) are capable of exceeding this threshold.

Potential users of an e-bike include commuters and persons who prefer to travel by bicycle but may not be physically able to complete the trip intended without an electric power assist. This travel option could expand the bicycle user base, attract interested but concerned cyclists to ride more and be an opportunity to work toward the goals contained in the TMP.

### **Peer City Review**

Staff researched experience in other communities that have allowed or, in some cases, not allowed e-bikes from using off-street, hard surface paths similar to Boulder's off-street pathway/greenways network. **Attachment E** provides a summary of this research. Based on the experience of other communities that have allowed e-bikes, there has not been a resulting increase in conflicts on multi-use paths or other bicycle facilities.

### **Paved paths on OSMP property**

**Attachment C** shows in red those hard surfaced trails that are identified as being "owned" by OSMP but are maintained by the Transportation Division. This relationship came about when, over the years, transportation proposed that these OSMP trails be hardened to provide a better bicycling surface. Bicycling was considered an open space purpose so an agreement was made to harden the surface and to have transportation maintain the trails. These paths are typically on the periphery of the OSMP land and connect with other transportation managed paths.

Modifications can be made to temporarily amend ordinances addressing the Visitor Master Plan and Long Range Master Plan. However, the Charter/passive recreation question raises a more difficult hurdle. The paved paths are part of the city's greenway system and are intended to serve both a recreation and transportation purpose. OSBT input and action at the Sept. 25 meeting will help guide a staff recommendation on how to handle e-bike use on these paths.

### **Integrating a comprehensive program of the 5 E's**

The City of Boulder's approach to support bicycling and walking is to achieve a comprehensive program that includes Engineering, Encouragement, Education, Enforcement and Evaluation initiatives. As part of the TMP update, staff is refining strategies to address concerns raised by community members for congestion and conflicts on the bicycling system today.

Independent of a pilot project to test e-bike use on paths, staff will be taking action to encourage cyclists to ride at appropriate speeds on the path system. This action will include the installation of 15 mph speed limit signs at key path locations and will be supported by an outreach campaign to raise public awareness on user rights and responsibilities as well as the rules of the path, including 15 mile per hour speed limit and walk right/pass left. Field observations to record unsafe behavior including speeding and other safety concerns along the path system will be conducted. Formal Police enforcement activities may be scheduled as resources allow and based on the findings of the field observations.

If approved by council, the proposed e-bikes pilot project for the off-street multi-use paths (non- OSMP) will be an opportunity to enhance this comprehensive approach, including additional efforts for education and enforcement. Results will be evaluated as part of the living laboratory analysis. This evaluation would include field observations to track user behavior and guide formal police enforcement activities. Based on results and as resources allow, targeted enforcement efforts may be conducted to record time spent and observations of safety concerns by various users including e-bikes, regular bikes, pedestrians as well as issuance of summonses / warning.

### **PROPOSED ORDINANCE REVISION**

The CAO has drafted a proposed ordinance for City Council consideration to pilot e-bike use on hard-surface, multi-use paths maintained to a transportation standard. This is included as **Attachment A**. The ordinance amends the definition of an e-bike to be consistent with state law. The pilot would evaluate behavior of e-bike users to determine whether these vehicles can co-exist with current users on multi-use paths. The ordinance authorizes the rulemaking authority of the City Manager to offer flexibility in determining the hard-surface multi-use path segments that allow e-bikes. This approach offers the opportunity to adjust to the scope of the pilot project in response to findings of the on-going evaluation. A sunset date of Dec. 31, 2014 would allow data collection, evaluation and quarterly updates to the City Council on the pilot project findings.

### **OPTIONS**

Below is a list of options considered for defining and regulating e-bikes in the City of Boulder:

**Option 1:** No change to the existing e-bike Definition (BRC 7-1-1 Definitions): "Electric assisted bicycle" means a bicycle with a battery powered electric motor with a capacity of *no more than four hundred watts* continuous input power rating which assists the person pedaling and which is not capable of propelling the bicycle and rider at more than *twenty miles per hour* on level pavement.



**Option 2:** Amend e-bike definition to conform with Colorado State Law\* CRS 42-1-102(28.5): "Electrical assisted bicycle" means a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an electric motor *not exceeding seven hundred fifty watts* of power, and a top motor-powered speed of *twenty miles per hour*.

*\*Denver and Fort Collins also uses this definition.*

### **Options for regulating an e-bike**

**Option 1: Clarify the existing law regulating e-bikes.** E-bikes may operate on the roadway and within designated on-street bike lanes but are prohibited from using the motor on multi-use paths, trails and sidewalks.

**Option 2: Adopt an ordinance to test e-bike use on multi-use paths for a pilot period.** This ordinance would sunset on Dec. 31, 2014. E-bike use on the following would continue to be prohibited:

- OSMP trails, including those that currently allow bikes; and
- Sidewalks, except those designated as multi-use paths.

The above option would allow the city to evaluate the impacts of allowing e-bike riders to operate the motor while bicycling on hard-surface, multi-use paths, with the exception of those on OSMP fee-property. Signs to inform path users of the pilot project and the current 15 mph speed limit would be installed at select locations along the pathway system to educate users. Formal police enforcement activities may be scheduled as resources allow and based on the findings of the field observations. Automatic in-pavement loop detectors will track bike volume. Manual counts would be conducted to collect volume data by user type (pedestrian, bike, e-bike, other). Additionally, an online survey and intercept surveys of multi-use path users would be conducted to gather input on the pilot program and use of e-bikes on multi-use paths.

**Option 3: Adopt an ordinance to test e-bike use on multi-use paths, except for a segment of the Boulder Creek Path, for a demonstration period.** This ordinance would sunset on Dec. 31, 2014. E-bike use on the following would continue to be prohibited:

- OSMP trails, including those that currently allow bikes;
- Sidewalks, except those designated as multi-use paths; and
- The Boulder Creek Path between Eben G. Fine Park and Scott Carpenter Park

Public input on the potential pilot program to test e-bike use on hard-surface, multi-use paths has expressed concern for impacts to the pedestrian experience and safety. This option would restrict the use of the electric-assisted motor on an e-bike along the Boulder Creek Path from the western city limit (west of Eben G. Fine Park) to 30<sup>th</sup> Street (Scott Carpenter Park). As the spine of the greenway system, this segment of the Boulder Creek

Path is a well-publicized tourist destination and serves as a linear park along the Boulder Creek riparian corridor. In addition to the comprehensive program outlined in Option 2, additional strategies would likely be required to regulate the use of e-bikes as non-motorized vehicles along the prohibited segment of the Boulder Creek path.

### **NEXT STEPS**

If the proposed e-bikes pilot project is approved by City Council, staff will proceed with implementation, including on-going community outreach, education, enforcement, and evaluation throughout the year long demonstration project.

Transportation and OSMP staff will work in partnership to identify the paths on OSMP property recommended for disposal as a transfer to transportation. A timeline will be outlined to negotiate the disposal of OSMP fee-owned property and future management by the Transportation Division.

For more information regarding e-bikes, please see the city's webpage and links from [www.GOBoulder.net](http://www.GOBoulder.net)

### **ATTACHMENTS**

Attachment A Ordinance XXX

Attachment B Public input summary

Attachment C Paved paths on OSMP property

Attachment D E-bikes FAQ, specifications and information

Attachment E Peer city review

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE CREATING A PILOT PROJECT ALLOWING ELECTRIC ASSISTED BICYCLES ON CERTAIN HARD-SURFACED, MULTI-USE PATHS BY AMENDING DEFINITIONS IN SECTIONS 1-2-1 AND 7-1-1; AMENDING SECTIONS 7-4-16, 7-5-5, AND 7-5-9 TO SPECIFY SAFETY STANDARDS THAT WILL APPLY TO ELECTRIC ASSISTED BICYCLES; ADDING A NEW SECTION 7-5-26 AUTHORIZING ELECTRIC ASSISTED BICYCLES WHERE PERMITTED BY A RULE ADOPTED BY THE CITY MANAGER; ESTABLISHING A SUNSET DATE OF DECEMBER 31, 2014; AND SETTING FORTH RELATED DETAILS.

WHEREAS, THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO, FINDS AND RECITES THE FOLLOWING:

- A. The 2013 Transportation Master Plan (TMP) update builds on a strong foundation of success through policy refinement, using a collaborative approach and addressing the current and future transportation needs of the community while integrating with the city's broader sustainability planning initiatives.
- B. As part of the TMP update, the Transportation Division is introducing new strategies to increase bicycle and pedestrian mode share. It includes a "Complete Streets Bike and Pedestrian Living Laboratory" that provide test facilities and pilot programs to better understand the community's transportation choices and identify potential opportunities, barriers, and ultimately strategies to encourage more people to walk and bike.
- C. The purpose of this ordinance is to establish a one-year electric assisted bicycle demonstration Pilot Project (the "Pilot Project"), which would allow and test use of electric assisted bicycles on off-street, hard-surfaced, multi-use path system within the City of Boulder limits.

- D. The Pilot Project is focused on the urban service area where there is a network of hard-surfaced, off-street, multi-use paths maintained to a transportation standard.
- E. The Pilot Project would not include use on facilities that are pedestrian only or intended to preserve the natural environment. Specifically, electric assisted bicycle use would continue to be prohibited on sidewalks and the natural surface Open Space and Mountain Park (OSMP) trail system surrounding Boulder.
- F. The Pilot Project will evaluate behavior of electric assisted bicycle users to determine whether these vehicles can co-exist with current uses on these multi-use paths.
- G. The Pilot Project is part of a Living Laboratory being implemented to introduce new strategies to increase bicycle mode share and encourage more people to complete trips by bicycle.
- H. The city's ordinances do not permit any self-propelled vehicle to be driven on any paths.
- I. In order to provide assurance that the use of electric assisted bicycles as an alternate mode of transportation contemplated by this program is safe, prudent, and in the best interest of all users of the city's hard-surfaced, multi-use path system, city staff will evaluate the following factors and data on an ongoing basis:
  - 1. The number of reported traffic collisions involving electric assisted bicycles occurring on hard-surfaced, multi-use paths that result in severe injury or fatality;
  - 2. The number of reported close call incidents involving electric assisted bicycles occurring on hard-surfaced, multi-use paths;
  - 3. Reported and observed unsafe behavior including speeding and other safety concerns along the hard-surfaced, multi-use path system by various users including electric assisted bicyclists, regular bicyclists, pedestrians and other users;

4. The time spent by Boulder Police officers conducting enforcement activities along the hard-surfaced, multi-use path system and the number of warnings and citations issued involving electric assisted bicycles.
- J. The greater Boulder community and affected Advisory Boards considered options and provided input to guide a staff recommendation on the Pilot Project.
- K. On September 23, 2013, the Transportation Advisory Board held a public hearing to consider the staff recommendation on the Pilot Project and make a formal recommendation to City Council.
- L. This program will sunset and be of no further force and effect after December 31, 2014, unless extended by affirmative council action.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,  
COLORADO:

Section 1. Section 1-2-1, B.R.C. 1981, is amended to read:

**1-2-1 Definitions.**

...

"Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or motorized wheelchair.

Section 2. Section 7-1-1, B.R.C. 1981, is amended to read:

**7-1-1 Definitions.**

...

"Electric assisted bicycle" means a ~~bicycle-vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an~~ with a battery powered electric motor not exceeding with a capacity of no more than fourseven hundred-fifty watts of continuous input power rating, ~~which assists the person pedaling and which is not capable of propelling the bicycle and a top motor-powered speed of rider at more than twenty miles per hour on level pavement.~~

"Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or motorized wheelchair.

Section 3. Section 7-4-16, B.R.C. 1981, is amended to read:

**7-4-16 Yield Required Before Entering or Leaving Street.**

(a) A driver entering a street at any place other than an intersection shall yield the right-of-way to any pedestrian or bicycle approaching on a sidewalk or path, to any electric assisted bicycle approaching on a multi-use path where such vehicles are permitted, and to any vehicle approaching on a roadway of the street.

(b) A driver leaving a street at any place other than an intersection shall yield the right-of-way to any pedestrian or bicycle approaching on a sidewalk or path, and to any electric assisted bicycle approaching in a multi-use path where such vehicles are permitted.

Section 4. Section 7-5-5, B.R.C. 1981, is amended to read:

**7-5-5 Use of Crosswalk.**

(a) No person shall immediately approach, enter or traverse a crosswalk which spans a roadway at a speed greater than eight miles per hour.

(b) Persons driving bicycles across a roadway upon and along a crosswalk from a sidewalk or path, and persons driving electric assisted bicycles across a roadway upon and along a crosswalk from a multi-use path where such vehicles are permitted, shall have all the duties applicable to pedestrians under the same circumstances.

(c) Such persons similarly have the rights of a pedestrian, but only if the bicyclist was entitled to use the sidewalk or path, and the approach, entry and traversal of the crosswalk are made at a speed no greater than a reasonable crossing speed so that other drivers may anticipate the necessity to yield when required.

Section 5. Section 7-5-9, B.R.C. 1981, is amended to read:

**7-5-9 Bicycle Must Yield Right-of-Way and Obey Traffic Control Devices on Sidewalk, Crosswalk, or Path.**

(a) A person driving a bicycle on a sidewalk, a crosswalk, or a path, and any person driving an electric assisted bicycle on a multi-use path, shall yield the right of way to any pedestrian and shall give an audible signal before overtaking and passing any pedestrian.

(b) If any traffic control device is in place alongside of or on a sidewalk or a path, no driver of a bicycle or pedestrian, and no driver of an electric assisted bicycle on a multi-use path where such vehicles are permitted, shall fail to obey the requirements of the device.

Section 6. Chapter 7-5, “Pedestrian, Bicycle and Animal Traffic,” B.R.C. 1981, is amended by the addition of a new section to read:

**7-5-26 Electric Assisted Bicycles.**

No person shall activate the motor of an electric assisted bicycle on any bike or pedestrian path or on a recreational trail except where permitted by a rule adopted by the city manager in accordance with Chapter 1-4, “Rulemaking.”

Section 7. The city manager shall report to the City Council at least quarterly, and shall present a program evaluation after the program concludes.

Section 8. This ordinance shall be effective until December 31, 2014. The City Council suspends the prohibition against operating a motorized vehicle on hard-surfaced, multi-use paths until that time for the limited purpose of implementing the Pilot Project described by this ordinance. For all other purposes, the regulations governing electric assisted bicycles remain in full force and effect.

Section 9. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 10. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

**Attachment A - Proposed E-bike Ordinance**

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY  
TITLE ONLY this \_\_\_\_ day of \_\_\_\_\_ 2013.

\_\_\_\_\_  
Attest: Mayor

\_\_\_\_\_  
City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED  
PUBLISHED BY TITLE ONLY this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Attest: Mayor

\_\_\_\_\_  
City Clerk



# Electric Assist Bike Project Public Process

The public process included several forums for community input:

- Project Webpage
- Online survey linked through City of Boulder project webpage
- Inspire Boulder
- Public meetings (Aug. 7 & Sept. 4, 2013)
- Test ride event (Sept. 4)
- Intercept Surveys (Sept 16 – 22) - postponed
- TMP Community Feedback Panel
- Emails and phone calls
- Transportation Advisory Board meetings (Aug. 12 and Sept 23, 2013)
- City Council meetings

First reading Oct. 1

Second reading/Public Hearing Oct. 22

Details on these community input forums are included below.

[E-bike Policy Review Project web page](#) – provides information on this effort and will be updated with information on upcoming public meetings.

[Electric-Assist Bike Online Survey](#) – this survey asks questions about public opinion on the potential demonstration project and seeks input on suggestions for how to address concerns with testing e-bike use on multi-use paths.

[Inspire Boulder \(MindMixer\)](#) is an idea collaboration website that allows community members to share and discuss ideas about city projects, issues and programs. Click on the **View Topics** link under **Transportation** to interact with others and provide input on the Living Laboratory demonstration projects, including the potential changes to regulations regarding e-bikes.

[Public Meetings](#) – Public input is being sought at two public meetings.

- On Wed. August 7, a public meeting was held from 4 to 6 p.m. at the Boulder Public Library, Boulder Creek room located at 1001 Arapahoe Avenue. At this meeting Transportation staff presented the potential e-bike pilot project concept and gather public input.
- On Wednesday, Sept. 4 a public meeting was held from 5 to 7 p.m. at the County Clerk and Recorder Building located at 1750 33<sup>rd</sup> Street. This purpose of this meeting was to

present an update on the options being considered for the e-bike pilot project and provide community members an opportunity to provide input on these options.

[E-bike test ride events](#) - Staff scheduled two opportunities in September for community members to learn more about and test ride e-bikes. Details of these events are:

- On Wednesday, Sept. 4, from 4 to 5 p.m. at the County Clerk and Recorder building located at 1750 33<sup>rd</sup> Street. A public meeting will follow from 5 to 7 p.m.
- On Sunday, Sept. 22, from 10 a.m. to 4 p.m. at the city-sponsored *Boulder Green Streets* event. Visit the *Connected Mobility Zone* at 13<sup>th</sup> Street and Alpine. This event was postponed due to the flood event. A new date has not yet been set.

[Intercept surveys](#) – Staff planned to conduct a survey of users traveling along multi-use paths during the week of Sept. 16, as part of a national bicycle data collection effort. Users will be stopped and asked to answer questions about their familiarity with e-bikes and opinion of the potential pilot project to test e-bike use on multi-use paths, as well as their other multi-use path related questions. This survey effort was postponed due to the flood event. A new date has not yet been set.

Community members also were encouraged to attend the Transportation Advisory Board (TAB) public hearing on Sept. 23, 2013, as well as the Council meetings where the e-bike policy changes will be considered, on October 1 and October 22.

[Sign Up for the TMP Community Feedback Panel](#) - This is an initiative of the TMP and an opportunity to be queried on TMP-related issues, receive updates including meeting announcements, and volunteer for various events associated with the TMP update. By design, most of the inquiries submitted to the TMP Community Feedback Panel will be online. But, Panel members also will be recruited for focus groups and other in-person groups, especially where we need to reach a specific demographic group, like in-commuters and interested but concerned cyclists. Panel members complete a profile with information about themselves and their travel patterns so that outreach and queries to the Panel can reach specific target audiences. Inquiries will be planned throughout the year as the TMP work continues and evolves. Over 400 people have signed up for the Panel as of September.

### **Key Findings from the Public Input**

#### **Against testing E-Bikes**

Paths are too congested  
Speed and Safety  
Behavior and enforcement

#### **Support testing E-Bikes**

Makes longer distance commutes more viable by bike  
Helps aging generations stay active  
Economic & non-polluting alternative to automobiles

## Public Input to date Overview

### Public Input Forums

Inspire Boulder  
E-Bike Online Survey  
Email/Phone  
Public meetings (8/7 & 9/4)

### Over 250 Comments expressing and opinion

About **40% are against** testing E-bikes on Multi-use paths

About **55% are supportive** of testing E-bikes on Multi-use paths

About **5%** are undecided

### Inspire Boulder

337 Views

23 People Commented

**6 Do not Support** testing E-bikes on Multi-Use Paths

**17 are Supportive** of testing E-Bikes on Multi-Use Paths

City seeks feedback on new bike facilities around town.  
Return to the Topic Page

Prev Idea <> Next Idea

RATE THIS IDEA

I Love it! ★★★★★

I Like it! ★★★

It's OK. ★

Neutral. /

IDEAS

Testing two variations of Buffered Bike Lanes - Spruce Street >

Protected Cycle Track - Baseline Rd. (30th St. - 35th St.) >

Buffered Bike Lanes - University Ave. (9th St. - Broadway) >


Back-in angled parking - University Ave. (Broadway- 17th St.) >

**Electric-assist Bike Policy on multi-use paths**

Select Language :  
Powered by Google Translate

### Electric-assist Bike Policy on multi-use paths

AUG 07, 2013 Anna Nord Administrator 295 ★74 30



Electric-assist Bicycle IMAGE

As part of the Living Lab concept, the city is exploring the possibility of a one-year pilot project to test the use of electric-assisted bicycles (e-bikes) on off-street multi-use paths (this pilot will not include open space trails).

Currently, the Boulder Revised Code (BRC) only permits e-bikes to operate on streets and in designated bicycle lanes, but are prohibited from operating on paths and sidewalks.

Changing an ordinance, even for a pilot program, requires council action. The Transportation Advisory Board will hold a public hearing on Sept. 9 and make a formal recommendation to City Council. Council will consider the pilot ordinance in October.

What do you think about e-bikes on multi-use paths?

