**Alan Woodmansey asks:** It seems like the federal land management agencies should have done this public input research prior to the DOI Order. Have the public partners been good partners since then? Or to put another way, how can the federal agencies be better partners helping on this issue?

**Matt:** You are correct that the Dept. of Interior should have done public outreach and used the National Environmental Policy Act to gather comment and assess impacts and conflicts before issuing the order. That Order has been challenged in court. Since that time, both the Dept of Interior and Dept of Agriculture have initiated public comment periods regarding e–bikes on trails. Currently, it looks like opening trails to e-bike use will be on a case-by-case basis, and hopefully with lots of input from locals.

**Bert Stratemann asks:** How do you manage Enforcement? On our trail system mountain bikes are equal in conflict with hikers. We also have single wheel electrical vehicles.

**Matt:** On public lands in Arizona, there is no enforcement unless there is a serious incident and 911 is engaged. So enforcement will be likely come down to self-regulation and people doing what’s right based on regulations and information at trailheads.

**Beth Keune asks:** Has the AZT identified which passages are currently being used by E-bikes and is there a way to measure the impact on the trail conditions through steward monitoring? **Matt:** Realistically, e-bikes are becoming more common on the Arizona Trail – although they’re technically illegal. I can’t think of a single time I was on the trails near Flagstaff (hiking, running and mountain biking) this summer that I didn’t see one. If not, have you considered allowing on a passage with land manager permission to understand the impacts to trail conditions? **Matt:** That decision-making is beyond our authority as a nonprofit organization. One of the big challenges is consistent management across jurisdictions, which is what all National Scenic Trails strive for. So the challenge of one segment being open to e-bikes is that they’ll inadvertently ride across invisible boundaries where one land manager’s line ends and another begins.

**Brad Pennington asks:** Was there any education on what an e-bike actually is. Most people seem to envision a small electric motorcycle instead of a bike that is almost indistinguishable from an analog?

**Matt:** Agreed. We used the research to assess how people felt about e-bikes but felt we would compromise the outcomes if we interjected education into it. Considering @ 10% of respondents cited “noise” as a concern about e-bikes, they obviously think about the two-stroke engines that have been retrofitted to make bicycles more like motorcycles.

I will be conducting a similar study in California in the Bay Area regarding e-bike access. Is there any questions beyond what you asked that you would if you did this again?

**Jake:** That’s great to hear! The more data and research on this topic the better. You are more than welcome to borrow any elements of our research design. We may all learn more by being able to compare results. Yes, in hindsight there a number of changes I would have made to the questionnaire. The most notable is that when asking people about their concerns about e-bikes I focused on what I would consider to be more tangible issues like speed and trail damage, but our qualitative data suggested that many people are concerned about more existential issues like slippery slopes, trail character, and the simple fact that e-bikes are motorized. Questions that further explore these topics could provide valuable insight.

Another more nuanced change I would make would be the language of questions 13 and 14 in the questionnaire. In the original design we were hoping to understand if people opinions on certain issues were driven by personal experiences with e-bikes or simply their perception of e-bikes. Somewhere along the way these questions became disjointed and we were unable to provide definitive linkages between the two. Some minor changes of language here could provide additional insight. Feel free to reach out to us if you’d like to further discuss survey design.

**Chad McCoy asks:** The production and disposal of the e-bike batteries go against what being in NATURE is all about. What would the expected damage to the trail be for a bike going 20+ mph? Great question! **Matt:** Since the Arizona Trail is built and maintained with mountain bikes in mind (outside designated wilderness, of course), the physical damage would be insignificant. And minor repairs to the trail is what our volunteer corps is all about. But the social conflicts are far more concerning. We want to do everything we can to unite people through the trail, not divide them. And even though e-bikes may be able to go 20 mph, you can’t go that fast safely on rugged singletrack (average speed of a mountain bike is 6.5 mph). The terrain limits the speed. Several photos really didn't appear to be built for bikes. A lot of people who mountain bike the AZT spend a lot of time walking :-)

**Chantelle Killbourn asks:** Is there a requirement to register Class 2 and Class 3 e-bikes?

**Matt:** No, not yet. That may be coming in the future, but is unlikely since there’s momentum to remove e-bikes from the “motorized” designation. Only motorized need to be registered.

