

E-Bike, E-Moto, and Micromobility Safety

September 2, 2026



SEMCOG UNIVERSITY

WORKSHOP

Welcome

Amy O'Leary, Executive Director, SEMCOG

Police are looking for a gang of teenagers on e-bikes who trespass

E-motos, sometimes mistaken for e-bikes, causing trouble on Michigan trails



by Laura Herberg
June 22, 2026



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E-Bikes And E-Motos: What To Know And How To Ride Safe

E-bikes and e-motos are changing the way people ride around Southeast Michigan – for both transportation and recreation. SEMCOG is working with our local partners and experts in this space to educate on the basics of e-bikes and e-motos to ensure our community members know how to ride safely and responsibly.

Information is included below on e-bikes, e-motos, and the differences between them as well as resources to help in their increasing popularity on our roadways.

What Is a Legal E-Bike?



E-Bike vs. E-Moto: Know the Difference



Where Can You Ride an E-Bike in Michigan?



Safety, Rules, and Etiquette



Resources



Sample Ordinances



For more information or questions, please contact Brian Pawlik, SEMCOG Transportation Planner III, at pawlik@semcog.org

Bicycle and Pedestrian Planning at SEMCOG

- Regional Transportation Plan (RTP) Updating
- Bicycle and Pedestrian Mobility Plan Updating
- Transportation Safety Plan Safe Streets Southeast Michigan, Performance Measures
- Technical Assistance Multi-modal Mobility, Safety, Access, Multi-Agency Facilitation
- Funding Assistance TAP, CMAQ, Safety, Etc
- Bicycle and Pedestrian (Multi-Modal) Counts & Big Data
- County & State Coordination- [Southeast Michigan Active Transportation Committee](#)
- Regional Corridors and Trails- The Great Lake to Lake, Iron Belle, & Great Lakes Way
- Micromobility- E-Bikes, E-Motos, E-Scooters, Electric Skateboards, E-Trikes, and others (light-weight electric quad vehicles, bots, etc.)

Speaker Introduction

Andy Rohrer, *League of Michigan Bicyclists*

Quinn Passmore, *Michigan State Police – Office of Highway Safety Planning*

Tim Novak, *Michigan Department of Natural Resources*

John Waterman, *Programs to Educate all Cyclists (PEAC)*



E-BIKES & E-MOTOS

What They Are — and What Michigan Law Does (and Doesn't) Say

SEMCOG University • September 2, 2026

Andy Rohrer

Executive Director, League of Michigan Bicyclists
execdir@lmb.org



E-Bikes vs. E-Motos: What's the Difference?

Two wheels, a battery, and electric motor, but very different — it's the pedals and watts that matter.



E-BIKE

Defined in MCL 257.13e

- Seat (aka, saddle) and fully operable pedals
- Electric motor under 750 watts (~1hp)
- **Sorted into three classes:**

Class 1 — pedal-assist only, up to 20 mph

Class 2 — pedal-assist plus throttle, up to 20 mph

Class 3 — pedal-assist only, up to 28 mph



E-MOTO

Not a legal e-bike under Michigan law

- Throttle-operated — no pedaling required
- Motor exceeds 750 watts, often much higher
- Easily exceeds 20 mph on motor power alone with power delivery that enables “stunt” riding
- If pedals are present, they are typically not able to be used effectively
- Typically marketed as an “electric dirt bike” or “Class 4 e-bike”

E-Bikes vs. E-Motos: What's the Difference?

Visual similarity ends at "two wheels"



E-Bike



"Pedal-assist electric bicycle ($\leq 750W$)"

1. Traditional bicycle frame
2. Visible pedals and chain
3. Compact motor and battery

E-Moto



"High-powered electric motorcycle (motor vehicle)"

1. Motorcycle-style frame
2. Bench seat and wide tires
3. Large battery and motor housing

Michigan Law: Defines E-Bikes, Silent on E-Motos



With no state definition, communities are writing their own rules — and they don't match.



