



**CITY OF BOULDER
OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**

MEETING DATE: September 25, 2013

AGENDA TITLE: Consideration and recommendation to the city manager and City Council on the prospect for holding a stage of the USA Pro-Cycle Challenge that could impact Open Space and Mountain Parks managed property.

PRESENTER/S

Michael D. Patton, Director, Open Space and Mountain Parks

EXECUTIVE SUMMARY

The City of Boulder is being considered for a stage of the USA Pro-Cycle Challenge (USA PCC) bicycle race to be held during August of 2014. The proposed stage would be similar to that held in 2012 and would end with travel up Flagstaff Road, turn into Realization Point with the finish line in the parking area NW of Sunrise Amphitheater. It is anticipated that staging in and around the finish line would be similar to that of 2012 with VIP seating and food tents located around the area.

Estimates for 2012 spectators along Flagstaff Road from Gregory Canyon to the finish line vary widely from 30,000 to 40,000 reported by race organizers to fewer than 15,000.

Staff established monitoring protocols to measured environmental impacts attributable to the 2012 race and concluded there were no long-term impacts.

STAFF RECOMMENDATION

Staff requests the Open Space Board of Trustees consider providing a recommendation to the City Council and city manager on the prospect for authorizing a stage of the USA Pro-Cycle Challenge Race similar to that held for 2012.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- Economic – It is anticipated that the overall economic impacts of the race on the community will be positive. Exact revenues will depend on how many spectators actually come to Boulder. The 2012 race had a small but positive economic impact in terms of increased revenue and was considered very positive in promoting return visits to Boulder.
- Environmental – If the precautions are similar to those developed for 2012 and spectators cooperate, the overall environmental impacts on the city's Open Space along the route are expected to be minor. For the majority of the route along Open Space, spectators and race support will be on asphalt and hardened surfaces. During late August near summer's end, vegetation senescence (dormancy) occurs and should allow for rapid recovery next spring if spectators remain on hardened surfaces. Trash and recycling containers will be placed at locations where spectators are expected to gather. Evidence from last year's race suggests that littering was minimal.
- Social - Because Open Space and Mountain Parks (OSMP) lands, facilities and programs are equally accessible to all members of the community, it helps support the city's community sustainability goal because all residents "who live in Boulder can feel a part of and thrive in" this aspect of their community. Viewing the Pro-Cycle Challenge Race will be accessible to all who wish to participate.

OTHER IMPACTS

- Fiscal – OSMP received \$12,000 in additional sales tax revenue and was reimbursed \$102,000 by the General Fund to offset cost associated with the race. If spectator numbers are similar to those of 2012, it is possible that costs for OSMP could be reduced based on experiences gained from last year.
- Staff time – The race is not associated with the OSMP work plan. OSMP will track all staff time associated with the race.

PUBLIC COMMENT AND PROCESS

This item is being heard at this public meeting, advertised in the *Daily Camera* on Sept. 22, 2013.

ANALYSIS

The City of Boulder was selected to hold a stage of the 2012 USA Pro-Cycle Challenge Race. The finish for the stage was set at the Flagstaff Summit which has been managed by OSMP. OSMP regulations prohibit competitive events. The city attorney was asked to consider the question and while the decision was much more complex and extensive, essentially it was determined that the Summit Road was not Open Space and that a competitive event could be held.

Given the compressed time frame for the race, the Open Space Board of Trustees (OSBT) was not able to consider the race in the same fashion it would other significant events effecting OSMP-managed lands.

The race was held on Aug. 25, 2012 and was considered the most successful to date based primarily on the Boulder stage that featured an arduous climb up Flagstaff Road and finish at the Flagstaff Summit. Race organizers estimated that as many as 30,000 to 40,000 spectators lined Flagstaff Road as the racers passed by while other “counts” reported significantly fewer.