## E-bike Online Survey

144 Participants (of that 101 answered Q1)

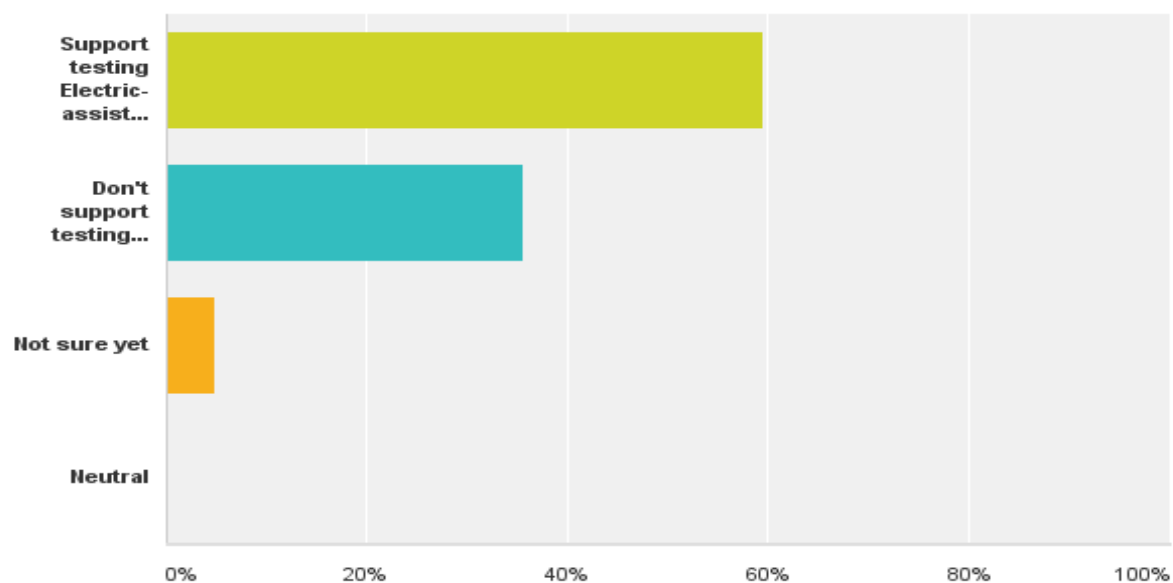
36% do not Support testing E-bikes on Multi-Use Paths

60% are Supportive of testing E-Bikes on Multi-Use Paths

4% are unsure

### **Q1 What do you think about the potential pilot project to test Electric-assist bike use on multi-use paths?**

Answered: 101 Skipped: 43



## Emails/Phone

12 do not Support testing E-bikes on Multi-Use Paths

12 are Supportive of testing E-Bikes on Multi-Use Paths

5 are unsure

## **Comments from Public Meetings**

### **September 4, 2013 Public Meeting**

#### **Definition:**

- Clarify the definition of speed – power assist not exceeding 20 mph – motor for 170 lb person be complete.
- Use multiple definitions like in Europe
  - 20 mph – no restrictions
  - Expanded capability for motor assist, might need license/insurance
    - 20 mph not on multi-use path
- No power limit or 1000 watt limit
- CO law excludes tricycles – two wheels in front (tadpole)
- Gross vehicular weight
  - E-bikes under “x” lbs
  - Motorcycles over “x” lbs

#### **Other Options:**

- Allow e-bikes wherever bikes are allowed
- Allow e-bikes wherever bikes allowed except soft surface/natural surface paths
- Option 3 – on weekends on creek path excluded but test on several weekends
- Reduced speed on Boulder Creek Path – especially in the congested area around downtown. Make speed limit 10-12 mph for all bikes.
- 250 pedal assist only like in Europe – over 250 requires registration of bike

#### **Long Term options to explore:**

- Segregate electric and non-electric based on speed (China)

#### **Five E's:**

- Enforce regulations. Keep them simple and easy to enforce
- Education – police may not know the rules, need consistent messaging of rules
- Education and enforcement – especially Boulder Creek of all multi-use users (dog walkers, skateboarders, peds walking abreast, long boarders)
- Engineering – Re-engineer design for the section between Eben Fine and Arapahoe
- Education – teach bike riders of all types to be predictable. Don't be unpredictable.
- Fix acute corners on creek path west of Scott Carpenter
- Engineering – increase the capacity of Boulder Creek Path in the downtown area to help alleviate congestion.

#### **Option 2:**

- E-bikes be treated like other bikes
  - Also sidewalks and trails
- Test Boulder Creek congested area
- If we don't try it, we won't know.

#### **Option 3:**

- OSMP might kill pilot to include
- Along Boulder Creek, dismount zones or slow zones for safety – all users

**Bicycling is going to increase. What public information and safety measures are critical regardless of council's actions on E-bikes?**

- Speedometers on bikes or a way to monitor speed
- Govern/control on speed
- Yellow yield sign to show who yields to whom
- Video – welcome to safe cycling in Boulder – transient population (education)
- Speed indicators on paths
- Engineering – E-bikes separate modes of travel.

**August 7, 2013 Public Meeting**

**1. Definition – Do you have any comments about the proposed definition of electric-assist bicycles?**

- Clarify: 20 mph capable without pedaling.
- Yes, pedals only.
- Only speed is important. Cars are not limited in power, only speed. Injury is related to the mass and speed, not the power of a motor. No power limit.
- No matter what legal definition the city decides on, to the average pedestrian e-bikes are motorized vehicles. Just as “60% of cyclists are not comfortable sharing the road with motor vehicles” it is common sense that a majority of pedestrians will be uncomfortable sharing the MUP with motorized e-bikes.
- 750 watt or less or  $\geq 20$  mph.

**2. Location – Do you have any comments about the potential demonstration project to allow e-bikes on off-street multi-use paths, not including open space trails?**

- Speed limit enforcement is critical for both bicycles and e-bikes. Pedestrians are under threat now and more bicycles of any kind will increase the danger.
- Be equitable: anywhere bikes are allowed.
- With all bikes – use of cell phones while riding should be outlawed.
- Throughout Boulder.
- I am opposed to the demonstration project because I think pedestrians will be put at safety risk, the city will not be able to enforce the e-bikes ok, but not mopeds, segways. The city will not be able to enforce 20 mph speed limit (it doesn't enforce now). E-bikes are motorized vehicles. They are terrific for commuting, pollution, getting disabled out... but they should be separate from pedestrians because they go faster, weigh more, and are more intimidating than regular bikes. Restrict their use to Boulder's roads and designated bike lanes.
- Anywhere bikes are allowed.

**3. Demonstration Project – What suggestions do you have for conducting an effective Demonstration Project in terms of...**

- **Evaluation – In how the Demonstration Project is evaluated?**

- Measure speed with sensors. Volunteer monitors.
    - Observe behavior between bikers and e-bikers
  - **Engineering – Through engineering design, including signage and pavement markings?**
    - Sure, make it clear it is a pilot project.
    - None – no need.
  - **Enforcement – Through enforcement of regulations, including the existing speed limit of 15 mph?**
    - Paint “15 mph” on paths everywhere.
    - Yes.
  - **Education – How community members are informed and involved in the demonstration?**
    - Talk to the ped advocates.
    - Please provide education on how legal e-bikes are no faster than regular bikes and how quiet they are.
- 4. What best practices from other cities should Boulder consider?**
- I think the wattage restriction on the bike lanes should be lifted, perhaps to a full 1,000 w.
  - Don’t allow motorized vehicles on our MUP, like 11 other communities on the list.
  - All
- 5. Path usage – Do you have any concerns about allowing use-bike on multi-use paths?**
- I am already concerned about lack of speed limit signage and enforcement. E-bikes will raise the average speed that pedestrians encounter bicycles. I’m concerned that I’ve already seen electric motorcycles on the MUP going well over the speed limit. Once any motors are allowed, it will be much more difficult to keep motorcycles off the MUP.
  - Yes – Pedestrian safety enforcement of some motorized vehicles but not others. Enforcement of speed limits, expenditure of nonexistent city funds on a project that upends a working system (e-bikes can already operate on roads – why do they need to have access to MUP?) They don’t!!!!
  - None
- 6. Public Outreach – Please share any comments you have on the proposed outreach to obtain public input during the next month as we draft an ordinance for City Council’s consideration.**
- I am left thinking that the deck is stacked in favor of the demonstration project. Staff seems inclined at the outset. I would hope that staff actively solicits pedestrian opinions by surveying pedestrians on the MUPs with an unbiased questionnaire.
  - Work with local e-bike retailers to offer 1<sup>st</sup> hand.
- 7. Experience – What is your personal experience with electric-assisted bicycles? Check all that apply.**

- ☐ My business sells e-bikes
- ☐ I own and ride one (2) (Leonard Sitongia, [sitongia@onebeam.net](mailto:sitongia@onebeam.net) is happy to give demos)
- ☐ I have limited experience riding e-bikes (1)
- ☐ I have a friend or family member with an e-bike (3)
- ☐ I have never ridden an e-bike (1)
- ☐ My experience with e-bikes is as a pedestrian (2)
- ☐ Other \_\_\_\_\_ (1)
  - Want to offer charging station.

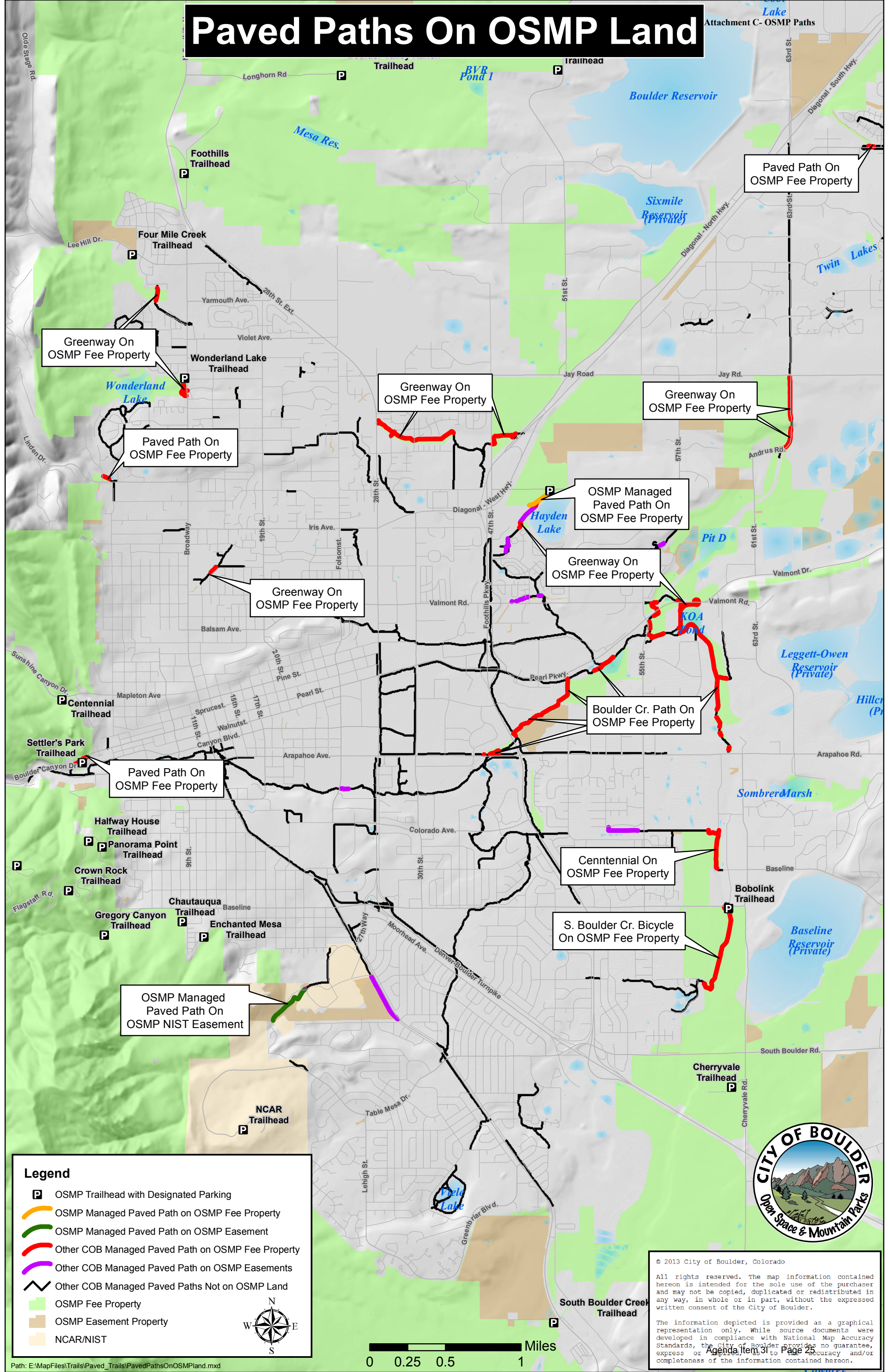
#### 8. General Comments

- Don't forget: allow e-bikes on public bike parking.
- The pedestrian lobby is anti-bikes, they should be educated that this is about e-bikes, not all non-pedestrian transportation. The safety risk is not specific to e-bikes. Please make this clear so that they stop wasting our time.
- I think e-bikes are nifty and have a role to play for commuting, recreation, congestion reduction etc. I just think they belong on roads or bike only paths as they are motorized and thus intimidating (for good reason) to pedestrians.
- Enforcement – Would suggest considering cell phone enforcement combined with displayed registered numbers on all bikes travelling on MUPs. Violations can be reported to data center where after xx number of reports a citation is issued. This along with video camera distribution would support safety.



# Paved Paths On OSMP Land

Attachment C- OSMP Paths

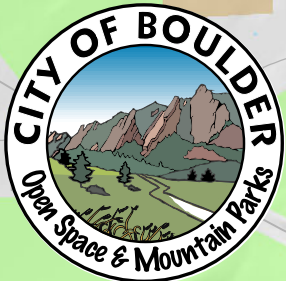


## Legend

- OSMP Trailhead with Designated Parking
- OSMP Managed Paved Path on OSMP Fee Property
- OSMP Managed Paved Path on OSMP Easement
- Other COB Managed Paved Path on OSMP Fee Property
- Other COB Managed Paved Path on OSMP Easements
- Other COB Managed Paved Paths Not on OSMP Land
- OSMP Fee Property
- OSMP Easement Property
- NCAR/NIST



0 0.25 0.5 1 Miles



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## About e-bikes

An electric-assisted bicycle is most often powered by a lithium battery and controlled by a console that tracks speed and offers different power options. These power options include a human power only and several ranges of power assist options (Pedelec). Some models also offer a throttle option that does not require the rider to pedal in order to propel the bicycle. The distance a rider can travel on an e-bike before charging the battery is estimated to be 15 to 60 miles, depending on the size of the motor and battery as well as the power option selected by the rider when traveling. An e-bike generally weighs between 35 and 55 lbs. The cost of an e-bike generally ranges from \$1,500 to several thousand dollars.

A regular bicycle can be transformed into an e-bike by installing a conversion kit comprised of an electric motor and battery. BionX, a Canadian company reputed to be a leading manufacturer of e-bike conversion systems, sells kits that range in price from \$1,100 to \$2,100.

## Federal regulations

Federal regulations govern the safety requirements and standards for e-bikes in the United States. The Consumer Product Safety Commission defines a low-speed electric bicycle as “a two- or three-wheeled” vehicle with fully operable pedals and an electric motor of less than 750 watts (1 h.p.) whose maximum speed on a paved level surface, when powered solely by such a motor while ridden by an operator who weighs 170 pounds is less than 20 mph. It further defines a bicycle to include the above definition. States and local jurisdictions regulate the use of e-bikes and may adopt a more restrictive definition of an e-bike. An e-bike is distinguished from other higher powered personal mobility devices vehicles such as a moped or scooter by definition. Specifically, e-bikes are defined as having fully operable pedals, an upper threshold for the power assist of the motor that ranges between 750 and 1000 watts of power and top motor-powered speeds of 20 mph.

## Questions & Answers

Source: <http://www.hybrid-cycles.com/faqs.php>

### How fast can electric bikes go?

On motor power alone, our electric bikes can travel up to 20 mph, depending on the weight of the rider and the difficulty of the terrain. Downhill and/or with the rider pedaling, higher speeds may be achieved.

### How far can an electric bike go on a single charge?

Different models have different ranges. Hybrid Cycles offers several models that can travel up to 25 miles on a single charge in pedal-assist mode, while others can travel up to 40 miles on a single charge in pedal-assist mode. These ranges assume a 150-pound rider traveling on flat ground and may vary based on rider and terrain.



### **How do the different modes work?**

Hybrid electric bicycles use batteries to power a quiet, efficient electric motor. In pedal-assist mode (electric-motor-assist mode), the bike senses the torque applied while pedaling, and the motor kicks in as needed to help the rider, making it easier to pedal up hills or on long rides. In throttle mode (electric motor power mode), the motor does all the work and the rider need not pedal at all. In manual mode (traditional mode), the rider shuts off the motor completely and pedals the bike just like a conventional bicycle.

The throttle / electric motor power mode requires the least exertion and provides the most speed on flat terrain, while the pedal-assist / electric-motor-assist mode provides the furthest range on a single charge.

### **How do you charge the battery?**

Simply plug the charger into any standard wall outlet and insert the battery into the charger.

### **How long does it take to charge the battery completely?**

Charge times vary depending on the charge depletion, the manufacturer, model, and battery type. The initial charge should take between 6-12 hours. A fully depleted SLA battery takes between 6-8 hours to charge, while NiMH & Li Ion batteries take between 4-6 hours. Electric bikes cost very little to charge.

### **What is the battery life?**

With normal usage and proper maintenance, the battery should last 800 charge cycles.

### **How often should I charge the battery?**

For longest life, charge the battery after each ride (or daily, if you ride more than once a day). If your bike is out of use for a long period of time, you should charge the battery at least once every three weeks.

### **Does the battery recharge while riding?**

On most bikes, no. The [Easy Motion Neo bikes](#) employ a regenerative braking system, which recharges the battery while you are coasting or braking. While this does extend the power-assist range somewhat, you will still need to plug in the battery for a full charge.

### **Do I always need to pedal?**

No. Throttle mode requires no pedaling at all. Pedal-assist mode requires pedaling, but provides more power for climbing.

### **What sort of maintenance does an electric bike require?**

Care for your hybrid bicycle as you would any other high-end bicycle. Keep it clean and dry, keep your battery charged, and take it into a bike shop periodically for tune-ups.

### **Are electric bicycles considered bikes, or are they motor vehicles?**

Electric bikes are considered bikes (not motor vehicles), under federal law, unless your state or local entity has passed a law otherwise. Normal bicycle laws apply. Be sure to check your state and local laws for any recent changes.

### **Do electric bikes require a license or registration?**

The rules vary from state to state. Check with your local DMV for information about electric bikes for your state. Rider age minimums and helmet laws also apply to electric bikes in some states.

## Some models of electric-assisted bicycles

	<p><b>Emotion Diamond</b></p> <ul style="list-style-type: none"> <li>• 36V / 8Ah battery</li> <li>• 250 Watt mid-drive motor</li> <li>• Range up to 62 miles per charge</li> <li>• 8 Speed</li> <li>• Pedelec</li> <li>• Motor assist up to 20 mph</li> <li>• 46 lbs</li> <li>• Retail: \$2950</li> </ul> <p><i>Source: <a href="http://petesbikes.com">petesbikes.com</a></i></p>
	<p><b>Pedego 2013 City Commuter Classic</b></p> <ul style="list-style-type: none"> <li>• 36/10, 36/15 or 48Watt/10Ah</li> <li>• 400/500 Watt rear Hub Motor</li> <li>• Range up to 28 miles per charge</li> <li>• 7 speed</li> <li>• Pedelec/Throttle</li> <li>• Motor assist up to 20 mph</li> <li>• 40 lbs</li> <li>• Retail: \$2395+</li> </ul> <p><i>Source: <a href="http://smallplanetvehicles.com">smallplanetvehicles.com</a></i></p>
	<p><b>Yukon Navigator</b></p> <ul style="list-style-type: none"> <li>• 24V 10Ah battery</li> <li>• 250 Watt rear Hub Motor</li> <li>• Range up to 28 miles per charge</li> <li>• Single Speed</li> <li>• Pedelec</li> <li>• Motor assist up to 15 mph</li> <li>• 77 lbs</li> <li>• Retail: \$500+</li> </ul> <p><i>Source: <a href="http://bing.com">bing.com</a> &amp; <a href="http://Amazon.com">Amazon.com</a></i></p>
	<p><b>Currie IZIP E3C</b></p> <ul style="list-style-type: none"> <li>• 36V 11.4Ah lithium icon battery</li> <li>• 500 Watt rear Hub Motor</li> <li>• Range up to 30+ miles per charge</li> <li>• 27 Speed</li> <li>• Pedelec/Throttle</li> <li>• Motor assist up to 20 mph</li> <li>• 50 lbs</li> <li>• Retail: \$2499+</li> </ul> <p><i>Source: <a href="http://bing.com">bing.com</a> &amp; <a href="http://REI.com">REI.com</a></i></p>

# The Coming Battle Over Electric Bicycles

[Henry Grabar](#) 9:00 AM ET

source: <http://www.theatlanticcities.com/commute/2013/09/coming-battle-over-electric-bicycles/6763/>

Around this time last year, Andy Clarke, president of the League of American Bicyclists, was pedaling home when he experienced a quirky moment of convergence.

Just as he passed a fellow cyclist mounted atop a jaunty penny-farthing bicycle, with its comically mismatched wheels, an electric bicycle zipped past them both. Technologically speaking, it was the past, the present, and the future of the bicycle, all riding side by side, if only for a second.

"To the core cyclist, it's cheating."



The electric bicycle has so far remained a novelty item in the United States, but manufacturers, retailers, and analysts say that will soon change. Fueled by [soaring numbers](#) of bike commuters and rapidly evolving battery technology, the electric bicycle is poised for a breakthrough, if it can only roll over legal obstacles and cultural prejudices.

The market "has been growing very consistently since about 2008," says Larry Pizzi, the president of Currie Technologies, one of the nation's largest distributors of e-bikes, as they're called. "They haven't become mainstream. But they're getting closer."

Sleeker and cleaner than the clunky rides of yore, the newest wave of commuter e-bikes are nearly indistinguishable from regular bicycles. Many have motors located in the hub of the rear wheel, which on the best models, can [sense the pressure on your pedals](#) and contribute assistance accordingly. A full charge at a standard wall outlet can take a rider dozens of miles at the federally mandated speed of 20 mph.

For potential riders, there are two main drawbacks: cost and weight. A nice electric bicycle tends to cost around \$2,000, and to weigh roughly 50 pounds, twice as much as a normal bike. Both metrics figure to get smaller as the bikes grow more popular and technology improves.

Because e-bikes are a generic consumer product, like pens or lamps, there's no firm data on how many are sold in the U.S. But Pizzi says Currie's sales have grown around 20 percent each year. Other e-bike companies, like Florida's [ProdecoTech](#), report that their business has doubled over the last year. With a \$1.5 million grant from the San Francisco Municipal Transportation Agency, Berkeley and San Francisco will [launch](#) a pilot e-bike sharing program next spring. Copenhagen will also [debut](#) an electric bike-share program.

The consulting group eCycleElectric estimated that the overall market for e-bikes in the United States [doubled](#) between 2012 and 2013. A more conservative analysis, by Navigant Research, has annual sales crossing the 100,000 mark in 2018.

