



# E-BIKE

## TOOLKIT

STRATEGIES & SOLUTIONS FOR TRAIL MANAGERS



# TOOLKIT

## INTENTION

**This crowdsourced toolkit was developed to help communities across Michigan navigate the evolving landscape of e-bike use on trails. Built from the feedback and ideas shared during three collaborative workshops hosted by the Michigan Trails & Greenways Alliance and facilitated by Parallel Solutions, the toolkit addresses key challenges and offers practical insights and resources.**

**It focuses on important issue areas such as safety, etiquette, education, equity, infrastructure, and enforcement. As a living resource, it will continue to grow and adapt as new challenges and solutions emerge, serving as a guide for thoughtful, informed trail management.**

### TOPLINE TAKEAWAY

E-bikes are both a challenge and an opportunity for trail systems. Addressing their use within an inclusive trail system requires a holistic, collaborative approach rooted in education, infrastructure design, consistency, and personal responsibility.

Shifting the conversation from “how do we address e-bikes” to “how do we ensure safety, address speed and behavior, and create trail design & use compatibility” may help refocus the issue and foster common ground across trail user communities.





SAFETY



The increasing speed and presence of e-bikes on trails raises serious safety concerns. E-bike users can travel at speeds unfamiliar to traditional trail users, creating surprise encounters, particularly on natural surface or mountain bike trails. Users report a false sense of confidence among e-bike riders, leading to near-misses or actual collisions. Trail conditions may not be suited for high-speed travel, compounding the risk.

## STRATEGIES & SOLUTIONS

- Consider promoting speed regulation on rentals.
- Safety education at point of sale.
- Enhanced signage highlighting speed expectations.