Open Space and Mountain Parks had never been associated with such an event and began planning for the race in January of 2012. Staff made two presentations to City Council based on OSBT recommendations for providing spectator safety and enjoyment as well as resource protection. On the day of the race more than 130 OSMP staff and volunteers provided services to spectators and protected OSMP land. Bottled water was secured and made available to spectators as they began the climb up Flagstaff Road at Gregory Canyon. Fencing was installed to divert spectators from especially dangerous or environmentally sensitive areas. Nearly 100 portable restrooms were made available and over 86 waste and recycle containers were located along Flagstaff Road.

The Open Space and Mountain Parks Department received reimbursement of \$102,000 from the General Fund as well as \$12,000 in additional sales tax revenue to offset expenses associate with the race.

Staff learned a great deal about what is required to manage the Flagstaff finish of the race and believes that the planning and management costs could be reduced for 2014 presuming a similar-sized crowd.

Staff reviewed environmental impacts on OSMP lands along Flagstaff Road and on trails used by spectators. Only minimal vegetation trampling was noted and impacts were considered minimal since much of the vegetation was beginning senescence. Staff recommended that no restoration activities were required as a result of the race. Wildlife disturbances were more difficult to quantify, however, a mother bear and two cubs were seen fleeing the meadow SW of Panorama Point as a large group of spectators filled the area. A link to the Resource Condition Assessment Summary Report from the 2012 race is included below.

Submitted by:

Michael D. Patton, Director

ATTACHMENTS:

[Link to Pro-Cycle Monitoring Summary](https://www-static.bouldercolorado.gov/docs/2012-pro-cycle-monitoring-summary-1-201304101150.pdf)

<https://www-static.bouldercolorado.gov/docs/2012-pro-cycle-monitoring-summary-1-201304101150.pdf>



**CITY OF BOULDER
OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**

MEETING DATE: September 25, 2013

AGENDA TITLE Consideration of a recommendation to City Council for an Open Space and Mountain Parks supplemental appropriation to provide for repair and reconstruction of land damaged by the recent storm.

PRESENTER/S

Michael D. Patton, Director, Open Space and Mountain Parks
Michael Orosel, Financial Services Manager

EXECUTIVE SUMMARY

During the week of Sept. 8, 2013, the City of Boulder experienced an historic rainfall that in the latter half of the week caused flooding and substantial damage to both the Open Space and Mountain Parks (OSMP) system and city infrastructure. At the time of the writing of this memorandum, department staff was completing an onsite assessment and analysis of the damage. Preliminary reports from staff performing the onsite assessment are that the damage to the system is both extensive and severe. Costs associated with the damage have not been determined; however, the City Council will be requested to approve a 2013 supplemental appropriation to provide funds for repairs to the system.

STAFF RECOMMENDATION

Staff requests the Open Space Board of Trustees recommend that the City Council approve a supplemental appropriation of between \$500,000 to \$1,000,000 to the Open Space and Mountain Parks 2013 budget for necessary repairs and reconstruction of resource damage caused by the September storm and floods.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- Environmental: Open Space and Mountain Parks is a significant community-based program that preserves open space land contributing to the environmental sustainability goal of the City Council.

- Economic: The Open Space and Mountain Parks program contributes to council's economic sustainability goal because it provides the physical context for the diverse and vibrant economic system that supports services for residents. The land system and the quality of life it represents attract visitors and help businesses to recruit and retain quality employees.
- Social: The Open Space land system is accessible to all members of the community and therefore helps support council's community sustainability goal because all residents "who live in Boulder can feel a part of and thrive in" this aspect of their community.

OTHER IMPACTS

- Fiscal: Funds for the supplemental appropriation would come from Open Space Fund balance.
- Staff Time: Staff time to prepare the supplemental budget is budgeted as part of the department's work plan. Staff time to monitor and perform the work related to the storm damage will be diverted from other projects within the department's work plan.

PUBLIC COMMENT AND PROCESS

This item is being heard at this public meeting, advertised in the *Daily Camera* on Sept. 22, 2013.