Legally, the electric bicycle landscape is messy. The New York City Council [voted](#) in May to ban all electric bicycles (for the second time, no less), which has left owners in the city confused and cautious. Even a local bicycle retailer told me he was unsure about the law's scope.

## Attachment D - E-bikes FAQ, Specs and Info

Across the United States, too, electric cyclists are caught in a [web of conflicting ordinances](#). Few legal codes properly distinguish between "throttle" bikes, which operate like motorcycles, and "pedal assist" bikes, which send power to the wheels only when the cyclist pedals. Access to infrastructure also varies from city to city. E-bikes are for the most part permitted in bike lanes (where they are permitted at all), though banned from multi-use paths in cities like Denver and Boulder.

Looking for lessons abroad, which proved a successful tactic for U.S. cities researching bicycle infrastructure, yields few obvious suggestions. In the bike-mad Netherlands (pop. 17 million), over [100,000 electric bicycles](#) are sold each year, to little controversy. Singapore's [boom in electric bike consumption](#), meanwhile, has activists calling for more regulation.

In China, where some estimate the electric bike count at [120 million](#), the battle over the "silent killer" — so-called for the e-bike's quiet approach that leaves pedestrians oblivious — has raged for over a decade. Citing pedestrian safety, Beijing [banned](#) electric bikes in 2002, only to repeal the prohibition in 2006. In Shenzhen, where e-bikes were reportedly responsible for [15 percent of all traffic accidents and 64 deaths in 2010](#), banned electric bikes in 2011. Guangzhou banned them in 2007, but police confiscating e-bikes sparked [riots](#) this summer.

In the U.S., where e-bike speed and horsepower regulations are tightly enforced, there's no evidence that electric bicycles are more dangerous. Advocates point out that man-powered bikes routinely exceed the 20 mph limit of the e-bike.

While many cycling advocacy groups in the U.S. see e-bikes as a lure for drivers, the elderly, and the sweat-averse, a certain suspicion remains. "To the core cyclist, it's cheating," Loren Mooney, the editor of *Bicycling Magazine*, [has said](#). City governments are wary, and some "regular" cyclists fear that the spread of electric bicycles could stoke pedestrian vitriol, as it did in Chinese cities.

Bias narrows the market, advocates say. "The biggest challenge for the e-bike industry is that distribution points are few and far between," says Larry Pizzi. Out of more than 4,500 bicycle shops in the United States, fewer than one in six sell e-bikes.

That could be a huge missed opportunity for independent outfits. "Bike shops and traditional bike retailers need to get their heads out of the sand and realize that electric bikes are a huge opportunity, and a huge potential market we have struggled to reach," Clarke, of the League of American Bicyclists, says. "I don't think it takes a genius to realize these things are selling like hotcakes in both Denmark and Germany."

Clarke posits that this obstinacy may be due to the unusually self-conscious nature of cycling in the U.S. Even as bicycle commuting is entering the mainstream, its core acolytes have continued to treat the bike as a cult-like object rather than a regular consumer product. How can supporters dispel the sense that, as the *Guardian's* Steve Caplin [wrote](#) in a defense of the mode, the electric bicycle is "masquerading as a bike"?

I asked Clarke if he didn't feel some resentment when his electrically powered comrade sped past in the bike lane.

"For a fleeting second," he conceded. "But I'd rather have someone riding that bicycle than not."

*Top image: Timur Emek/Associated Press*



Henry Grabar is a freelance writer and a former fellow at The Atlantic Cities. He lives in New York.

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## ● Davis, California

### **VC Section 406 Motorized Bicycle**

(a) Classifies an e-bike with "motorized bicycle" or "moped". But distinguishes it from these vehicles as...

(b) A "motorized bicycle" is also a device that has fully operative pedals for propulsion by human power and has an electric motor that meets all of the following requirements:

(1) Has a power output of not more than 1,000 watts.

(2) Is incapable of propelling the device at a speed of more than 20 miles per hour on ground level.

### **Electric bicycles are to be operated like conventional bicycles in California, with the following exceptions:**

- A person must be at least 16 years old,
- Anyone riding an electric bicycle must wear a bicycle helmet.
- Motorized bicycles may not be operated on dedicated bicycle paths unless allowed by local government ordinance.[44]
- Additional laws or ordinances may apply to the use of electric bicycles by each city or county

## ● Seattle, Washington

### **RCW 46.04.169**

"Electric-assisted bicycle" means a bicycle with two or three wheels, a saddle, fully operative pedals for human propulsion, and an electric motor. The electric-assisted bicycle's electric motor must have a power output of no more than one thousand watts, be in capable of propelling the device at a speed of more than twenty miles per hour on level ground, and be incapable of further increasing the speed of the device when human power alone is used to propel the device beyond twenty miles per hour.

### **Electric bicycles are to be operated like conventional bicycles, with the following exceptions:**

- A person must be at least 16 years old,
- Anyone riding an electric bicycle must wear a bicycle helmet.
- Motorized bicycles may be operated on dedicated bicycle paths unless restricted by local government ordinance.
- Additional laws or ordinances may apply to the use of electric bicycles by each city or county

## ● Portland, Oregon

### **814.405 - Status of electric assisted bicycle**

- Considered a bicycle, rather than a motor vehicle, for purposes of the Oregon Vehicle Code, except when otherwise specifically provided by statute
- Has fully operative pedals for human propulsion and an electric motor with power output not more than 1,000 watts.
- Not capable of going faster than 20 mph on level ground.
- Approved lighting must be used when operating under limited visibility

## **E-Bikes on Multi Use Paths**

### **Permitted**

Portland, OR  
Seattle, WA

### **Prohibited**

City of Boulder  
Fort Collins  
City and County of Denver  
Davis, CA\*

\*not enforced planning to change local ordinance to allow on paths

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**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE: OCTOBER 29, 2013**

**AGENDA TITLE:** Second reading and consideration of a motion to adopt ordinance No. 7941 creating a pilot project allowing electric assisted bicycles on certain hard surfaced multi-use paths by amending Definitions in Sections 1-2-1- and 7-1-1 and amending Sections 7-4-16, 7-5-5 and 7-5-9 and adding Section 7-5-26 authorizing electric assisted bicycles where permitted by rule adopted by the City Manager, establishing a sunset date of December 31, 2014.

**PRESENTER/S**

Jane S. Brautigam, City Manager  
Tom Carr, City Attorney  
Paul J. Fetherston, Deputy City Manager  
Bob Eichem, Chief Financial Officer  
Maureen Rait, Executive Director of Public Works  
Tracy Winfree, Director of Public Works for Transportation  
Michael Gardner-Sweeney, Transportation Planning and Operations Coordinator  
Kathleen Bracke, GO Boulder Program Manager  
Jeff Haley, Parks Planner, Parks and Recreation Department  
Dean Paschall, Communication & Public Process Manager, Open Space and Mountain Parks  
Carey Weinheimer, Traffic Commander, Boulder Police Department  
Molly Winter, Executive Director of Downtown, University Hill and Parking Services  
Marni Ratzel, Senior Transportation Planner

**EXECUTIVE SUMMARY**

As part of the city's Transportation Master Plan (TMP) update, the Transportation Division is introducing a "Complete Streets Bike and Pedestrian Living Laboratory" to test innovative treatments and programs to see if they are appropriate for Boulder. An ordinance to authorize use of electric assisted bicycles (E-bikes) on hard-surface multi-

use paths is being proposed to evaluate behavior of e-bike users and determine whether these vehicles can co-exist with current users on multi-use paths.

The proposed ordinance is included as **Attachment A**. It enables the City Manager, under rulemaking authority, to regulate the hard-surface paths where a person may activate the motor of an e-bike and establishes a sunset date of Dec. 31, 2014. During the pilot project the definition of a motorized vehicle will be amended to exclude an e-bike. The ordinance also will amend the definition of an e-bike to conform to state law. The pilot project duration allows for data collection, evaluation, community input, and quarterly updates to the City Council on the pilot findings.

The pilot would not include use on facilities that are pedestrian-only or intended to preserve the natural environment. Specifically, the proposed ordinance states that e-bike use would continue to be prohibited on sidewalks and the soft-surface trails in the Open Space and Mountain Park (OSMP) system surrounding Boulder. The pilot would be focused in the urban service area where there is a network of hard-surface, off-street multi-use paths.

The Open Space Board of Trustees passed a motion finding that the use of e-bikes on open space land is not consistent with the charter. OSBT asked staff to investigate possible disposal of paved paths maintained by the Department of Transportation. Under the charter, disposal occurs when land is “sold, leased, traded, or otherwise conveyed.” The land in question already is owned by the City of Boulder. Transferring responsibility from one department to another is not a disposal as that term is used in the charter. Thus, staff will not be working on disposal of these paths. Council has three options: 1) develop a protocol for designating lands as no longer “open space land” as that term is used in the charter; 2) find that the use of paved paths for e-bikes is an open space purpose; or 3) exclude from the pilot project paved paths in open space property.

**Attachment B** shows hard-surface multi-use paths on city land that are potentially managed by OSMP. Public Works for Transportation is responsible for both routine and capital maintenance of all of these hard surface paths, which are maintained to a transportation standard. To facilitate a viable travel option for commuters to complete trips by bike during seasonal snow/ice and debris removal is prioritized and anticipated by community members. Transportation and OSMP staff are working in partnership to refine the map based on property acquisition research and management practices.

## **BACKGROUND**

All background and board recommendation information can be viewed as part of the Oct. 1 first reading packet available at <https://bouldercolorado.gov/city-council/city-council-meetings>.

## **FIRST READING QUESTIONS**

The proposed ordinance was introduced to City Council for first reading on Oct. 1 and council had the following question.

**Question:** There was a question raised about whether e-bikes will be permitted to engage the motor on multi-use paths.

**Answer:** The intent of the pilot project is to allow e-bike users to engage the electric assisted motor while traveling on paved multi-use paths. During the pilot project the definition of a motorized vehicle will be amended to exclude an e-bike. The ordinance adds a new section to the Boulder Revised Code that authorizes the City Manager's rulemaking authority to regulate use of the motor option on an e-bike.

### **STAFF RECOMMENDATION**

As detailed in the 'options' section of this memo, staff considered several alternatives for defining and regulating e-bikes in the City of Boulder. The staff recommended option for an e-bike definition is Option 2. Accordingly, staff also recommends Option 2 for regulating the use of e-bikes, with the amendment to allow e-bike use on hard surface multi-use paths on OSMP fee-property identified as serving primarily a transportation function. These options propose to amend the definition of an e-bike to be consistent with state law and allow a pilot project to test e-bike use on hard-surface, multi-use paths in the City of Boulder that are maintained to a transportation standard.

If approved by City Council, the e-bike pilot project will begin in November 2013 and run through Dec. 31, 2014. E-bike use on "Open Space land" will be prohibited. , .

#### **Suggested Motion Language:**

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

Motion to adopt an ordinance creating a pilot project allowing electric assisted bicycles on certain hard surfaced multi-use paths by amending Definitions in Sections 1-2-1- and 7-1-1 and amending Sections 7-4-16, 7-5-5 and 7-5-9 and adding Section 7-5-26 authorizing electric assisted bicycles where permitted by rule adopted by the City Manager, establishing a sunset date of December 31, 2014.

### **OPTIONS**

Below is a list of options considered for defining and regulating e-bikes in the City of Boulder:

**Option 1:** No change to the existing e-bike Definition (BRC 7-1-1 Definitions):  
"Electric assisted bicycle" means a bicycle with a battery powered electric motor with a capacity of no more than four hundred watts continuous input power rating which assists the person pedaling and which is not capable of propelling the bicycle and rider at more than twenty miles per hour on level pavement.

**Option 2:** Amend e-bike definition to conform with Colorado State Law\* CRS 42-1-102(28.5): "Electrical assisted bicycle" means a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an electric motor not exceeding seven hundred fifty watts of power, and a top motor-powered speed of twenty miles per hour.

*\*Denver and Fort Collins also uses this definition.*

### **Options for regulating an e-bike**

**Option 1: Clarify the existing law regulating e-bikes.** E-bikes may operate on the roadway and within designated on-street bike lanes but are prohibited from using the motor on multi-use paths, trails and sidewalks.

**Option 2: Adopt an ordinance to test e-bike use on multi-use paths for a pilot period.** This ordinance would sunset on Dec. 31, 2014. E-bike use on the following would continue to be prohibited:

- OSMP soft-surface trails, including those that currently allow bikes; and
- Sidewalks, except those designated as multi-use paths.

The above option would allow the city to evaluate the impacts of allowing e-bike riders to operate the motor while bicycling on hard-surface, multi-use paths, with the exception of those on OSMP managed property. Signs to inform path users of the pilot project and the current 15 mph speed limit would be installed at select locations along the pathway system to educate users. Formal police enforcement activities may be scheduled as resources allow and based on the findings of the field observations. Automatic in-pavement loop detectors will track bike volume. Manual counts would be conducted to collect volume data by user type (pedestrian, bike, e-bike, other). Additionally, an online survey and intercept surveys of multi-use path users would be conducted to gather input on the pilot program and use of e-bikes on multi-use paths.

**Option 3: Adopt an ordinance to test e-bike use on multi-use paths, except for a segment of the Boulder Creek Path, for a demonstration period.** This ordinance would sunset on Dec. 31, 2014. E-bike use on the following would continue to be prohibited:

- OSMP soft-surface trails, including those that currently allow bikes;
- Sidewalks, except those designated as multi-use paths; and
- The Boulder Creek Path between Eben G. Fine Park and Scott Carpenter Park

Public input on the potential pilot program to test e-bike use on hard-surface, multi-use paths has expressed concern for impacts to the pedestrian experience and safety. This option would restrict the use of the electric-assisted motor on an e-bike along the Boulder Creek Path from the western city limit (west of Eben G. Fine Park) to 30<sup>th</sup> Street (Scott Carpenter Park). As the spine of the greenway system, this segment of the Boulder Creek Path is a well-publicized tourist destination and serves as a linear park along the Boulder Creek riparian corridor. In addition to the comprehensive program outlined in Option 2,

additional strategies would likely be required to regulate the use of e-bikes as non-motorized vehicles along the prohibited segment of the Boulder Creek path.

### Options for Addressing OSMP Managed Land

As noted above, the Open Space Board of Trustees has passed a motion finding that the use of e-bikes is not appropriate under the charter. The OSBT minutes will reflect the motion as follows:

Tom Isaacson moved the Open Space Board of Trustees finds that the use of e-bikes on Open Space paved paths is not appropriate under the charter, however the Open Space Board of Trustees recommends that the Open Space and Mountain Parks staff begin investigating a possible disposal of those identified paved multi use paths on Open Space and Mountain Parks land that principally serve a transportation function. Shelley Dunbar seconded. This motion passed four to one. Frances Hartogh dissented.

There is a gap in the charter with respect to open space land. Open space land is defined as follows:

As used in this charter, "open space land" shall mean any interest in real property purchased or leased with the sales and use tax pledged to the open space fund pursuant to the vote of the electorate on November 7, 1967, or proceeds thereof, any interest in real property dedicated to the city for open space purposes, and any interest in real property that is ever placed under the direction, supervision, or control of the open space department, unless disposed of as expressly provided in section 177 below.

Disposal as noted above involves a conveyance of the land. Yet, it is clear that open space land is owned by the city and managed by OSMP. Thus, conveyance is not appropriate. Open space land may only be used for open space purposes, which are as follows:

Open space land shall be acquired, maintained, preserved, retained, and used only for the following purposes:

- (a) Preservation or restoration of natural areas characterized by or including terrain, geologic formations, flora, or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species;
- (b) Preservation of water resources in their natural or traditional state, scenic areas or vistas, wildlife habitats, or fragile ecosystems;

(c) Preservation of land for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing;

(d) Preservation of agricultural uses and land suitable for agricultural production;

(e) Utilization of land for shaping the development of the city, limiting urban sprawl, and disciplining growth;

(f) Utilization of non-urban land for spatial definition of urban areas;

(g) Utilization of land to prevent encroachment on floodplains; and

(h) Preservation of land for its aesthetic or passive recreational value and its contribution to the quality of life of the community.

OSBT's motion can be viewed as the board's recommendation that riding e-bikes is not one of the purposes identified by the above-quoted charter section. As a policy recommendation by the board charged with advising the council regarding open space land, this recommendation should be given deference, but is not binding on the council. Council is ultimately the body that is charged with interpreting the charter. Thus, council has the option of deciding that riding e-bikes is an appropriate use of open space land.

In the alternative, council could direct staff to explore a means to address the question of how to make open space land no longer open space land.

Staff's recommendation is that a one-year pilot is not worth the effort to resolve these issues. They should be addressed only if a future council decides to make the policy permanent.

## **NEXT STEPS**

If the proposed e-bikes pilot project is approved by City Council, staff will proceed with implementation, including on-going community outreach, education, enforcement, and evaluation throughout the year long pilot project. Transportation and OSMP staff will work in partnership to identify the paths on OSMP property recommended for disposal as a transfer to transportation. The estimated timeline and process is anticipated to be complete by the first quarter 2014.

For more information regarding e-bikes, please see the city's webpage and links from [www.GOBoulder.net](http://www.GOBoulder.net)

## **ATTACHMENTS**

Attachment A Ordinance No. 7941

Attachment B Paved paths on OSMP fee property



ORDINANCE NO. 7941

AN ORDINANCE CREATING A PILOT PROJECT ALLOWING ELECTRIC ASSISTED BICYCLES ON CERTAIN HARD-SURFACED, MULTI-USE PATHS BY AMENDING DEFINITIONS IN SECTIONS 1-2-1 AND 7-1-1; AMENDING SECTIONS 7-4-16, 7-5-5, AND 7-5-9 TO SPECIFY SAFETY STANDARDS THAT WILL APPLY TO ELECTRIC ASSISTED BICYCLES; ADDING A NEW SECTION 7-5-26 AUTHORIZING ELECTRIC ASSISTED BICYCLES WHERE PERMITTED BY A RULE ADOPTED BY THE CITY MANAGER; ESTABLISHING A SUNSET DATE OF DECEMBER 31, 2014; AND SETTING FORTH RELATED DETAILS.

WHEREAS, THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO, FINDS AND RECITES THE FOLLOWING:

- A. The 2013 Transportation Master Plan (TMP) update builds on a strong foundation of success through policy refinement, using a collaborative approach and addressing the current and future transportation needs of the community while integrating with the city's broader sustainability planning initiatives.
- B. As part of the TMP update, the Transportation Division is introducing new strategies to increase bicycle and pedestrian mode share. It includes a "Complete Streets Bike and Pedestrian Living Laboratory" that provide test facilities and pilot programs to better understand the community's transportation choices and identify potential opportunities, barriers, and ultimately strategies to encourage more people to walk and bike.
- C. The purpose of this ordinance is to establish a one-year electric assisted bicycle demonstration Pilot Project (the "Pilot Project"), which would allow and test use of electric assisted bicycles on off-street, hard-surfaced, multi-use path system within the City of Boulder limits.

- D. The Pilot Project is focused on the urban service area where there is a network of hard-surfaced, off-street, multi-use paths maintained to a transportation standard.
- E. The Pilot Project would not include use on facilities that are pedestrian only or intended to preserve the natural environment. Specifically, electric assisted bicycle use would continue to be prohibited on sidewalks and on the Open Space and Mountain Park (OSMP) trail system surrounding Boulder.
- F. The Pilot Project will evaluate behavior of electric assisted bicycle users to determine whether these vehicles can co-exist with current uses on these multi-use paths.
- G. The Pilot Project is part of a Living Laboratory being implemented to introduce new strategies to increase bicycle mode share and encourage more people to complete trips by bicycle.
- H. The city's ordinances do not permit any self-propelled vehicle to be driven on any paths.
- I. In order to provide assurance that the use of electric assisted bicycles as an alternate mode of transportation contemplated by this program is safe, prudent, and in the best interest of all users of the city's hard-surfaced, multi-use path system, city staff will evaluate the following factors and data on an ongoing basis:
  - 1. The number of reported traffic collisions involving electric assisted bicycles occurring on hard-surfaced, multi-use paths that result in severe injury or fatality;
  - 2. The number of reported close call incidents involving electric assisted bicycles occurring on hard-surfaced, multi-use paths;
  - 3. Reported and observed unsafe behavior including speeding and other safety concerns along the hard-surfaced, multi-use path system by various users including electric assisted bicyclists, regular bicyclists, pedestrians and other users;

4. The time spent by Boulder Police officers conducting enforcement activities along the hard-surfaced, multi-use path system and the number of warnings and citations issued involving electric assisted bicycles.
- J. The greater Boulder community and affected Advisory Boards considered options and provided input to guide a staff recommendation on the Pilot Project.
- K. On September 23, 2013, the Transportation Advisory Board held a public hearing to consider the staff recommendation on the Pilot Project and make a formal recommendation to City Council.
- L. This program will sunset and be of no further force and effect after December 31, 2014, unless extended by affirmative council action.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,  
COLORADO:

Section 1. Section 1-2-1, B.R.C. 1981, is amended to read:

**1-2-1 Definitions.**

...

"Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or motorized wheelchair.

Section 2. Section 7-1-1, B.R.C. 1981, is amended to read:

**7-1-1 Definitions.**

...

"Electric assisted bicycle" means a ~~bicycle-vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an~~ with a battery powered electric motor not exceeding with a capacity of no more than fourseven hundred-fifty watts of continuous input power rating, ~~which assists the person pedaling and which is not capable of propelling the bicycle and a top motor-powered speed of rider at more than twenty miles per hour on level pavement.~~

"Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or motorized wheelchair.

Section 3. Section 7-4-16, B.R.C. 1981, is amended to read:

**7-4-16 Yield Required Before Entering or Leaving Street.**

- (a) A driver entering a street at any place other than an intersection shall yield the right-of-way to any pedestrian or bicycle approaching on a sidewalk or path, to any electric assisted bicycle approaching on a multi-use path where such vehicles are permitted, and to any vehicle approaching on a roadway of the street.
- (b) A driver leaving a street at any place other than an intersection shall yield the right-of-way to any pedestrian or bicycle approaching on a sidewalk or path, and to any electric assisted bicycle approaching in a multi-use path where such vehicles are permitted.