E-Bikes

MCL 257.13e & 257.662a

- Three classes are specified
- Where they can ride — roads, bike lanes, and some trails by class
- No restrictions for Class 1 & 2
- Minimum age of 14 for Class 3 riders and mandatory helmet use under age 18



E-Motos

No mention of “e-moto” anywhere in the MCL

- No statewide definition of “e-moto”
- No wattage or speed threshold set in law
- No registration or insurance requirement
- No dedicated enforcement hook for law enforcement and Conservation Officers

Result: our communities have no state law to point to for the fastest, highest-power devices on our roads today

The Local Patchwork: No uniformity across municipalities



With no state definition, communities are writing their own rules — and they don't match.



SOUTH LYON

Oakland County • 2026

- Banned e-motos, electric motorcycles & dirt bikes citywide, outright
- Capped e-bikes at 15 mph on trails; sidewalk riding prohibited
- **Ordinance draws a clear line between e-bikes and e-motos**



DEARBORN HEIGHTS

Wayne County • June 2026

- Banned e-bikes from all city property after a string of child injuries
- \$200 registration fee; \$400 fine for unregistered bikes
- **Ordinance does not separate e-bikes from e-motos or scooters**

Media and law enforcement often use “e-bike” as shorthand for any two-wheeled electric device — that confusion is driving ordinances that often overreach on legal e-bikes or miss e-motos entirely

E-BIKE

KNOW THE LAW IN MICHIGAN



E-BIKE (Electric Bicycle)



HAS PEDALS



ELECTRIC MOTOR: 750W OR LESS
CLASSES 1, 2, OR 3



MAX ASSISTED SPEED: 20-28 MPH
(Class dependent)



CAN BE USED ON BIKE PATHS
AND ROADS (WHERE BIKES
ARE ALLOWED)



NO LICENSE, REGISTRATION,
OR INSURANCE REQUIRED



RIDERS MUST FOLLOW BICYCLE
RULES OF THE ROAD



HELMET REQUIRED FOR
RIDERS UNDER 18

VS.

E-MOTO

KNOW THE DIFFERENCE



E-MOTO (Electric Motorcycle)



NO PEDALS



ELECTRIC MOTOR: ANY SIZE



DESIGNED FOR HIGHER SPEEDS
AND OFF-ROAD USE



NOT ALLOWED ON BIKE PATHS
OR SIDEWALKS



REGISTRATION REQUIRED,
AND INSURANCE



MUST FOLLOW MOTORCYCLE
RULES OF THE ROAD



HELMET REQUIRED FOR
RIDERS UNDER THE AGE OF 21

AN ELECTRIC MOTORCYCLE REQUIRES
A MOTORCYCLE ENDORSEMENT.



MICHIGAN LAW REMINDERS



E-BIKES ARE NOT
MOTOR VEHICLES



E-MOTOS ARE CONSIDERED
MOTOR VEHICLES



MISUSE CAN RESULT IN
TICKETS, FINES, OR
VEHICLE IMPOUND

E-BIKE & BICYCLE LAWS

MCL: 257.660a & 257.660c allow BICYCLES to be rode on both sidewalks and the roadway as long as it is not prohibited by a Traffic Control Device (Street Sign).

MCL: 257.662a (1) allows individuals on an Electric Bicycle the same rights as a Bicycle provided they are abiding by the rest of MCL 257.662a. The same MCL: 257.662a (6) allows E-Bikes to be in the roadway in the same manner allowed for bicycles.



MODIFYING AN ELECTRIC BICYCLE'S PROPULSION SYSTEM in a manner inconsistent with MCL 257.13a is prohibited unless the manufacturer label specifying the class of electric bicycle is replaced (MCL 257.662a(3)).

If an E-Bike has a motor greater than 750 watts, and/or can exceed 28mph on a flat and level surface without pedaling IT IS NOT AN E-BIKE.

E-Bikes are limited on where they can be rode (State Parks, Mackinac Island, etc.). Refer to MCL 257.662a and local ordinances.

ALL E-BIKES MUST HAVE:

- A seat or saddle
- Fully operational pedals
- An electric motor no greater than 750 watts of power (1-horsepower)



REMEMBER:

Riders are responsible for knowing and following Michigan laws and all local ordinances where they ride.

