## Michigan Pedestrian and Bicycle Safety Action Plan 2019-2022

Updated May 2018





### Contents

ACRONYMS	3
DISCLAIMER STATEMENT	4
INTRODUCTION	5
GOALS	7
STRATEGIES	8

http://www.michigan.gov/ohsp

### Acronyms

	American Automobile Association
AAA 1-B	Area Agency on Aging 1-B American Association of Retired Persons
AARP AASHTO	
ADA	American Association of State Highway and Transportation Officials Americans with Disabilities Act
CDC	Center for Disease & Health Promotion
EMS	Emergency Management System
FHWA	Federal Highway Administration
GTSAC	Governor's Traffic Safety Advisory Commission
LMB	League of Michigan Bicyclists
MDHHS	
MDE	Michigan Department of Health and Human Services Michigan Department of Education
MDOS	Michigan Department of State
MDOS	Michigan Department of Transportation
MFF	Michigan Fitness Foundation
MSP	Michigan State Police
MVN	Motor Vehicle Network
NACEM	North American Conference on Elderly Mobility
NCHRP	National Cooperative Highway Research Program
OHSP	Office of Highway Safety Planning
OSA	Office of Services to the Aging
PBSAT	Pedestrian and Bicycle Safety Action Team
RIDP	AAA Road Improvement Demonstration Program
SDAP	Senior Driver Awareness Program
SEMCOG	Southeast Michigan Council of Governments
SHSP	Strategic Highway Safety Plan
SMWG	Senior Mobility Work Group
SOS	Secretary of State
SRTS	Safe Routes to School
TIA	Traffic Improvement Association of Oakland County
TRB	Transportation Research Board
UMTRI	University of Michigan Transportation Research Institute
VMT	Vehicle Miles Traveled

## **Disclaimer Statement**

This document has been prepared by the members of the Pedestrian and Bicycle Safety Action Team. It is considered a living document, and is a compilation of activities and initiatives to address pedestrian and bicycle safety in the State of Michigan.

The Action Team is part of a network of ad hoc committees comprised of local, state, federal, and private partners, working in collaboration with the Governor's Traffic Safety Advisory Commission (GTSAC) to identify traffic safety challenges and comprehensive solutions. The result of these efforts will support achievement of the mission, vision, and goals identified in the State's Strategic Highway Safety Plan (SHSP). While the strategies identified in the State's SHSP have been approved by the GTSAC, the activities and initiatives identified in this Action Plan, as well as any opinions or conclusions expressed, are those of the individual Action Team member agencies and not necessarily those of the GTSAC.

### Introduction

For more than a decade, national organizations such as the American Association of State Highway and Transportation Officials (AASHTO), National Cooperative Highway Research Program (NCHRP), Federal Highway Administration (FHWA) and the National Centers for Chronic Disease and Health Promotion (CDC) have stressed the need for safer travel for pedestrians and bicyclists, providing Americans with greater mobility, accessibility, and opportunities for physical activity. Nationally and in Michigan, crashes involving pedestrians and/or bicyclists have been disproportioned to their share of travel.

The state of Michigan has and will continue to recognize the importance of safe pedestrian and bicycle travel. The state is developing regional bicycle plans, has a safe routes to school program and many health initiatives that support increasing bicycling and walking. Michigan is a leader in Complete Streets with a policy guiding Michigan Department of Transportation's (MDOTs) implementation of the enabling legislation. As of June 2013 over 80 agencies across Michigan have local complete streets ordinances, policies or resolutions.

All of this success brings new challenges, especially among the youth, senior populations and individuals with disabilities. Distracted traveling, violations of vehicle code, and impairment (intoxication) are contributing to higher crashes among those who walk or bicycle as a healthy, cost effective and efficient mode of transportation or recreation.