Section 4. Section 7-5-5, B.R.C. 1981, is amended to read:

**7-5-5 Use of Crosswalk.**

- (a) No person shall immediately approach, enter or traverse a crosswalk which spans a roadway at a speed greater than eight miles per hour.
- (b) Persons driving bicycles across a roadway upon and along a crosswalk from a sidewalk or path, and persons driving electric assisted bicycles across a roadway upon and along a crosswalk from a multi-use path where such vehicles are permitted, shall have all the duties applicable to pedestrians under the same circumstances.
- (c) Such persons similarly have the rights of a pedestrian, but only if the bicyclist was entitled to use the sidewalk or path, and the approach, entry and traversal of the crosswalk are made at a speed no greater than a reasonable crossing speed so that other drivers may anticipate the necessity to yield when required.

Section 5. Section 7-5-9, B.R.C. 1981, is amended to read:

**7-5-9 Bicycle Must Yield Right-of-Way and Obey Traffic Control Devices on Sidewalk, Crosswalk, or Path.**

- (a) A person driving a bicycle on a sidewalk, a crosswalk, or a path, and any person driving an electric assisted bicycle on a multi-use path, shall yield the right of way to any pedestrian and shall give an audible signal before overtaking and passing any pedestrian.

- (b) If any traffic control device is in place alongside of or on a sidewalk or a path, no driver of a bicycle or pedestrian, and no driver of an electric assisted bicycle on a multi-use path where such vehicles are permitted, shall fail to obey the requirements of the device.

Section 6. Chapter 7-5, “Pedestrian, Bicycle and Animal Traffic,” B.R.C. 1981, is amended by the addition of a new section to read:

**7-5-26 Electric Assisted Bicycles.**

No person shall activate the motor of an electric assisted bicycle on any bike or pedestrian path or on a recreational trail except where permitted by a rule adopted by the city manager in accordance with Chapter 1-4, “Rulemaking.” B.R.C. 1981.

Section 7. The city manager shall report to the City Council at least quarterly, and shall present a program evaluation after the program concludes.

Section 8. This ordinance shall be effective until December 31, 2014. The City Council suspends the prohibition against operating a motorized vehicle on hard-surfaced, multi-use paths until that time for the limited purpose of implementing the Pilot Project described by this ordinance. For all other purposes, the regulations governing electric assisted bicycles remain in full force and effect.

Section 9. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 10. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY  
TITLE ONLY this 1st day of October 2013.

Attest: \_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

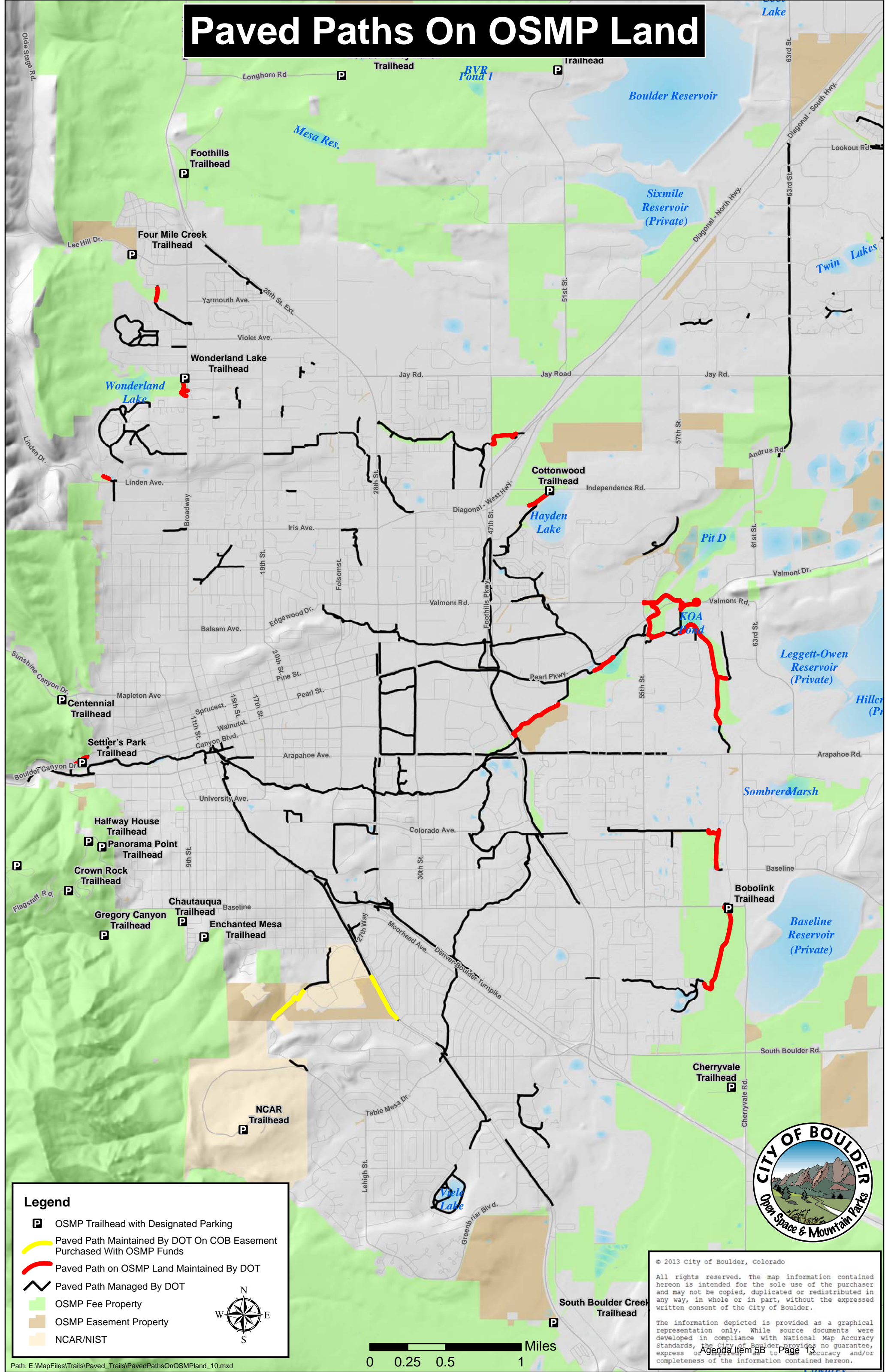
READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED  
PUBLISHED BY TITLE ONLY this 29th day of October 2013.

Attest: \_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk



# Paved Paths On OSMP Land









**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE: NOVEMBER 18, 2014**

**AGENDA TITLE:** Second reading and consideration of an ordinance to extend the pilot project allowing e-bike use on certain multi-use paths by removing the expiration date.

**PRESENTER/S**

Jane S. Brautigam, City Manager  
Maureen Rait, Executive Director of Public Works  
Tracy Winfree, Director of Public Works for Transportation  
Michael Gardner-Sweeney, Transportation Planning and Operations Coordinator  
Kathleen Bracke, GO Boulder Program Manager  
Jeff Haley, Parks Planner, Parks and Recreation Department  
Jim Reeder, Land and Facilities Division Manager, Open Space and Mountain Parks  
Kurt Weiler, Traffic Commander, Boulder Police Department  
Molly Winter, Executive Director of Downtown, University Hill and Parking Services  
Marni Ratzel, Senior Transportation Planner

**EXECUTIVE SUMMARY**

On Feb. 7, 2014, the city began a pilot project to allow and test electric-assisted bicycle (e-bike) use on hard-surface multi-use paths, not including paths on Open Space and Mountain Parks (OSMP) lands. The pilot project was authorized by an ordinance adopted by council in November 2013 that established a pilot project sunset date of Dec. 31, 2014.

A staff evaluation of multi-use path users during the pilot project showed that e-bikes make up a very small proportion of path users. During a seven-hour multi-use path observation, 1,000 bikes were counted and only three of those were e-bikes. Since the pilot project began, there have been no reported traffic collisions or close calls involving e-bikes. In addition, intercept surveys of other path users show that the majority of path users have not interacted with e-bikes and support their use on multi-use paths. This qualitative and quantitative data suggests that e-bikes can continue to coexist with current users on multi-use paths.

The proposed ordinance to remove the sunset provision is provided in **Attachment A**. The Oct. 21, 2014 first reading packet is provided as **Attachment B**.

### **FIRST READING QUESTIONS**

City Council members provided several questions during the first reading, which staff has addressed below.

1. *How is electric-assisted bicycle use on open space lands being addressed?*

The proposed ordinance will only remove the sunset date, leaving the restriction on electric-assisted bicycle use on OSMP lands in place. The potential transfer/disposal of OSMP land to Transportation Division management for embedded elements in the hard-surface path system not core to the OSMP system will be presented to the Open Space Board of Trustees and City Council as a separate item at a future date.

2. *What control mechanisms are permissible? Throttle- or pedal-engaged? How do we regulate? Should we consider changing to the European definition?*

The Boulder Revised Code (B.R.C.) defines an electric-assisted bicycle as “a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an electric motor not exceeding 750 watts of power rating, and a top motor-powered speed of twenty miles per hour.” This definition was modified as part of the pilot to be consistent with the State of Colorado definition.

European Union (EU) directive 2002/24/EC exempts vehicles with the following definition from type approval: “Cycles with pedal assistance which are equipped with an auxiliary electric motor having a maximum continuous rated power of 0.25 kW, of which the output is progressively reduced and finally cut off as the vehicle reaches a speed of 25 km/h or if the cyclist stops pedaling.” This is the de facto definition of an electrically assisted pedal cycle in the EU. As with all EU directives, individual member countries of the EU are left to implement the requirements in national legislation.

The European standards for low-speed electric bicycles are much more stringent than the U.S. Consumer Product Safety Commission standards, limiting the maximum assisted speed to 15 mph and requiring the user to pedal at all times in order to obtain assistance. The EU does not allow the “throttle” type of e-bike.

Staff recommends no changes in the definition at this time to remain consistent with state standards, with continued monitoring to determine whether variance from state standards would be advantageous in the future.

3. *Should we do additional outreach and education on the operation of electric-assisted bicycles? The operation of an electric-assisted bicycle is likely intimidating for potential new users because of its speed and weight. It was suggested that staff consider working with Community Cycles to provide training for people interested in using an electric-assisted bicycle.*

The idea of providing public exposure and training on the use of electric-assisted bicycles is excellent. As part of the pilot program consideration, staff did demonstrations and allowed people to use electric-assisted bicycles. As the pilot transitions to an ongoing transportation option, continued outreach and education will be advantageous. Staff will explore options for providing this outreach, including working with Community Cycles.

#### **STAFF RECOMMENDATION**

Based on the technical evaluation and community input, staff recommends that e-bike use be continued as allowed today and that Ordinance 7941 be amended to remove the sunset provision.

#### **Suggested Motion Language:**

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

Motion to adopt Ordinance No. 8007, removing the sunset provision of Ordinance 7941 allowing e-bike use on certain multi-use paths.

#### **ATTACHMENTS**

Attachment A: Ordinance 8007

Attachment B: Oct. 21, 2014 First Reading Packet Item



**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE: OCTOBER 21, 2014**

**AGENDA TITLE:** Introduction, first reading and consideration of a motion to order published, by title only, an ordinance to remove the sunset provision to Ordinance 7491, and continue allowing e-bike use on certain multi-use paths.

**PRESENTER/S**

Jane S. Brautigam, City Manager  
Maureen Rait, Executive Director of Public Works  
Tracy Winfree, Director of Public Works for Transportation  
Michael Gardner-Sweeney, Transportation Planning and Operations Coordinator  
Kathleen Bracke, GO Boulder Program Manager  
Jeff Haley, Parks Planner, Parks and Recreation Department  
Jim Reeder, Land and Facilities Division Manager, Open Space and Mountain Parks  
Kurt Weiler, Traffic Commander, Boulder Police Department  
Molly Winter, Executive Director of Downtown, University Hill and Parking Services  
Marni Ratzel, Senior Transportation Planner

**EXECUTIVE SUMMARY**

On Feb. 7, 2014, the city began a pilot project to allow and test electric-assisted bicycle (e-bike) use on hard-surface multi-use paths, not including paths on Open Space and Mountain Parks (OSMP) lands. The pilot project was authorized by an ordinance adopted by council in November 2013 that established a pilot project sunset date of Dec. 31, 2014.

A staff evaluation of multi-use path users during the pilot project showed that e-bikes make up a very small proportion of path users. During a seven-hour multi-use path observation, 1,000 bikes were counted and only three of those were e-bikes. Since the pilot project began, there have been no reported traffic collisions or close calls involving e-bikes. In addition, intercept surveys of other path users show the majority of path users have not interacted with e-bikes and support their use on multi-use paths. This qualitative

and quantitative data suggests that e-bikes can continue to coexist with current users on multi-use paths.

This item introduces an ordinance to remove the sunset provision of Ordinance 7491(**Attachment B**), which allows e-bikes on certain multi-use paths, excluding paths on OSMP-managed lands. The draft ordinance is included as **Attachment A**. It enables the City Manager, under rulemaking authority, to regulate the hard-surface paths where a person may activate the electric-assisted motor of an e-bike. The current regulation establishes a Map of Multi-Use Paths That Allow E-Bike Use (**Attachment C**) and allows the pilot project to continue until Dec. 31, 2014. A new rule to remove the sunset date would be published approximately 30 days after council approval of the ordinance and enacted approximately two weeks thereafter, on or about Jan. 2, 2015.

Consistent with the current ordinance, the new ordinance would not include use on facilities that are pedestrian-only or intended to preserve the natural environment. Specifically, the proposed ordinance states that e-bike use would continue to be prohibited on sidewalks, paths and soft-surface trails in the OSMP system surrounding Boulder.

#### **STAFF RECOMMENDATION**

Based on the technical evaluation and community input detailed in subsequent sections of this memo, staff recommends that e-bike use be continued as allowed today and that Ordinance 7941 be amended to remove the sunset provision.

#### **Suggested Motion Language:**

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

Motion to introduce and order published, by title only, an ordinance removing the sunset provision of Ordinance 7941.

#### **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- **Economic:** Bicyclists tend to shop locally and invest in the local economy. A local survey estimates the direct economic benefit of the bicycling industry in Boulder to be \$52 million in 2010. E-bikes support local trips to shopping and employment for people of all ages and abilities.
- **Environmental:** E-bikes are an efficient, zero-emission transportation option, reducing greenhouse gases and vehicle miles traveled. An estimated 40 percent of all car trips are less than two miles away. Reducing the number of trips made by cars reduces congestion and frees up road space for essential motor vehicle trips. E-bikes expand the distance a bicyclist is willing and able to ride, which increases the potential to shift some single-occupant vehicle trips to e-bike trips.

- **Social:** Allowing the use of e-bikes on multi-use paths supports a complete transportation system. E-bikes expand travel options and help aging generations stay active and healthy. Biking is an active form of transportation that helps address health problems related to sedentary behavior.

## **OTHER IMPACTS**

- **Fiscal** – There are no budgetary impacts associated with this work.
- **Staff time** – No additional staffing or staff time is expected as a result of these proposed changes.

## **BOARD AND COMMISSION FEEDBACK**

On Oct. 13, 2014, the Transportation Advisory Board (TAB) held a public hearing to consider the staff recommendation to remove the sunset provision and continue to allow electric-assisted bicycle use on certain multi-use paths, excluding paths on OSMP-managed land. The board unanimously passed a motion in support of a recommendation to City Council to remove the sunset provision from Ordinance 7941.

TAB members are supportive of removing the sunset provision and continuing e-bike use on multi-use paths as a means to increase mobility and bicycle mode share. TAB members expressed a desire for staff to continue monitoring the use of e-bikes on multi-use paths and to revisit the issue should a problem arise in the future. At least one board member felt that the low percentage of e-bike users observed on multi-use paths and relatively low response rate from the survey demonstrates that there was not adequate data to make an educated long-term policy decision regarding e-bike use on multi-use paths.

Other affected boards include the Downtown Management Commission (DMC), Open Space Board of Trustees (OSBT), University Hill Commercial Area Management Commission (UHCAMC), and Parks and Recreation Advisory Board (PRAB). These boards received the TAB packet materials for this topic as an information item in advance of the City Council meeting.

## **PUBLIC FEEDBACK**

There was an extensive public engagement process that preceded the board and council consideration of the e-bikes pilot project. Throughout the pilot project, [Inspire Boulder](#) offered a digital forum for community input and dialog. Stakeholders from that process who expressed interest in updates about the city's policy regarding the use of e-bikes have been informed of the staff recommendation and the TAB and council meeting schedule to consider the proposed ordinance, and have been provided with links to the TAB and council materials.

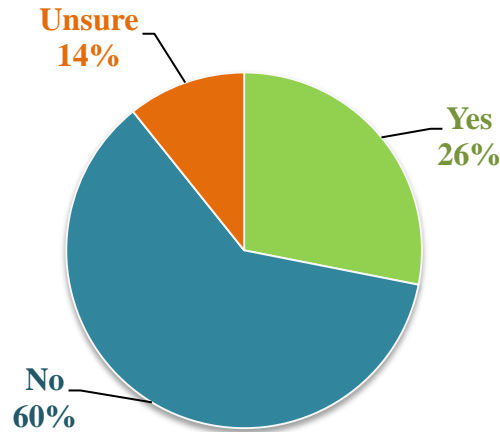
An intercept survey of multi-use path users was conducted during the week of Sept. 6, 2014. Four locations along the paths were selected to intercept path users: Boulder Creek multi-use path at Boulder High School; Elmer's Twomile Creek multi-use path at Goose

Creek multi-use path; Arapahoe Avenue multi-use path at 48<sup>th</sup> Street/Boulder Community Health; and South Boulder Creek path south of Baseline Road.

A total of 126 respondents answered two questions about e-bikes included on the survey. These questions and a breakdown of responses are detailed below.

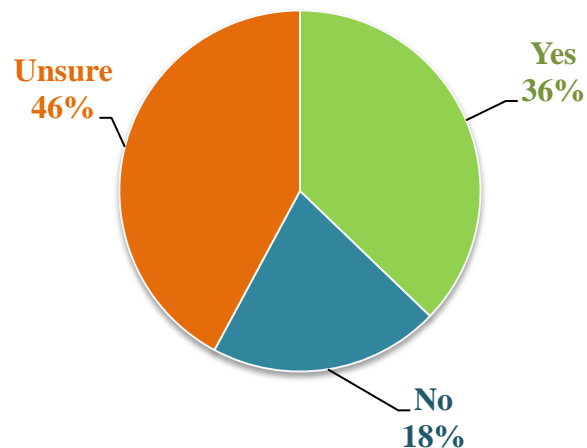
**Have you encountered an electric-assisted bicycle on multi-use paths in Boulder?**

- **Yes:** 34
- **No:** 74
- **Unsure:** 13



**Do you support the use of electric-assisted bicycles on Boulder's multi-use paths?**

- **Yes:** 45
- **No:** 25
- **Unsure:** 51



Two community members attended the Transportation Advisory Board meeting on Oct. 13, 2014, to provide testimony during the public hearing. Both community members expressed support for continuing to allow e-bike use on multi-use paths. Additionally, Community Cycles provided written comment in support of continuing to allow e-bike use on multi-use paths.

**BACKGROUND**

One objective of the updated [Transportation Master Plan](#) (TMP) is achieving an increase in bicycle mode share from 10 to 15 percent by 2020 and ultimately to 30 percent by 2035. In support of this objective, staff is focusing its efforts on attracting and better accommodating “interested but concerned cyclists” and especially increasing trips by older adults, women and families with young children – accommodating bicyclists from eight to 80 years old. Engineering improvements, coupled with strategies to encourage,

educate, enforce, and evaluate, are the five “E’s” that comprise this comprehensive approach to increasing bike mode share in Boulder.

As part of the 2014 TMP update, the city introduced a [Living Laboratory](#) to test a variety of new bicycle facilities and programs and evaluate their long-term application in Boulder. These bicycle pilot projects include innovative treatments that offer the opportunity to experiment with enhancements to the existing system and aim to encourage bicycle use by all types of people for a variety of trip purposes.

In February 2014, the city began the pilot program to test the use of e-bikes on certain hard-surfaced multi-use paths, not including paths on OSMP lands or sidewalks (except those designated as multi-use paths). Staff conducted a qualitative and quantitative evaluation of the e-bike pilot project that is detailed in the “Analysis” below.

## **ANALYSIS**

In order to assess whether the use of e-bikes as an alternate mode of transportation is safe, prudent, and in the best interest of all users of the city’s hard-surfaced, multi-use path system, city staff evaluated the factors and data on an ongoing basis. Since the inception of the pilot project, the findings are as follows:

1. There have been no reported traffic collisions involving e-bikes on hard-surfaced, multi-use paths;
2. There have been no reported close call incidents involving e-bikes on hard-surfaced, multi-use paths;
3. There have been no reported or observed unsafe behaviors by e-bike users, including speeding and/or other safety concerns, along the hard-surfaced, multi-use paths; and
4. There has not been a need for Boulder Police officers to issue any warnings or citations involving e-bikes along the hard-surfaced, multi-use path system, or for officers to increase enforcement at a particular location. Enforcement efforts were only to be considered if a problem location was identified.

Staff conducted field surveys in August 2014 and key findings indicate that allowing e-bikes to ride on multi-use paths has not resulted in large numbers of e-bikes using the trail system and that 82 percent of all bicycles (e-bikes and “regular” bikes) are traveling at or below the posted 15 mph speed limit on multi-use paths.