ANALYSIS

During the week of Sept. 9, 2013, the City of Boulder experienced a rainstorm and subsequent flooding that has been described variously as anywhere from a 100- to 1,000-year storm and flood. Extensive damage occurred on the OSMP land and to city infrastructure. The severity of the damage to system resources was such that the system was closed to the public by city manager executive order.

Certain staff reported to work during the flooding and prior to Sept. 16, 2013 to develop a plan to perform a field assessment of the system. On Sept. 16, 2013 the assessment teams met at the Cherryvale campus for a brief training prior to going into the field. The field assessment took two to three days for teams to complete depending on the accessibility of areas. The data collected was submitted to the Resource Information Systems group for mapping.

Subsequent to the field data collection and mapping, project priorities and costing will be determined. At this time, there is no estimate of the cost of work that will be contracted for and commenced in 2013. At the present time, there are balances of approximately \$650,000 in the visitor infrastructure CIP and \$150,000 in Lottery CIP. These funds are available for storm damage repair.

Council can only appropriate funds on an annual basis, i.e., the 2013 supplemental appropriation would provide funds for only 2013. However, any CIP funds that are appropriated for 2013 and remain unencumbered and unexpended may be carried over to and made available for the next year. In addition, the 2014 recommended budget for

OSMP has \$1,210,000 allocated for visitor infrastructure CIP projects; these funds may be utilized for flood damage repair projects. Funds for flood damage repair for 2015 and beyond will be included when developing the CIP for those years.

Because the estimated 2013 flood-related costs are unknown at this time, the department is proposing that its supplemental appropriation for 2013 flood damage repair be in the range of \$500,000 to \$1,000,000. At the time the actual request is made, a specific dollar amount will be identified.

Submitted by:

Michael D. Patton, Director, Open Space and Mountain Parks

Michael Orosel, Financial Services Manager

ATTACHMENT:

A. 2013-2019 Open Space Fund Financial

This page is intentionally left blank.