**Charles Provine asks:** Was the thought of making forest roads the e-Bike routes? I have hiked along forest roads and they are bigger than AZ trailways....and offer safer passage for bikers. It seems the alternatives were not offered and thus the polarization was evidenced in the surveys. I could imagine we could connect and expand a trail system for Bikes that would be expansive and varied.

**Matt:** Currently, all roads open to motorized uses are open to e-bikes. The Arizona Trail Association has been advocating for e-bikes to use these roads for many years. It was the Secretarial Order from 2019 that directed land managers to treat e-bikes the same as bicycles, and to allow them wherever bicycles are allowed, that kicked our advocacy up a notch. There are hundreds of thousands of miles of motorized trails and roads in America – and those are great for e-bikes. But we all know how pleasant the trail experience is, and e–bike riders want that, too. A lot of organizations are advocating for keeping e-bikes off non-motorized trails, but expanding opportunities on motorized trails and roads. We’ll see what happens.

**Cheryl Lea asks:** Concern with e-bikes would be safety and users going at higher speeds. Thus, would there be consideration for a pilot for ebikes in a certain segment, and/or certain measures to make sure that collisions would be minimized?

**Matt:** Since the Arizona Trail is designated by Congress as non-motorized, opening any segment would violate the National Trails System Act and would likely expose the land manager to litigation. But outside a National Scenic Trail, I think it’s a great idea for pilot projects to begin to understand the impacts and implications.

Do ebikes contribute to higher levels of erosion on trails? Is there any difference w/ erosion from mountain bikes and e-bikes?

ATA answered: This was a simple study which is looking at the different impact between regular mountain bike class one and a dirt bike and they found, looking at a very small stretch of the trail in one set of conditions, that this was more impactful than regular mountain bike but not very much so in not nearly as impactful as a dirt bike but to his earlier, it is hard to distinguish between different classes of bikes and obviously class one is publicist so there are a lot of factors which could go into it. Having more impact than a mountain bike including the additional weight of the battery, you know, the additional potential of being and then the throttle sort of that additional traction sort of deal. And could have more impact but there is definitely a need for more research but it is not real clear at this time.

And looking at these impacts because they are important in terms of environmental and physical impacts on the trails the things we look at our type in frequency. Frequency is far more important than when we look at what are the impacts of the e-bikes on trail treads, that is probably 2% of people whom are actually on the trail and so, we do not think that there will be significant impacts whatsoever into presenting the user group but it comes in two frequency so is a daily or weekly or a few times a day that is where we begin to see the physical impacts to those trails.

But like Jake said, I think more research would help to answer that question because it is an ongoing and a growing concern among land managers especially when you look at things like dress and maintenance in public lands. Aside from a few road crossings the only paid segments of the scenic trail is within Grand Canyon National Park is where it is the Greenway Trail which is 10-foot wide paved trail segment which connects a nearby community with the south side of the Grand Canyon that is one of those segments were if the park were to allow E bikes on a segment of the national scenic trail that could be a place where they are indeed appropriate, that trail was specifically designed for that use and paved against our wishes but if that is that situation we look forward to it realigning the trail through Grand Canyon National Park with the support of leadership to remove it from that paved portion but currently, the intended purpose for that trail is an experience for hikers mountain bikers and equestrian so natural surfaces and single-track.

Are there any paved segments along the AZ Trail?

**Christopher Douwes asks:** What e-bike-related research do you think is most necessary?

ATA answered: Yes honestly there has not been enough which is really our motivation instead of sending out an e-mail saying what do you think which is how this started, to undertake a legitimate research effort which has taken a year to implement and analyze and produce, I think more research is absolutely needed and I saw huge gaps in research which was the motivation for us doing this and so, perhaps I will say that this particular research project only applied to one trail it is 100 miles long but it was only apply to one trail which is designated as non-motorized. But, the lens through which we want to look because bicycling is not just in existing and tolerated but encouraged in mountain biking is a very important part of the Arizona trail experience. So I feel like this research project is probably the most comprehensive in terms of looking at these E bikes on trails.