Key findings from approximately seven hours of observing 1,000 traveling bicycles at four multi-use path locations included the following:

- Three e-bikes were observed (out of 1,000 bikes);
- 82 percent of cyclists were traveling at or below the 15 mph speed limit;
- Less than 1 percent of cyclists experienced near-miss conflicts;
- 67 percent of all cyclists observed were male;



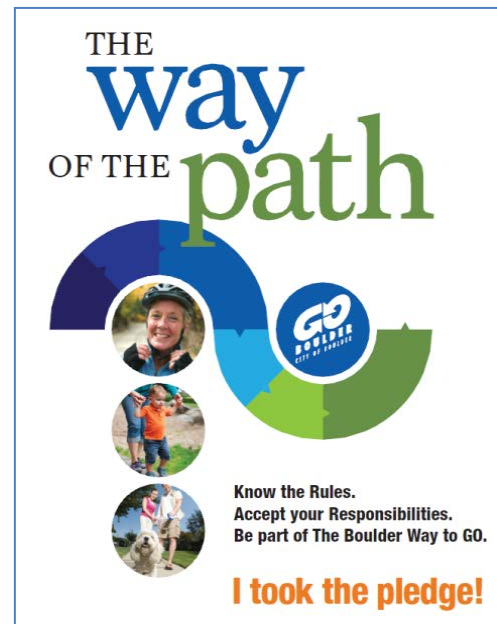
- 33 percent of all cyclists observed were female;
- 10 percent of cyclists observed wore a “full lycra cycling kit;” and
- 7 percent of cyclists observed were children.

The city launched [The Way of the Path](#) courtesy campaign this fall to encourage safe behaviors for all path users, with an emphasis during the back-to-school timeframe. This campaign is part of the community outreach initiated with the e-bikes pilot program as part of the Living Lab, though it is designed to be universal in communicating safety and etiquette messages. The Way of the Path campaign features messaging about eight rules designed to encourage proper etiquette and safety for all path users. It is supported by a [project Web page](#) and [social media](#), as well as a team of Bicycle Ambassadors.

In partnership with Community Cycles, Bicycle Ambassadors staffed a table at the Wednesday Boulder Farmers’ Markets and at spot locations along the multi-use paths throughout September to raise awareness about the rules and ask community members to pledge their commitment to make paths more safe and enjoyable. Those who signed the pledge receive weekly [blog posts](#) and surveys on the rules of the path. As of the seventh week of the campaign, more than 330 people have pledged to follow The Way of the Path, several of whom are completing weekly surveys to share their perspective and experience as path users.

Some highlights from the surveys so far include:

- More than 80 percent of respondents knew the 15 mph speed limit on Boulder's multi-use paths;
- The top three reasons for using Boulder's multi-use paths were recreational/social, exercise, and shopping/errands; and
- A total of 21 people completed the weekly blog survey asking two questions about e-bikes. Of these respondents, 17 expressed support for e-bike use on multi-use paths, four were unsure and none were in opposition. In answer to the question of whether they have encountered an e-bike on multi-use paths, four said yes, four responded that they were unsure and 13 answered no.



The Way of the Path campaign will continue on an ongoing basis throughout 2014 and 2015, regardless of whether e-bike use on multi-use paths continues or not.

### **PROPOSED ORDINANCE REVISION**

The City Attorney's Office has drafted a proposed ordinance for City Council consideration that would remove the sunset provision (Section 8) of Ordinance 7491 (**Attachment B**) and continue to allow e-bike use on hard-surface, multi-use paths, excluding paths on OSMP. This proposed ordinance is included as **Attachment A**.

Based on the pilot project technical analysis and community feedback, staff recommends that the use of e-bikes on the hard-surface multi-use paths is working well and recommends that council remove of the sunset date provision of Dec. 31, 2014 to allow e-bikes on certain multi-use paths in 2015 and beyond.

### **NEXT STEPS**

If the proposed ordinance to remove the sunset provision is approved by City Council, staff will proceed with amending the current rule to continue to allow e-bike use on specific hard-surface multi-use paths in Boulder.

Visit [www.goboulder.net](http://www.goboulder.net) for more information about e-bikes and multi-use paths.

### **ATTACHMENTS**

Attachment A: Ordinance 8007

Attachment B: Ordinance 7491

Attachment C: Map of Multi-Use Paths That Allow E-Bike Use

ORDINANCE NO. 8007

AN ORDINANCE TO REMOVE THE SUNSET PROVISION OF  
ORDINANCE 7941, AND TO CONTINUE ALLOWING E-BIKE  
USE ON CERTAIN MULTI-USE PATHS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,  
COLORADO:

Section 1. The first sentence of Section 8 of Ordinance 7941 is repealed. This sentence provided that Ordinance 7941 would no longer be effective after December 31, 2014. All other provisions of Ordinance 7941 shall remain in full force and effect including the remaining provisions of Section 8.

Section 2. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 3. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY  
TITLE ONLY this 21<sup>st</sup> day of October, 2014.

\_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
City Clerk

1 READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED  
2 PUBLISHED BY TITLE ONLY this \_\_\_\_ day of \_\_\_\_\_, 2014.

3  
4  
5  
6 Attest: Mayor \_\_\_\_\_

7  
8 \_\_\_\_\_  
9 City Clerk

ORDINANCE NO. 7941

AN ORDINANCE CREATING A PILOT PROJECT ALLOWING ELECTRIC ASSISTED BICYCLES ON CERTAIN HARD-SURFACED, MULTI-USE PATHS BUT EXCLUDING THOSE ON OPEN SPACE AND MOUNTAIN PARK PROPERTY BY AMENDING DEFINITIONS IN SECTIONS 1-2-1 AND 7-1-1; AMENDING SECTIONS 7-4-16, 7-5-5, AND 7-5-9 TO SPECIFY SAFETY STANDARDS THAT WILL APPLY TO ELECTRIC ASSISTED BICYCLES; ADDING A NEW SECTION 7-5-26 AUTHORIZING ELECTRIC ASSISTED BICYCLES WHERE PERMITTED BY A RULE ADOPTED BY THE CITY MANAGER; ESTABLISHING A SUNSET DATE OF DECEMBER 31, 2014; AND SETTING FORTH RELATED DETAILS.

WHEREAS, THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO, FINDS AND RECITES THE FOLLOWING:

- A. The 2013 Transportation Master Plan (TMP) update builds on a strong foundation of success through policy refinement, using a collaborative approach and addressing the current and future transportation needs of the community while integrating with the city's broader sustainability planning initiatives.
- B. As part of the TMP update, the Transportation Division is introducing new strategies to increase bicycle and pedestrian mode share. It includes a "Complete Streets Bike and Pedestrian Living Laboratory" that provide test facilities and pilot programs to better understand the community's transportation choices and identify potential opportunities, barriers, and ultimately strategies to encourage more people to walk and bike.
- C. The purpose of this ordinance is to establish a one-year electric assisted bicycle demonstration Pilot Project (the "Pilot Project"), which would allow and test use of electric assisted bicycles on off-street, hard-surfaced, multi-use path system within the City of Boulder limits.



- 1 D. The Pilot Project is focused on the urban service area where there is a network of hard-  
2 surfaced, off-street, multi-use paths maintained to a transportation standard.
- 3 E. The Pilot Project would not include use on facilities that are pedestrian only or intended  
4 to preserve the natural environment. Specifically, electric assisted bicycle use would  
5 continue to be prohibited on sidewalks and on the Open Space and Mountain Park  
6 (OSMP) trail system surrounding Boulder.
- 7 F. The Pilot Project will evaluate behavior of electric assisted bicycle users to determine  
8 whether these vehicles can co-exist with current uses on these multi-use paths.
- 9 G. The Pilot Project is part of a Living Laboratory being implemented to introduce new  
10 strategies to increase bicycle mode share and encourage more people to complete trips by  
11 bicycle.
- 12 H. The city's ordinances do not permit any self-propelled vehicle to be driven on any paths.
- 13 I. In order to provide assurance that the use of electric assisted bicycles as an alternate  
14 mode of transportation contemplated by this program is safe, prudent, and in the best  
15 interest of all users of the city's hard-surfaced, multi-use path system, city staff will  
16 evaluate the following factors and data on an ongoing basis:
- 17 1. The number of reported traffic collisions involving electric assisted bicycles  
18 occurring on hard-surfaced, multi-use paths that result in severe injury or fatality;  
19 2. The number of reported close call incidents involving electric assisted bicycles  
20 occurring on hard-surfaced, multi-use paths;  
21 3. Reported and observed unsafe behavior including speeding and other safety concerns  
22 along the hard-surfaced, multi-use path system by various users including electric  
23 assisted bicyclists, regular bicyclists, pedestrians and other users;  
24  
25

1 4. The time spent by Boulder Police officers conducting enforcement activities along the  
2 hard-surfaced, multi-use path system and the number of warnings and citations issued  
3 involving electric assisted bicycles.

4 J. The greater Boulder community and affected Advisory Boards considered options and  
5 provided input to guide a staff recommendation on the Pilot Project.

6 K. On September 23, 2013, the Transportation Advisory Board held a public hearing to  
7 consider the staff recommendation on the Pilot Project and make a formal  
8 recommendation to City Council.

9 L. This program will sunset and be of no further force and effect after December 31, 2014,  
10 unless extended by affirmative council action.

11  
12 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,  
13 COLORADO:

14 Section 1. Section 1-2-1, B.R.C. 1981, is amended to read:

15 **1-2-1 Definitions.**

16 . . .

17 "Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or  
18 motorized wheelchair.

19 Section 2. Section 7-1-1, B.R.C. 1981, is amended to read:

20 **7-1-1 Definitions.**

21 . . .

22 "Electric assisted bicycle" means a ~~bicycle~~ bicycle-vehicle having two tandem wheels or two parallel  
23 wheels and one forward wheel, fully operable pedals, an with a battery-powered electric motor  
24 not exceeding with a capacity of no more than fourseven hundred-fifty watts of continuous input  
25 power rating, which assists the person pedaling and which is not capable of propelling the  
bicycle and a top motor-powered speed of rider at more than twenty miles per hour on level  
pavement.

1 "Motor vehicle" means any self-propelled vehicle other than a moped, electric assisted bicycle or  
2 motorized wheelchair.

3 Section 3. Section 7-4-16, B.R.C. 1981, is amended to read:

4 **7-4-16 Yield Required Before Entering or Leaving Street.**

- 5 (a) A driver entering a street at any place other than an intersection shall yield the right-of-  
6 way to any pedestrian or bicycle approaching on a sidewalk or path, to any electric  
7 assisted bicycle approaching on a multi-use path where such vehicles are permitted, and  
8 to any vehicle approaching on a roadway of the street.
- 9 (b) A driver leaving a street at any place other than an intersection shall yield the right-of-  
10 way to any pedestrian or bicycle approaching on a sidewalk or path, and to any electric  
11 assisted bicycle approaching in a multi-use path where such vehicles are permitted.

12 Section 4. Section 7-5-5, B.R.C. 1981, is amended to read:

13 **7-5-5 Use of Crosswalk.**

- 14 (a) No person shall immediately approach, enter or traverse a crosswalk which spans a  
15 roadway at a speed greater than eight miles per hour.
- 16 (b) Persons driving bicycles across a roadway upon and along a crosswalk from a sidewalk  
17 or path, and persons driving electric assisted bicycles across a roadway upon and along a  
18 crosswalk from a multi-use path where such vehicles are permitted, shall have all the  
19 duties applicable to pedestrians under the same circumstances.
- 20 (c) Such persons similarly have the rights of a pedestrian, but only if the bicyclist was  
21 entitled to use the sidewalk or path, and the approach, entry and traversal of the  
22 crosswalk are made at a speed no greater than a reasonable crossing speed so that other  
23 drivers may anticipate the necessity to yield when required.

24 Section 5. Section 7-5-9, B.R.C. 1981, is amended to read:

25 **7-5-9 Bicycle Must Yield Right-of-Way and Obey Traffic Control Devices on Sidewalk,  
Crosswalk, or Path.**

- (a) A person driving a bicycle on a sidewalk, a crosswalk, or a path, and any person driving  
an electric assisted bicycle on a multi-use path, shall yield the right of way to any  
pedestrian and shall give an audible signal before overtaking and passing any pedestrian.



1 (b) If any traffic control device is in place alongside of or on a sidewalk or a path, no driver  
2 of a bicycle or pedestrian, and no driver of an electric assisted bicycle on a multi-use path  
3 where such vehicles are permitted, shall fail to obey the requirements of the device.

4 Section 6. Chapter 7-5, "Pedestrian, Bicycle and Animal Traffic," B.R.C. 1981, is  
5 amended by the addition of a new section to read:

6 **7-5-26 Electric Assisted Bicycles.**

7 No person shall activate the motor of an electric assisted bicycle on any bike or pedestrian path  
8 or on a recreational trail except where permitted by a rule adopted by the city manager in  
9 accordance with Chapter 1-4, "Rulemaking," B.R.C. 1981. Such rule adopted by the city  
10 manager shall not include paths or trails on open space land as defined in the City Charter  
11 Section 170.

12 Section 7. The city manager shall report to the City Council at least quarterly, and shall  
13 present a program evaluation after the program concludes.

14 Section 8. This ordinance shall be effective until December 31, 2014. The City Council  
15 suspends the prohibition against operating a motorized vehicle on hard-surfaced, multi-use paths  
16 until that time for the limited purpose of implementing the Pilot Project described by this  
17 ordinance, except that the use of electric assisted bicycles, whether the motor is activated or not,  
18 is prohibited on sidewalks and on open space land, as defined in the City Charter Section 170.  
19 For all other purposes, the regulations governing electric assisted bicycles remain in full force  
20 and effect.

21 Section 9. This ordinance is necessary to protect the public health, safety, and welfare of  
22 the residents of the city, and covers matters of local concern.

23 Section 10. The City Council deems it appropriate that this ordinance be published by  
24 title only and orders that copies of this ordinance be made available in the office of the city clerk  
25 for public inspection and acquisition.

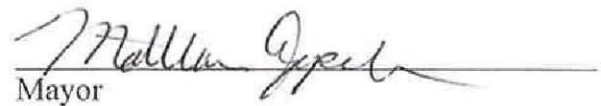
1 INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY  
2 TITLE ONLY this 1st day of October 2013.

3  
4   
Mayor

5 Attest:

6  
7   
City Clerk

8  
9 READ ON SECOND READING, AMENDED, AND ORDERED PUBLISHED BY  
10 TITLE ONLY this 29th day of October 2013.

11  
12   
Mayor

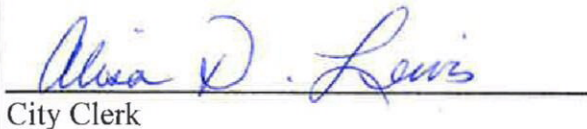
13 Attest:

14  
15   
City Clerk

16  
17 READ ON THIRD READING, PASSED, ADOPTED, AND ORDERED PUBLISHED  
18 BY TITLE ONLY this 12th day of November, 2013.

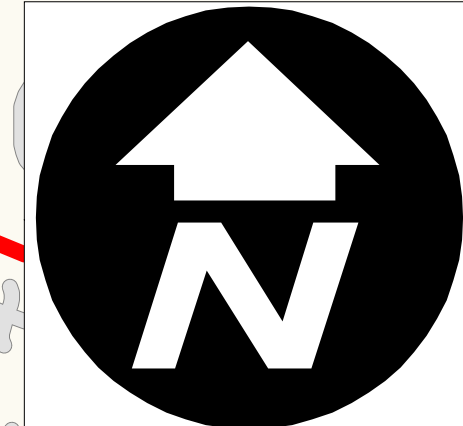
19  
20   
Mayor

21 Attest:

22  
23   
City Clerk



# City of Boulder Existing Multi-Use Paths that allow E-Bike Use



- Legend**
- E-Bikes Use Allowed
  - E-Bikes Use Prohibited
  - University of Colorado
  - City Limits

0 0.25 0.5 1 Miles



# E-bikes put the “easy” in riding but conflict where the rubber meets the road

By STEVE LIPSHER

March 2, 2018 at 12:00 pm



Helen H. Richardson, The Denver PostA woman rides an e-bike on a paved trail near Boulder.

There was no way — no way — the paunchy elderly man in warmup pants was passing me, barely breaking a sweat and chirping out a cheerful, possibly condescending “Hello there!”

I was huffing and puffing on my road bike, headed toward Vail Pass last fall, when I suffered this wound to my ego, only to spy with some relief the bulge on his bike frame that indicated he was on a battery-powered electric bike.

His pedal strokes were being magnified two or three times by the power pack, and he was maintaining a pace uphill noticeably faster than my hard-earned 10 mph.

To me, it seemed like he was cheating in the always competitive human race; to him, it was a way merely to enjoy leisurely bike ride on a pleasant afternoon.

Technically, we were on a paved bike path designated for non-motorized use, although the increasing popularity of e-bikes is now blurring that line.

Statewide, communities have grappled with where to allow e-bikes after a 2017 law gave local governments that control.

Vail allows pedal-assisted e-bikes on its paved bike paths; Grand Junction and Colorado Springs let them on “urban trails,” including paved and hardened-dirt bike paths. Broomfield opted to allow them on paths open to traditional bicycles, while Jefferson County opened the gates to e-bikes on all of its trails, including its popular open-space parks, as a year-long pilot program. Boulder County and Summit County have been considering the issue just this week.

(Interestingly, the state law requires helmets for riding the most powerful e-bikes, which have a maximum speed of 28 mph, even though that requirement inexplicably doesn’t exist in Colorado for motorcycles that travel at highway speeds and faster.)

The debate over whether to allow e-bikes on recreational paths and trails has created some strange bedfellows.

Bike manufacturers and shop owners, sensing an untapped market, eagerly are promoting them, even as their loyal pedal-pushing customers express skepticism if not outright disdain. Environmentalists and traffic managers see them as a possible relief for congestion on the roads and reduce pollution. Recreationalists fear they will be incompatible with existing uses, while seniors and tourists view them as the key to enjoying riding — especially in the mountains.

Everyone, it seems, is at least somewhat torn over where they should be allowed.

For me, a bright line exists on the dirt trails: Given that e-bikes are motorized, I would like to see them confined to routes that allow motorcycles and ATVs, not the single-track trails popular among hikers, horseback riders and mountain bikers.

Of course, I also hold views contrary to many of my mountain-biking friends when I say there are trails where we should be prohibited, too, and, quite frankly, I’m in favor of “use segregation,” such as how land managers keep snowmobilers and backcountry skiers in different areas on Vail Pass and Rabbit Ears Pass. (I’d love to see skier-only and snowboarder-only trails at the ski resorts, too.)

Quite frankly, illegal user-created trails have become a major headache for the U.S. Forest Service and the Bureau of Land Management, and motorcycles and mountain bikers — and, mark my words, someday it will be e-bikers — are the primary culprits in these abuses.

As for pavement, Colorado boasts some of the best dedicated bike paths in the world, linking towns and providing safe routes through densely congested urban areas.

Unfortunately, many of the most popular ones already attract such crowds of bicyclists, walkers, parents with strollers, joggers and skateboarders — of all abilities — that they already can be dangerous.

Thousands of tourists annually pay to ride shuttles up to the top of Vail Pass and coast on rental bikes downhill on the bike path to Frisco, often only on the edge of control and seemingly unaware of the strict need to ride single-file and keep right on blind curves.

There are those who, when I call out a courtesy “on your left” as I’m overtaking them, immediately look to the left — and then, invariably, swerve left into my path — as if wanting to verify that I am really there.

I’ve seen clueless riders stopped with their bikes parked sideways across the path, as well as people walking dogs on leashes, pushing prams while walking dogs on leashes and even roller-skating while walking dogs on leashes.

I know at least two people who have been injured in hit-and-run collisions on the bike paths, including one who sparked a countywide vigilante manhunt last fall via social media, ultimately resulting in the culprit’s apprehension on a bus by a sheriff’s deputy.

Adding e-bikes, with their effortless speed, to this mix only will create more mayhem on the bike paths already packed with the unaware, the inconsiderate and the distracted.

But, come to think of it, I don’t want these people on the roads, either.

Steve Lipsher (slipsher@comcast.net) of Silverthorne writes a monthly column for The Denver Post.



## Grand Junction City Council

### Regular Session

Item #3.a.i.

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**Meeting Date:** February 21, 2018

**Presented By:** John Shaver, City Attorney, Rob Schoeber, Parks and Recreation Director

**Department:** Parks and Recreation

**Submitted By:** Rob Schoeber, Parks and Recreation Director

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### **Information**

#### **SUBJECT:**

An Ordinance Amending Chapter 12 of the Grand Junction Municipal Code Concerning Riverfront and Other Trail Regulations Concerning the Operation of Electrical Assisted Bicycles

#### **RECOMMENDATION:**

Parks and Recreation Advisory Board unanimously supported this ordinance revision at their April 27, 2017 meeting. Staff recommends that City Council adopt the recommendation and approve the ordinance.

#### **EXECUTIVE SUMMARY:**

City Council formally considered this item at the December 20, 2017 Regular City Council meeting and the ordinance was not adopted on second reading. Since that time, the Mayor and members of Council have requested that this item be brought back for Council discussion.

The City of Grand Junction currently maintains a trail system approximately 21 miles in length, including Riverfront, Ridges and Urban Trails. These developed hard surface trails are utilized for non-motorized activities such as walking, running and cycling. Other power driven mobility devices (OPDMDs) may be operated on any of these trails by individuals with mobility disabilities.

E-bikes, or electrical assisted bicycles, use a small electric engine to boost rider's speeds. They are popular among riders of all ages and are designed to enhance a rider's pedaling with limited engine power.

During the recent Colorado legislative session, HB 17-1151 was approved by the legislature. In summary, this bill removes electrical assisted bicycles from the definition of motorized vehicles and creates three classes of E-bikes. The three classifications are defined according to the maximum speed of the electrical power in relationship to the pedaling by the rider.

**Class I Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

**Class II Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance regardless of whether the rider is pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

**Class III Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty-eight miles per hour.

Great Outdoors Colorado (GOCO) has provided significant capital funding for trails in the Grand Valley, primarily the Riverfront Trail. In general, GOCO opposes motorized uses on all of their grant funded trails. Recently, however GOCO has stated that they view E-bikes differently than motorized uses, and are leaving these decisions up to the local communities. Policy revisions pertaining to E-bikes are currently being explored in several Colorado communities including, Loveland, Vail, Steamboat Springs, Boulder, Durango, Town of Breckenridge, and Summit County.

