



# Nonmotorized/Micromobility Needs Assessment

## Overview of Needs Analysis

Nonmotorized and micromobility travel and infrastructure continue to grow throughout the region. To create an efficient network, these types of facilities are an essential element of transportation plans. While balancing available funds is always a challenge, there is broad acknowledgement that nonmotorized transportation, such as walking and biking, and new and emerging micromobility options like e-bikes and e-scooters, increase transportation and accessibility options, support transit, provide economic benefits, and help improve air quality, health, and quality of life outcomes.

## Process for Determining and Addressing Needs

Project specific nonmotorized needs are identified in the GVMC Illustrative Nonmotorized Needs List. This list is updated on a regular basis and continues to be a priority for GVMC and its members. The GVMC Nonmotorized Committee met three times from late 2022 to early 2023 to discuss nonmotorized topics, goals, and regional needs. The Committee met on:

October 27<sup>th</sup>, 2022  
December 5<sup>th</sup>, 2022  
May 23<sup>rd</sup>, 2023

In addition to the needs identified in the 2045 MTP, reaffirmed by a comprehensive staff analysis using updated data, additional needs emerged through discussion at these committee meetings. On the May 23<sup>rd</sup>, 2023 meeting, the committee met specifically to discuss these needs.

## Identified Needs

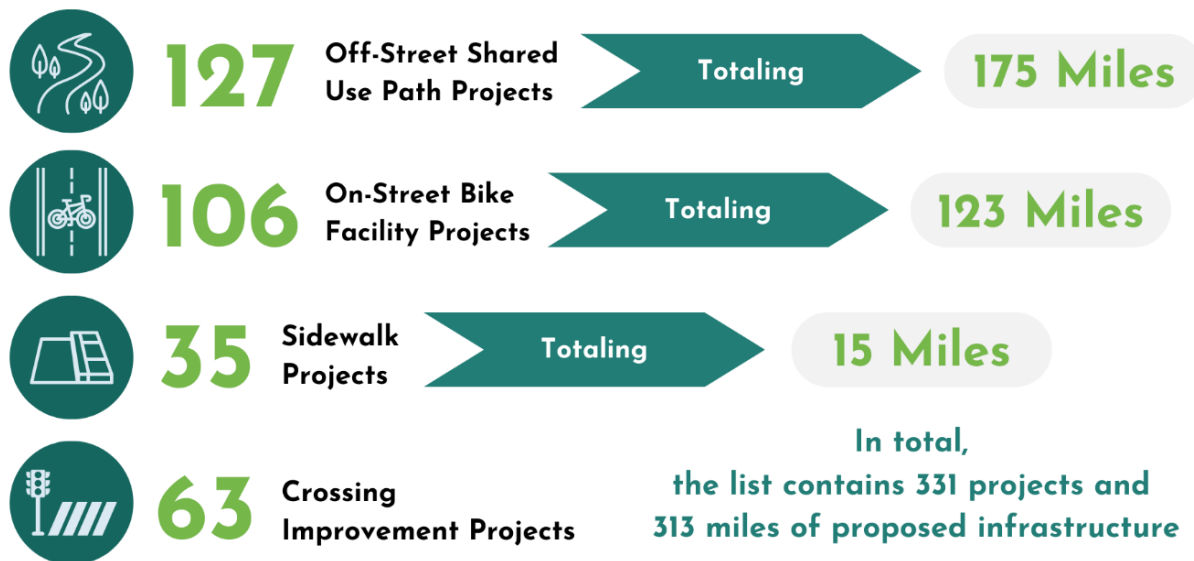
### Need 1: Additional Funding to Address Regional Priorities and Goals

Project level nonmotorized needs are identified in GVMC's Illustrative Nonmotorized Needs List. The list contains nonmotorized infrastructure projects developed by the MPO's member jurisdictions, highlighting projects important to each community. The document is updated at the time of Transportation Improvement Program (TIP) or MTP development, and changes as the desires of the communities and listed projects evolve. This list was updated in early 2023 and includes 331 projects that would cost over \$316 million to construct. The list can be found [by clicking here](#).