We could do a very similar study to this where we are actually at home on the trails were we went to a different trail like he said were allowed. I think that would tell us a lot more about the specific topic which would validate providing some additional insight as a trail maintainer, I have spent about ten years doing trail maintenance for various organizations and for me, I would like to see more research done on the trail impacts of the E bikes and they did a very simple one offer version of which I think could lay the groundwork which would be more involved by gaining an understanding, you know of how you design the trail is, plays a really big role on the impacts that the different users have and this is joined for hike and bike I think they're taking in a lot of different factors and I would like to know more specifically if there are additional factors which need to be taken into consideration.

Are motorized wheelchairs allowed on any segment of the AT?

**Matt:** Only on segments of trail that are open to other motorized uses, such as Forest Roads and the paved Tusayan Greenway Path within Grand Canyon National Park. The singletrack is rugged and narrow (typically, 24 inches) which is not wide enough to accommodate most wheelchairs.

**Christine Moreland asks:** Certain e-bikes have been modified to help people with different physical abilities access parks when they previously couldn't. When parks restrict e-bikes to preserve the natural environment, how might they allow e-bikes for accessibility only?

**Matt:** Great perspective! Since many of the respondents of our research survey supported e-bikes on non-motorized trails “but only if they benefited people with disabilities” this might assist land managers in making exceptions with some measure of confidence. We feel that parks and trails and natural spaces should be open and accessible for all.

Did any of the research explore the environmental impact of e-bikes on the trail? Was that a concern for respondents?

ATA answered: Obviously, for the openly open ended responses people could choose to mention what they felt they wanted to mention and impacts did come up like the data showed earlier, this was not one of the top concerns. But definitely mentioned, I want to say it was roughly 20% of respondents said it was a concern that they had. And then we have this as an option where would you be concerned about them being allowed on the Arizona trail. Like I said we chose not to include that because that was the top concern and based on the qualitative data, we could see the categories which we offered people were exactly aligned with what people wanted to say. So I would say that it is a concern and it is something that we give people the ability to express but that does not seem to be one of the top concerns which came out of the study. And that is what we did, there is a lot more than other things.

**Christy Claes asks:** I’m also concerned/interested in lawsuits to reverse rulings and what is suggested to learn from those? **Matt:** Immediately after the Secretarial Order was issued, it was challenged in court by Public Employees for Environmental Responsibility (PEER). Additionally, the Tahoe National Forest opened their non-motorized trails to e-bikes last year and were promptly sued. They have reversed their decision and non-moto trails are now closed to e-bikes. It’s an ongoing process. A great contact for information on litigation and e-bikes is Randy Rasmussen at the Back Country Horsemen of America (quietrecreation@gmail.com)

**Colin Leslie asks:** Do any sections of the Arizona Trail have baseline data for daily conflict rates among user groups, such that a follow-up study could be conducted to see if conflict rates change as e-bike use increases? **Matt:** Nope. The Arizona Trail Association documents complaints and incidents surrounding conflict on the trail, and also gathers data from land managers, but nothing of substance has ever been studied. I love the idea of seeing if conflict rates change as e–bike use increases. Thank you!

**Curt Kruger asks:** How about a Trail Class limited to 10 mph assist?

**Matt:** Interesting...I’ve often wondered how the various classes of e-bike speeds came to be. The unfortunate reality is that the 20 mph speed governor is easily modified, so anyone wanting to go faster can do that. There are e-bikes available outside the USA that go 45 mph. And with emerging technology, I can assume faster speeds and better batteries are on the horizon.

**Dan Gronseth asks:** We currently allow e-bikes (Class 1 & 2 only) in City parks and preserves. We have received some complaints, but not all e-bike-related. I am interested in how other agencies are doing with e-bikes - incidents, complaints, etc.?

**Matt:** Good on ya for allowing them. I think your experiences will help shape policy into the future. I’d say document their use, complaints, conflicts, etc. over time. It wasn’t that long ago that hikers were very opposed to mountain bikes on trails; now they’re part of the recreational landscape with minimal conflicts. I encourage education that encourages the anti-e-bike community to view them as a fellow outdoor lover (“one of us”) and not “them.”

