



**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 ~~bicyele-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 ~~bicyele 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

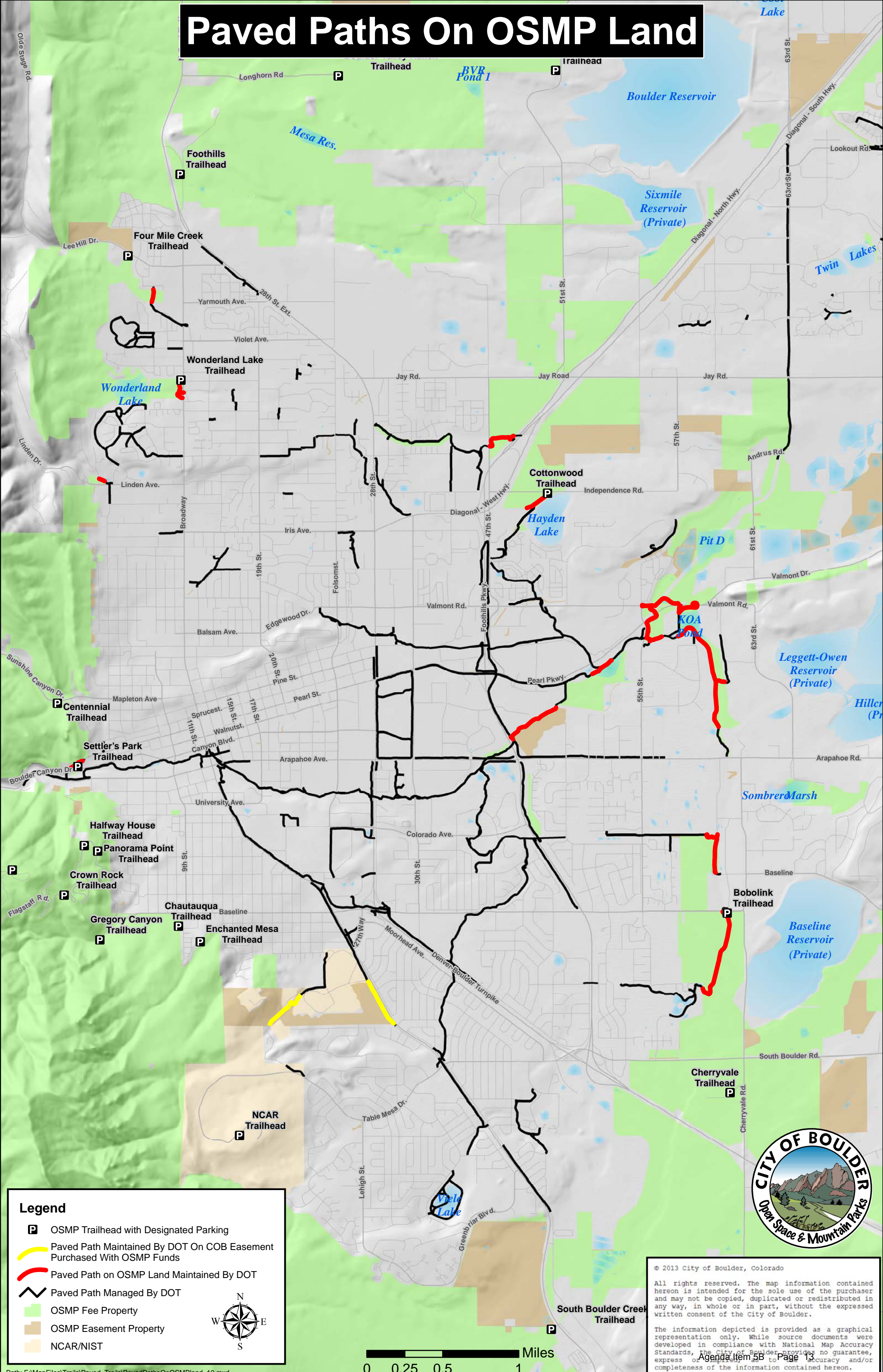
READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED  
PUBLISHED BY TITLE ONLY this 29th day of October 2013.

Attest:

\_\_\_\_\_  
Mayor


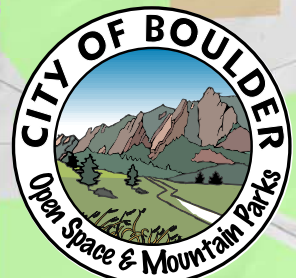
\_\_\_\_\_  
City Clerk

# Paved Paths On OSMP Land



**Legend**

- OSMP Trailhead with Designated Parking
- Paved Path Maintained By DOT On COB Easement Purchased With OSMP Funds
- Paved Path on OSMP Land Maintained By DOT
- Paved Path Managed By DOT
- OSMP Fee Property
- OSMP Easement Property
- NCAR/NIST

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