If all projects in the list were completed, it would add over 313 miles of infrastructure to the regional network including:

### Nonmotorized Committee Representation:

Ada Township  
Algoma Township  
Allendale Charter Township  
Alpine Township  
Association for the Blind and Visually Impaired  
Caledonia Charter Township  
Cannon Township  
Cascade Charter Township  
City of Cedar Springs  
City of East Grand Rapids  
City of Grand Rapids  
City of Grandville  
City of Hudsonville  
City of Kentwood  
City of Lowell  
City of Rockford  
City of Walker  
City of Wyoming  
Courtland Township  
Disability Advocates of Kent County  
Friends of the White Pine Trail  
Gaines Charter Township  
Georgetown Charter Township  
Grand Rapids Public Museum  
Grand Rapids Charter Township  
Greater Grand Rapids Bicycle Coalition  
ITP-The Rapid  
Jamestown Charter Township  
Kent County  
MDOT  
Medema Consulting  
Ottawa County  
Plainfield Charter Township  
Prein & Newhof  
Tallmadge Charter Township  
Village of Sand Lake  
Village of Sparta  
Vriesman & Korhorn  
West Michigan Environmental Action Council  
West Michigan Regional Planning Commission  
West Michigan Trails & Greenways



The projects included in this list address regional priorities and needs such as mode shift, connectivity and continuity, safety, ADA and accessibility, regional facilities, environmental justice and sensitive environmental resources, and project support, readiness, and maintenance.

The list primarily contains proposed infrastructure construction projects and does not account for the maintenance of existing facilities. As the list continues to grow, so does the need for additional funding for maintaining the systems. Among the many sources of funding available for nonmotorized transportation, there is a marked lack of money for ongoing maintenance of facilities.

Due to limited funding, a continually growing list of projects, and the need to maintain existing facilities, additional funding is needed.

## Need 2: Regionwide Needs Identified in the Grand Region Nonmotorized Plan

MDOT completed the Grand Region Nonmotorized Plan in 2017, and GVMC participated on the Core Plan Team. This plan identified nonmotorized needs for multiple agencies in the Grand Region as a whole, which includes 13 counties in West Michigan, as well as needs and priorities by county. This plan is scheduled to be updated sometime in the coming years.

The following needs and priorities were identified during that planning process, updated to reflect the status at the time of MTP document development:

### Grand Region Needs

1. A coordinated and consistent nonmotorized wayfinding system. West Michigan Trails and Greenways, in collaboration with regional stakeholders, has developed a Wayfinding Sign Concepts and Implementation Guide for west Michigan trails and bikeways to assist in accomplishing this goal. At the time of document development, the guide has been completed, with the need for installation of the signage remaining.
2. Expansion of the "Driving Change" education program, including education on new and emerging travel modes
3. Communication and support regarding nonmotorized issues
4. Ongoing and long-term maintenance of the nonmotorized geographic information systems (GIS) database
5. Measurement of progress
6. Nonmotorized improvements on non-freeway state trunklines
7. Nonmotorized safety improvements such as increased lighting on unlit roadways and intersections

### Kent and Eastern Ottawa Counties (GVMC Region) Needs

1. Interurban/River to River Trail
2. Connect Fred Meijer Kenowa Trail to the Fred Meijer M-6 and Kent Trails
3. Improve surface condition of Fred Meijer Flat River Valley Trail north of Lowell
4. Improve connectivity of Fred Meijer Grand River Valley Rail Trail to downtown Lowell and Fred Meijer Flat River Valley Rail Trail

5. Plainfield Township trail millage goal of over 30 miles of nonmotorized facilities connecting to the White Pine State Trail and more
6. Connecting Fred Meijer Standale Trail to Fred Meijer Pioneer Trail in Walker
7. Modify route of North Country Trail to increase the amount of trail that is off-road
8. Nonmotorized bridge and/or nonmotorized facilities on the Forest Hill Avenue bridge over I-96 in Kentwood
9. Determine primary east-west nonmotorized corridor(s) between Grand Rapids and Lowell
10. Idema Explorers Trail along the Grand River in Ottawa County
11. Connecting North Bank Trail across Ottawa County connecting Spring Lake to Grand Rapids
12. 4-foot-wide paved shoulders along Leonard Street/Drive from 24th Ave to 148th Avenue
13. North-south connection between Kenowa Trail in Jamestown Township and Allegan

