

# GVMC Nonmotorized Project Evaluation Criteria

Criteria Updated September 2021 | Document Updated April 2023

## Study Process and Project Evaluation Criteria

In July 2013, the Nonmotorized Committee created a new evaluation process for projects submitted for inclusion into the 2014 Nonmotorized Plan. The new priority process involved the rating of five major factors: mode shift, connectivity/continuity, safety/ADA, regional vs. local facility, and high use/social equity. The rating system was designed to have minimal personal influence by the rater, with the physical location of the project being the primary determining factor for each project's score. The scoring process is primarily conducted using Geographic Information Systems, or GIS, and additional information provided by the jurisdiction submitting the project.

On August 31, 2021 the Nonmotorized Committee met to discuss updates to the evaluation criteria to further align with federal performance measures and incorporate additional factors of value to the competitive scoring process for programming regional Transportation Alternatives Program (TAP) funds. Each factor has the possibility of 0 to 3 points awarded relating to low, medium, and high, with a minimum of 0 and maximum of 21 points awarded to each project in total. The updated rating factors are outlined in this document, including the methodology used to determine project scores. The scoring system is meant to reflect the MPO's priorities for funding proposed projects with federal dollars and align with federal requirements for a competitive selection process for projects funded with federal TAP funding.

## Evaluation Criteria



### Mode Shift

Measurable changes in bicycling, walking trips, and/or transit ridership are likely based on the geographic proximity to trip attractors, trip generators, and transit bus stops. Up to three points may be awarded to each project that would display a measurable likelihood of mode shift.

Criteria	Points Awarded
1. Located in an area with medium to high density of trip attractors	1 Point
2. Located in an area with medium to high density of trip generators	1 Point
3. May bridge a gap for bus access and/or be near a bus stop	1 Point

## Methodology

Projects are awarded points for being near trip attractors, trip generators, and transit.

### 1. Trip Attractors

Data Source: MDOT approved Axle Employment Data

Retail, education services, health care, arts, entertainment, recreation, and food services locations, or trip attractors, are extracted from the Axle Employment Data using their respective NAICS (North

American Industry Classification System) codes. A point density GIS analysis is then used to determine likely areas of medium and high trip attractor density. In other words, the higher the concentration of services within a specified distance, the greater the value, or higher the density. Projects intersecting areas of medium to high density of trip attractors receive a point.

## 2. Trip Generators

Data Source: U.S. Census population data at the block group level

Trip generators are traditionally factors of population and can represent the possibility of latent demand. Population data by block group is analyzed and normalized by acre using GIS to determine areas most likely to produce trips. The higher the population per square acre, the greater the value, or higher the density. Projects intersecting areas of medium to high population density receive a point.

## 3. Transit Proximity

Data Source: Bus stop location data provided by The Rapid

A quarter mile is the standard average distance people are willing to travel to a bus stop. While this does not apply to all, this distance is used to score projects based on proximity to transit. A quarter mile buffer is applied to bus stop locations using GIS. Projects intersecting this buffer receive a point.



## Connectivity/Continuity

The project will fill a gap in relation to existing facilities and allow for the continuous flow of travel for a specific type of nonmotorized travel. Up to three points may be awarded for each project that bridges a gap or removes a barrier.

Criteria	Points Awarded
1. Existing facilities are found on both ends of the proposed project - these may include sidewalks, neighborhood bikeway networks, multiuse paths, etc. If the project is a small piece of a proposed alignment and connected by proposed facilities on either side as part of a larger connector to existing facilities it, would still be awarded a point for this rule	1 Point
2. Services both bicyclists and pedestrians if nothing currently exists for either mode along the proposed facility/street alignment	1 Point
3. Allows for the continuous flow of travel for nonmotorized users	1 Point

## Methodology

All Criteria

Data Source: GVMC's existing nonmotorized facilities location data

Using GIS, projects are visually analyzed against existing nonmotorized facilities to determine whether they meet the criteria above.



## Safety

The project will eliminate conflict points between vehicles and forms of nonmotorized travel. This should minimize the incidents of crashes, injuries, and fatalities. Up to three points may be awarded for each project that addresses safety based on the following characteristics.

<b>Criteria</b>	<b>Points Awarded</b>
1. Located in an area of moderate to high crashes involving nonmotorized travelers	1 Point
2. Located within a half mile of a past pedestrian or bicycle related fatality or serious injury	1 Point
3. Will be separated from vehicle traffic (through barriers and/or space)	1 Point

### Methodology

#### 1. Areas of Moderate to High Nonmotorized Crashes Involving Nonmotorized Travelers

Data Source: Bicycle/pedestrian crash data from the State of Michigan Police Division

A point density GIS analysis is conducted using bicycle/pedestrian crash location data. If the project falls in an area of moderate to high density of nonmotorized crashes, it receives a point.

