E-bikes and Trails:

Measuring Impact and Acceptance of Class 1 E-bikes on Trails
Presentation Overview

Relevant legislation
JCOS study design
Current findings
Decision on Class I on JCOS paved trails
E-bike demo
Discussion
HB 17-1151
Defines 3 classes of electrical assisted bicycles

Class 1: 750w/20mph speed cut off, no throttle
Class 2: 750w/20mph speed cut off, throttles allowed
Class 3: 750w/28mph speed cut off, no throttle

Requires classification labeling (1/1/2018)
HB17-1151
Effective August 9
Defines where they can be used
"42-4-1412. Operation of bicycles and other human-powered vehicles. (14) (a) (l) A person may ride a class 1 or class 2 electrical assisted bicycle on a bike or pedestrian path where bicycles are authorized to travel."

Jefferson County, Colorado
Open Space
HB 17-1151

Impacts paved trail inventory
Allows local jurisdictions to prohibit use
Study Design

Focus on visitor engagement

Measuring attitudes, perceptions and acceptance
Study Design

Pre- and post-demo survey
Does exposure change perception?
Study Design

Visitor intercept survey
Attitudes, acceptance, and detection
Study design

Ghost riders
Study Results

Pre- and Post-test ride
Did test ride change perception? (n=81)

- Yes: 65%
- No: 32%
- Not Sure: 3%
Approval before and after demo (n=81)

Approve use by trail type BEFORE

- NOT SURE: 41%
- ALL: 36%
- [CATEGORY NAME]: [PERCENTAGE]
  - NO: 6%
  - MTN: 2%

Approve use by trail type AFTER

- NOT SURE: 23%
- ALL: 44%
- [CATEGORY NAME]: [PERCENTAGE]
  - NO: 8%
  - MTN: 5%
  - PAVED: 20%
Study Results

Visitor intercept survey
Ability to detect?

- (n=267)
  - YES [PERCENTAGE]
  - NOT SURE [PERCENTAGE]
  - NO [PERCENTAGE]

- (n=339)
  - YES [PERCENTAGE]
  - NOT SURE [PERCENTAGE]
  - NO [PERCENTAGE]
Acceptance by trail type

- **Yes, all types**: 42% (n=267)
  - Paved only: 30%
  - Natural only: 37%
  - Not sure: 12%

- **Yes, all types**: 37% (n=339)
  - Paved only: 32%
  - Natural only: 14%
  - Not sure: 15%
August 9 JCOS decision

Class I on paved trails
Response Themes
Speed & safety
Pre-existing conditions
General bike hate
Accessibility
Apathy
Slippery slope
Ego
Love at first ride
Response Themes: speed and safety

NO e-bikes they are not SAFE.
Too much speed without speed knowledge.
Too fast for unskilled riders.
Too much silent speed.
Response Themes: pre-existing conditions

Would put much more traffic on already crowded trails.
It’s the rider more than the bike.
It’s already too crowded.
If you are an *sshole on a regular bike, then you will be an *sshole on an e-bike.
Young males are the problem.
Response themes: general bike hate

Discourteous riders are a problem, e-bike or not.
We encountered many bikes who failed to yield. A test on bike courtesy should be required for all riders.
We never heard one biker announce themselves the entire hike.
I have concerns about bikes in general, not just e-bikes.
I prefer parks without bikes.
I don’t like being around bikes. It’s annoying.
I don’t want to share the trail with any bikes.
Response themes: accessibility

Too much power to novice riders.
Opens up opportunities for more people.
I’m an avid cyclist with a torn ACL. E-bikes give great opportunities for those that aren’t able to see beautiful parks.
Cyclists already struggle to maintain our reputation. One accident could cause a ban or significant restriction.
These could end up restricting access for other riders.
People without skill set riding in conditions they can’t handle.
Response themes: apathy

If rider is responsible, not worried.
No more risk than a regular bike.
No reason to restrict.
They are still bikes, you know?
As long as riders aren’t knuckleheads, we will all be fine 😊.
A bike is a bike.
If a bike is allowed, e-bike should be ok.
I am not concerned.
Response themes: slippery slope

I’d worry about powered vehicles of any type on natural surface trails. Please don’t allow e-bikes. Keep the trails motor free. Not appropriate. No motors. What’s the point? Electric does not belong on trail. A motor is a motor.
Response themes: ego

Seems like cheating.
Why would any able-bodied rider choose to ride one of these? [e-bikes] should not be a gateway [to trails] for beginners. I want them to be clearly identified, so I can feel good about myself when one passes me.
Not good. This makes MTB accessible to the general public. It is a privilege to be on the trail on your own power. It’s straight up cheating.
Response Themes: love at first ride

Love it. Perfect machine.
I want one.
Amazing bikes. This would be a fantastic addition to Jeffco.
Great fun.
They are so quiet, unobtrusive and fun!
Discussion
What’s next?