**Danny McCulough asks**: There is a big difference between Ebike types. Our trail system in suburban Minneapolis allows ebikes that cease to engage the motor at 20mph (Class 1). So far we have had very few issues- and there are more and more of them on our system each year.

**Matt:** I believe it! Again, our research was intentional in studying the “perceptions of conflict” not actual conflicts.

**Debbie Jensen asks:** Which way are you leaning in terms of decision on e-bike use and when will it be made?

**Matt:** As a nonprofit organization, we don’t have that kind of authority. While we built, and now maintain, promote and protect the Arizona Trail, its management decisions are made by federal and state agencies.

**Dillion Hoyt asks:** Do you plan to repeat the study with the same participants to see if there is a shift in opinion from one year to the next? A year ago, I did not like e-bikes, and now I love them.

**Matt:** It’s definitely a possibility! We are curious how federal policies are going to adapt to e-bikes, where they’ll be allowed, etc. Based on that information, we may further the research or encourage others to do something similar.

**Elizabeth Norton asks:** What did ATA decide re: ebike use on the trail?

**Matt:** Our comment letters to federal agencies during their respective public comment periods was to adhere to the National Trails System Act that clearly states “use of motor vehicles is prohibited.” If the definition of an e-bike is changed from motorized to something else then we may reconsider.

**Gery Kaufhold asks:** Will there be E-Bikes capable of sustaining a charge across multiple segments of the AZ Trail?? How much heavier than a normal mountain bike is an E-Bike - and how will rescuers be impacted by multiple E-Bikes getting stuck mid-section???

**Matt:** Yes. With emerging technology and batteries that can be swapped out mid-ride, the distances that e-bikes can travel increases every month. Most e-bikes weigh 20 to 30 pounds more than a standard mountain bike. Since they can still be pedaled like normal bikes after the battery is drained, hopefully folks can still ride or push them to the nearest trailhead without emergency assistance :-)

**Jan Hancock asks:** What is the sound difference between an e-bike and standard mountain bike? (Equine perception of sound)

**Matt:** No difference. The electric motor is virtually silent and cannot be heard over the sound of wheels on dirt.

**Jaqueline Kluft asks:** We work at a state park and enforcement of any rule is difficult. How would you enforce rules with ebikes?

**Matt:** This has been a major topic of discussion at the national level. Consensus is there is no way to enforce e-bike restrictions by class or speed or anything else. But land managers can set policy and regulations and hope the public obeys.

**Jim Lemaire asks Jake:** E-bike technology is advancing rapidly with much faster speeds & more torque becoming available at lower costs. Given the difficulty of distinguishing a Class 1 bike from a Class 3 and beyond bike, what impact for law enforcement do you see if Class 1 ebikes are allowed?

ATA answered: That is one of the challenges right now, so there is a better chance it is falling within class No. 2 but at the same time, if this is after throttle, it is difficult to know if class No. 2 is falling outside the realm of the E bikes classification system. Other than that, it is challenging for some of these folks whom have encouraged this classification system are also encouraging a system of labeling which would be consistent throughout the industry so that last one bike would be having a sticker customer to would have class to sticker and so on. And, that would be the only way that you could tell the difference other than personally writing it and seeing where the governor kicks in. But that is how I understand it do you know any more than that?

Obviously, at first glance you cannot tell. It looks like a bicycle. So really in terms of encouraging management of the E bikes on trails motorized or not it is important to understand that this will be on the honor system that if you are a trail user in the bicycle passes you, you probably cannot tell what it is. But hopefully the decisions which are made about this new use is going to be encouraging the honor system and it is similar to when trails are signed for a specific use or motorized or non-motorized it is up to the individual once they get there to determine if they follow the rules or if they do their own thing. At first glance and in terms of enforcement we see at this time it is actually impossible to enforce and distinguish the difference between traditional mountain bikes.

**Joy Himmelfarb asks:** What are your thoughts about enforcement of either 1) limiting bike class or 2) keeping ebikes off the trail?

**Matt:** Enforcement is impossible. Consensus at the national level is there is no way to enforce e-bike restrictions by class or speed or anything else. But land managers can set policy and regulations and hope the public obeys.