During a City Council workshop on June 5, 2017, this topic was discussed with members of the Riverfront Commission. The Commission stated that they continue to support the ban of motorized equipment on the Riverfront Trail, with the exception of ADA compliant devices. They also stated that while they support the ban, they would not oppose the exception of E-bikes if the City chose to allow them.

The proposed ordinance revision would continue to ban all OPDMDs on City trails with the exception of ADA approved devices, and would also exclude Class I and Class II E-bikes from the definition of motorized devices.

### **BACKGROUND OR DETAILED INFORMATION:**

The City of Grand Junction currently restricts the use of motorized devices (with exception of ADA approved) on developed trails throughout the community. The trail system encompasses approximately 21 miles of hard surface trails in the Ridges, along the Riverfront and throughout subdivisions and parks.



Electrical assist bicycles are battery powered devices that can be operated either by power or pedaling. Depending upon the battery packs, E-bikes can range in speeds from 12 to 28 miles per hour. Earlier in 2017, the Colorado Legislature adopted House Bill 17-1151. This bill excludes E-bikes from the traditional definition of motorized devices, and defines them into three different categories according to maximum speed of the electrical power in relationship to pedaling by the rider. The classifications are as follows:

**Class I Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

**Class II Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance regardless of whether the rider is pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

**Class III Electrical Assisted Bicycle** – An electrical assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty-eight miles per hour.

Great Outdoors Colorado (GOCO) has provided on-going grants for the development of the Riverfront Trail. This funding is contingent upon the trails being utilized for non-motorized uses only. In recognition of HB 17-1511 however, GOCO has recently stated that local governments should develop policies that best fit their communities, and would support the allowance of E-bikes on GOCO funded trails.

The Riverfront Commission is made up of 11 members that are appointed by the City of Grand Junction, Town of Palisade, Mesa County and City of Fruita. In a letter dated September, 2016, the Commission expressed their concern about the use E-bikes on the Riverfront Trail and recommended the continued ban of all motorized devices on the trail (with the exception of ADA compliant devices). City Manager Greg Caton responded to their recommendation through a letter dated April, 2017, and encouraged the Commission to further study and evaluate the use of E-bikes on the trails. He cited several Colorado Communities who either allow their use or are exploring their uses on public trails. Several members of the Riverfront Commission attended a City Council workshop on June 5, 2017. They continued to support a full ban on motorized devices on the Riverfront Trail, however indicated that they would not oppose an exception for E-bikes if any of the local entities chose to allow exclude them from the ban.

The City of Grand Junction maintains a portion of the Riverfront Trail through an Intergovernmental Agreement with the City of Fruita, Town of Palisade, Mesa County and Colorado State Parks. Currently, the State is drafting a similar exception for Class I and Class II E-bikes, and the Town of Palisade continues to support the full ban.

The proposed ordinance revision would allow the use of Class I and Class II E-bikes on City trails. Class III E-bikes would be permitted on City streets.

**FISCAL IMPACT:**

Appropriate signage would be installed by Parks Department (estimate: \$300).

**SUGGESTED MOTION:**

I move to adopt/deny Ordinance No. 4785 - An ordinance amending Chapter 12 of the Grand Junction Municipal Code concerning Riverfront and other trail regulations concerning the operations of electrical assisted bicycles on final passage and order final publication in pamphlet form.

**Attachments**

1. Trails Map
2. House Bill 17 - 1151
3. Riverfront Commission Letter 9-20-16
4. City Manager Letter 4-20-17
5. Ordinance E Bikes
6. Trail Mileage
7. Urban Trails Map
8. Riverfront Trails Map
9. Ridges Map

**AN ORDINANCE AMENDING CHAPTER 12 OF THE GRAND JUNCTION  
MUNICIPAL CODE CONCERNING RIVERFRONT AND OTHER TRAIL  
REGULATIONS CONCERNING THE OPERATION OF ELECTRICAL ASSISTED  
BICYCLES**

The City Council has recently considered a modification to the City's code concerning electrical assisted bicycles also known as "E-bikes." The proposed change is to allow certain types or classes of E-bikes, as defined by this ordinance and Colorado law, to be operated on certain trails and all roads within the City. While the proposed change will create consistency between the Grand Junction Municipal Code and the Colorado Revised Statutes, it also furthers the opportunities for users of non-traditional bicycles to access certain trails and all streets in turn reducing automobile usage.

**NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION:**

“Riverfront,” “riverfront trails” or “trails” means those areas, facilities, lands and waters as identified on the mapS entitled “Riverfront Map”, “RIDGES MAP” AND “URBAN MAP,” COLLECTIVELY “TRAILS MAPS,” which mapS ARE incorporated in this article by this reference. The City Manager or his designee shall provide to the Parks and Recreation Advisory Board updated and revised maps of the TRAILS ~~riverfront~~ as additional trails, lands, lakes or facilities are acquired, placed or constructed. The most current mapS shall be on file on the City’s Geographical Information System (GIS) and incorporated by reference into this chapter and shall constitute the riverfront AND

TRAILS mapS. The substitution of maps and incorporation thereof by reference shall not necessitate re-adoption of this chapter.

12.08.140 Regulations relating to TRAILS ~~riverfront~~ trails, lands and waters.

(b) No person shall:

(1) Operate any motor vehicle OR OTHER POWER DRIVEN MOBILITY DEVICE(S) (OPDMD) on any ~~of the riverfront~~ CITY trail(s) or land(s) ~~of the riverfront~~ AS THOSE ARE DEPICTED AND DESCRIBED ON THE "TRAILS MAP(S)" except MAINTENANCE OR EMERGENCY VEHICLE(S) OR as may be authorized by the City or by signs AND ~~or~~ except for A "COMMON WHEELCHAIR" WHICH IS DEFINED AS A MANUALLY OPERATED OR POWER DRIVEN DEVICE DESIGNED PRIMARILY FOR USE BY A PERSON WITH A MOBILITY DISABILITY FOR THE PURPOSE OF INDOOR, OR OF BOTH INDOOR AND OUTDOOR LOCOMOTION. AN ELECTRIC MOTORIZED SCOOTER/POWER CHAIR MEETS THIS DEFINITION, PROVIDED IT MEETS SECTION 37.3 OF THE U.S. DEPARTMENT OF TRANSPORTATION'S REGULATIONS IMPLEMENTING THE ADA (49 CFR PARTS 27, 37, AND 38).

AN OPDMD IS DEFINED AS ANY MOBILITY DEVICE POWERED BY BATTERIES, FUEL, OR OTHER ENGINE(S), WHETHER OR NOT DESIGNED PRIMARILY FOR USE BY PERSONS WITH MOBILITY DISABILITIES THAT IS USED BY PERSONS WITH MOBILITY DISABILITIES FOR THE PURPOSE OF LOCOMOTION, INCLUDING GOLF CARS, ELECTRIC PERSONAL ASSISTANCE MOBILITY DEVICES (EPAMDS), SUCH AS THE SEGWAY PT® OR ANY MOBILITY DEVICE DESIGNED TO OPERATE IN AREAS WITHOUT DEFINED PEDESTRIAN ROUTES, BUT THAT IS NOT A COMMON WHEELCHAIR WITHIN THE MEANING OF THIS SECTION.

~~motorized wheelchairs, maintenance or emergency vehicles.~~ Motor vehicle shall be as defined in § ~~42-1-101~~, 42-1-102(58) C.R.S. et seq. EPAMDS SHALL BE AS DEFINED IN §42-1-102(28.7).

(C) WITH THE EXCEPTION OF A COMMON WHEELCHAIR, AN ELECTRIC MOTORIZED SCOOTER AND CLASS I AND CLASS II E-BIKES, NO MOTOR VEHICLE OR OPDMD IS ALLOWED ON THE TRAILS, AS THE SAME ARE DEPICTED AND DESCRIBED BY ORDINANCE 2606 AND THESE ADOPTED REGULATIONS.

(1) A CLASS I ELECTRICAL ASSISTED BICYCLE OR LOW-SPEED PEDAL-ASSIST ELECTRIC BICYCLE IS A TWO-WHEELED BICYCLE EQUIPPED WITH A MOTOR THAT PROVIDES ASSISTANCE ONLY WHEN THE RIDER IS PEDALING, AND THAT CEASES TO PROVIDE ASSISTANCE WHEN THE BICYCLE REACHES THE SPEED OF 20 MILES PER HOUR. A CLASS I ELECTRICAL ASSISTED BICYCLE MOTOR SHALL NOT EXCEED 750 WATTS OF POWER;

(2) A CLASS II ELECTRICAL ASSISTED BICYCLE OR LOW-SPEED THROTTLE-ASSISTED ELECTRIC BICYCLE IS A BICYCLE EQUIPPED

98 WITH A MOTOR THAT MAY BE USED EXCLUSIVELY TO PROPEL THE  
99 BICYCLE AND IS NOT CAPABLE OF PROVIDING ASSISTANCE WHEN  
100 THE BICYCLE REACHES THE SPEED OF 20 MILES PER HOUR;  
101

- 102 (3) A CLASS III ELECTRICAL ASSISTED BICYCLE IS A BICYCLE EQUIPPED  
103 WITH A MOTOR THAT PROVIDES ASSISTANCE ONLY WHEN THE RIDER  
104 IS PEDALING AND THAT CEASES TO PROVIDE ASSISTANCE WHEN  
105 THE BICYCLE REACHES A SPEED OF 28 MILES PER HOUR.  
106

107 (A) CLASS III ELECTRICAL ASSISTED BICYCLES ARE ALLOWED  
108 ONLY ON STREETS/BIKE LANES ADJACENT TO STREETS (NOT  
109 TRAILS, PATHS OR SIDEWALKS.)  
110

111 (B) CLASS III ELECTRICAL ASSISTED BICYCLES MAY NOT BE  
112 OPERATED BY A PERSON UNDER 16 YEARS OF AGE; A PERSON  
113 UNDER 16 YEARS OF AGE MAY RIDE AS A PASSENGER ON A  
114 CLASS III ELECTRICAL ASSISTED BICYCLE THAT IS  
115 MANUFACTURED TO ACCOMMODATE A PASSENGER(S).  
116

- 117 (4) ANY PERSON UNDER 18 YEARS OF AGE RIDING OR A PASSENGER ON  
118 A CLASS III ELECTRICAL ASSISTED BICYCLE SHALL WEAR AN  
119 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) OR  
120 UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION  
121 (USCPS) APPROVED HELMET OF A TYPE AND DESIGN MANUFACTURED  
122 FOR USE BY RIDERS OF BICYCLES. THE PROTECTIVE HELMET SHALL  
123 BE PROPERLY SECURED ON THE PERSON'S HEAD WITH THE STRAP  
124 FASTENED WHILE THE CLASS III ELECTRICAL ASSISTED BICYCLE IS IN  
125 MOTION.  
126

- 127 (5) NO PERSON SHALL OPERATE AN ELECTRICAL ASSISTED BICYCLE IN  
128 ANY PLACE WHERE THERE ARE ONE OR MORE SIGNS POSTED  
129 PROHIBITING SUCH ACTIVITY. NO PERSON SHALL OPERATE AN  
130 ELECTRICAL ASSISTED BICYCLE IN ANY PUBLIC PLACE IN A MANNER  
131 WHICH CAUSES INJURY TO ANY PERSON OR DAMAGE TO PUBLIC OR  
132 PRIVATE PROPERTY.  
133

- 134 (6) A PERSON USING AN ELECTRICAL ASSISTED BICYCLE IN ANY PUBLIC  
135 PLACE WITHIN THE CITY SHALL USE THE SAME IN A CAREFUL AND  
136 PRUDENT MANNER AND AT A RATE OF SPEED NO GREATER THAN IS  
137 REASONABLE AND PRUDENT UNDER THE CONDITIONS EXISTING AT  
138 THE PLACE AND TIME OF OPERATION, TAKING INTO ACCOUNT THE  
139 AMOUNT AND CHARACTER OF PEDESTRIAN TRAFFIC, GRADE AND  
140 WIDTH OF THE PATH, TRAIL OR RIGHT-OF-WAY AND CONDITION OF

THE SURFACE THEREOF AND SHALL OBEY ALL TRAFFIC CONTROL DEVICES.

(7) EVERY PERSON RIDING AN ELECTRICAL ASSISTED BICYCLE UPON A PUBLIC PATH, TRAIL OR OTHER RIGHT-OF-WAY SHALL YIELD THE RIGHT-OF-WAY TO ANY PEDESTRIAN THEREON.

(8) TO THE EXTENT NOT INCONSISTENT HERewith, HOUSE BILL 17-1151 AMENDING VARIOUS SECTIONS OF THE COLORADO REVISED STATUTES IS INCORPORATED BY THIS REFERENCE.

(9) WITHIN SIXTY DAYS OF THE THIRD ANNIVERSARY OF THE ADOPTION OF THIS ORDINANCE THE CITY COUNCIL SHALL CONSIDER THE EFFECTIVENESS OF THE ORDINANCE AT ACHIEVING ITS STATED PURPOSES. WITHOUT FURTHER ACTION BY THE CITY COUNCIL, THE TERMS AND PROVISIONS OF THIS ORDINANCE SHALL EXPIRE ON THE THIRD ANNIVERSARY OF THE EFFECTIVE DATE HEREOF. THE CITY COUNCIL MAY DETERMINE THAT THE ORDINANCE IS EFFECTIVE AS WRITTEN AND REINSTATE IT OR MAY AMEND IT AS IT DETERMINES IN ITS SOUND DISCRETION.

Introduced on first reading this 17<sup>th</sup> day of January 2018.

PASSED and ADOPTED this \_\_\_ day of February 2018.

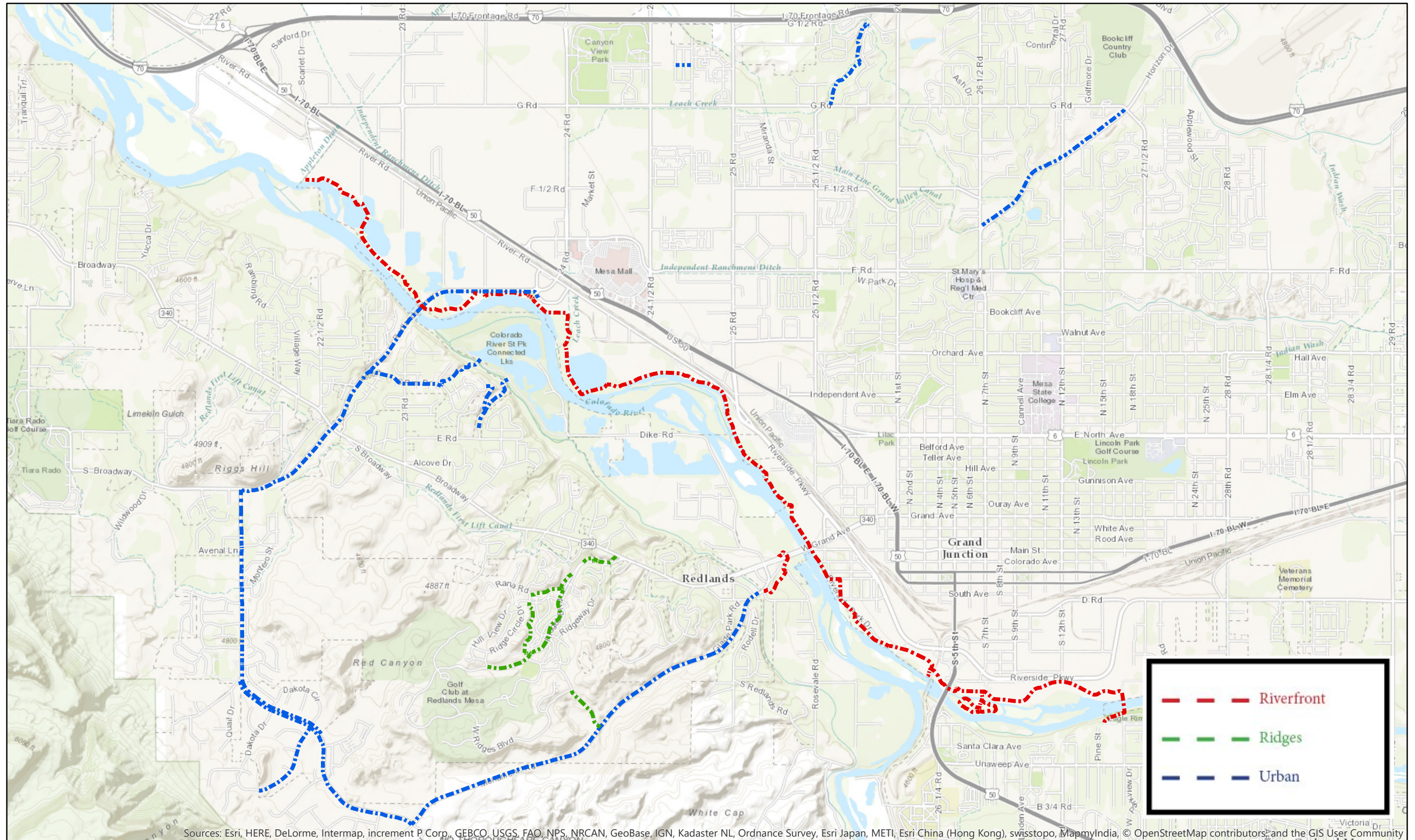
\_\_\_\_\_  
J. Merrick Taggart  
Mayor and President of the City Council

ATTEST:

\_\_\_\_\_  
Wanda Winkelmann  
City Clerk



# All Trails Map





# An Act

HOUSE BILL 17-1151

BY REPRESENTATIVE(S) Hansen and Willett, Becker K., Buckner, Ginal, Hooton, Kennedy, Lontine, Mitsch Bush, Valdez, Winter, Young, Singer;  
also SENATOR(S) Kerr and Hill, Gardner, Kagan.

CONCERNING THE REGULATION OF ELECTRICAL ASSISTED BICYCLES.

*Be it enacted by the General Assembly of the State of Colorado:*

**SECTION 1.** In Colorado Revised Statutes, 42-1-102, **amend** (28.5) and (58) as follows:

**42-1-102. Definitions.** As used in articles 1 to 4 of this title, unless the context otherwise requires:

(28.5) "Electrical assisted bicycle" means a vehicle having two ~~tandem wheels or two parallel~~ THREE wheels, ~~and one forward wheel;~~ fully operable pedals, AND an electric motor not exceeding seven hundred fifty watts of power. ~~and a top motor-powered speed of twenty miles per hour.~~ ELECTRICAL ASSISTED BICYCLES ARE FURTHER REQUIRED TO CONFORM TO ONE OF THREE CLASSES AS FOLLOWS:

(a) "CLASS 1 ELECTRICAL ASSISTED BICYCLE" MEANS AN ELECTRICAL



ASSISTED BICYCLE EQUIPPED WITH A MOTOR THAT PROVIDES ASSISTANCE ONLY WHEN THE RIDER IS PEDALING AND THAT CEASES TO PROVIDE ASSISTANCE WHEN THE BICYCLE REACHES A SPEED OF TWENTY MILES PER HOUR.

(b) "CLASS 2 ELECTRICAL ASSISTED BICYCLE" MEANS AN ELECTRICAL ASSISTED BICYCLE EQUIPPED WITH A MOTOR THAT PROVIDES ASSISTANCE REGARDLESS OF WHETHER THE RIDER IS PEDALING BUT CEASES TO PROVIDE ASSISTANCE WHEN THE BICYCLE REACHES A SPEED OF TWENTY MILES PER HOUR.

(c) "CLASS 3 ELECTRICAL ASSISTED BICYCLE" MEANS AN ELECTRICAL ASSISTED BICYCLE EQUIPPED WITH A MOTOR THAT PROVIDES ASSISTANCE ONLY WHEN THE RIDER IS PEDALING AND THAT CEASES TO PROVIDE ASSISTANCE WHEN THE BICYCLE REACHES A SPEED OF TWENTY-EIGHT MILES PER HOUR.

(58) "Motor vehicle" means any self-propelled vehicle that is designed primarily for travel on the public highways and that is generally and commonly used to transport persons and property over the public highways or a low-speed electric vehicle; except that the term does not include ELECTRICAL ASSISTED BICYCLES, low-power scooters, wheelchairs, or vehicles moved solely by human power. For the purposes of the offenses described in sections 42-2-128, 42-4-1301, 42-4-1301.1, and 42-4-1401 for farm tractors and off-highway vehicles, as defined in section 33-14.5-101 (3), ~~C.R.S.~~, operated on streets and highways, "motor vehicle" includes a farm tractor or an off-highway vehicle that is not otherwise classified as a motor vehicle. For the purposes of sections 42-2-127, 42-2-127.7, 42-2-128, 42-2-138, 42-2-206, 42-4-1301, and 42-4-1301.1, "motor vehicle" includes a low-power scooter.

**SECTION 2.** In Colorado Revised Statutes, 42-3-103, amend (1)(b) introductory portion and (1)(b)(I) as follows:

**42-3-103. Registration required - exemptions.** (1) (b) This subsection (1) ~~shall~~ DOES not apply to the following:

(I) A bicycle, ~~electric~~ ELECTRICAL assisted bicycle, or other human-powered vehicle;

**SECTION 3.** In Colorado Revised Statutes, 42-4-111, **amend** (1) introductory portion and (1)(dd) as follows:

**42-4-111. Powers of local authorities.** (1) Except as otherwise provided in subsection (2) of this section, this ~~article~~ ARTICLE 4 does not prevent local authorities, with respect to streets and highways under their jurisdiction and within the reasonable exercise of the police power, from:

(dd) Authorizing OR PROHIBITING the use of ~~the electrical motor on~~ an electrical assisted bicycle on a bike or pedestrian path IN ACCORDANCE WITH SECTION 42-4-1412;

**SECTION 4.** In Colorado Revised Statutes, 42-4-221, **amend** (9); and **add** (10) and (11) as follows:

**42-4-221. Bicycle and personal mobility device equipment.**  
(9) (a) ~~Any person who violates any provision of this section commits a class B traffic infraction~~ ON OR AFTER JANUARY 1, 2018, EVERY MANUFACTURER OR DISTRIBUTOR OF NEW ELECTRICAL ASSISTED BICYCLES INTENDED FOR SALE OR DISTRIBUTION IN THIS STATE SHALL PERMANENTLY AFFIX TO EACH ELECTRICAL ASSISTED BICYCLE, IN A PROMINENT LOCATION, A LABEL THAT CONTAINS THE CLASSIFICATION NUMBER, TOP ASSISTED SPEED, AND MOTOR WATTAGE OF THE ELECTRICAL ASSISTED BICYCLE. THE LABEL MUST BE PRINTED IN THE ARIAL FONT IN AT LEAST NINE-POINT TYPE.