#### 2. Within a Half Mile of Past Pedestrian or Bicycle Related Fatalities or Serious Injuries

Data Source: Bicycle/pedestrian crash data from the State of Michigan Police Division

A half mile buffer is applied to locations of past pedestrian or bicycle related fatalities or serious injuries using GIS. Projects intersecting this buffer receive a point.

#### 3. Separation from Vehicle Traffic

Data Source: Information submitted by responsible jurisdiction

Finally, If the proposed facility will be separated from vehicle traffic (through barriers and/or space), it is be awarded a point.



### ADA/Accessibility

The project will improve the nonmotorized network conditions for users with disabilities and/or the elderly. All projects must address applicable ADA requirements; however, up to three points may be awarded to projects that address ADA/accessibility.

<b>Criteria</b>	<b>Points Awarded</b>
1. Improves ADA accessibility for facilities in the nonmotorized network	1 Point
2. Located in an area with higher than the regional average of persons 65 years and older	1 Point
3. Located in an area with higher than the regional average of persons with disabilities.	1 Point

### Methodology

#### 1. Improves ADA Accessibility

All projects are required to account for ADA/Accessibility. A point is awarded to each project that improves ADA accessibility for facilities in the nonmotorized network.

## 2. Aging Population

Data Source: Environmental justice data delineated from U.S. Census data during the most recently adopted TIP or MTP

If a project is located in a block group with higher than regional average of persons 65 years and older, it receives a point.

## 3. Persons with Disabilities

Data Source: Environmental justice data delineated from U.S. Census data during the most recently adopted TIP or MTP

If a project is located in a block group with higher than regional average of households with persons with disabilities, it receives a point.



### **Regional vs. Local Facility**

The project allows for the continuous flow of travel for users, and transportation impacts are regional or multi-jurisdictional. Up to three points may be awarded based on the regional impact of the project proposed.

<b>Criteria</b>	<b>Points Awarded</b>
1. Bridges a gap for a populous from a localized system to access a more regional network that extends into other jurisdictions	1 Point
2. Allows for the continuous flow of travel between jurisdictions	1 Point
3. Has been identified as a multijurisdictional need and has formally received such support	1 Point

### **Methodology**

#### 1. Bridges a Gap

Data Source: GVMC's existing nonmotorized facilities location data

Using GIS, projects are visually analyzed against existing nonmotorized facilities to determine whether they meet the criteria

#### 2. Allows for Continuous Flow

Data Source: GVMC's existing nonmotorized facilities location data

Using GIS, projects are visually analyzed against existing nonmotorized facilities to determine whether they meet the criteria

#### 3. Multijurisdictional Support

Data Source: Information submitted by responsible jurisdiction



### **Environmental Justice and Sensitive Environmental Resources**

The project should provide transportation for traditionally underserved communities and improve/mitigate negative impacts on sensitive environmental resources. Up to three points may be awarded for each project that serves a population center within an environmental justice (EJ) area and incorporates elements to mitigate negative impacts on environmentally sensitive resources.

<b>Criteria</b>	<b>Points Awarded</b>
1. Falls within an Environmental Justice (EJ) Area	2 Points
2. Includes elements that will improve or mitigate negative impacts on sensitive environmental resources (protecting established vegetation/habitat, improving air quality, implementing sediment and erosion control techniques, protecting water quality, etc.)	1 Point

### Methodology

#### 1. Environmental Justice Areas

Data Source: Environmental justice data delineated from U.S. Census data during the most recently adopted TIP or MTP

If a project is located in a block group that has been delineated as an Environmental Justice Area as adopted in the most recent TIP or MTP, it receives two points.

#### 2. Mitigates or Improves Negative Impacts on Sensitive Environmental Resources

Data Source: Information submitted by responsible jurisdiction



### **Project Support, Readiness, and Maintenance**

The project should demonstrate local support, an ability to be constructed according to applicable federal and state standards within the estimated budget, and timeline and include a plan for continued maintenance. Up to three points may be awarded to each project in this category.

<b>Criteria</b>	<b>Points Awarded</b>
1. Included in a locally developed and approved plan (including appropriate public input/involvement).	1 Point
2. Has gone through a "feasibility study" process to ensure that all federal and state design standards can be met within the proposed project alignment with an accurate estimated budget (accounting for retaining walls, boardwalk, etc.)	1 Point
3. Has an associated plan for routine and periodic maintenance (snow plowing, cleaning, structural issues, etc.)	1 Point

### Methodology

All Criteria

Data Source: Information submitted by responsible jurisdiction