



**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.

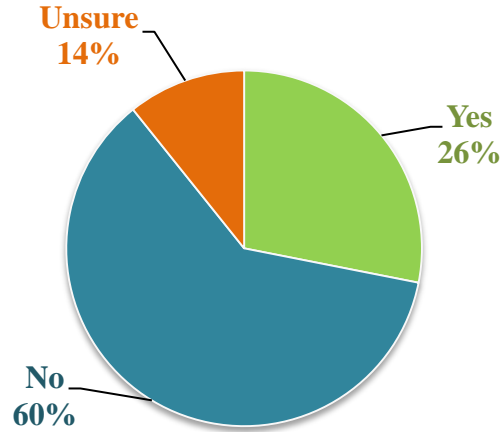
An intercept survey of multi-use path users was conducted during the week of Sept. 6, 2014. Four locations along the paths were selected to intercept path users: Boulder Creek multi-use path at Boulder High School; Elmer's Twomile Creek multi-use path at Goose

Creek multi-use path; Arapahoe Avenue multi-use path at 48th 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.

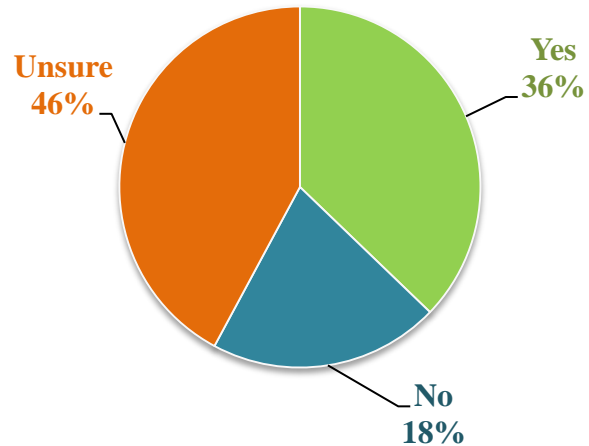
Have you encountered an electric-assisted bicycle on multi-use paths in Boulder?

- **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.

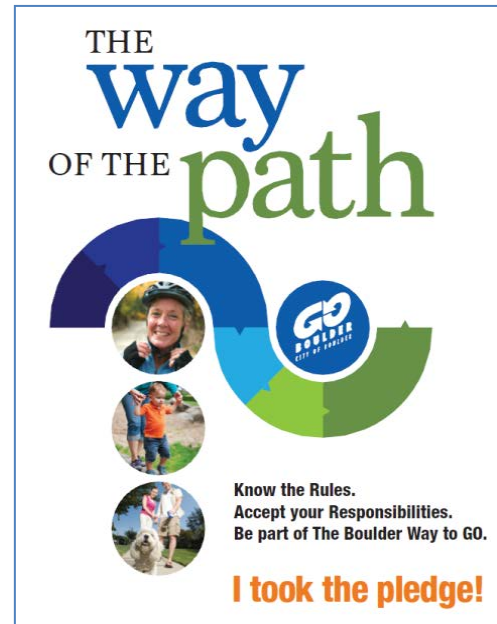
Staff conducted field surveys in August 2014 and key findings indicate that allowing e-bikes to ride on multi-use paths has not resulted in large numbers of e-bikes using the trail system and that 82 percent of all bicycles (e-bikes and “regular” bikes) are traveling at or below the posted 15 mph speed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

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READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED
PUBLISHED BY TITLE ONLY this ____ day of _____, 2014.

Mayor

Attest:

City Clerk

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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;
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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 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER,

12 COLORADO:

13
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 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 INTRODUCTION, READ ON FIRST READING, AND ORDERED PUBLISHED BY
2 TITLE ONLY this 1st day of October 2013.

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4 
5 Mayor

6 Attest:

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8 City Clerk

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

11 
12 Mayor

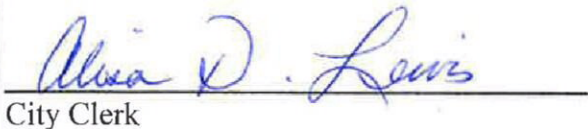
13 Attest:

