

**PeopleForBikes / Bicycle Product Suppliers Association
eMTB Intercept Study
April 2017**

Overview

In April 2017, a study was conducted by the national non-profit bicycling advocacy group PeopleForBikes, with support from the industry association the Bicycle Product Suppliers Association to provide the Bureau of Land Management information that could guide decision-making about where, when, and how to manage e-MTBs.

The study took place at four trailheads in the Fruita, CO area – one that provides access to motorized recreation (or “motorized” trail: Rabbit Valley), and three that provide access to non-motorized recreation (or “non-motorized” trails: 18 Road, Lunch Loops, Kokopelli).

Specifically the study sought to answer the following questions:

- What is your familiarity with, perception of, support of, and perceived benefits and barriers of eMTBs?
- What would the social impacts be at the cycling areas that do not allow e-bike use if trails were opened for e-bike use?
- Would people who currently do not use BLM bike trails start using those trails if e-bikes were allowed?

Methodology

Survey questions – one for the motorized trail users (<http://bit.ly/2oZk2ew>), and one for the non-motorized trail users (<http://bit.ly/2qqTNIU>) – were developed in partnership with the BLM, City of Fruita, PeopleForBikes, and the International Mountain Bicycling Association.

These ten-minute intercept surveys were conducted among those local to and those visiting trails in Fruita, CO. The interview locations and timing (i.e. sampling plan) were designed to yield a representative sample of trail users:

- Trailheads where motorized vehicles (including eMTBs) are not permitted and where they are permitted;
- Visitors to the area and local residents;
- Weekday and weekend users; and
- Demographics (e.g., age, gender, etc.)

The study was conducted on the following days and times:

- Motorized trail:
 - Saturday, April 8, 2017, from 8 a.m. – 6 p.m.
 - Sunday, April 9, 2017, from 8 a.m. – 6 p.m.
 - An eMTB demo was also hosted at the Rabbit Valley trailhead on both days of the survey. The demo was advertised for Sunday, but not for Saturday so that answers could be judged independently of whether a respondent visited the trailhead specifically to try an eMTB. The demo was for Class 1 eMTBs only, defined as “a bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.” (Note: 20 mph is not the average speed, but the maximum speed at which the motor will work.)
- Non-motorized trails:
 - Wednesday, April 5, 2017, from 5 – 8 p.m.

- Saturday, April 8, 2017, from 8 – 11 a.m.

The following number of interviews was conducted at each trailhead:

- Rabbit Valley: 64 surveys
- 18 Road: 55 surveys
- Lunch Loops: 38 surveys
- Kokopelli: 19 surveys

Top-Level Takeaways

- **Education and experience are important**, i.e. it is difficult to formulate an educated opinion of eMTBs without first seeing and riding one. Riding an e-MTB changes perceptions from the negative or neutral, to neutral or positive.
- **Messaging is key**. One of the main concerns with allowing eMTBs on non-motorized trails is that someone's favorite trail may become too crowded and their experience will be diminished. If eMTB access changes, communicating why and where the changes are being made will dissipate some of the concerns. With the appropriate level of outreach and education, the social impact of allowing eMTBs on non-motorized trails can be minimal. Specific outreach to mountain biking advocates, in particular, may help build support and collaboration around revised access.
- **More research** on the relative trail impacts of eMTBs vs. standard MTBs is needed, and more research on the actual attitude changes before and after a demo (instead of asking participants to self report after).
- **A short-term pilot test** to allow eMTB access on non-motorized trails along with data collection may provide the necessary information to consider revised eMTB access.

Topline Findings

Familiarity with, perception of, support of, and perceived benefits and barriers of e-MTBs:

- Familiarity with eMTBs:
 - Just under one-third of respondents reported high familiarity with eMTBs.
 - Fruita "locals" are particularly familiar with eMTBs.
 - Those who report high familiarity with eMTBs, and users at non-motorized trailheads are particularly concerned about conflict and trail damage.
- Perception of eMTBs:
 - Generally, people at the motorized trailhead are more positive about eMTBs than non-motorized trail users.
 - For those who demo'd an eMTB, nearly all reported a positive experience and 62% reported that it changed their perceptions about eMTBs for the better. *(Note: These results are consistent with findings from Jefferson County, CO that 71% of demo participants reported a change in their perceptions of eMTBs after trying one.)*
 - Trail users estimated that eMTBs go 18-20 MPH.
 - On a scale of 1-10 (1 = traditional MTB; 10 = dirt bike), users at the motorized trailhead rated an eMTB on average a 3.5; users at the non-motorized trailheads rated an eMTB a 4.9.
- Support for eMTBs:
 - Nearly all motorized trail users agree that eMTBs should be permitted on motorized trails, especially those who have ridden an eMTB.
 - Motorized trail users are especially likely to be supportive of policies that support e-MTB access to non-motorized trails.
 - About 40% of users surveyed at non-motorized trails believe that eMTBs should be allowed on non-motorized trails and 26% support policies toward that end.