MICHIGAN HAS 3 CLASSIFICATIONS OF E-BIKES

KNOW YOUR E-BIKE	CLASS 1	CLASS 2	CLASS 3
Minimum age to operate	None	None	14
Rider required to wear helmet	No	No	Yes, if ages 14-18 years
Rider must pedal for motor to engage	Yes	No	Yes
Maximum speed for motor assist	20 MPH	20 MPH	28 MPH

OUT-OF-CLASS ELECTRIC VEHICLE (OCEV)

- If it's not Class 1, 2, or 3, it's not legally an e-bike
- Max. assisted speed above limits OR
- Motor power over 750 watts OR
- Throttle over 20 mph
- May be scooter, motorcycle, moped, or ORV



QUESTIONS?

CONTACT THE
OAKLAND COUNTY
SHERIFF'S OFFICE



DISCLAIMER:

This information is provided as a general guide and is for informational purposes only. It is not intended to be a substitute for knowing your local ordinances and laws.

Laws and ordinances can change. Always check your local laws and ordinances and ride responsibly.



RIDE RESPONSIBLY. **KNOW THE LAW.** KEEP OUR ROADS SAFE FOR EVERYONE.





Proposed State Legislation

LMB's priorities for closing the e-moto gap in Michigan law



DEFINE & TIER THE LAW

- Add a statewide definition of “e-moto” to the Michigan Vehicle Code — closing the gap that leaves it undefined today
- Split it into two tiers by real-world performance: an “e-moped” (20–30 mph, regulated like today’s mopeds) and a true “e-moto” (over 30 mph, held to motorcycle-level license, registration & insurance rules)
- Add an anti-tampering rule to prevent e-mopeds from being “hacked” into moto-level speeds

APPLY IT CONSISTENTLY

- Keep e-mopeds and e-motos off public sidewalks, designated cycling infrastructure, and non-motorized recreational trails
- Require e-motos to operate on the roadway
- Require a public hearing before any local authority regulates e-bikes, e-mopeds, or e-motos in its jurisdiction
- Prohibit deceptive marketing of e-mopeds and e-motos

One statewide definition means one consistent standard for local ordinances — instead of regulating the device, communities can decide where and how the devices can be used.

We're working with a small group of state legislators on both sides of the aisle. Given how the legislative calendar works, we don't expect movement until the next legislature is sworn in January 2027.



Micro-Mobility in Michigan



Quinn Passmore

- Program Coordinator for Michigan's Vulnerable Roadway Users initiatives at OHSP
- Four years of experience in statewide safety program management.
- Oversee grants supporting pedestrian, bicycle, motorcycle, Amish roadway, and roadside safety.
- Lead coordination with local partners, law enforcement, and statewide stakeholders on various safety initiatives.
- Focus on data-driven strategies to reduce fatalities and improve safety for all vulnerable roadway users.

Office of Highway Safety Planning

Planning

Data analysis and review

Coordination with federal and state funding partners

Public participation and engagement

Programming

Grant program application review

Project oversight and federal compliance

Partnership and relationships

Communications

Paid media

Earned media



Definitions & Laws

Micromobility refers to the growing trend of small, lightweight, low-speed transportation devices that allow users to travel faster than a typical pedestrian, bicycle, or kick-scooter, while remaining well below the speed and operational characteristics of a motorcycle or car.

Under the Michigan Vehicle Code, these devices share the same rights and responsibilities as other vehicles on the roadway. MCL 257.657

Michigan law requires all traffic to travel in the same direction, and riders must obey all traffic control devices. Riders are expected to travel as close to the righthand side of the roadway. MCL 257.660





St. Johns Father Relives Horror Of Son's E-Bike Accident: 'I Wasn't Prepared For What I Saw'