#### Additional MDOT Grand Region Priorities

A nonmotorized priority of the MDOT Grand-Region is identifying and addressing gaps in the network which involve changes to state highways, specifically bridge related gaps, and safety for all users of the transportation system. Most of these potential projects will involve partnerships with local communities. In addition to projects included in the needs list, MDOT has identified potential nonmotorized priority locations for future consideration:

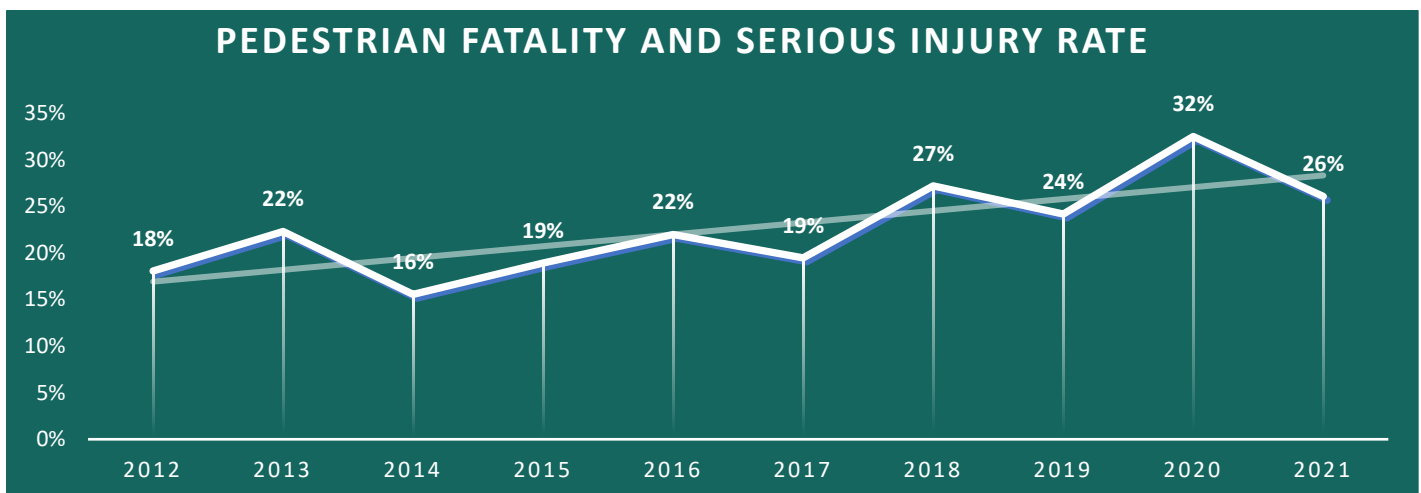
1. Fruit Ridge Avenue over I-96 (For the bridge if funding is short, or for the local nonmotorized connections to the interchange bridge)
2. US-131 nonmotorized crossings in the PEL Study area (M-11 to Cherry Street)
3. M-45 crossing and routes in Allendale Township
4. Target locations along M-11 (28<sup>th</sup> Street)
5. M-21 (E. Fulton Street) over I-96
6. Maryland Avenue over I-96
7. M-44C (Plainfield Avenue)