- Those who have ridden an eMTB are especially favorable to revised eMTB access to non-motorized trails.
- IMBA members and advocates are less likely to agree that e-MTBs should be allowed on non-motorized trails
- Perceived benefits and barriers of e-MTBs:
 - Many of those surveyed consider two key benefits of eMTBs: encouraging new mountain bikers/getting more people outside and extending someone's ability to mountain bike into older age.
 - Some benefits of eMTBs that were listed are that they are quiet, simulate a MTB trail experience, require just as much work as a regular MTB, and have similar trail impacts as traditional MTBs.
 - The main barriers cited, in answer to whether or eMTBs should be allowed on non-motorized trails are that eMTBs might require higher rates of rescue, decrease healthy lifestyles, jeopardize MTB access victories by blurring the lines between non-motorized and motorized travel; and that there are enough motorized trail areas to satisfy eMTB riders.

What would the social impacts be at the cycling areas that do not allow e-bike use if trails were opened for e-bike use?

- Those that do not want eMTBs to be allowed on non-motorized trails primarily say that it is because eMTBs are motorized.
- The top concerns about e-MTBs include crowding, trail damage, and potential user conflict.

Would people who currently do not use BLM bike trails start using those trails if e-bikes were allowed?

- **Nearly all non-motorized trail users would continue to use the trails if eMTBs were permitted.**
- Almost 40% of non-motorized trail users think that eMTBs should be allowed on those trails, especially those who have ridden an eMTB.

Conclusion

When someone has demo'd an eMTB, their perceptions of a Class 1 eMTB improve, and they realize that an eMTB is more similar to a traditional mountain bike than a dirt bike. However, many of those who demo'd an eMTB believe that eMTBs, because of their motor, belong on motorized trails. This does not preclude the fact that many people who have ridden an eMTB believe that they have similar social and environmental impacts as a regular bike, but people are still concerned about trail crowding and user conflict. If Class 1 eMTB to a non-motorized trail is desired, this access should be preceded by a pilot project on a few selected trails, accompanied with proper signage, education, and user etiquette information.

In response to the concerns expressed in this study, the following should be noted:

- Trail crowding will occur with or without eMTBs. The solution is not to restrict access, but to build more trails.
- User conflict will occur with or without eMTBs. eMTBs allow someone to climb a trail faster, although concerns are only expressed in terms of downhill speeds.
- Technology cannot be blamed for some riders going riding a trail that they are not fit or skilled enough to ride. This also occurs with or without eMTBs.

Appendix 1: Selected Feedback from Surveys

Chosen quotes from "Advice to Land Managers:"

- I think non-motorized trails should be non-motorized, without exception. There are plenty of motorized trails for eMTBs to use.
- eMTBs should be allowed on specific trails separate from MTBs and hikers.
- Open selected trails to e-bikes, clearly mark which trails are open to e-bikes, and solicit feedback from trail users.
- I worry about the speed of the bikes and how that might impact the perception and experience of other users.
- Allow Class 1eMTBs on non-motorized.
- I do not like the idea of assist and motors on trails where motors are not allowed. I am however excited about e-bikes for my parents to ride around the neighborhood.
- Ride one before you judge them.
- Let them on, they're the same as a regular bike.
- Signage, guidelines, education.
- Limit them to some trails, directional only.
- Make more trails in general.
- Consider same techniques as when designating trails for hikers, horses, and bikes.
- Expand singletrack-style motorized friendly trails similar to many in the Crested Butte area.
- Study effects on trail degradation.

Chosen quotes from users who demo'd an eMTB:

- No noise!
- It's fast.
- It was really impressive how it kicks in. I really like how there are different power levels.
- Super fun through a steep up hill.
- This was great! I'd love to do it again, but don't think there are a lot of opportunities, I'd worry about changing the nature of the multi-use trails that I already use if eMTBs were allowed, and the cost feels a little high for me to add as a new hobby. But I could totally see myself renting at a riding destination.
- Lots of fun. Had a great time riding. Takes time to get used to.
- Will consider buying one.
- It was great how easy it was to get moving.
- It was not as easy as I thought it would be!
- I never once peeled out like a motorcycle, even when I attempted to.
- Great way for the family to ride together.
- Not suitable for MTB trails.
- Safer and more than expected.
- Worried about losing motivation for regular biking.
- I didn't know that you had to pedal a Class 1 eMTB to engage the motor.
- There needs to be delineation between eMTBs and mountain bikes on some trails.
- Range and speed were impressive.
- I thought they would feel more like a motorcycle it was just like my trail bike.
- Now I understand why they are appealing to many.

Chosen quotes from users of non-motorized trails when asked for reasons to allow eMTBs on non-motorized trails (note: when asked why not to allow eMTBs on non-motorized trails, the answer was resoundingly "because they are motorized."):

- They get people outside.
- Class 1 eMTBs are like bikes and are ok on trails.
- As long as the user is respectful to others and respects the trails.
- eMTBs help provide a little extra power to get over obstacles for someone who may not be able to ride.
- There is still a lot of research that needs to be done, but there are certain riders that would greatly benefit from e-bikes.
- As long as eMTB riders aren't presenting a danger to themselves or others than why not?
- I'm old and need help going uphill.
- They are mostly human powered.
- They are only faster going up and people go fast down all the time so I think its about the same.
- Without significant noise or speed increase I don't see any difference from traditional bikes.

Appendix 2: Demographics

	Motorized trail users	Non-motorized trail users
% Who mountain bike weekly or more often	78%	87%
Average # of years mountain biking	13.92	15.08
% Involved in mountain bike advocacy	45%	43%
% IMBA members	28%	23%
% Local	27%	42%
% Male	78%	69%
% White/Caucasian	94%	90%
Average Age	40	39