**Judy Willott asks:** Since your research was completed, do you see a change in attitudes, especially with increased availability and use of e-bikes? We find increased trail use by everyone with COVID.

ATA answered: We took this survey and put it out into the world around mid-April through mid-May so that is that timestamp which we are looking at for this quantitative data at least and I do not have a real good indication of the differing opinions as things have changed. But I do you think the time is a very important variable in I think that if we ran this same survey in five years, it is very feasible that opinions will shift one way or another so that is a great question. I do not know if you have anything to add to that? Yes I feel like you are absolutely right. With COVID we are seeing more of trail that you speak Memorial they use numbers on a random Tuesday in April. Will let more people are getting out on the trail and I also think that e-Bikes especially in the mountain bike is increasing in popularity with one group of professionals told me that he thinks that by 20308 bike sales will surpass traditional mountain bike sales. So if we were to take in this undertake this research again in a few years, we would likely see greater tolerance for E bikes a lot more experience with the e-Bikes and that is shaping the nature of how land managers are managing this use.

**Julianne Mills asks:** I am curious about implications for e-bike use, or against e-bike use, and how that affects people with disabilities specifically?

**Matt:** Since many of the respondents of our research survey supported e-bikes on non-motorized trails “but only if they benefited people with disabilities” this might assist land managers in making exceptions with some measure of confidence. We feel that parks and trails and natural spaces should be open and accessible for all.

Why is the Arizona National Scenic trail one of the few scenic trails that encourages mountain bike users?

**Matt:** Probably because of the “age” of the trail. The Arizona Trail was developed in concept as mountain biking was emerging, and it became increasingly popular as the Arizona Trail gained in momentum from concept to construction. The trail’s founders saw benefit in a very inclusive approach.

**Justin Kooyman asks:** The Secretarial Order doesn't override the National Trails System Act. How could allowing a motorized vehicle on a NST be justified?

**Matt:** Because the National Trails System Act has not yet been challenged in court when pitted against the Secretarial Order, we don’t know the outcome. We can assume there is no legal way for an electric-motorized bicycle to be allowed on a Congressionally designated non-motorized trail, but that will likely lead to the reclassification of e-bikes as something other than motorized. But they have a motor, so that will be challenged in court, too. I can’t wait to see how this all plays out.

**Karen Creech asks:** What is a typical speed for a recreational mtn biker?

**Matt:** On the Arizona Trail (and rugged singletrack trail in general) it’s 6.5 miles per hour

**Katie Stevens asks:** Isn't it also the mileage travelled? If ebikes go further in a day, there will be more damage?

**Matt:** Possibly, but most trails that are built to withstand multiple uses (including horses – extremely heavy and metal shoes) won’t see very limited physical impacts from e-bikes. E-bikes' pneumatic tires distribute a lot of the weight, and they are only marginally heavier than a standard mountain bike.

**Kirk Astroth asks:** Can individuals modify the governors on these e-bikes so the speed limitations can be exceed? How much is tampering an issue?

**Matt:** Oh heck yes! Google “how do I make my e-bike go faster” and you’ll find lots of helpful hints for disabling the governor. A growing concern is emerging technology and when e-bikes will be able to go much faster and farther. All fearmongering aside, battery technology improves monthly.

**Laurie Giannotti asks:** For trails allowing ebikes are they posting a speed limit and what is it?

**Matt:** Great question. Most trails do not have speed limits (unless they’re paved urban parks) since the terrain really limits the speed. I can’t think of many places along the entire 800-mile Arizona Trail where you could ride a bike at 20 mph without risking a serious crash.

Why do folks prefer class 1 vs 2?

**Matt:** Since Class 1 is just like a normal mountain bike, with a little extra help from the electric motor, it’s the bridge from bicycle to e-bike. Since e–bikes are primarily marketed to bicyclists, it’s the easiest and least expensive way to try out the technology.

**Lisa Docter asks:** In my research I am finding numerous videos of bike riders exclaiming that the speed limiter is dumb and showing users how to disable them. How will it be policed if electric motorized bike users disable their speed limiter?

