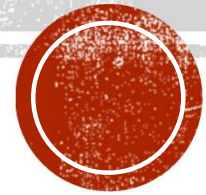


E-BIKES & EMERGING TECHNOLOGY ON NATURAL SURFACE TRAILS



ARIZONA PARKS AND RECREATION CONFERENCE
NOVEMBER 2, 2021

TODAY WE WILL COVER:

- Some *basic* Ebike information
- City of Phoenix Evaluation – Process
- What else is “OUT THERE” & how should we manage them (can we)?



OVERVIEW: E-BIKE DEFINITION

- E-bikes are essentially a conventional bicycle, with a rechargeable electric battery and motor included. In Arizona, an E-bike is defined as a “motorized electric bicycle”
- Arizona Revised Statute (ARS 28-819) states that “an operator of an electric bicycle is granted all the rights and privileges and is subject to all of the duties of a person riding a bicycle,” which would include riding on bicycle and multi-use paths.
- While the State of Arizona has officially defined the e-bike classifications and operational expectations, local agencies have the power to enact regulations appropriate to their trail systems and open space areas.



OVERVIEW: E-BIKE DEFINITION - CONTINUED



CLASS 1

A "Class 1 electric bicycle," or "low-speed pedal-assisted electric bicycle," is 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.



CLASS 2

A "Class 2 electric bicycle," or "low-speed throttle-assisted electric bicycle," is a bicycle equipped with a motor that may be used exclusively to propel the bicycle, and that is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour.



CLASS 3

A "Class 3 electric bicycle," or "speed pedal-assisted electric bicycle," is a bicycle equipped with a motor that provides assistance only when the rider is pedaling, ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour, and is equipped with a speedometer.



LOCAL AREA STANCES

Phoenix: Currently follows state guidance, allowing Class 1 and 2 E-bikes natural surface trails (eMTB). Other agencies that allow eMTB's:

- Maricopa County Parks
- Arizona State Parks
- Flagstaff
- Federal property that allows motorized use

Areas that specifically do NOT allow eMTB:

- Scottsdale – McDowell Sonoran Preserve
- The Arizona Trail
- Federal Wilderness Areas
- Pima County



Some agencies/trail managers haven't taken a specific stance at all...



FEDERAL NON-MOTORIZED NATIONAL SCENIC TRAILS...

The Arizona Trail was designated as a federal non-motorized National Scenic Trail, E-Bikes are not allowed on it even if it is passing through lands that would otherwise allow E-Bikes



WHAT IS YOUR AGENCY STANCE?

- DO THEY HAVE ONE?
- DO YOU KNOW WHAT IT IS?
- CAN YOU/YOUR STAFF RECOGNIZE AN EBIKE ON YOUR TRAILS?
- CAN YOU TELL THE DIFFERENCE BETWEEN THE CLASSES?



IS THIS AN EBIKE?

The easy answer is a Motorino XMr (and the similar ZebraNow * pictured here) fails to be an E-bike per Arizona law because of the wheelsize.

They otherwise would clearly be a fully-compliant class 1 (if pedal assist/ throttle-less) or a class 2, where the definitions plainly states it's OK for a motor be used exclusively; in other words, an E-bike to be and E-bike in Arizona, MUST have pedals, thereby being able to propelled by human power, but not required to do so.

To state that again and in a slightly different way: it's not okay to remove the pedals from a Class 2 even if you never want, or never need to pedal; and a Class 1 would not function without the pedals, because by definition that's the only way a Class 1 "goes".



EMTB SUBCOMMITTEE – RECOMMENDATION

The focus of the meeting discussion was how to review and evaluate eMTB activity in our preserve areas in order to provide an informed policy recommendation into the future. Future recommendations should have a strong focus on safety and education.

The PSPMPPC e-bike/eMTB subcommittee recommends a 12-month evaluation period/study of e-bike usage on the natural surface trails in city mountain park and preserve areas. This evaluation period/study will provide the qualitative and quantitative data needed to make an informed recommendation/decision regarding the management of e-bikes/eMTB in the City of Phoenix into the future.