ATTACHMENT A
CITY OF BOULDER
2012-2019 PROPOSED BUDGET
OPEN SPACE and MOUNTAIN PARKS FUND

OPEN SPACE AND MOUNTAIN PARKS									
	2012	2013	2014	2015	2016	2017	2018	2019	
	Actual	Revised	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Beginning Fund Balance	\$ 13,219,306	\$ 18,917,725	\$ 12,214,241	\$ 13,104,894	\$ 16,917,866	\$ 19,533,953	\$ 25,397,632	\$ 31,939,401	
Sources of Funds									
Net Sales Tax Revenue	\$ 24,843,163	\$ 25,406,420	\$ 26,295,672	\$ 27,176,894	\$ 28,088,010	\$ 29,000,132	\$ 29,928,588	\$ 19,303,939	
Investment Income	324,723	325,000	325,000	325,000	325,000	325,000	325,000	325,000	
Lease and Miscellaneous Revenue	733,655	485,909	485,909	485,909	485,909	325,000	325,000	325,000	
Sale of Property	893,731	-	-	-	-	-	-	-	
Funds from CDOT for Granite acquisition	-	1,300,000	-	-	-	-	-	-	
General Fund Transfer	1,025,753	1,072,174	1,103,384	1,137,095	1,171,553	1,208,122	1,245,832	1,284,720	
Grants	222,983	25,500	-	-	-	-	-	-	
Total Sources of Funds	\$ 28,044,008	\$ 28,615,003	\$ 28,209,965	\$ 29,124,898	\$ 30,070,472	\$ 30,858,254	\$ 31,824,420	\$ 21,238,659	
Uses of Funds									
General Operating Expenditures	\$ 10,061,560	\$ 11,750,079	\$ 11,723,191	\$ 12,490,150	\$ 12,546,271	\$ 12,922,659	\$ 13,310,339	\$ 13,709,649	
Increase to 2013 base	-	-	755,639	-	-	-	-	-	
Operating Supplemental and Carryover	-	260,087	-	-	-	-	-	-	
Vehicle Acquisition	-	-	-	-	300,000	-	-	-	
Cost Allocation	1,070,853	1,066,954	1,108,400	1,163,820	1,222,011	1,283,112	1,347,267	1,414,630	
Capital-Real Estate Acquisition CIP	1,599,195	3,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	
Capital-Real Estate Acquisition Carryover	-	5,571,422	-	-	-	-	-	-	
Capital-Water Rights Acquisition CIP	21,761	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Capital-Water Acquisition Carryover	-	187,817	-	-	-	-	-	-	
Capital-South Boulder Creek Instream Flow	-	100,000	100,000	150,000	2,000,000	-	-	-	
Capital-So Bldr Crk Instream Flow Carryover	-	50,000	-	-	-	-	-	-	
Capital-North TSA	-	50,000	50,000	50,000	100,000	200,000	100,000	50,000	
Capital-Reroute Flagstaff Trail	-	-	120,000	-	-	-	-	-	
Capital-Reroute Green Mtn. West Ridge	-	-	60,000	-	-	-	-	-	
Capital-Reroute Saddle Rock Trail	-	-	65,000	-	-	-	-	-	
Capital- Reroute Ute and Range View Trails	-	-	65,000	-	-	-	-	-	
Capital-West TSA	169,486	450,000	500,000	550,000	550,000	450,000	600,000	50,000	
Capital-East TSA	-	-	-	-	-	50,000	50,000	200,000	
Capital-Mineral Rights Acquisition	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Capital-Mineral Acquisition Carryover	-	261,184	-	-	-	-	-	-	
Capital-Visitor Infrastructure CIP	826,114	400,000	350,000	300,000	250,000	200,000	200,000	500,000	
2nd Supplemental Appropriation		1,000,000							
Capital-VI CIP Carryover	-	803,712	-	-	-	-	-	-	
Capital-Highway 93 Underpass Carryover	-	1,000,000	-	-	-	-	-	-	
Debt Service - BMPA	1,734,407	1,597,457	1,500,969	1,110,243	996,341	395,842	169,282	69,366	
Debt Service - Bonds & Notes	6,862,213	7,069,775	5,221,113	3,797,712	3,789,762	3,792,962	3,805,763	2,025,231	
Total Uses of Funds	\$ 22,345,589	\$ 35,318,487	\$ 27,319,312	\$ 25,311,926	\$ 27,454,386	\$ 24,994,575	\$ 25,282,651	\$ 23,718,876	
Ending Fund Balance Before Reserves	\$ 18,917,725	\$ 12,214,241	\$ 13,104,894	\$ 16,917,866	\$ 19,533,953	\$ 25,397,632	\$ 31,939,401	\$ 29,459,184	
Reserves									
OSBT Contingency Reserve	\$ 5,475,000	\$ 5,475,000	\$ 3,500,000	\$ 2,500,000	\$ 2,400,000	\$ 2,000,000	\$ 2,000,000	\$ 1,100,000	
Pay Period 27 Reserve	287,270	-	45,000	95,000	145,000	195,000	-	-	
Sick/Vacation/Bonus Reserve	490,000	490,000	490,000	490,000	490,000	490,000	490,000	490,000	
Property and Casualty Reserve	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	
South Boulder Creek Flow Reserve	1,150,000	1,450,000	1,750,000	2,000,000	-	-	-	-	
Vehicle Acquisition Reserve	-	-	150,000	300,000	-	-	-	-	
Facility Maintenance Reserve	-	-	100,000	200,000	300,000	400,000	500,000	600,000	
Total Reserves	\$ 7,802,270	\$ 7,815,000	\$ 6,435,000	\$ 5,985,000	\$ 3,735,000	\$ 3,485,000	\$ 3,390,000	\$ 2,590,000	
Ending Fund Balance After Reserves	\$ 11,115,455	\$ 4,399,241	\$ 6,669,894	\$ 10,932,866	\$ 15,798,953	\$ 21,912,632	\$ 28,549,401	\$ 26,869,184	



**CITY OF BOULDER
OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**

MEETING DATE: September 25, 2013

AGENDA TITLE: Consideration of City of Boulder Transportation Department’s proposal to recommend to the City Council a pilot project allowing electric-assisted bicycles on certain hard-surfaced, multi-use paths.