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15 City Clerk

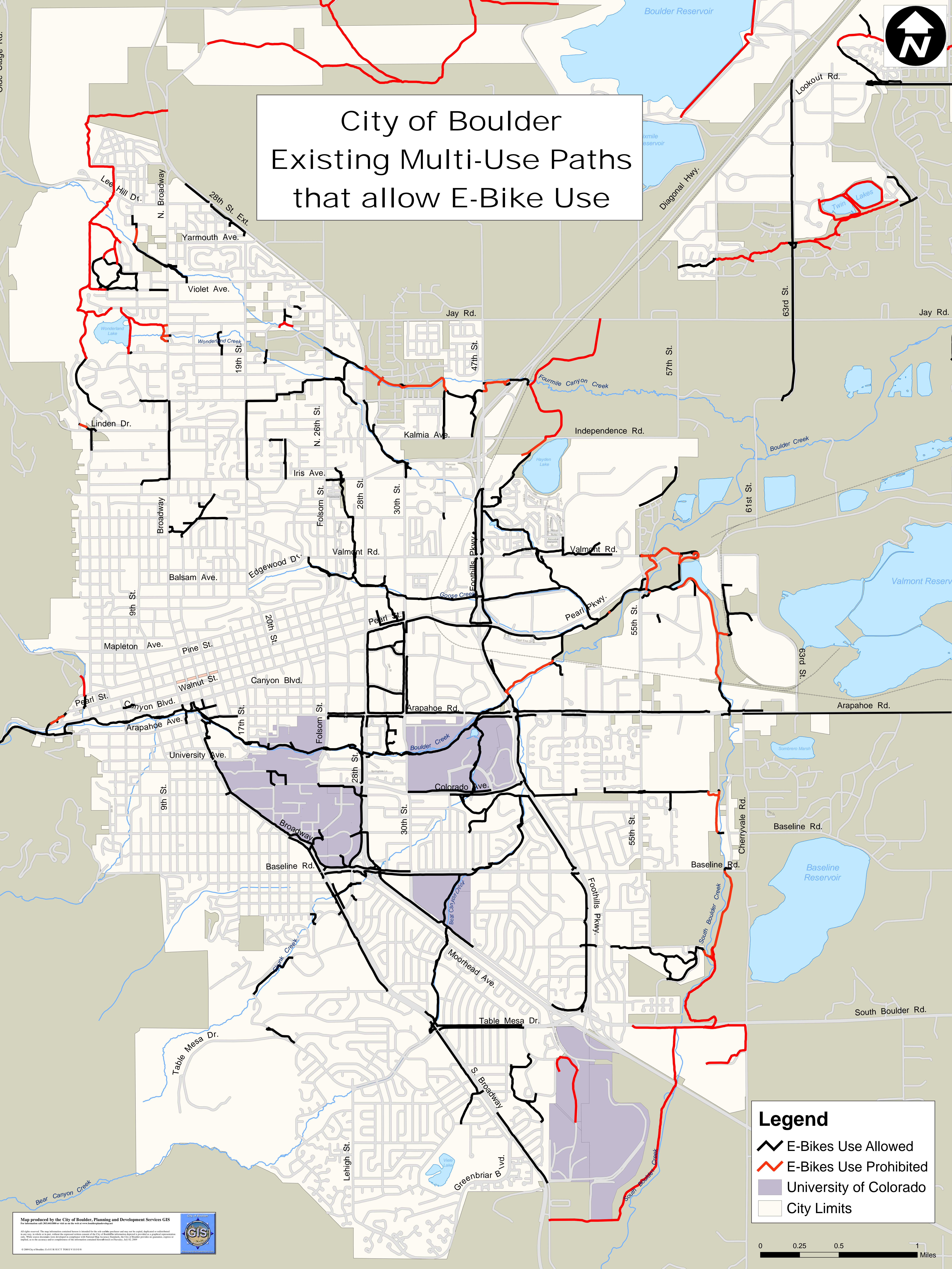
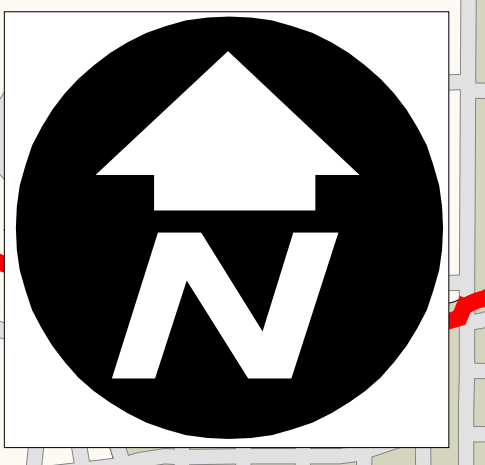
16 READ ON THIRD READING, PASSED, ADOPTED, AND ORDERED PUBLISHED
17 BY TITLE ONLY this 12th day of November, 2013.

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20 Mayor





21 Attest:

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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