(b) A PERSON SHALL NOT KNOWINGLY MODIFY AN ELECTRICAL ASSISTED BICYCLE SO AS TO CHANGE THE SPEED CAPABILITY OR MOTOR ENGAGEMENT OF THE ELECTRICAL ASSISTED BICYCLE WITHOUT ALSO APPROPRIATELY REPLACING, OR CAUSING TO BE REPLACED, THE LABEL INDICATING THE CLASSIFICATION REQUIRED BY SUBSECTION (9)(a) OF THIS SECTION.

(10) (a) AN ELECTRICAL ASSISTED BICYCLE MUST COMPLY WITH THE EQUIPMENT AND MANUFACTURING REQUIREMENTS FOR BICYCLES ADOPTED BY THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION AND CODIFIED AT 16 CFR 1512 OR ITS SUCCESSOR REGULATION.

(b) A CLASS 2 ELECTRICAL ASSISTED BICYCLE MUST OPERATE IN A MANNER SO THAT THE ELECTRIC MOTOR IS DISENGAGED OR CEASES TO FUNCTION WHEN THE BRAKES ARE APPLIED. CLASS 1 AND CLASS 3

ELECTRICAL ASSISTED BICYCLES MUST BE EQUIPPED WITH A MECHANISM OR CIRCUIT THAT CANNOT BE BYPASSED AND THAT CAUSES THE ELECTRIC MOTOR TO DISENGAGE OR CEASE TO FUNCTION WHEN THE RIDER STOPS PEDALING.

(c) A CLASS 3 ELECTRICAL ASSISTED BICYCLE MUST BE EQUIPPED WITH A SPEEDOMETER THAT DISPLAYS, IN MILES PER HOUR, THE SPEED THE ELECTRICAL ASSISTED BICYCLE IS TRAVELING.

(11) A PERSON WHO VIOLATES THIS SECTION COMMITS A CLASS B TRAFFIC INFRACTION.

**SECTION 5.** In Colorado Revised Statutes, 42-4-1412, **amend** (14); and **add** (15) as follows:

**42-4-1412. Operation of bicycles and other human-powered vehicles.** (14) (a) (I) ~~Except as authorized by section 42-4-111, the rider of an electrical assisted bicycle shall not use the electrical motor on a bike or pedestrian path~~ A PERSON MAY RIDE A CLASS 1 OR CLASS 2 ELECTRICAL ASSISTED BICYCLE ON A BIKE OR PEDESTRIAN PATH WHERE BICYCLES ARE AUTHORIZED TO TRAVEL.

(II) A LOCAL AUTHORITY MAY PROHIBIT THE OPERATION OF A CLASS 1 OR CLASS 2 ELECTRICAL ASSISTED BICYCLE ON A BIKE OR PEDESTRIAN PATH UNDER ITS JURISDICTION.

(b) A PERSON SHALL NOT RIDE A CLASS 3 ELECTRICAL ASSISTED BICYCLE ON A BIKE OR PEDESTRIAN PATH UNLESS:

(I) THE PATH IS WITHIN A STREET OR HIGHWAY; OR

(II) THE LOCAL AUTHORITY PERMITS THE OPERATION OF A CLASS 3 ELECTRICAL ASSISTED BICYCLE ON A PATH UNDER ITS JURISDICTION.

(15) (a) A PERSON UNDER SIXTEEN YEARS OF AGE SHALL NOT RIDE A CLASS 3 ELECTRICAL ASSISTED BICYCLE UPON ANY STREET, HIGHWAY, OR BIKE OR PEDESTRIAN PATH; EXCEPT THAT A PERSON UNDER SIXTEEN YEARS OF AGE MAY RIDE AS A PASSENGER ON A CLASS 3 ELECTRICAL ASSISTED BICYCLE THAT IS DESIGNED TO ACCOMMODATE PASSENGERS.

(b) A PERSON SHALL NOT OPERATE OR RIDE AS A PASSENGER ON A CLASS 3 ELECTRICAL ASSISTED BICYCLE UNLESS:

(I) EACH PERSON UNDER EIGHTEEN YEARS OF AGE IS WEARING A PROTECTIVE HELMET OF A TYPE AND DESIGN MANUFACTURED FOR USE BY OPERATORS OF BICYCLES;

(II) THE PROTECTIVE HELMET CONFORMS TO THE DESIGN AND SPECIFICATIONS SET FORTH BY THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION OR THE AMERICAN SOCIETY FOR TESTING AND MATERIALS; AND

(III) THE PROTECTIVE HELMET IS SECURED PROPERLY ON THE PERSON'S HEAD WITH A CHIN STRAP WHILE THE CLASS 3 ELECTRICAL ASSISTED BICYCLE IS IN MOTION.

(c) A VIOLATION OF SUBSECTION (15)(b) OF THIS SECTION DOES NOT CONSTITUTE NEGLIGENCE OR NEGLIGENCE PER SE IN THE CONTEXT OF ANY CIVIL PERSONAL INJURY CLAIM OR LAWSUIT SEEKING DAMAGES.

**SECTION 6. Act subject to petition - effective date.** This act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly (August 9, 2017, if adjournment sine die is on May 10, 2017); except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless

approved by the people at the general election to be held in November 2018 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.



Crisanta Duran  
SPEAKER OF THE HOUSE  
OF REPRESENTATIVES



Kevin J. Grantham  
PRESIDENT OF  
THE SENATE

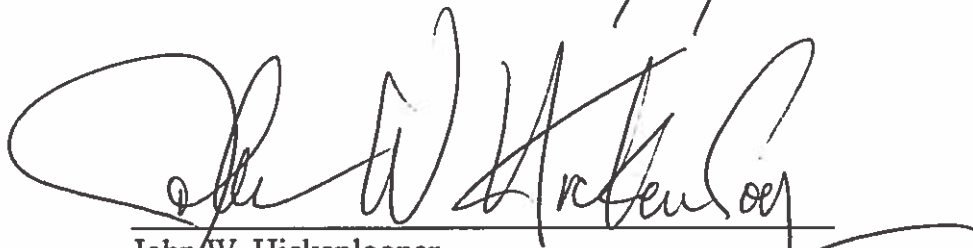


Marifyn Eddins  
CHIEF CLERK OF THE HOUSE  
OF REPRESENTATIVES



Effie Ameen  
SECRETARY OF  
THE SENATE

APPROVED 1:45 Pm 4/4/17



John W. Hickenlooper  
GOVERNOR OF THE STATE OF COLORADO

# Memo



**To:** City Council

**From:** Terri Partch, City Engineer  
Tanya Allen, Transportation Manager

**Date:** 5/4/2017

**Re:** Trail Use, Parking, and Pet Safety during the GAB closure

---

The City is encouraging greater bike and pedestrian travel as a way of reducing traffic volumes during the Grand Avenue Bridge closure. If the anticipated changes in travel behavior materialize, the City's bike, pedestrian, and parking networks will be subject to unusual stresses more characteristic of urban areas. Clarification of existing rules and/or introduction of new regulations will be necessary to accommodate this increase in demand.

A task force comprised of Staff from multiple City Departments reviewed existing policies related to trails and sidewalks; bridges and walkways; parking; and pet safety and identified several areas where changes could be made to maximize use of limited trail and parking resources while minimizing the likelihood of conflicts between users. These recommendations follow.

## **Trails and Sidewalks**

### **1. Allow Limited Use of E-assist Bikes on Multi-Use Trails**

Allowing limited use of e-assist bikes on local paved, multi-use trails will make bike commuting a more viable option for those living 2 miles or more from work and those for whom Glenwood's hilly terrain presents a significant impediment. Issues include what qualifies as an e-bike and whether to allow blanket or restricted permission.

#### **Recommendation:**

Allow public e-bike usage (with motor engaged) on the River Trail/RGT, Midland, and Atkinson Trails on a trial basis for a finite period that overlaps with the bridge closure (e.g. August 1, 2017-April 30, 2018). Set maximum speed to 20mph (consistent with current speed restrictions for all users). Continue to allow e-bikes to be treated as bicycles when riding on sidewalks and all other trails with motor off (consistent with current policy).

#### *Implementation*

- Amend Code to define what constitutes an electric-assisted bicycle and exclude them from the definition of motor vehicle. Adjust other areas of Code as necessary. (Example Attachment 1A)
- Pass ordinance (Example Attachment 1B) allowing for a specified test period.
- Prepare map of affected areas
- Conduct public outreach
- Solicit public feedback near end of trial period to determine whether the trial policy should be adopted, expanded, or eliminated

N.B.: If public use is not considered acceptable, the Code may still need to be amended to allow for official use by City staff not engaged in maintenance or emergency response. Police Department use is covered under the provision for emergency vehicles.

### **Additional Background:**

According to Colorado State Laws, E-assist bikes are defined as “two-wheeled vehicles powered below 750w and traveling at 20mph/less.” They are allowed on multi-use trails and sidewalks where normal bikes are permitted but **must not use the motor**. Individual jurisdictions can override this rule and/or impose a more restrictive definition. Policies vary from complete prohibition (absolutely no motorized vehicles) to permitted on certain trails with speed restrictions. Few (if any) jurisdictions have no restrictions whatsoever. The recent trend is toward greater liberalization, especially in Colorado. Glenwood Springs appears to have no current e-assist bike regulations and thus defaults to State law.

## **2. Continue to Restrict Other Motorized Vehicles on Trails, with Exceptions**

The Code currently excludes “power driven aids or devices used by a disabled person for mobility” from the definition of a motorized vehicle. Electric Assisted Personal Mobility Devices (EPAMDs, e.g. Segways) currently fall under the definition of motorized vehicles. Some jurisdictions are more liberal with this designation. The School District has asked to use the trail system to transport special needs children via electric vehicles during the detour. The Traveler paratransit service has asked to use golf carts to shuttle riders across the new pedestrian bridge. This type of use is not currently allowed.

### **Policy Recommendation:**

Continue to exclude all other motorized vehicles from City trails, but add language to code that would allow the City Manager or designee to authorize additional exceptions.

### *Implementation*

- Amend Code to allow the City Manager or designee to authorize additional users on City trails.
- Determine whether this also applies to new Grand Avenue Pedestrian Bridge and regulate accordingly.

### 3. Clarify Rules on Sidewalk Riding

Already congested downtown sidewalks will face additional pressures as more people are encouraged to bike and walk downtown. High traffic volumes on 8<sup>th</sup> Street and the lack of a through lane on 7<sup>th</sup> Street means many bicyclists may opt for the sidewalk out of safety and/or convenience unless clear direction and suitable alternatives are provided. Sidewalk riding is currently permitted in Glenwood Springs, with the exception of areas specifically posted. Existing signage is sparse and there is no public communication regarding these boundaries.

#### Policy Recommendation

Continue to allow sidewalk riding for all ages in most areas but emphasize need to yield to pedestrians. Clarify restrictions in the Downtown area, and provide alternate preferred routes for cyclists where sidewalk riding is prohibited.

#### Implementation

- Confirm boundaries of Downtown Dismount Zone. Consider adding to Code.
  - Recommended Area: 8<sup>th</sup> and 9<sup>th</sup> Streets between Colorado and Cooper; 700-900 blocks of Grand Avenue
- Identify a convenient route those wishing to travel to/through the area can use without dismounting. (10<sup>th</sup> Street may be the closest non-dismount possibility)
- Post dismount/no sidewalk riding signs and/or pavement markings in Dismount Zone. Examples:







- Mark preferred bike route with signage and/or sharrows as appropriate.
- Include preferred route and dismount zone on published bike map (suggested dismount zone, Attachment 3A).
- Consider whether to make an exception for children 12 and under (some jurisdictions exempt children under 12 or children riding bicycles below a specified wheel size from all sidewalk restrictions)
- Public relations/informational campaign explaining new rules and emphasizing need to yield to pedestrians at all times.
- Enforcement by volunteer bike ambassadors and/or Police as warranted.

### **Bridges and Walkways**

Bridges and walkways are pinch points in the bike and pedestrian networks and thus ripe for conflict if user expectations are not clear. Rules regarding yielding and/or dismounting should be consistent throughout the trail system. Specific rules may be necessary for the Grand Avenue pedestrian bridge given it serves as both a transportation link and a destination in and of itself.

#### **4. Grand Avenue Pedestrian Bridge**

The new pedestrian bridge is a critical bike/pedestrian connection between attractions on the north side of the river such as the Hot Springs Pool and Colorado River Trail and restaurants and shops downtown. Every effort should be made to balance transportation and recreation on the bridge so that it is not perceived as a barrier to accessing downtown attractions and amenities. Advocates for the disabled community have expressed concerns regarding the convenience/accessibility of the new pedestrian bridge and requested additional accommodations for the disabled community during and/or after the detour, such as street furniture for resting and connecting golf cart service across the bridge. The Model Traffic Code was amended in 120.040.020 to explicitly prohibit “skates, skateboards, and similar devices” on the old Colorado River pedestrian bridge, so there is some precedent for allowing/excluding certain uses beyond those that apply to the trail system (Attachment 4A).

#### **Policy Recommendation:**

Allow bicyclists to ride on the Bridge but emphasize the need to yield to pedestrians. The new bridge is wide enough to accommodate mixed traffic from an engineering standpoint. Continue to prohibit skates, skateboards and similar devices consistent with past practice.

Do not include the bridge on the map of areas where E-assist bikes are allowed to ride with motor engaged. Consider an exception for transport of disabled individuals during the detour period.

#### *Implementation*

- Post signs indicating bikes must yield to pedestrians
- Enforce as necessary

### **5. Other Bridges/Walkways in the Trail Network**

Requiring bicyclists to dismount is an impediment to through travel. Most bridges in our system are designed to accommodate mixed traffic at current volumes. Most existing bridges are not signed.

#### **Policy Recommendation:**

Allow bicycles to ride on all bike/pedestrian bridges of 10' width or greater. Post signs indicating bikes must yield to pedestrians. Consider "dismount when pedestrians present" signs on bridges if less than 10'. Dismount signs previously posted at Two Rivers Park can be saved for temporary use during high-traffic events.

#### *Implementation*

- Remove any remaining signs indicating bicyclists must dismount on bridges and walkways measuring at least 10'.
- Install signs indicating bikes must yield to pedestrians on all bridge crossings
- Work with local advocacy group to promote trail courtesy and yielding behavior

### **Pet Safety**

#### **6. Leash Law**

Paved multi-use trails in the City of Glenwood Springs are popular for both transportation and recreation. We anticipate even greater transportation usage during the Grand Avenue Bridge closure. Dogs roaming off-leash on these trails can approach bicyclists and pedestrians, impeding the smooth flow of trail traffic and risking injury to both dogs and humans. As the volume of trail users increases, so does the likelihood of conflict between different types of users. Current code prohibits animals "running at large," defined as "anywhere off the real or personal property of the owner and not under the control of a person restraining the animal by leash" (110.020-Animal Control and Maintenance). No leash length is specified. However, these existing leash laws are currently not strictly enforced.

## **Policy Recommendation:**

Commit to stricter enforcement of existing leash laws on paved trails that function as critical non-motorized transportation corridors. These include the River Trail/RGT, Midland Trail, Atkinson Trail, and Two Rivers Park Trail. Issue a press release informing the public that existing leash laws will be strictly enforced on these trails. Include information in the press release as to where off-leash play is allowed. Consider adding a provision to the code that allows the City Manager to designate specific areas for off-leash dog play and publicize these as an alternative for dog owners.

### *Implementation*

- Issue press release noting increased enforcement areas and areas where off-leash play is encouraged (Example, Attachment 7A)
- Refresh existing trail signage and include information re: leash law on City web pages and trail maps (Example, Attachment 7B)
- Prepare code amendments if desired (Example, Attachment 7C)
- Enforce as necessary

## **Parking**

### **7. Improved Signage**

Existing public lots lack uniform signage and clear information regarding parking hours and restrictions.

## **Policy Recommendation**

Post consistent, recognizable signage on all City-owned lots that includes parking hours. Replace and/or refresh existing parking wayfinding signage to ensure clarity and consistency.

### **8. Additional Overflow Lots**

Several locations have been identified for additional temporary and/or permanent parking lots. These include:

- Youth Zone
- Centennial Drive
- Old Wastewater Treatment Plant
- West Glenwood Mall

## **Policy Recommendation**

Allocate funds for construction/right of entry for one or more of these overflow lots.

### **9. Managing Parking at Two Rivers Park**

The Park's proximity to downtown will make it an attractive location for those interested in parking for the day and walking or biking to their final destination. In the absence of clear signage or enforcement, people may also be tempted to leave cars overnight or for longer periods. Current signage indicates park hours and no overnight camping but does not explicitly prohibit overnight parking.

### **Policy Recommendation**

Designate 5 spaces for official City vehicles and an adequate number of spaces (TBD) for authorized vanpools. Post "No Overnight Parking" at the entrance. Indicate overflow parking locations (e.g. the Centennial lot), if identified. Require boats and boat trailers to park in the Centennial overflow lot.

### *Implementation*

- Order and post signage as necessary.
- Enforce set restrictions.

**Attachments:**

- 1A. Example Code Revision - E-Bike use
- 1B. Example e-bike ordinance (Vail)
- 1C. Example e-bike use map (Vail)
- 3A. Proposed Downtown Dismount Area
- 4A. Restrictions on the old pedestrian bridge.
- 7A. Example Press Release – Aspen Leash Law
- 7B. Example Public Information Sheet – Aspen Leash Law
- 7C. Example Code Revision – Off-leash areas

## Attachment 1A

### 090.040.110 - Motorized Vehicles Prohibited on City Trails

#### (a) *Definitions* .

*Motorized vehicle* means any vehicle, whether or not home-built by the user, that is not solely human powered excluding emergency vehicles, maintenance vehicles, ~~and~~ power driven aids or devices used by a disabled person for mobility, and electric assisted bicycles.

*Electric assisted bicycle* means a vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an electric motor not exceeding seven hundred fifty (750) watts of power rating, and traveling no more than twenty (20) miles per hour..

*City trail* means those trails which are designated on the City's Trail Map.

(b) *Motorized Vehicles Prohibited* . It shall be unlawful for any person to operate a motorized vehicle on any City trail.

(c) Violation of this section shall be a misdemeanor and punishable in accordance with [Section 010.020.080](#) of this Code.

(8-05, § 1; 6-12, § 2)

**ORDINANCE NO. 9  
SERIES 2016**

**AN ORDINANCE AMENDING CHAPTER 4 OF TITLE 7 OF THE VAIL  
TOWN CODE TO REGULATE ELECTRIC ASSISTED BICYCLES AND  
ALLOW ELECTRIC ASSISTED BICYCLES ON BICYCLE AND  
PEDESTRIAN PATHS IN THE TOWN**

WHEREAS, the Town encourages alternative transportation modes that are environmentally friendly and that reduce society's dependence on fossil fuels;

WHEREAS, the Town desires to promote the use of electric assisted bicycles as an alternate mode of transportation and to encourage more people to complete trips by environmentally-friendly modes of transportation;

WHEREAS, currently, the Vail Town Code does not permit electric assisted bicycles to be operated on bicycle and pedestrian paths; and

WHEREAS, the Town Council desires to safely integrate electric assisted bicycles into the Town's bicycle and pedestrian path system and to ensure that the use of electric assisted bicycles as an alternate mode of transportation contemplated by this ordinance is safe, prudent, and in the best interest of all users.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE  
TOWN OF VAIL, COLORADO THAT:**

Section 1. Section 7-4-1 of the Vail Town Code is hereby amended to include the following new definition:

ELECTRIC ASSISTED BICYCLE: A vehicle having two tandem wheels or two parallel wheels and one forward wheel, fully operable pedals, an electric motor not exceeding five hundred (500) watts of power rating, and a top motor-powered speed of twenty (20) miles per hour.

Section 2. The definition of "motor vehicle" contained in Section 7-4-1 of the Vail Town Code is hereby amended to read as follows:

MOTOR VEHICLE: Any self-propelled vehicle, other than an electric assisted bicycle or electronic personal assistive mobility device (EPAMD), which is designed primarily for travel on the public streets and highways and which is generally and commonly used to transport persons and property over the public streets and highways.

Section 3. Section 7-4-5 of the Vail Town Code is hereby renumbered as Section 7-4-6.

Section 4. Former Section 7-4-5 of the Vail Town Code is hereby replaced with the following:

#### **7-4-5: ELECTRIC ASSISTED BICYCLES:**

**A. Model Traffic Code:**

1. Except as otherwise provided in this Section, the operation of electric assisted bicycles in the Town shall be exempt from the Model Traffic Code adopted by the Town as well as such other Town ordinances that regulate motorized vehicles in the Town.
2. For purposes of operation, parking, and equipment, electric assisted bicycles shall be considered bicycles and shall be subject to the provisions and regulations concerning bicycles contained in the Model Traffic Code adopted by the Town.

**B. Bicycle and Pedestrian Paths:** A person may operate an electric assisted bicycle, with the motor activated, on any bicycle and pedestrian path in the Town, other than a bicycle and pedestrian path in any of the prohibited areas set forth below.

**C. Prohibited Areas:** It is unlawful for a person to operate an electric assisted bicycle with the motor activated in or on the following:

1. Vail Nature Center;
2. Betty Ford Alpine Garden;
3. Village Streamwalk;
4. Children's playgrounds;
5. Turf areas;
6. Natural/unimproved areas; or
7. Sidewalks that are not part of a designated bicycle and pedestrian path.