Lexington, MA Minuteman Bikeway speed signage

**With great  
power comes  
great  
responsibility**

**Keep your  
speed in check**



**Help us keep the  
trails safe and  
welcoming for all!**  
[traversetrails.org](http://traversetrails.org)





# ETIQUETTE

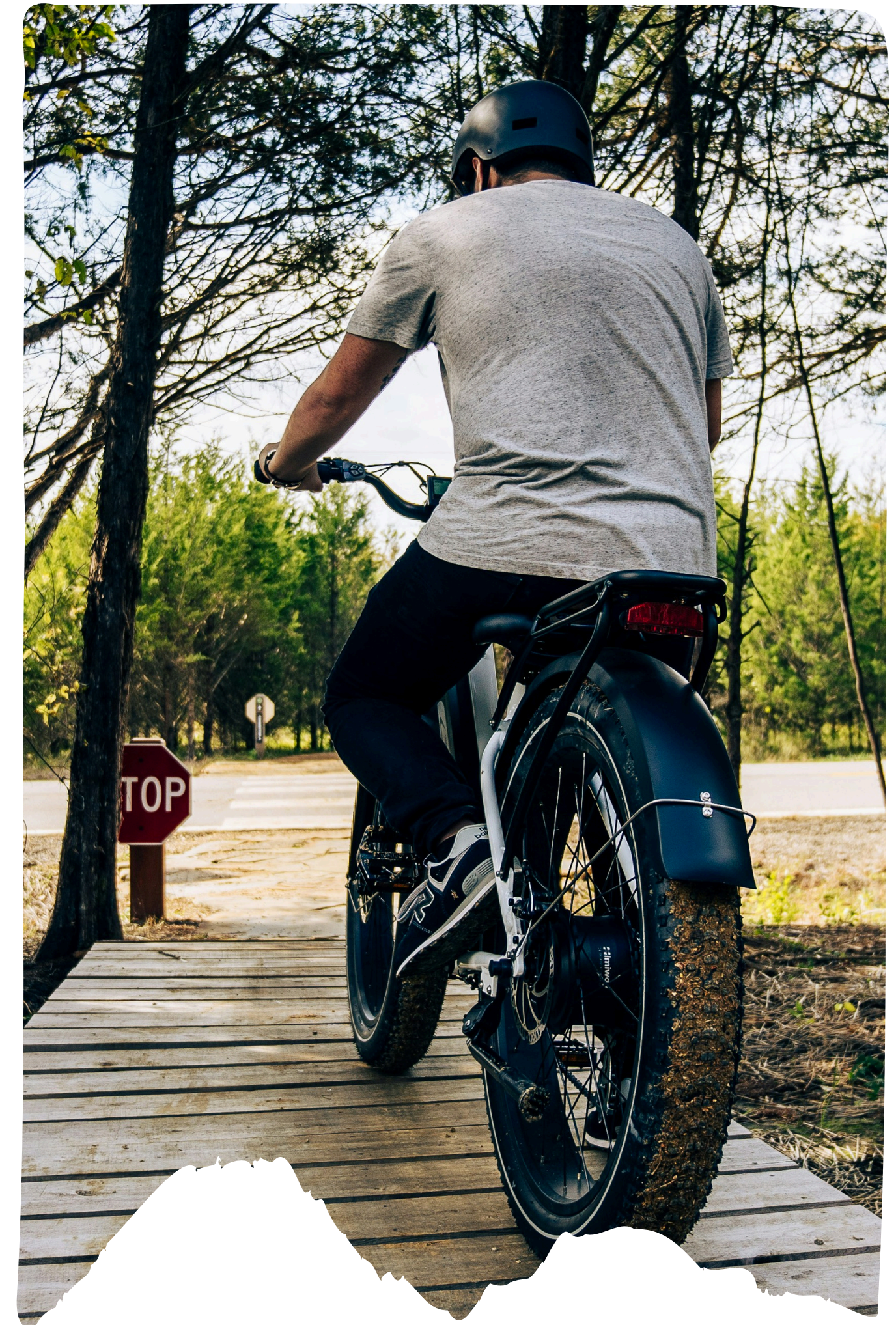
& TRAIL CULTURE



There is growing friction between traditional and new trail users due to etiquette lapses. When any users, e-bike or not, fail to yield, pass without warning, or use earbuds they contribute to a breakdown in shared trail norms and heighten the chance of personal injuries.

## STRATEGIES & SOLUTIONS

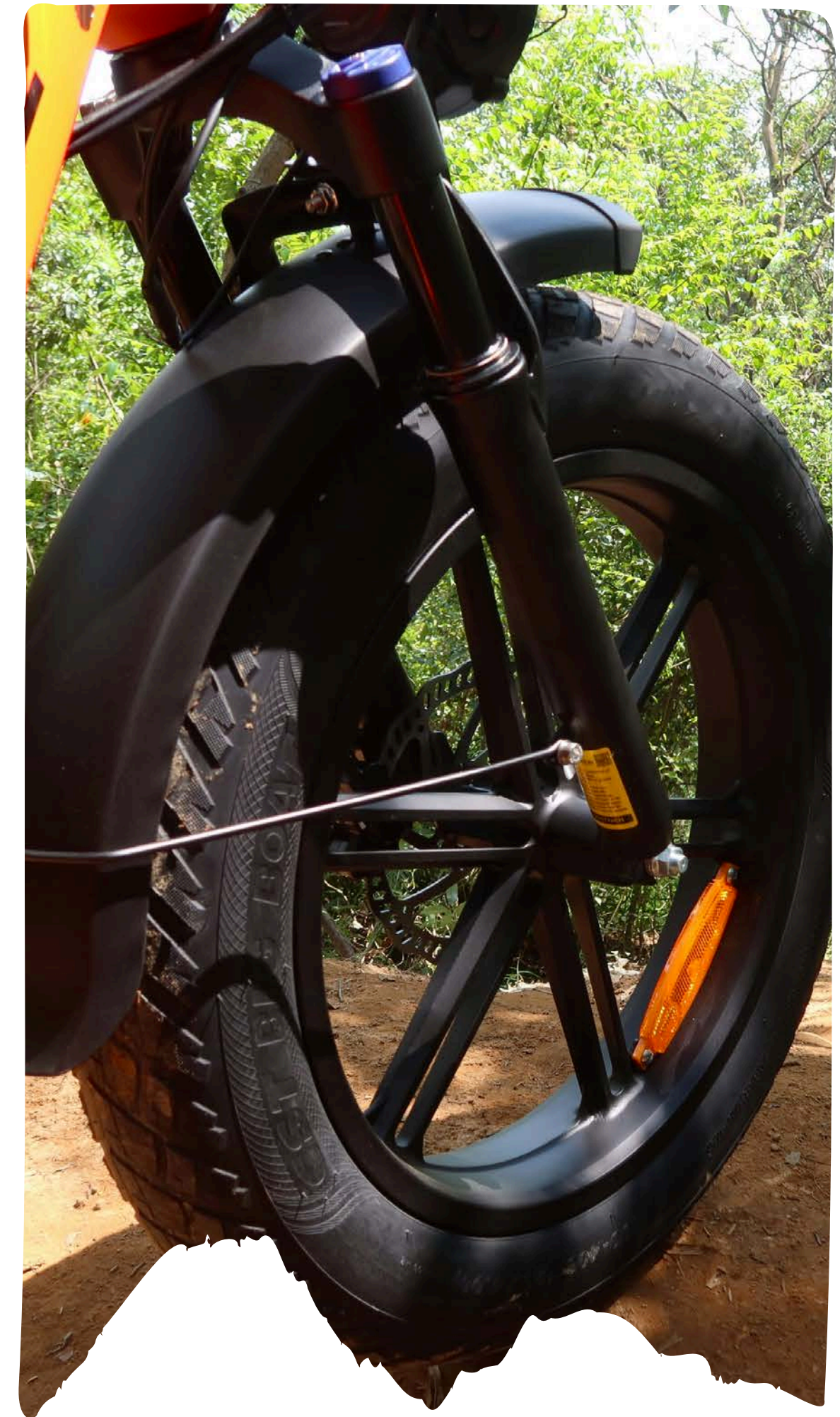
- Focus on face-to-face engagement to help build a positive trail culture.
- Coordinate volunteer trail ambassador programs that encourage positive behaviors and interactions, trail stewardship, and a sense of community among trail users.
- Invest in etiquette awareness marketing campaigns.
- Use trail etiquette signage and QR-coded signage linking to etiquette resources.