***Note – Trail Management Plans should be adaptive – and reviewed in the future!**



NEXT STEPS...

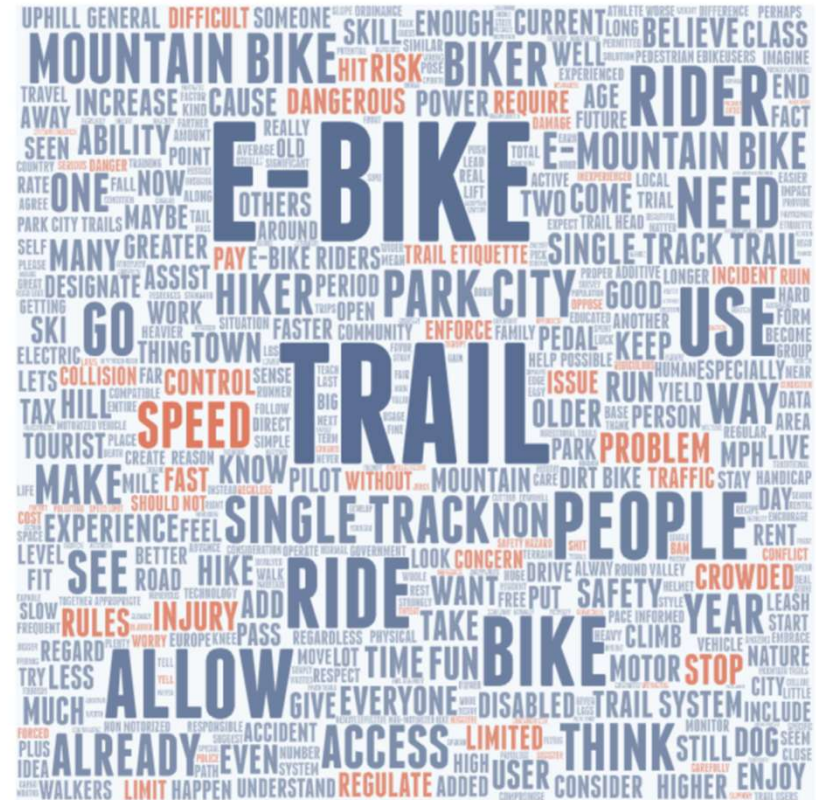
What we need/want to know:

- What is the current usage of e-bikes on our trails? (Baseline Data)
- What types of e-bikes are being used on our trails?
- How often are they riding our trails?
- What speeds are they traveling on our trails?
- What behaviors do they exhibit on our trails?
- What is the natural resource impact on our trails compared to regular mountain bikes?
- What is the potential for increased use on our trails given this newer method of travel?
- Are e-bikes more prone to accidents? Any rescue data/statistics that compare?



HOW DO WE GET THIS DONE?

- Survey Instrument Creation
 - to answer the basic questions?
 - (modify an existing instrument)
- Park Steward Observations?
- Park Ranger Observations?
- Social Media Comments/Input?



NOW...THE OTHER CRAZY STUFF...



All of these have electric motors...are they legal – or not?



ONE WHEELS...

- All electric...





MORE “ONE WHEEL” DEVICES...

- Electric Unicycles – with variations!



<https://www.insideedition.com/media/videos/electric-scooters-and-skateboards-are-causing-deadly-accidents-70823>



AND MORE...

- Still one wheel...





HOW ABOUT TWO — OR MORE WHEELS?

- Scooters and Skateboards...



A LITTLE MORE BEEFY BOARD...





NOT ALL-TERRAIN ENOUGH?



HOW ABOUT SCOOTERS...



WHAT DO YOU CALL THIS???



CLOSING THOUGHTS...

- More questions than answers!
- What are you/we – going to do when these “toys” show up in our areas...