The following statistics provide a snapshot of the pedestrian/bicyclist safety issues in Michigan from 2017<sup>1</sup>:



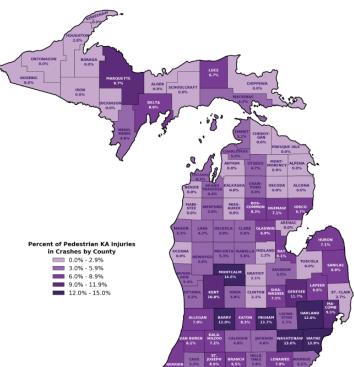
<sup>2</sup>There were 2,411 pedestrians involved in 2,285 motor vehicle crashes.

Of the 2,411 pedestrians involved in crashes, 158 (6.6%) were killed and 1,945 (80.7%) were injured.

There were 111 (70.3%) male pedestrians killed and 47 (29.7%) female pedestrians killed. Of all pedestrian actions prior to a crash, "crossing not at an intersection" was the most deadly, accounting for 55 (34.8%) of the pedestrian fatalities.

For each pedestrian killed, there were about 12 pedestrians injured.

The highest number of pedestrian-involved crashes occurred during October, with 259 (11.3%).



<sup>&</sup>lt;sup>1</sup> Michigan Crash Facts, Pedestrian Fact Sheet/Bicycles Fact Sheet

<sup>&</sup>lt;sup>2</sup> Graphics from MDOT's website on walking and biking <u>https://www.michigan.gov/mdot/0,4616,7-151-9615---</u>,00.html

The time period with the most pedestrian-involved crashes occurred from 6:00-6:59 PM, with 188 (8.2%). Thursday was the deadliest day for pedestrians with 27 (17.3%) pedestrian-involved fatal crashes and 27 (17.1%) pedestrian fatalities.

Of the 158 pedestrians killed, 55 (34.8%) of the deaths were the result of an alcohol-involved crash and 44 (80.0%) of those pedestrians had been drinking.

A total of 12 (7.6%) pedestrian fatalities occurred among youth age 15 and under. Teen/young adults (ages 16-20) accounted for five (3.2%) of the pedestrian fatalities. Adults ages 21-64 accounted for 114 (72.2%) of the pedestrian fatalities. There were 27 (17.1%) fatalities in the 65 and over age group.

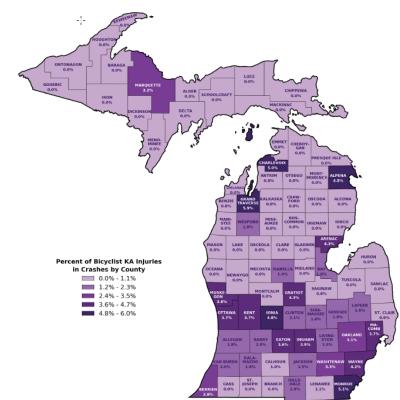


There were 1,723 bicyclists involved in motor vehicle crashes in Michigan in 2017. A total of 21 bicyclists were killed in 21 fatal crashes on Michigan roadways. An additional 1,363 bicyclists were injured in 1,356 police-reported crashes on traffic crash records. Male bicyclists (1,299) were involved in more bicycle crashes than female bicyclists (374), with 14 male bicyclists killed and seven female bicyclists killed. Gender was not reported for 50 bicyclists in crashes.

Police reported that 11 of the bicyclists killed (52.4%) were "going straight ahead" just prior to crash. In motor vehicle crashes, 1,286 bicyclists were riding in daylight conditions, 27 were riding during dawn,

57 were riding during dusk, 240 were riding in dark lighted conditions, 99 were riding in dark unlighted conditions, and 14 bicyclists were riding in unknown lighting conditions.

The peak hour for bicyclist involvement in crashes was from 5:00-5:59 PM, with 168 bicyclists involved. The peak hour for bicyclist fatalities was from 8:00-8:59 PM, with four bicyclist fatalities. Of the 21 bicyclists killed, five (23.8%) were the result of a hadbeen-drinking crash and one (20.0%) of those bicyclists had been drinking. No bicyclist fatalities occurred among youth age 15 and under. Teen/young adults (ages 16-20) accounted for two (9.5%) of the bicyclist fatalities. Adults ages 21-64 accounted for 13 (61.9%) of the bicyclist fatalities. Six (28.6%) fatalities were in the 65 and over age group.