PRESENTER/S

Michael D. Patton, Director, Open Space and Mountain Parks

EXECUTIVE SUMMARY

This memo includes Transportation Department’s draft memorandum (Attachment A) for the Oct. 1, 2013, City Council agenda item regarding a pilot project allowing electric-assisted bicycles on designated hard-surfaced, multi-use paths. The pilot project proposes to evaluate behavior of e-bike riders to determine whether these vehicles can co-exist with current uses on these city-owned and city-maintained multi-use paths. The project focuses on the urban service area where there is a network of hard-surface, off-street multi-use paths. The pilot project will not include use on trails that are pedestrian only or intended to preserve the natural environment or are soft surface.

There is an interest to include segments of Open Space and Mountain Parks (OSMP) paved-surface trails in the pilot program, specifically those in core portions of the city where these paths are connected to the city’s Greenways system. There are hard-surfaced trails which are “owned” by OSMP but maintained by the Transportation Department. This situation occurred when, over the years, Transportation proposed that it harden the trails to provide a better bicycling surface. Bicycling was considered an Open Space purpose, so agreement was made to harden the surface and to have Transportation maintain the trails. These trails or paths are typically on the periphery of OSMP land and connect with other Transportation-managed trails. One example would be the OSMP trail segment along Broadway in front of NOA/NIST. This is actually a section of the multi-use path that runs from Dartmouth Avenue to Baseline Road and was conveyed to OSMP at the time NOA/NIST “protected area” was acquired by the city. Other examples are segments of the Boulder Creek Path beginning at 47th Street and continuing out to KOA Lake. OSMP hard-surface trails total approximately six miles in various segments.

At present, the OSMP Department Visitor Master Plan (VMP) and Long Range Management Policies (LRMP) include the prohibition of any motorized vehicle or conveyance on OSMP property. City ordinances enable enforcement of these regulations. In addition, the City Charter provides only for passive recreation; any motorized conveyance has been considered not to be passive recreation.

The Transportation Department would like to include the Open Space Board of Trustees' (OSBT) comment and recommendation based on its Sept. 25, 2013 public hearing on whether OSMP hard-surface, multi-use paths are appropriate to include in the e-bikes demonstration project. This information and the recommendation from the Transportation Advisory Board (TAB) will inform the final recommendation to City Council on Oct. 1, 2013.

STAFF RECOMMENDATION

Staff requests consideration of the prospect for use of e-bikes on OSMP.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- Economic – Greater commuter options into and around the City of Boulder have the potential for increasing visitation and may result in city retail and business benefits. The OSMP program contributes to council's economic sustainability goal because it provides the physical context for the diverse and vibrant economic system that supports services for residents. The land system and the quality of life it represents attract visitors and help businesses to recruit and retain quality employees.
- Environmental - Open Space and Mountain Parks is a significant community-based program that preserves open space land contributing to the environmental sustainability goal of the City Council.
- Social – Including electric-assisted biking opportunities along selected hard-surface Open Space trails can have positive and negative social impacts. E-bikes may allow members of the public with limited abilities admittance to areas that may otherwise be difficult or impossible to access. Introducing motorized vehicles in new areas could impact the safety of the pedestrians and cyclists currently utilizing the trails. Difficulty patrolling the e-bike areas and controlling e-bike access to connecting areas that are not open to their use are major concerns. The Open Space land system is accessible to all members of the community and therefore helps support council's community sustainability goal because all residents "who live in Boulder can feel a part of and thrive in" this aspect of their community.

OTHER IMPACTS

- Fiscal – Depending on Board recommendation, there should be no additional fiscal impacts to OSMP.