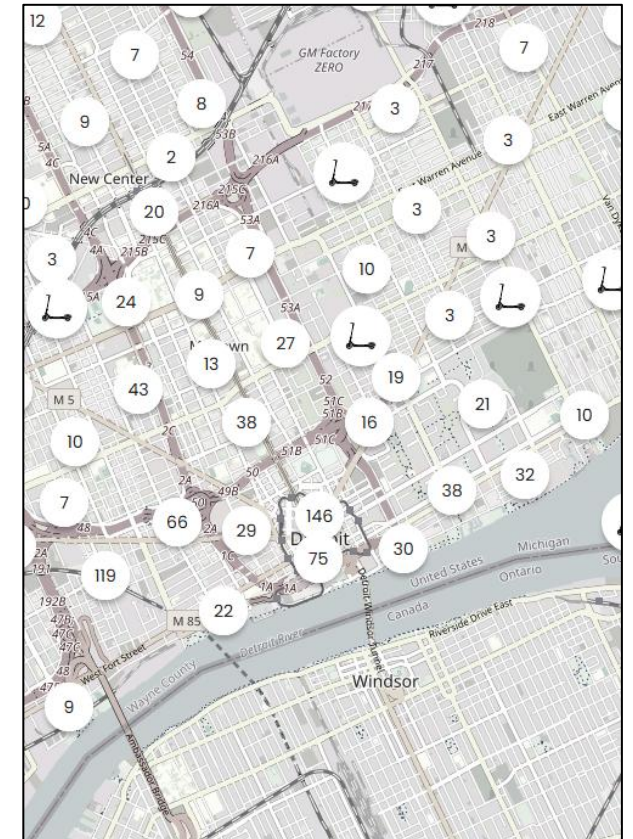
Dangers



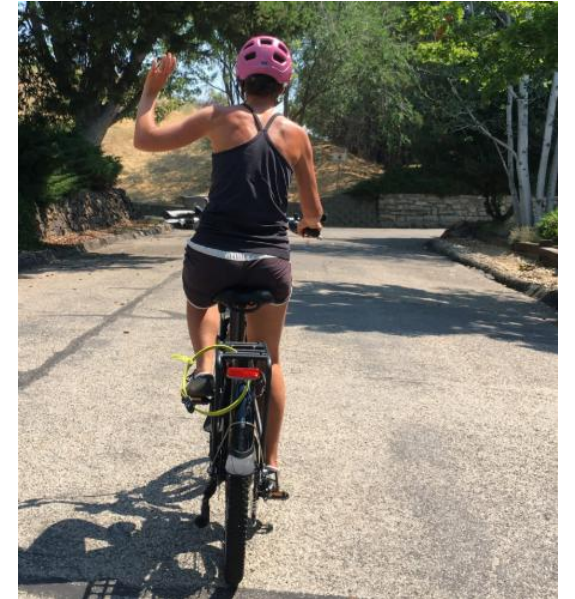
Emerging Data & Trends

- **Michigan shared systems** – 72 operating systems statewide as of 2025.
- **Docking infrastructure** – 9,661 docking stations across Michigan cities
- **Market growth** – E-bike prices dropped below \$2,000 in 2022, triggering a major surge in personal sales
- **National trend** – Personal e-bike purchases have surpassed electric-vehicle sales nationally in recent years
- **Crash-data limitation** – UD-10 e-bike field won't produce official analyzable data until late FY27

Data reflects emerging indicators; actual numbers may vary based on reporting practices and availability of finalized UD-10 fields.

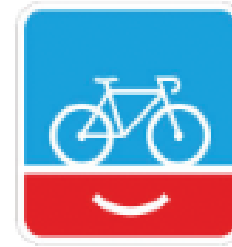


Safety





Micromobility Training



peopleforbikes

<https://ebikecourse.com>



Future Recommendations

• Enforcement

- Law enforcement must understand e-bike definitions, Class 1-3 distinctions, and safe operation.
- Officers need training to differentiate e-motos vs. e-bikes as high-powered devices become visually similar.
- Michigan may eventually require state-level guidance or model policies, similar to California's approach.

• Education

- Michigan may benefit from standardized e-bike training modules and expanded public education on safe operation and maintenance.
- Integrating micromobility content into Driver Education's vulnerable-roadway-user curriculum would be a cost-efficient, high-impact step.
- Education aligns with national recommendations emphasizing micromobility safety training.

Future Recommendations

Growth of E-Bikes

- E-bike sales continue to outpace electric car sales nationwide, showing strong year-over-year growth in micromobility adoption.
- Expanding bike lanes, shared-use paths, and trail networks are making micromobility safer and more practical.
- Michigan campuses, downtowns, and tourist areas are seeing rapid growth in e-bike and e-scooter fleets.
- High gas prices and expanding charging infrastructure are accelerating the shift toward electrified multimodal travel.

