

What is an eBike?

Electric Bike (noun)

- *Variants:* eBike, electric bicycle, electric assisted bicycle
- HB 8 Definition:
 - (A) is designed to travel with not more than three wheels in contact with the ground
 - o (B) has fully operative pedals for human propulsion
 - (C) has a seat or saddle for use of the rider
 - (D) is equipped with an electric motor that has a power output of not more than 750 watts and
 - (E) is a class 1, class 2, or class 3 electric-assisted bicycle.

eBike Class System Explained

Easy as 1, 2, 3:

- 1: Pedal Assist up to 20 MPH
- 2: Pedal and/or throttle assist up to 20 MPH
- 3: Pedal Assist up to 28 MPH
- eBike Misnomers
 - "Electric motorcycles" like Surron, Talaria, etc
 - These are sometimes confused as "eBikes" but they are electric motorcycles and are wholly different than eBikes

Watts Explained:

• 250-750 (No More Than 750)

Land Use Areas





- Muni of Anchorage Allowed wherever bikes are allowed.
- eBike defined similar as US CPSA. <u>See AO 2016-67</u>
- June 2016 Bicycle means a low-speed electric bicycle and any device propelled solely by human power upon which any person may ride, having at least two tandem wheels either of which is more than 14 inches in diameter

Low-speed electric bicycle means any bicycle or tricycle with fully operable pedals, an electric motor of no more [LESS] than 750 watts (1 h.p.), and a maximum speed on a paved level surface, when powered solely by such a motor and when carrying one person weighing 170 pounds, of no more [LESS] than 20 miles per hour. For purposes of this title, low-speed electric bicycles are not motor vehicles or motordriven cycles.

High-speed electric bicycle means any bicycle or tricycle with fully operable pedals, an electric motor of more than 750 watts (1 h.p.), and a maximum speed on a paved level surface. when powered solely by such a motor and when carrying one person weighing 170 pounds, of more than 20 miles per hour. For purposes of this title, high-speed electric bicycles are motor-driven cycles.

Mat-Su Borough - I don't believe they have any rules or regs in regards to eBikes. I believe the Borough Trails committee had a discussion regarding eBikes but nothing set.

Land Use Areas





- NPS Allows any eBike as classified by 3 Class system, (not more than 750 watts, operable
 pedals, maximum throttle speed of 20 mph for 170 lb person on level flat ground) with the
 exception that you cannot use a throttle alone to propel the bike, if you have a class 2
 throttle powered bike you must move the pedals while using the throttle. Anywhere bikes
 are allowed eBikes are allowed
 - a. Superintendents may manage particular classes of e-bikes differently.
 - b. December 2020

• State of Alaska / State Parks - Allowed where bicycles are allowed is what I have been told by state park rangers but I believe lacking any state regulation or definition of electric bike they don't have a clear answer to allow or not allow.

Land Use Areas





- **USFS** Allowed if the land is classified as OK'd for specialized motorized use, eBikes would be the only "motorized vehicle" allowed to use these trails. This is subject to local land managers designating such trails. My understanding is that there have been no reclassifications done to allow eBikes on any of the USFS trails in Alaska.
- March 2022

- BLM E-bikes are allowed on trails limited to bicycles and non-motorized travel ONLY IF a BLM Manager has issued a written decision authorizing e-bike use in accordance with applicable laws and regulations. My understanding is that the decision to authorize has not been issued for Anchorage Campbell Tract.
- December 2020

Who Rides and Buys eBikes?















Social Impact

More Fun, More Riding, Creates a Positive Feedback Loop



- Recreational riding
- Cargo and family bikes
- Youth and adults commuting to school and work
- Hunting, fishing, berry picking, etc



Social Impact

Accessibility:

- Neurological limitations (stroke, neuromuscular disease, etc)
- Reduced mobility (knee, hip)
- Reduced cardiovascular fitness (heart failure, decreased physical fitness)
- Respiratory compromise (COPD, asthma)
- Electric Recumbent
- aMTB Trail Building



Social Impact

Intergenerational Rides:

Enjoying the trails with people of different physical ability, bringing community

and family together



Why State Law Matters

- Guiding language for land management areas to reference
- State law should align with federal law and use language consistent with eBike class system
- Lack of/or ambiguous definitions make it confusing for law enforcement officers
- Anchorage is a good case study for eBikes as bicycles working well, increasing ridership and therefore increasing overall support for bike trails

Business Statistics

- Opened in 2014
- 1,500+ Electric Bike Customers

Demographic:

- 50 and over male and female, slightly more male
- Many customers ride over 1,000 miles / year
- Highest Mileage Customer had 30k+ miles on his eBike over 6 years



Moving Forward

- Adoption of Class 1 allowed on all trails bikes are allowed nationwide
- Adoption of 3-class system/CPSA definition state and nationwide
- More ridership equals better trails for the community.
- If you haven't tried an eBike take a test ride

- NPS- https://www.nps.gov/subjects/biking/e-bikes.htm
- BLM- https://www.blm.gov/programs/recreation/e-bikes
- MOA- https://akebike.com/wp-content/uploads/2016/12/AO-2016-67-As-Amended-OCR.pdf
- CPSA- https://www.congress.gov/107/plaws/publ319/PLAW-107publ319.pdf
- AK HB8- https://www.akleg.gov/PDF/33/Bills/HB0008Z.PDF