Across Michigan, there is greater demand for coordinated walking and bicycling facilities, educational and enforcement programs, and encouragement opportunities. The Pedestrian and Bicycle Safety Action Team (PBSAT), a GTSAC sub-committee consisting of multiple agencies and disciplines, is working to change these trends.

## Goals

PBSAT goals are SMART: Specific, Measurable, Achievable, Realistic, and Time-bound

Pedestrian and bicycle count data is not consistently and reliably available in order to understand exposure. As walking and bicycling increases in Michigan, there are not currently methods in place to collect these volumes in order to develop a rate of fatalities and serious injuries. The PBSAT will continue to monitor and survey new technologies to try to understand and capture pedestrian and bicycle volumes moving forward.

The goals of the PBSAT will fall in line with the state's set performance measures.

### **Strategies**

# Strategy 1: Identify and promote the use of best practices when designing and operating transportation facilities:

## <u>Objective</u>: Increase and improve the network connectivity and operation of pedestrian and bicycle facilities in the state of Michigan.

Ongoing Activities/Actions:

- 1. Conduct trainings highlighting best practices at all levels of government with programs such as Training Wheels, ADA training, and pedestrian safety including specific guidelines such as NACTO.
  - Lead Agencies: MDOT, LMB
- 2. Investigate innovative training programs nationwide. Lead Agencies: MDOT, MDHHS
- **3.** Promote national webinars and trainings from various professional organizations. *Lead Agencies: MDOT*
- 4. Encourage best practices including sidewalks, shoulders, refuge islands, road diets, bike lanes, Pedestrian Hybrid Beacons (and other signalized ped/bike facilities). Lead Agencies: MDOT, FHWA
- 5. Promote and Support Road Safety Audits and other assessments such as Safe Routes to School.
- 6. Identify and encourage best practices for emerging technologies in transportation (connected vehicles, etc.).
- 7. Promote and support the Safe Routes to School (SRTS) planning process, strategies, and practices throughout school districts and communities. Lead Agency: PBSAT
- 8. Identify best practices for college campuses encourage presenting at campus safety conferences to demonstrate programs (literature search of what other states are doing safety initiatives on campuses nationally)

Lead agency: PBSAT Check to see if this is being done currently/if there is still a yearly safety conference Lead agency for literature search: MDOT

**9.** Encourage and support data collection and sharing on new and existing bicycle and pedestrian facilities.

Lead Agency: PBSAT

Lead Agency: MDOT for storing and sharing pedestrian and bicycle data

**10.** Promote pedestrian and bicycle related resource materials and content at events and via other methods as appropriate. Develop content as appropriate. *Lead Agency: MDOS, MDOT, LMB, OHSP, MTGA* 

### Strategy 2: Raise awareness of pedestrian and bicycle safety

#### **<u>Objective</u>**: Improve motorist, bicyclist and pedestrian knowledge and behavior.

Ongoing Activities/Actions:

- 1. Analyze and distribute pedestrian and bicycle crash data.
  - Evaluate different databases available (EMS, medical, hospital, etc) and look for opportunities to integrate this data and how this information can be used to increase pedestrian/bicycle safety