**D. Minimum Age:** An electric assisted bicycle shall only be operated by persons sixteen (16) years of age or older.

**E. Exception:** The provisions of this Section limiting the use of electric assisted bicycles shall not apply to a person with a mobility impairment caused by physical disability that uses the device to enhance that person's mobility.

**F. Equipment:** All electric assisted bicycles operated in the Town shall be equipped with audible warning devices.



G. Rules: To allow for safe integration of electric assisted bicycles on bicycle and pedestrian paths, the Town Manager may prescribe, adopt, promulgate and enforce reasonable rules that restrict or otherwise limit the time, place or manner of operation or use of electric assisted bicycles;

Section 5. Not later than 180 days after the effective date of this ordinance, Town staff shall provide a report to the Town Council that evaluates whether use of electric assisted bicycles on pedestrian paths is safe, prudent, and in the best interest of all users of the Town's bicycle and pedestrian path system, so that the Town Council may determine whether this ordinance should be repealed.

Section 6. If any part, section, subsection, sentence, clause or phrase of this ordinance for any reason is held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance; and the Town Council hereby declares that it would have passed this ordinance, and each part, section, subsection, sentence, clause or phrase thereof, regardless of any one or more parts, sections, subsections, sentences, clauses or phrases declared invalid.

Section 7. The Town Council hereby finds, determines, and declares that this ordinance is necessary and proper for the health, safety, and welfare of the Town and the inhabitants thereof.

Section 8. The amendment of any provision of the Town Code as provided in this ordinance shall not affect any right which has accrued, any duty imposed, any violation that occurred prior to the effective date hereof, any prosecution commenced, nor any other action or proceeding as commenced under or by virtue of the provision amended. The amendment of any provision hereby shall not revive any provision or any ordinance previously repealed or superseded unless expressly stated herein.

Section 9. All bylaws, orders, resolutions and ordinances, or parts thereof, inconsistent herewith are repealed to the extent only of such inconsistency. This repealer shall not be construed to revise any bylaw, order, resolution or ordinance, or part thereof, theretofore repealed.

INTRODUCED, READ ON FIRST READING, APPROVED, AND ORDERED  
PUBLISHED ONCE IN FULL ON FIRST READING this 7<sup>th</sup> day of June, 2016 and a  
public hearing for second reading of this Ordinance is set for the 5<sup>th</sup> day of July, 2016, in  
the Council Chambers of the Vail Municipal Building, Vail, Colorado.

---

Dave Chapin, Mayor

ATTEST:

---

Patty McKenny, Town Clerk

READ AND APPROVED ON SECOND READING AND ORDERED PUBLISHED  
this 5<sup>th</sup> day of July, 2016.

---

Dave Chapin, Mayor

ATTEST:

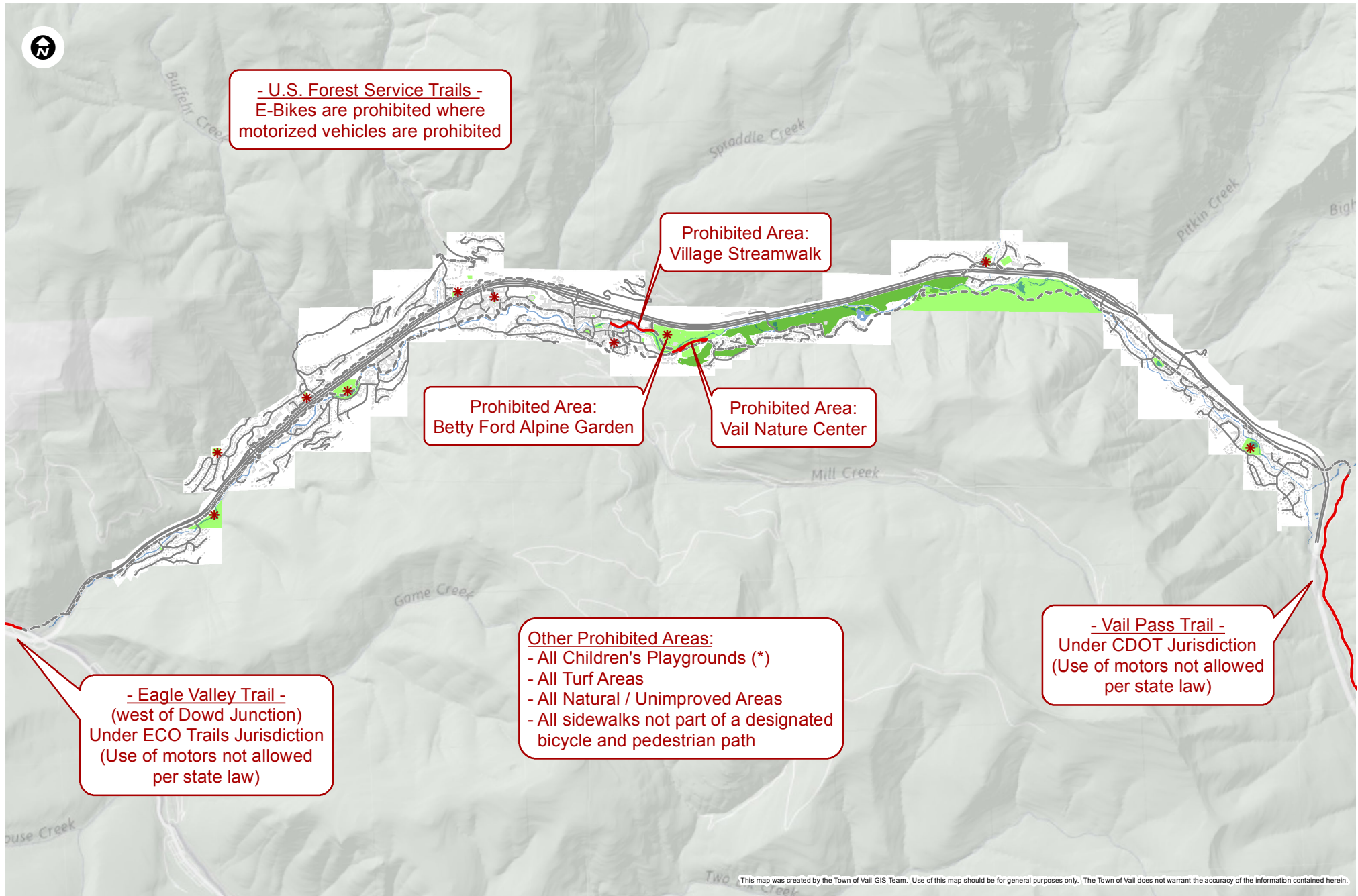
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Patty McKenny, Town Clerk

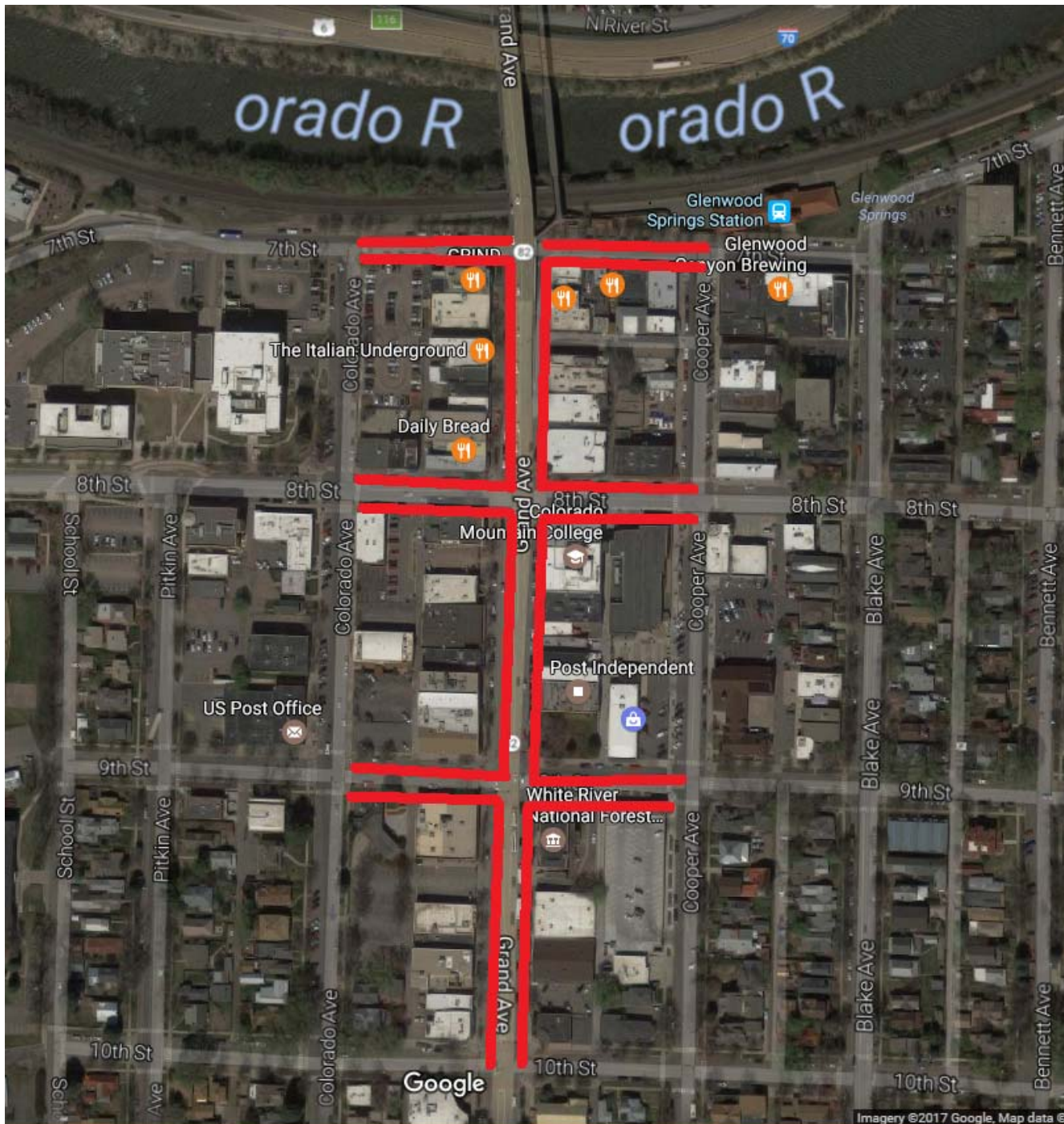
# Electric Assisted Bicycles - Use Areas

Per Ordinance No. 9, Series of 2016

July 7, 2016



This map was created by the Town of Vail GIS Team. Use of this map should be for general purposes only. The Town of Vail does not warrant the accuracy of the information contained herein.





## Attachment 4A

### 120.040.020- Additions, deletions, or modifications to Model Traffic Code.

The following sections of the Model Traffic Code are hereby amended to read as follows:

(1)

Part 1 Section 109 of the Model Traffic Code is hereby amended by the addition of a new subsection (14) as follows:

**"Section 109(14). Low-Power Scooters, Animals, Skis, Skates, Toy Vehicles and All-Terrain Recreational Vehicles on Highways.**

"(14) Skating and Skateboarding Prohibited on Pedestrian Bridge. It shall be unlawful for any person to travel upon the Colorado River pedestrian/bicycle bridge on skates, skateboards or similar devices. For purposes of this section, the Colorado River pedestrian/bicycle bridge is defined to include any and all portions of the bridge existing and in place (easterly of the Colorado Highway 82 bridge), including all ramps, approaches, landings and stairways appurtenant thereto."

(2)

Part 6, Subsection 225(3) of the Model Traffic Code is hereby amended as follows:

(3) Any person who violates subsection (1) of this section commits a class B traffic infraction.  
Any person who violates subsection 1.5 of this section shall, upon conviction, be punished by a fine of five hundred dollars \$500.00).



## Press Releases

### What's New?

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### Spots to walk dogs off-leash around Aspen

ASPEN - With summer use of Aspen-area trails intensifying, Pitkin County Open Space and Trails is reminding pet owners where they can walk their dogs off-leash.

Areas for watchful off-leash play include: Rio Grande Park, Wagner Park, Smuggler Mountain Road and the Marolt Open Space. The pond at Marolt, along Castle Creek Road on the western edge of the property, is available for dogs who like to take a swim. There is also an irrigation ditch for water-loving dogs to enjoy. In all off-leash areas, dogs need to be in sight and under voice control.

In addition, many U.S. Forest Service and Bureau of Land Management lands offer off-leash alternatives. Know before you go!

Dogs are prohibited at the City of Aspen Golf Course, Cozy Point Ranch, Sky Mountain Park, North Star Open Space and at the Maroon Creek wetlands.

City and county leash laws are enforced in the downtown pedestrian malls, at Herron Park (including the wading area), the Hunter Creek Trail, Rio Grande Trail, Jenny Adair Wetlands, Marolt Wetlands (near the Marolt Ranch housing), and at the playing fields on the Aspen schools campus and at the Aspen Recreation Center.

Having a dog off-leash in areas where leashes are required, and uncollected dog waste, are both ticketable offenses.

Most public lands are multiple-use areas. Enjoy, share and be aware.

**Contact: John Armstrong**  
**970 920-5399**

Posted on Friday, June 20, 2014

[Return](#)



**City of Aspen**  
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# *ENJOYING ASPEN WITH YOUR DOG*

Welcome to Aspen - a great place for dogs! By following the rules and obeying signage you will help keep Aspen a dog friendly town. Aspen's dog friendly atmosphere is a delicate balance that depends on responsible dog ownership, including use of leashes and picking up after your pet. This card is a reference to help you be on top of your game as a dog owner. Happy Tails!

*AS YOU TRAVEL ABOUT TOWN,  
YOUR PET MUST BE LEASHED.*



THE CITY OF ASPEN

QUESTIONS OR CONCERNS CONTACT: 970-920-5120



### *Ticketable Offenses:*

- *Dog at Large (Off Leash)*
- *Uncollected Pet Waste*

### Areas for *watchful* off-leash play with your pet:

- Rio Grande Park
- Wagner Park
- Smuggler Mountain Road
- Marolt Open Space.  
*(Roundabout pond encouraged for swimming dogs)*

### Dogs Strictly Prohibited:

- City of Aspen Golf Course
- Cozy Point Ranch
- North Star Open Space
- Maroon Creek Wetlands

### Leash Law Strictly Enforced:

- Downtown *(Including Ped. Mall)*
- Herron Park *(Wading Pool Included)*
- Hunter Creek Trail
- Rio Grande Trail
- Jennie Adair Wetlands
- Marolt Wetlands *(Near Housing)*
- Playing Fields at School Campus and Aspen Recreation Center



## Attachment 7C

### ARTICLE 100.020 - ANIMAL CONTROL AND MAINTENANCE

#### 100.020.010 - Definitions.

As used in this article, the following words shall have the meanings ascribed to them:

*Animal* means any vertebrate creature other than a human being.

*Animal litter* means defecation by an animal.

*Animal owner* means a person who owns an animal; has a property right in an animal; or intentionally has an animal in his/her custody, possession, maintenance, care or control. Animal owner shall include a person who is temporarily boarding an animal or has undertaken the care, custody, control, maintenance or possession of an animal, and includes a person providing food, drink, shelter, or care to stray animals otherwise running at large.

*Dog-off-leash area* means any area on city property designated by the City Manager or the City Manager's designee as an area in which dogs may be allowed to run off leash.

*Harboring* means the occupant of any premises on which an animal is kept or to which it customarily returns daily for food and care for a minimum period of ten (10) days is presumed to be harboring or keeping the animal.

*Rabies vaccination* means inoculation of an animal with a rabies vaccine approved by the Colorado Department of Public Health and Environment.

*Running at large* means anywhere off the real or personal property of the owner and not under the control of a person restraining the animal by leash. Excepted from this definition are dogs under the direct supervision of a handler in an area designated as a dog off-leash area.

(35-92 § 1; 7-05, § 1)

#### 100.020.120- Animal-Related Nuisance.

(a) Circumstances in which animal ownership, custody, maintenance or control creates, contributes to, or permits any of the following undesirable animal conduct or conditions upon public or private property causing injury or substantial annoyance, or discomfort to the health and welfare of others shall be unlawful.

- (1) Molesting pedestrians or passing vehicles;
- (2) Attacking or chasing people or other animals, with the exception of trespassers upon the private premises of the animal owners;

- (3) Damaging public or private property, including failure of the owner or custodian of an animal to immediately remove feces deposited by such animal upon any public or private property (other than property of the owner);
  - (4) Running at large;
  - (5) Making continuous noise in an excessive manner which is persistent and loud enough to be heard beyond the premises where the animal(s) is kept or harbored, and which substantially interferes with the reasonable use and enjoyment of other nearby properties in the community.
  - (6) The existence of substantial stench/offensive odor, or general unsanitary conditions in which the animal(s) is kept, so as to interfere with the reasonable use and enjoyment of other nearby properties or otherwise make their physical occupation unreasonably uncomfortable.
- (b) No animal owner shall permit any animal-related nuisance or condition caused by animal(s) in his/her temporary or permanent care, custody, control, maintenance or possession.
- (c) Animal control or law enforcement officials shall have the specific authority to impound an animal(s) upon violation of this Code section and to issue uniform citations to the animal's owner. Officials shall possess the power to enter private property in the performance of their duties only if consent of the owner or occupant of the property is freely given or a search warrant is obtained or in the event of the imminent actual harm to the animal or others.

(Code 1962 § 20.8; Code 1971 §§ 3-3, 3-4, 3-33; 35-92 § 3; 26-96 § 1; 18-98 § 8, 7-05, § 1)



**City of Glenwood Springs**  
101 West 8<sup>th</sup> Street  
Glenwood Springs, CO 81601

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**Contact:** Patrick Fleming  
City Manager's Intern  
970-384-6444 (o)

## **PRESS RELEASE**

July 31, 2017

### **The City of Glenwood Springs Institutes New Rules for Trail Use**

GLENWOOD SPRINGS, CO – Starting August 1, the City of Glenwood Springs will temporarily allow motorized electrical assisted bicycles (e-bikes) on public trails, bike paths, and sidewalks designated as bike paths to increase commuter options during the Grand Avenue Bridge closure. The City will also be enforcing a stricter animal leash law, requiring animals to be on a leash that is no more than six-feet in length whenever utilizing any public, hard surface trail or within the boundaries of Two Rivers Park.

#### **Electric Bikes**

Administrative Order 2017-01 temporarily suspends enforcement of Municipal Code Section 090.040.110, as it relates to the use of motorized electrical assisted bicycles on public trails and bike paths. Formerly, all e-bikes were banned from public trails, as they were considered motorized vehicles. In an effort to increase access to alternative transportation options during the Grand Avenue Bridge (GAB) closure, pedal-assisted electric bikes with motors of 750w or less and a top speed of 20mph will be allowed on public trails, sidewalks, and bike paths, throughout the GAB detour. City Council and City Staff will evaluate this rule change at the end of the detour, and will determine the long-term future of the new rule at that point.

#### **Leash Requirement**

The upcoming 95-day Grand Avenue Bridge closure will not only impact the amount of congestion on city roads, it will lead to a significant increase in the number of people using the City's trails and sidewalks to get around town. With this increased traffic on trails, the potential for accidents is also increased. Because of this, the City believes that requiring animals to be leashed is in the interest of public health, safety, and welfare. The new rule is contained in Ordinance 2017-15, and can be viewed at <http://www.gwsco.gov/documentcenter/view/2790>.

The City of Glenwood Springs appreciates everyone's patience and cooperation during this trying time for our community.

For more information on the Grand Avenue Bridge closure and detour, visit [cogs.us/DetourToolbox](http://cogs.us/DetourToolbox).

## Frequently Asked Questions

### What is an e-bike?

According to Colorado State Law, an “electrical assisted bicycle” or “e-bike” is defined as *“a vehicle having two or three wheels, fully operable pedals, and an electric motor not exceeding seven hundred fifty watts of power.”*

There are three different classes of e-bike:

A **Class 1** e-bike has a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

A **Class 2** e-bike is equipped with a motor that provides assistance regardless of whether the rider is pedaling but ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour.

A **Class 3** e-bike is equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty-eight miles per hour.

Only Class 1 and Class 2 e-bikes will be allowed on City trails and sidewalks.

### Why e-bikes and not scooters, Segways, etc.?

The primary intent of this change is to make bicycling a viable transportation option for individuals with strength or fitness limitations. It may also increase the distance others are willing to bicycle on a daily basis. The goal is to make bicycling accessible to a greater number of people, not encourage motorized use of City trails and sidewalks.

### I still don't get it. Why can't I ride my electric scooter?

The Municipal Code prohibits motorized vehicles on City trails and sidewalks. E-bikes that meet the criteria outlined above are now temporarily exempted from the definition of motorized vehicles.

Scooters and other motorized vehicles- excluding emergency vehicles, maintenance vehicles and power driven aids or devices used by a disabled person for mobility- remain prohibited.

### Can I ride my e-bike on the Rio Grande Trail?

E-bikes are currently permitted only on the portion of the Rio Grande Trail maintained by the City of Glenwood Springs – from Two Rivers Park to 23<sup>rd</sup> Street. The Trail south of 23<sup>rd</sup> Street is governed by the Roaring Fork Transportation Authority (RFTA). RFTA does not currently allow e-bikes but the City has encouraged them to revisit this policy. Visit [www.rfta.com](http://www.rfta.com) for the latest information.

### What happens after the Grand Avenue Bridge Detour?

City staff will revisit the question of e-bikes on City trails following the detour and consider adopting a permanent ordinance.

### Can e-bikes be parked at public bicycle racks or on sidewalks?

E-bikes are considered bikes and may park wherever standard bikes are allowed.

### Do I have to buy an e-bike? Can I just add a motor to my existing bicycle?

E-bike conversion kits are available. E-bike conversions must meet either the Class 1 or Class 2 definitions above to be permitted on City trails.