Infrastructure

- Michigan is expanding shared-use paths, protected bike lanes, and Complete Streets/Safe Streets projects.
- These improvements create safer corridors for micromobility users and support broader adoption.
- The state will need clearer guidance on which e-bike classes are allowed on specific trails and facilities.

Funding - 405(g)

- **State match requirement** – States must provide a 20% matching share.
- **Eligibility threshold** – States qualify if combined annual nonmotorized fatalities exceed 15% of total annual crash fatalities, based on the most recent final FARS data.
- **Allowable uses** – Under the IIJA, eligible states may use grant funds for:
 - Training law enforcement
 - Enforcement mobilizations
 - Public education and awareness programs



Local Municipalities

- **Update local policies** to explicitly include micromobility devices such as e-bikes and e-scooters
- **Lower speed limits** in areas with high vulnerable-roadway-user activity
- **Train law enforcement and public officers** on e-bike classifications and operational differences
- **Promote safe riding** including helmet use, hand signals, and proper bike-lane behavior
- Improve signage to clarify where micromobility devices may operate
- **Create slow-zones** near schools, parks, downtowns, and trail crossings
- **Launch public-education campaigns** on e-bike safety, right-of-way rules, and shared-space etiquette

Legislation and Licensing

Countermeasure	Effectiveness	Cost	Use	Time
Bicycle Helmet Laws for Children	★★★	\$	Medium	Short
Universal Bicycle Helmet Laws	★★★	\$	Low	Short
Active Lighting Laws	★★	\$	High	Varies
Motorist Passing Bicyclist Laws	★	\$	Medium	Short
Lower Speed Limits	★★★★★	\$	High	Varies

Other Strategies for Behavior Change

Countermeasure	Effectiveness	Cost	Use	Time
Promote Bicycle Helmet Use with Education	★★★	\$\$\$	Unknown	Medium
Safe Routes to School	★★★	\$	High	Short
Bicycle Safety Education for Children	★★	\$	Unknown	Short
Cycling Skills Clinics, Bike Fairs, Bike Rodeos	★	\$	Unknown	Short

Micromobility in Michigan (MiM)

Scan to email to
be added to the
Micromobility in Michigan Group



passmoreq2@michigan.gov

- Statewide collaboration
- Quarterly meetings
- Open discussion
- Shared expertise
- Safety focus

Thank You

Quinn Passmore

Vulnerable Roadway Users Program Coordinator

Office of Highway Safety Planning



Michigan DNR & E-Bikes

September 2, 2026

Presentation Overview



- E-Bike Classes in Michigan Law
- Current Allowable Use
- Policy Change Process
- Why We Made the Change

E-Bike Classifications

E-bikes are separated into three classes based on several attributes. A permanent label must be affixed on the e-bike that accurately identifies its class type. After purchase, if the bike is altered in a way that changes its class type, a new label meeting the [legal criteria](#) must be affixed that accurately identifies the new class type.



Class 1

Equipped with a motor that **provides assistance only when the rider is pedaling** and disengages or **ceases to function when the bike reaches a speed of 20 miles per hour.**



Class 2

Equipped with a motor that propels the bike, **whether the rider is pedaling or not**, to a speed of **no more than 20 miles per hour**, and disengages or **ceases to function when the brakes are applied or throttle is released.** Has throttle and peddle assist.



Class 3

Equipped with a motor that **provides assistance only when the rider is pedaling** and disengages or **ceases to function when the bike reaches a speed of 28 miles per hour.**

Current Allowable Use

The Michigan DNR has approved class 1 and class 2 (for mobility only) e-bikes on approximately **2,800 miles** of DNR-managed trails. This expansion follows months of collaborative research and discussion with trail users and organizations.

E-bike use on DNR-managed trails

- **Class 1 e-bikes**
Allowed on all state park, recreation area and state forest trails/pathways that permit traditional bicycles. The only exceptions are state game and wildlife areas, congressionally authorized trails such as the North Country Trail and the High Country, Shingle Mill and Pickerel Lake pathways in Pigeon River Country.
- **Class 2 e-bikes**
If a cyclist has a [DNR-issued permit](#) (no cost) for mobility issues, Class 2 e-bikes are allowed in all areas open to Class 1 e-bikes.
- **Class 3 e-bikes**
Class 3 e-bikes are not allowed on any state-managed trail.