# EXAMPLES

- **T.A.R.T. Trails, Inc. (Michigan):** Trail etiquette guidelines emphasize courtesy, caution, and control. Their Bell for Every Bike campaign promotes awareness through bell distribution. Their “Caught Ya Being Good” card campaign, rewards good behavior with ice cream or coffee and helps model proper trail etiquette in a positive way.
- The **Michigan Horse Trails Association** has information about trail etiquette on their [website](#), including sample “share the trail” language for use on multi-use trails.
- **Durango Trails (Colorado):** Their Durango Shares the Trail marketing campaign encourages positive interactions and trail stewardship.
- **American Trail Running Association:** Their Trails Are Common Ground marketing campaign fosters inclusivity and respect among trail users.
- **North Shore Mountain Bike Association (NSMBA, Vancouver):** Provides comprehensive trail etiquette guidelines, emphasizing yielding protocols and environmental respect.
- **Whistler Off Road Cycling Association (WORCA, Vancouver):** Offers detailed etiquette advice, including e-bike specific guidelines and environmental considerations.
- **Capital Regional District (CRD, Vancouver):** Their Cruise with Courtesy campaign outlines multi-use trail etiquette for the region.





## EXAMPLE ETIQUETTE SIGNAGE



**WHOA,  
PARTNER!**

**PLEASE  
ANNOUNCE  
WHEN  
PASSING**



**Help us keep the  
trails safe and  
welcoming for all!**  
[traversetrails.org](http://traversetrails.org)

**REMEMBER  
BICYCLISTS...**



**YOU  
YIELD  
TO**



**EVERYONE**



**Help us keep the  
trails safe and  
welcoming for all!**  
[traversetrails.org](http://traversetrails.org)





# EDUCATION

& AWARENESS



There is a lack of education across all levels — users, staff, and retailers — about e-bike laws, classifications, and etiquette. Conflicting rules across jurisdictions and the rise in requests for mobility e-assist on nonmotorized trails reveal gaps in user knowledge. Many staff managing trail systems aren't fully trained on the latest regulations or equipped to educate the public. Cross-sector collaboration is critical for addressing the multifaceted e-bike challenge. Events, workshops, and summits have helped build community and spark creative, grassroots solutions.

## STRATEGIES & SOLUTIONS

- Invest in developing and promoting government and non-profit educational videos and materials, [like this one from T.A.R.T. Trails, Inc.](#)
- Collaborate with retailers to increase point-of-sale and rental education. Share governmental and non-governmental education videos and create materials for in-store displays featuring etiquette info — emphasize speed and yielding.
- Host workshops for trail managers to educate them about best practices and share success stories.
- Engage e-bike experts in planning and decision-making about trail design, infrastructure planning and signage.
- Support and promote volunteer ambassador programs led by businesses, nonprofits, and government.
- Share and amplify existing e-bike education information, guides and toolkits developed by the [State of Michigan](#), [Detroit Greenways Coalition](#), [Northern Michigan Mountain Bike Association](#), and [People for Bikes](#).

## E-bikes at state parks and on state-managed trails



### Enjoy e-bikes? Here's what you need to know before riding:

- Two types of e-bikes are allowed on many Department of Natural Resources lands open to bicycle use, including state parks, recreation areas, linear trails, and state forest pathways and campgrounds.
- E-bikes are not allowed on state game and wildlife areas or on these three pathways: High Country (Montmorency County), Shingle Mill and Pickeral Lake (both in Otsego County).
- Class 3 e-bikes, which are pedal-assisted and have a maximum speed of 28 miles per hour, are prohibited on any state-managed land.