- Staff time – Depending on Board recommendation there should be no additional staff time expended than what is in its normal work plan.

PUBLIC COMMENT AND PROCESS

This item is being heard as part of this public meeting advertised in the Daily Camera on Sept. 22, 2013.

ANALYSIS

At present, all of the OSMP system prohibits the use of any motorized vehicle or conveyance. The fundamental reason for this prohibition is that motorized conveyances have been determined not to be passive recreation and therefore prohibited by the Boulder City Charter. The LRMP and VMP, approved in 1995 and 2005 by the OSBT and City Council, affirmed the prohibition of motorized vehicles on OSMP lands. Motorized vehicles were found to be inconsistent with and contrary to the purposes of OSMP. Staff is in strong support of the current definition and prohibition.

Staff finds no grounds for authorizing motorized bicycles on OSMP. Should the OSBT want to consider the use of electric bicycles on OSMP, the viable alternative is to consider the disposal/transfer of some portions of current OSMP hard-surfaced trails. For example, the Boulder Creek Path from 47th Street to KOA Lake functions as both a passive recreation opportunity and an east-west transportation corridor. The path is on the very edge of OSMP land, is hard surfaced and currently maintained by the Transportation Department. The total length of this segment of the Creek Path is less than a mile.

Several other segments of the hard-surfaced Greenways Trail system occur on OSMP, including a 0.75 mile section along Fourmile Creek, a 0.4 mile section adjacent to Hayden Lake and a 0.14 mile section along Farmers' Ditch near the North Boulder Recreation Center. However, several segments of hard-surface trail on OSMP are not suitable or appropriate to dispose/transfer, e.g. the Bobolink Trail, because they are interior on OSMP and/or have important natural values that have particular management requirements.

A detailed survey and analysis will need to be completed prior to any final decision to dispose/transfer OSMP interests in identified hard-surface trails. An updated map will be provided at the Sept. 25, 2013 OSBT meeting.

Submitted by:

Michael D. Patton, Director

ATTACHMENT:

A. Transportation's draft memo to City Council Oct. 1, 2013

This page is intentionally left blank.



**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 Eichen, Chief Financial Officer
Maureen Rait, Public Works Executive Director
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, within the City of Boulder, electric-assist bicycles or “e-bikes” are allowed to operate on the road and use bike lanes, but are prohibited from multi-use paths and sidewalks. As directed by council, the City of Boulder is considering a potential demonstration 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

ATTACHMENT A

determine whether these vehicles can co-exist with current users on multi-use paths. **Attachment A** is the proposed ordinance that would allow this demonstration to occur. It suggests a new section (7-5-26) be added to the code to enable the City Manager's rulemaking authority to regulate the hard-surface paths where a person may activate the motor of an electric assisted bicycle. The ordinance establishes a sunset date of December 31, 2014. The demonstration project would commence 30 days after Council approval of the ordinance. This duration would allow data collection, evaluation, community input, and quarterly updates to the City Council on the pilot project findings.

The pilot would not include use on facilities that are pedestrian-only or intended to preserve the natural environment. Specifically, the proposed ordinance for the pilot period makes clear 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 September 25., the Open Space Board of Trustees (OSBT) convened a public hearing to consider and take action on whether OSMP hard-surface multi-use paths are appropriate to include in the e-bikes demonstration project. The Board voted to...(to be incorporated after the meeting).

On Sept. 23 the Transportation Advisory Board held a public hearing to consider a staff recommendation on the pilot project and make a formal recommendation to City Council. The TAB recommendation was: (to be incorporated after the meeting).

STAFF RECOMMENDATION

A staff recommendation for the pilot demonstration project, and specifically which hard-surface multi-use paths to include in the demonstration project, will be developed with input from the TAB and OSBT public hearings scheduled for the week of Sept. 23, 2013.

Staff is considering several alternatives for defining and regulating e-bikes in the City of Boulder. An objective of the demonstration project is to include a logical, connected system that works for bicyclists as well as fits with and respects the context of the surrounding area.