**Matt:** Enforcement is impossible, and most trails do not have speed limits. But the terrain will be the natural limited. I can’t think of many places along the entire 800-mile Arizona Trail where you could ride a bike at 20 mph without risking a serious crash.

**Lori Rome asks:** What are your thoughts about the majority of people NOT wanting ebikes on trails and yet land managers (DOI leadership) are pushing it? Seems like a disconnect. Land managers are not listening to the voice of the people?

**Matt:** You are absolutely correct, and that’s why I hope our research has some impact on land managers and federal agencies.

**Lawrence Bloomfield asks:** How/who would enforce e-bike use?

**Matt:** Enforcement is impossible. But sound policy and clearly posted information (trailheads, online, etc.) hopefully tell people what allowed and what’s not, and we trust that most people follow the rules.

**Marti Miller asks:** We've are having questions about e-bike and e-motorcycle. Is it safe to differentiate by Es’ that exceed 28mph?

**Matt:** The biggest differences between e-bikes and e-motorcycles are size and speed. It’s not that hard to tamper with the speed governor of an e-bike to allow it to go much faster.

**Jake:** Just an anecdote, but a coworker of mine purchased an e-dirt bike mostly for commuting to and from work. It arrived labeled as a Class 2 e-bike governed at 20mph, but it came with instructions on how to easily remove the governor. Without the governor he can reach speeds around 40mph.

**Martin Overholt asks:** What conflicts are you currently seeing between equine users and pedal bikes?

**Matt:** They are very rare. This has a lot to do with our organization’s advocacy, education/outreach, and just the nature of people in Arizona. It’s also because the Arizona Trail doesn’t receive a lot of use outside major towns and popular trailheads. But since mountain bikes have been part of the Arizona Trail as long as equines have, they’re on equal ground. We also work hard to bring mountain biking and equestrian groups together to help them build friendships to that when they meet on the trail they see “them” as “us.”

**Martin Pardoe asks:** Curious on results and opinions in this webinar. We have a draft e-bike policy that we're looking to formalize in 2021.

**Mike Kahn asks Jake:** Any new scientific research (not industry funded) on environmental impacts of e-bikes on unpaved trails?

Not yet, but we are hoping that research is emerging. We definitely need more data.

**Mike Vandeman asks:** How much farther can a mountain biker travel with an e-bike, than without it?

That really depends on the rider, how long the battery lasts, etc. It’s more about torque and limiting energy output than distance. But with emerging technology and the possibility of swapping out batteries mid-ride, e-bikes may be an option for long-distance trail users as well as the casual rider out for an after-work spin.

How many square miles of habitat was destroyed to build the Arizona trail (including off-trail impacts on the wildlife)?

**Matt:** Trails limit the zone of human impact on the landscape, so a strong argument can be made that trails don’t destroy habitat. Instead, the 2-foot-wide path keeps humans within a very narrow corridor, and all trails are designed to limit impacts to natural and cultural resources. Current research on recreational trail impacts to wildlife have varying results. Some studies show trails are important wildlife corridors at night when recreation is limited. Others show trails can displace wildlife. It’s VERY site-specific. Big cat biologists believe that trails improve wildlife habitat, and since jaguars, ocelots, mountain lions and bobcats have been documented on the Arizona Trail, learning more about this is important.

In an effort to better understand the recreational trail and wildlife nexus (positive, negative, no effect, etc.) we have undertaken a comprehensive wildife and recreation monitoring project using motion-triggered wildlife cameras. We are in Year 2 of a 5 Year analysis, so stay tuned for the results.

How much farther can one ride on an e-bike than on a non-motorized mountain bike? (That determines the impact on the wildlife.)

**Matt:** That really depends on the rider, how long the battery lasts, etc. It’s more about torque and limiting energy output than distance. But with emerging technology and the possibility of swapping out batteries mid-ride, e-bikes may be an option for long-distance trail users as well as the casual rider out for an after-work spin.

Why was there no research on the impacts of e-bikes on the wildlife?

That’s a different study altogether.

**Peter Hoh asks:** When you say "allowed on non-motorized trails” those are trails ONLY that allow regular bikes. Foot trails only are excluded?