### Class of e-bike and allowable use

- Class 1 e-bikes (pedal-assisted, up to 20 miles per hour):
  - ◊ Allowed on improved-surface trails (paved or gravel/asphalt), natural-surface nonmotorized trails open to bicycles in state parks and recreation areas, linear trails and state forest pathways and campgrounds.
- Class 2 e-bikes (throttle- and pedal-assisted, up to 20 miles per hour):
  - ◊ Allowed on both linear paved trails and natural-surface trails for mobility purposes as long as a cyclist has a permit to do so.



Learn more about e-bikes on state-managed trails at [Michigan.gov/DNR/Ebikes](https://Michigan.gov/DNR/Ebikes).







# EQUITY

& ACCESS



E-bikes provide increased access to trails for seniors, people with disabilities, and individuals without cars — enhancing inclusivity. This is one of the most celebrated aspects of e-bike adoption, opening the outdoors to previously underrepresented users. However, due to individual habits and expectations as well as infrastructure design, it can be challenging to balance the speeds and behaviors associated with some e-bike use and access with preserving the peaceful enjoyment of the trail for other users.

## STRATEGIES & SOLUTIONS

- Incorporate transportation choices and equity into infrastructure planning and design.
- Encourage trail managers to communicate access policies.
- Celebrate e-bike use.
- Share success stories and benefits – active lifestyle with ‘assistance’, affordability (versus car ownership), commuting longer distances or over varied terrain, complements other transit choices (bus, etc.)
- The Michigan Assistive Technology Program provides demonstrations, training, and loans of assistive technology including e-bikes to individuals with disabilities. This has enabled some e-bike users to access hunting and fishing sites they could not previously access.
- On Mackinac Island, a place where no cars are permitted and where people walk, ride horses, and ride bikes for transportation and recreation, the Mackinac Island City Council has an ordinance enabling the use of e-bike’s by those who have a qualifying disability and shares information for all users about how to get around safely.

## THE CITY OF MACKINAC ISLAND MACKINAC STATE HISTORIC PARKS

# E-BIKE REGULATIONS

- Qualified persons with a mobility disability may bring and use a class 1 (non throttled) e-bike.
- No other class of e-bikes are allowed on the island.
- No throttled e-bikes, regardless of mobility issues are allowed on the island.
- No e-bikes with top assisted speeds over 20-mph allowed.



*Help us preserve our heritage.*

**CITYOFMI.ORG / MACKINACPARKS.COM**





# INFRASTRUCTURE

& FUNDING



Current trail infrastructure lacks accommodations for e-bike use and struggles with funding eligibility tied to motorized classifications. Trail facilities lack charging stations and there are stories of stranded users due to depleted batteries. Federal funding constraints also pose practical and bureaucratic barriers to building, maintaining and managing public trail infrastructure.

The Recreational Trails Program (RTP) generally allows for e-bike use on trails funded through the "Diverse" category, but not on trails funded by the "Non-motorized" category. E-bikes are considered a motorized use under federal guidance, and trails funded solely by non-motorized RTP funds cannot allow motorized use, including e-bikes, during their useful life. This is creating significant barriers for trail developers and managers who rely on RTP funding to create Michigan's public trails network.

## STRATEGIES & SOLUTIONS

- Install solar-powered EV chargers similar to the ones installed in the Western Upper Peninsula across the Porcupine Mountains area.
- Revise public funding trail criteria to include e-assist as a nonmotorized use so that funding for trail development is maintained. Explore and advocate for other RTP funding eligibility tweaks for funding is maintained.







ENFORCEMENT



**Inconsistent rules and lack of enforcement undermine trust and usability across trail systems. Lack of capacity to enforce leads to unenforced rules, and different jurisdictions have conflicting definitions of allowed uses. Trail managers report confusion about which e-bike classes are allowed where, which is leading to user frustration.**

## **STRATEGIES & SOLUTIONS**

- Develop or advocate for a 'Uniform Trail Code' or trail design framework for trail asset owners and managers to reference for Class 1, 2, and 3 e-bikes.
- Create and share standardized signage templates and advocate for e-bike class signage.
- Explore a state-level registration system for e-bikes and “color code” registration stickers by e-bike vehicle class to help support visibility and awareness. Synchronize registration sticker colors with signage indicating allowable use areas to support user education and enforcement.







[michigantrails.org](http://michigantrails.org)  
[info@michigantrails.org](mailto:info@michigantrails.org)



[parallelmi.com](http://parallelmi.com)