E-bikes on DNR-managed roads

- **Class 1, 2 and 3 e-bikes**
You can ride Class 1, 2 and 3 e-bikes on all roads where a non-electric bicycle can be ridden.

Policy Change Process

The change process took over 3 years. These are the steps we took to get to where we are today:

- Started researching and benchmarking other federal, state, local, and privately managed lands and the impact of e-bike use.
- Reviewed and catalogued other e-bike policies from across the country, with a highlight on neighboring Midwest states.
- Developed an E-Bike subcommittee through the Michigan Trails Advisory Council (MTAC).
- Discussed E-Bikes at several public meetings and industry conferences.
- Presented the Land Use Order to MTAC and several of its subcommittees, the MSPAC, and the Natural Resource Commission.



Policy Change Process

After it was implemented, we continued to gather feedback and assess the policy:

- The Department developed an online survey for public input.
- The Department is developed an online reporting form for E-Bike interactions.
- The Land Use Order had a one-year probationary period and was reviewed to determine if any noticeable impact on the natural resources was apparent.



Why We Made the Change

In doing our research and interviews with parks professionals, the department found that agencies allowing e-bike use:

- Found no measurable difference in resource damage, injuries, or incidents between standard pedal bikes and legal e-bikes.
- Saw increased use of public trails.
- Reported increased visitor satisfaction.
- Access to public spaces increased quality of life for users and economic impact for communities.

Public input sessions revealed:

- There were mixed feelings on the issue, but we saw greater support for inclusion than opposition.
- Much of the opposition was based on hypotheticals and unsupported opinions.
- Proponents shared that if they couldn't use an e-bike, they would lose access.
- Views changed over time.

Therefore, the Department determined:

- Resource damage, injuries, and incidents would be relatively unchanged.
- Increased access would improve user satisfaction and quality of life.
- Increased access aligns with the Department's Evergreen Goals and the 10-year Trails Plan.

Management Issues

The department continues to face management issues with:

- User Etiquette
- Misidentification & Confusion
- Trespass & Illegal Trail Use
- Law Enforcement





Empowering Independence

How does e-mobility enhance
Adaptive Cycling?

John Waterman

Founder and Executive Director



EMPOWERING INDEPENDENCE

“

*"It feels like it's always
downhill."*

- Shawn Kohsmann



THE POTENTIAL PROGRESSION

E-Bikes Can Increase Independence, SOMETIMES





THE POTENTIAL EQUIPMENT

Tailoring E-Bikes to Rider Needs

2-Wheel E-Bikes

Stamina equalizer for riders who are comfortable riding a 2-Wheel bike but are easily fatigued

3-Wheel E-Trikes

Upright: Requires extra awareness for cornering

Recumbent: Better stability

Handcycle: difficulty stopping and turning

E-Tandems

Bypass cognitive/visual barriers; electric assist manages combined weight safely



PEDAL-ASSIST CYCLES ARE LEGALLY PROTECTED

- Classified as **Other Power-Driven Mobility Devices (OPDMDs)** under ADA.
- Legally protected for individuals with mobility disabilities.
- Blanket "motorized equipment" bans inadvertently strip hard-earned mobility rights.



Infrastructure & Policy Solutions

Design Infrastructure to Support E-Mobility

Infrastructure Barrier

Standard 36-inch paths and narrow gates can trap adaptive equipment.

Policy Recommendations

- 48in wide gates and pull off areas along trail
- Regulate behavior and speed (10-15 mph), not device classes.
- Exempt OPDMD users from sidewalk bans when adjacent streets are unsafe.