Lead Agency: OHSP, MDOT, LMB, MDHHS

- 2. Educate motorist, pedestrians and bicyclists on safe behavior and laws.
  - Update and promote a bicycle safety video PSA similar to the SOS radio PSA.
  - Update and implement a pedestrian and bicycle safety message for Motor Vehicle Network.
  - Update and implement a pedestrian and bicycle safety message for MDOS Express News.
  - Review and update materials used by driver education instructors to determine if it adequately addressed pedestrian and bicyclists safety *Lead Agency: MDOS.*
  - Promote the SOS bicycle safety radio public service announcement.
  - Educate road users on the proper use of High-Intensity Activated Crosswalk signals Lead agency: MDOT (brochure development) Supporting agencies: PBSAT, MDOS, OHSP
  - Include pedestrian and bicyclist safety in the safety section of the *Michigan Model for Health* curriculum. *Lead agency: MFF*
  - Task the Office of Highway Safety Planning with developing and implementing a statewide, branded pedestrian and bicyclist safety campaign that allows for customization to accommodate local needs.
    - Evaluate/encourage/promote developing an electronic pedestrian and bicyclist safety toolkit that supports the statewide brand and messaging and includes, at minimum, a how-to guide for conducting data-driven, evaluated campaigns including methods for measuring impact and outputs; print, broadcast and social media messages and templates; and public outreach and enforcement tips and tactics.
    - Identify a single statewide brand to include on all pedestrian and bicyclist safety outreach materials for cohesive and clear messaging.
    - Identify and publicize best practices in using 405(h) grant funds and other resources (for meeting the 20 percent match) to enforce and educate roadway users about pedestrian and bicyclist safety laws. Lead agency: OHSP

Supporting Agencies: MDOS, MDE, MSP, LMB, MDHHS, OHSP, MDOT, MFF

3. Ensure that the knowledge exams for both Graduated Driver Licenses and Temporary Instruction Permits include questions on pedestrian and bicyclist safety for each applicant. The pool of questions for both exams should be periodically reviewed for validity and updated with new questions as necessary.

Lead agency: MDOS

- 4. Collaborate amongst pedestrian and bicycle committees, action teams, and other groups meeting to discussion pedestrian and bicycle safety issues
  - Compile a list of active groups and make each aware of the others (Traffic Safety Networks, Regional Pedestrian and Bicycle Committees, MDOT Transportation Service Centers and Regions, etc.)
  - Invite different areas of ped/bike safety to speak at PBSAT meetings to bring expertise and depth to the team's understanding of issues.
    - UD-10 updating limitations and current process
    - Current training details for officers going through police academies (how to incorporate ped/safety in areas team is not as familiar with)
    - Emergency Management Services, hospitals, etc.

- Invite different areas of ped/bike safety representatives to attend PBSAT meetings as members
  - AARP
  - Legislation
  - EMS/Safety Prevention
  - Etc
- 5. Encourage and/or support revisions and updates to educational and training materials related to motor vehicle drivers that recognize multimodal transportation and new roadway designs intended to promote bicycle and pedestrian safety.
  - Continue to include/encourage discussion of pedestrians and bicyclists in work zones at project preconstruction conferences.
  - M2D2 MDOT
  - Continue to conduct Road Safety Audits statewide (including review of pedestrians and bicyclists) and encourage pedestrian and bicycle Road Safety Audits PBSAT
  - Review/support/encourage the development of the MDOT Ped/Bike Risk models MDOT

Lead Agencies: PBSAT, MDOS, MDOT, LMB

- 6. Engage and educate law enforcement personnel and traffic professionals on pedestrian and bicycle laws and data.
  - Give as much emphasis to pedestrian education and enforcement as is currently given to bicycle education and enforcement.

Lead Agencies: MDE, LMB, OHSP, MSP Supporting Agencies: MDOS, MDOT, OHSP

#### Short-Term (1-2 years) Activities:

- 7. Fund pedestrian and bicycle safety projects.
  - Advocate for increased spending on pedestrian and bicycle initiatives from programs focused on safety (such as SRTS initiatives, etc).

Lead Agencies: OHSP, MDOT, PBSAT, MFF

8. Support implementation of statewide or local pedestrian and/or bicycle safety media campaigns.

Lead Agency: PBSAT

Middle-Term (3-5 years) Activities:

9. Incorporate pedestrian and bicycle safety planning into MPO and rural task force safety planning process.

Lead Agencies: MDOT, FHWA

## Strategy 3: Provide recommendations related to pedestrian and bicycle safety legislation:

## <u>Objective</u>: Identify inconsistencies or gaps in current law pertaining to pedestrian and bicycle safety.

Ongoing Activities/Actions:

- 1. Monitor legislation that may impact pedestrian and bicycle safety.
  - School zones and bus stops
  - Speed limits

Lead Agencies: PBSAT

2. Encourage local agencies (counties, cities, villages) to adopt complete streets policies.

#### Lead Agencies: LMB, MFF

Short-Term (1-2 years) Activities:

- **3.** Develop legislation that incorporates the full pedestrian and bicyclist safety guidance of the Uniform Vehicle Code into the Michigan Vehicle Code and preempt conflicting local pedestrian and bicyclist safety ordinances to the Michigan Vehicle Code.
  - Adopt legislation requiring a driver to yield to pedestrians legally crossing the roadway at other than signalized intersections.

Lead Agencies: TBD

4. Develop legislation prohibiting the riding of a bicycle while under the influence of drugs or alcohol.

Lead Agencies: TBD

- 5. Develop proposed legislation that supports: increases driver education curriculum bicycle and pedestrian content; and enhanced penalties for crashes involving vulnerable users. *Lead Agencies: MFF, LMB*
- 6. Consider and monitor pedestrian safety practices. Lead Agencies: MDOT, MFF, LMB

Middle-Term (3-5 years) Activities:

7. Develop proposed legislation that supports: strengthening distracted driving laws; penalties for recklessly endangering bicyclists by blocking their path of travel ('dooring', parking in bicycle lanes, etc.).

Lead Agencies: MDOT, MFF, LMB

# Strategy 4: Recognize successful pedestrian and bicycle safety initiatives:

<u>Objective</u>: Identification of existing and research practices that are innovative and or successful pedestrian and bicycle safety programs and or initiatives.

Ongoing Activities/Actions:

- 1. Recognize proactive jurisdictions or jurisdictions highly active in promoting safety of pedestrians and bicyclists with nominations for annual awards. Lead Agency: PBSAT
- 2. Identify successful community stories and promote statewide. *Lead Agency: PBSAT*
- 3. Recognize/assist with content to the MDOT Work Zone Manual chapters on pedestrian and bicycle safety in work zones (2018) Lead Agency: MDOT
- 4. Update pedestrian and bicycle safety programs and initiatives resource list. Lead Agency: PBSAT
- 5. Fund pedestrian and bicycle safety projects.
- 6. Lead Agencies: MDOT, SEMCOGIdentify and invite cities and villages with yield/stop for pedestrian in crosswalks and/or safe passing ordinances to apply for 405(h) grant funds. Lead Agency: OHSP

# Strategy 5: Determine focus communities, cities and agencies for priority assistance:

<u>Objective</u>: Reduce crashes and injuries among pedestrian and bicyclists in identified communities across the state.

#### Ongoing Activities/Actions:

**1. Provide resources as feasible on pedestrian and bicycle crashes in identified communities.** *Lead Agency: MDOT, OHSP, LMB* 

Short-Term (1-2 years) Activities:

- 2. Monitor communities with high or above average crashes involving pedestrians and bicyclists. *Lead Agency: MDOT, OHSP*
- **3.** Identify and document crash location characteristics and crash type characteristics. *Lead Agency: MDOT, OHSP*
- 4. Utilize crash data along with other data points to identify schools/school districts that qualify for additional support from SRTS and partners. Lead Agency: PBSAT, MFF
- 5. Increase the rate at which 405(h) funds are being expended through the provision of proven countermeasures and the identification of funding sources that grantees can use to meet the 20 percent match requirement.

Lead Agency: OHSP

 Identify and publicize best practices in using 405(h) grant funds and other resources (for meeting the 20 percent match) to enforce and educate roadway users about pedestrian and bicyclist safety laws.

Lead Agency: TBD

6. Advocate for increased spending on pedestrian and bicycle initiatives from programs focused on safety.

Lead Agency: PBSAT

Middle-Term (3-5 years) Activities:

7. Provide technical assistance to communities to identify acceptable and feasible crash counter measures.

Lead Agency: MDOT, FHWA

### Strategy 6: TZD: Support, promote and implement the Toward Zero Deaths National Strategy