**Matt:** Specific to the Secretarial Order from 2019, yes. But since that order was issued, the Depts of Interior and Agriculture have initiated public comment periods as they consider e-bikes on all trails outside designated wilderness. This is a great big TBD...

**Roberta Winebar asks:** Allowing e-bikes causes a number of issues especially if the trail they want to use has nonnotarized recreational trail program funding on it. It is going to be very hard to enforce.

**Matt:** Agreed. It will be intereesting to see if e-biks are defined as something other than “motorized” and how that may hold up in court.

**Ryan Dusil asks:** A lot of concern in our region about Class III e-bikes. Class I-II are accepted, but there is a concern that we can't distinguish Class III e-bikes from the rest. Any guidance to help ease these concerns?

**Matt:** I wish I could offer advice here, but distinguishing between the various classes is nearly impossible. Developing sound regulations and hoping for the best seems to be the only course of action. Labeling bikes with their classes has been talked about, but a sticker can be removed even more easily than removing the speed governor – which is becoming more common.

**Ryan Kephart asks**: Did you account for differences between non-motorized trails that allow bikes on trails vs those that do NOT allow bikes on trails in your questionnaire?

**Matt:** Since the Arizona National Scenic Trail was used as “the trail” in this study, and mountain bikes are currently allowed (outside designated wilderness areas) we weren’t able to make that distinction. It would be easier when studying a shorter municipal trail system with restricted uses.

**Ryan Prehn asks:** We are looking at what NPS and other state agencies are doing to safely allow for advanced technologies with electric bicycles on multi-use trail systems.

**Matt:** Good. Stay tuned to what NPS does as a result of the recent public comment period. There will likely be very site-specific decisions made that involve the public in the future.

**Scott Chapman asks:** Have you considered allowing e-bikes on just a portion of the trail?

**Matt:** As a nonprofit organization, we don’t have that kind of authority. That's up to land managers. The two underlying issues are 1) federal legislation that prohibits motorized uses on a National Scenic Trail; and 2) consistent management across jurisdictions. Most trail users have no idea where land management boundaries are (often the lines are on a map but not marked in the middle of nowhere). So the challenge of one segment being open to e-bikes is that they’ll inadvertently ride across invisible boundaries where one land manager’s line ends and another begins.

**Steve Brown asks:** Aren't there other laws, some very recent, that allow a disabled person to ride an EBike (or even a jeep) on the trail?

ATA answered: So there is a Department of Justice ruling that makes allowances for disabled Americans to be able to access non-motorized trails with an assistive device. However, that is never really being pushed through the lens of the national trail system act. Because it has never gone to court or before the Supreme Court, we do not really know which would take higher priority.

**Todd Murdock asks**: Is there plans to do the survey again in the future? I would assume, that perceptions will continue to change.

**Matt:** Yes, and YES!

**Traci Meredith asks:** what damage to trail systems do e-bikes do?

**Matt:** Since the Arizona Trail is built and maintained with mountain bikes in mind (outside designated wilderness, of course), the physical damage would be insignificant. And minor repairs to the trail is what our volunteer corps is all about. But the social conflicts are far more concerning.

How fast do e-bikes go up hill and if it is at a fast speed

**Matt:** E-bikes can travel up to 20 mph uphill or downhill, but the terrain often limits the speed a person can travel. Also, speed governors can be manipulated to allow an e-bike to go much faster.

**Woody Keen asks:** Including 5 years on IMBA board of directors. I am back into backpacking again and really loving that. As a backpacker I cannot imagine how it is possible that an e-bike on a trail would not could not impact my user experience as a backpacker. You vison statement clearly had non-motorized user experience in it, how can ATA now justify adding ebikes? Will your vision statement change?

**Matt:** The Arizona Trail Association absolutely does **not** condone allowing e-bikes on a Congressionally designated non-motorized trail as long as they’re defined as motorized. If that changes in the future and holds up in court and somehow it’s determined e-bikes are something other than motorized, then we may rethink our opposition. But based on the research findings presented today and that a bike with a motor (no matter how quiet) is motorized, I don’t really see that happening. The ATA is not advocating for e-bikes on the AZT.