Discussion: ***Local Experiences and Needs***

Survey Questions:

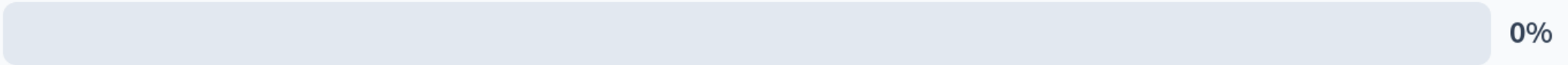


Scan the QR code to answer
on Poll-Everywhere

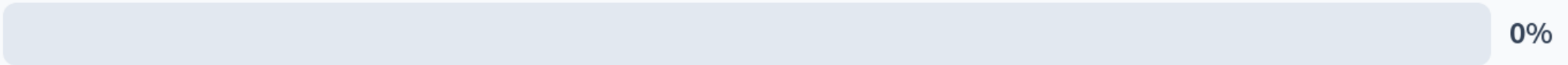


Has your community developed an ordinance or are you thinking about developing an ordinance?

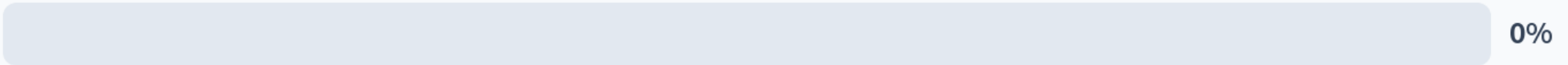
Yes, developed an ordinance



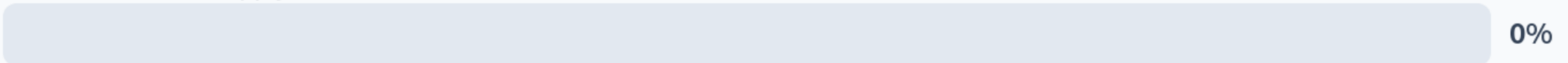
Yes, thinking about developing an ordinance



No, have not developed an ordinance and not thinking of developing one

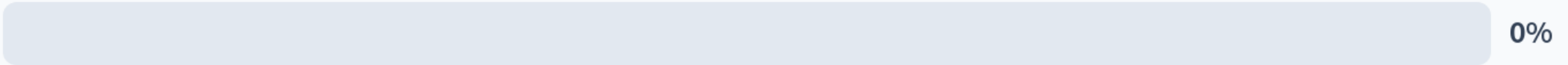


Not sure/does not apply

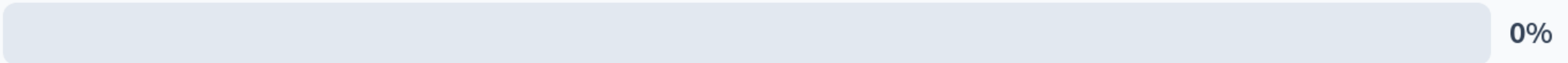


Where are you experiencing the most issues or challenges from e-bikes/e-motos in your community?