The proposed ordinance to authorize the pilot project is included as **Attachment A**. It suggests a new section (7-5-26) be added to the code to enact the City Manager's rulemaking authority to regulate the hard-surface paths where a person may activate the motor of an electric assisted bicycle.

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 funding earmarked for Transportation Innovations in the city’s 2013 and 2014 budgets. Any voluntary over time employed to conduct enforcement also would be absorbed in the Transportation Innovations 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 September 23, 2013 the Transportation Advisory Board held a public hearing to consider the e-bike pilot project and a staff recommended option. The Board action was.... (to be incorporated after the meeting).

Other affected boards include the Downtown Management Commission, Open Space Board of Trustees, University Hill Commercial Area Management Commission, and Parks and Recreation Advisory Board. In early September, these boards received a staff memorandum with information on the options under consideration for the potential e-bikes demonstration pilot project and public process forums for the community to provide input. Each board discussed the item at their September meeting. Input is detailed below.

The OSBT first discussed the e-bike pilot at its meeting on September 11, 2013. Conversation focused on safety concerns and conflict with the Open Space and Mountain Parks 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 are functioning in another way such as hard surface paths that serve a transportation purpose. On September 23, 2013, the OSBT is scheduled to hold a public hearing to consider the e-bike pilot project and potential options for how to handle e-bike use on hard-surface multi-use paths upon Open Space and Mountain Park (OSMP) property. The Board action was (to be incorporated after the meeting).

On September 23, the Parks and Recreation Advisory Board (PRAB) discussed the e-bike pilot. Their input was: (to be incorporated after the meeting).

On September 18, 2013, the University Hill Management Commission (UHMC) discussed the e-bike pilot. Their input was: (to be incorporated after the meeting).

On September 9, the Downtown Management Commission (DMC) made a motion in support of Option 3 but do not want to allow e-bikes on the section of the Boulder Creek Path from Scott Carpenter Park to Eben 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 Web 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. Community members also attended the Transportation Advisory Board public hearing on September

23, 2013, and were encouraged to attend the Council meetings on Oct. 1 and Oct. 22 where the e-bike pilot project options will be considered.

Over 200 comments were received expressing an opinion on the proposed options for a pilot project to test e-bike use on paths. A majority of 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. An estimated 34 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 based on rider and vehicle. Options to regulate use suggested included to allow e-bikes wherever bikes are allowed (including sidewalks and OSMP trails); allow e-bikes wherever bikes were allowed except on OSMP natural surface paths; and restrict e-bike use on some weekends. But, allow 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 speak in support of 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 & Recreation, Open Space and Mountain Parks, the City Attorney's office, 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 and select "Complete Streets" or "Living Laboratory".

Current 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.

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 of Boulder definition currently differs from State Law by defining an e-bike 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 which are identified as being "owned" by OSMP but which are maintained by Transportation. 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 late September 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 and others as well as issuance of summonses / warning.

The pilot program would be supported by a social media campaign and more traditional outreach strategies to raise awareness on the pilot allowing e-bikes on multi-use paths and the continued prohibition of e-bikes on sidewalks (other than those designated as multi-use paths).

PROPOSED ORDINANCE REVISION

The City Attorney's Office 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 Manger to offer flexibility in determining the hard-surface multi-use path segments that allow e-bikes. This approach offers the opportunity to adjust to scope of the pilot project in response to findings of the on-going evaluation. A sunset date of December 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.

Options for defining an e-bike

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 demonstration period of one year. This ordinance would sunset 12 months after it commences. 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

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. The pilot project would include comprehensive program that encompasses the five E's of engineering, encouragement, education, enforcement and evaluation. 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 ordinance to test e-bike use on multi-use paths, except for a segment of the Boulder Creek Path, for a demonstration period of one year. This ordinance would sunset 12 months after is commences. 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
- 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 30th 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

ATTACHMENT A

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.

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

DRAFT