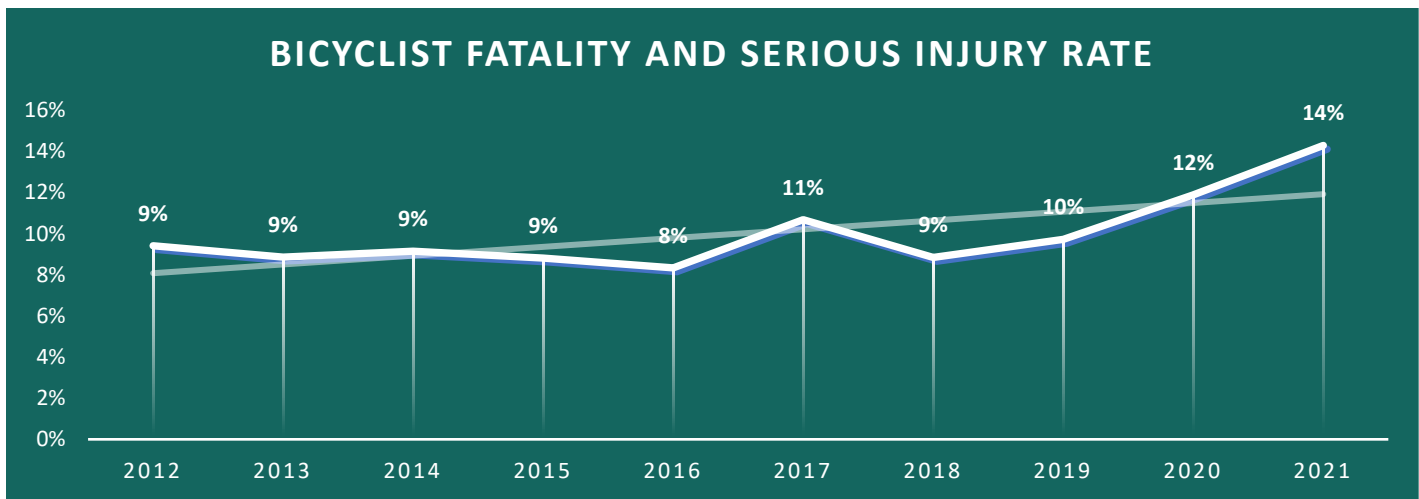
### Need 3: Improved Safety for Pedestrians, Bicyclists, and Vulnerable Road Users

On average, 201 pedestrian and 164 bicycle crashes occur in the MPO region each year. Of this, an average of 45 pedestrian and 16 bicycle crashes resulted in a fatality or serious injury.

While pedestrian and bicycle crashes account for a small portion of all crashes in the region at just 2%, vulnerable road users like pedestrians and cyclists are significantly more likely to suffer injuries or death as a result of a crash with a vehicle. From 2012-2021, a total of 206,392 crashes occurred throughout the MPO region. 2,010 crashes, approximately 1% of total crashes, involved a pedestrian and 1,639 crashes, approximately 1% of the crashes, involved a cyclist. Of the total crashes, 4,002 crashes, or 2%, resulted in fatality or serious injury. However, looking at pedestrian crashes alone, 446, or 22%, resulted in a fatality or serious injury. Of the bicycle-involved crashes, 160, or 10%, resulted in fatality or serious injury.

While total number of bicycle and pedestrian crashes in the MPO area has trended downwards from 2012 to 2021, the rate of fatalities and serious injuries has trended upwards, as displayed on the charts below:





#### Need 4: Education Regarding Nonmotorized Transportation and Micromobility

Education regarding nonmotorized and micromobility travel, specifically regarding safety, was identified as a need by the Nonmotorized Committee. The networks within the region continue to grow, and alternative modes of travel such as micromobility devices like e-bikes and e-scooters are gaining popularity. It is ever important to remain informed and, in turn, inform the public on the rights and responsibilities assigned to each mode, appropriate use of facilities, and emerging technology.

#### Need 5: Regional Coordination

Just like road networks, nonmotorized networks are often constructed, maintained, and funded by several different entities. A need that emerged from committee discussion was the need for increased regional collaboration amongst MPO members to facilitate a more consistent user experience across jurisdictions. A unified and normalized approach to issues such as design, facility and treatment implementation, and rules and regulations would contribute to more functional, consistent, and safer systems throughout the region.

In addition to consistency, improved coordination would allow for early identification of cross-jurisdictional projects, resulting in the ability to add nonmotorized infrastructure to projects where not previously planned and the maximization of limited resources.

### Costs to Address the Needs

It would take approximately \$316 million to complete all projects listed in the Illustrative Nonmotorized Needs List. Although levels of funding shift over time, nonmotorized needs have historically outweighed the funding available for project implementation.

From FY2023-2026 the total amount spent, including local match, leveraging GVMC Transportation Alternatives Program (TAP) and Carbon Reduction Program (CRP) funding, is projected to total approximately \$4 million annually. Given the number and expense of projects and projected funding levels, it would take approximately 79 years to complete the list of projects as-is. In addition to the listed projects, funding for maintenance is also needed.

To complete this list in the next 10 years, using MPO funding only, it would require a total of \$31.6 million a year, or an additional \$27.6 million a year in funding.

*There is no identified dollar amount assigned to the remaining needs listed in this assessment.*