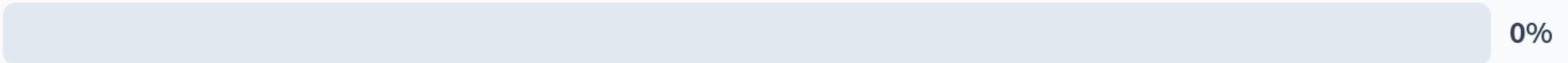
Neighborhood sidewalks and streets



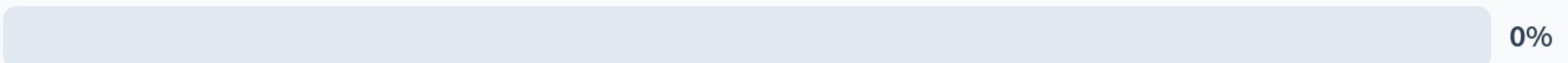
Parks, schools, and trails



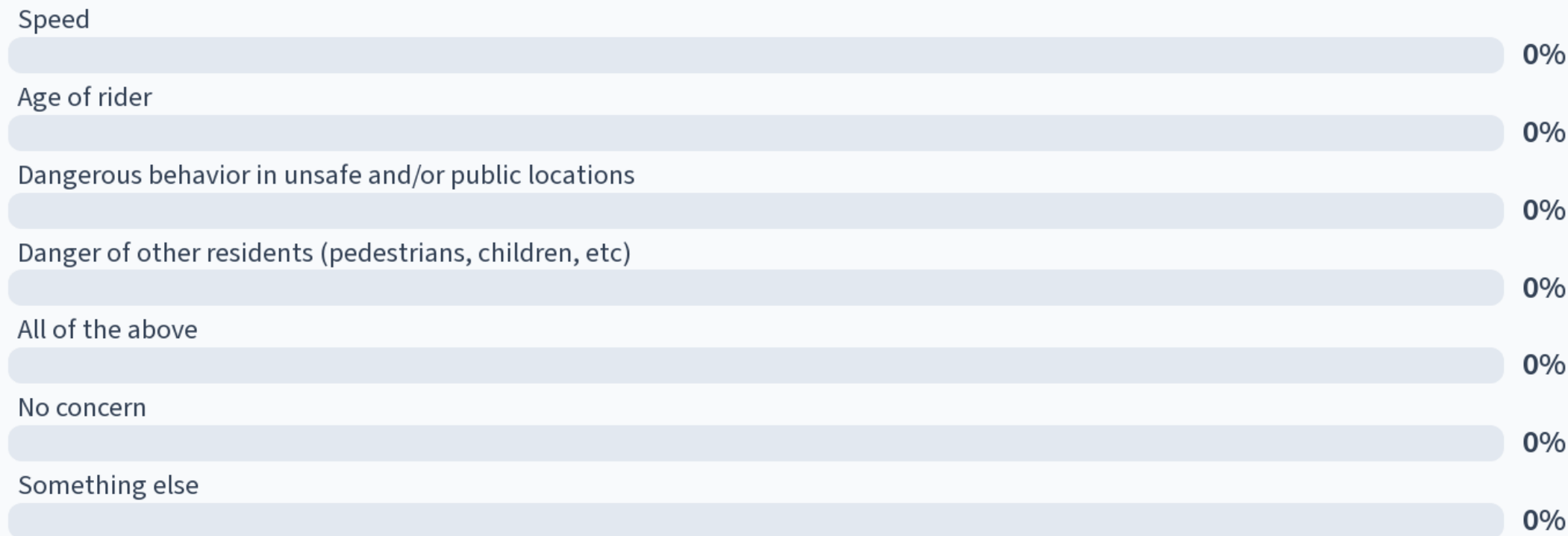
On roads, sidewalks, and intersections along major roadways



All of the above



Of the following issues, what is of most concern?



What kind(s) of support would be most helpful and empowering to your community and its efforts to promote safe mobility for all residents?

Enhanced statewide law to target e-mobility devices (Example: Requiring licensure for e-devices that go above a certain speed)

0%

More education on the types of e-mobility devices, along with their potential benefits and challenges

0%

Model ordinances to support locally targeted approaches to managing e-mobility devices

0%

Something else

0%

Discussion: ***Local Experiences and Needs***

Closing Remarks and Next Steps

Continuing the Conversation...

- **Civic Advisory Committee** **9/14/2026**
 - Representative group of residents, business owners, community leaders and other interested parties that meet regularly to discuss issues of common concern.
- **Southeast MI Active Transportation Committee (SEMI Active)** **9/16/2026**
 - Monitor & help implement SEMCOG and MDOT's joint Bicycle and Pedestrian Mobility Plan
 - Includes SEMCOG, local and statewide MDOT Offices, County planning, recreation, & road agencies, interested local governments, bicycle, & pedestrian advocacy organizations, & other professionals
- **Transportation Coordinating Council** **9/17/2026**
 - Align planning initiatives b/t stakeholders at local/regional levels & aligned performance measures
- **Transportation Safety Action Committee** **10/7/2026**
 - Exchange information & monitor implementation of the Southeast MI Transportation Safety Plan.
- **Michigan's Micromobility Group (MiM)** **10/26-11/2026**
 - State, regional, & local agencies, including safety, medical, & law enforcement focusing on e-bikes, e-motos, & other micromobility solutions
- **Michigan's Pedestrian and Bicycle Safety Team (PBSAT)** **11/5/2026**
 - Unites agencies, law enforcement, & advocacy groups to reduce traffic injuries and fatalities.

E-Bikes And E-Motos: What To Know And How To Ride Safe

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