

Michigan Motorcycle Safety Action Plan

Michigan Motorcycle Safety Action Team 2017-2022

Contents

Disclaimer Statement	Page 2
Intro and Problem Identification	Page 2
Maps	Page 3
Goal	Page 6
Strategies	Page 6
Acronyms	Page 11
Acknowledgements	Page 11

http://www.michigan.gov/gtsac

Disclaimer Statement

The members of the Michigan Motorcycle Safety Action Team have aided in preparing this document. It is considered a living document, and is a compilation of activities and initiatives to address motorcycle rider 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 goals and strategies 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

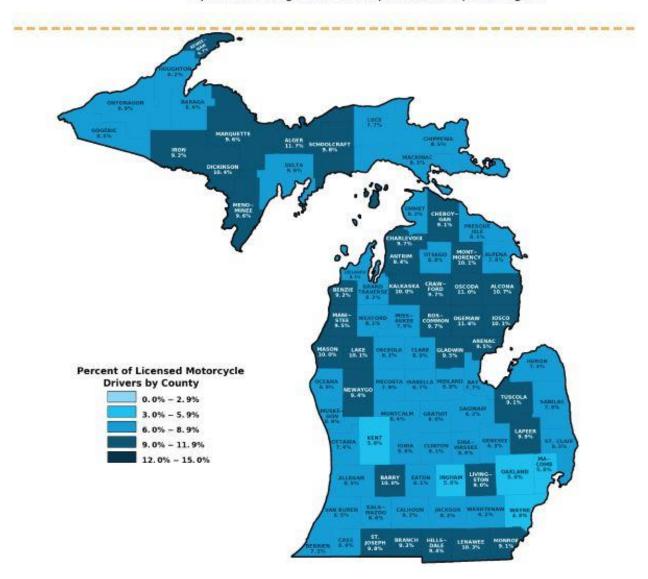
Motorcycle rider safety is an emphasis area of the Michigan Strategic Highway Safety Plan (SHSP). Per vehicle mile traveled, motorcyclists are more than 30 times more likely than passenger car occupants to die in a motor vehicle crash. This is because motorcyclists face risks not encountered when driving cars and trucks. When a crash occurs, motorcycle riders are much more vulnerable than passengers of other vehicles. Various factors such as alcohol impairment and excessive speed have been identified as contributing factors to the occurrence of motorcycle crashes. Lack of proper licensing and training are areas of major concern. The following statistics provide a snapshot of the motorcyclist safety issues within Michigan for 2016:

- ➤ The death rate for motorcyclists was 17.9 per 100 million vehicle miles traveled compared to the overall mileage death rate of 1.0 per 100 million vehicle miles traveled
- Nearly half of all motorcyclists killed were unendorsed
- Over 30 percent of all motorcyclists killed involved the use of alcohol and/or drugs
- Over a quarter million registered motorcycles
- Over half a million endorsed motorcyclists
- Over 3,200 motorcycle crashes
- > 141 fatalities and 659 incapacitating injuries
- > Half of motorcyclist fatalities were riders not wearing a helmet
- More than 90 percent of riders killed were male

- * Note Motorcyclists are drivers and passengers
- ** Source of data and maps provided by University of Michigan Transportation Research Institute (UMTRI)

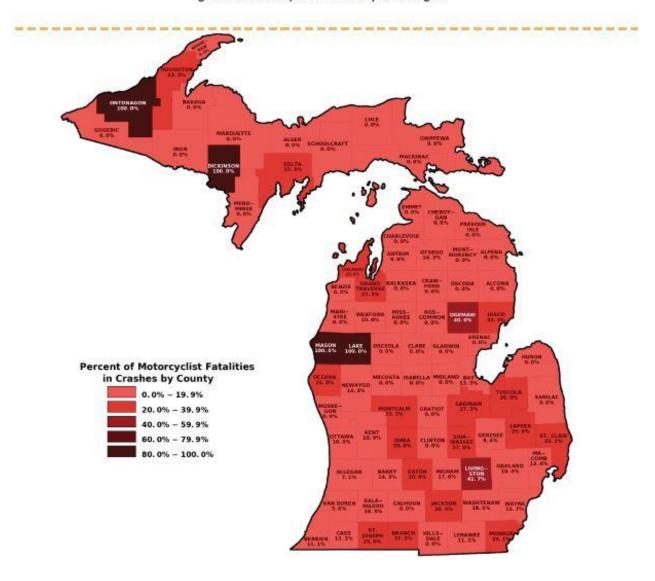
2015

This map displays shaded categories of licenced motorcycle operators in each county as a percentage of the total licenced drivers for that county. Darker shades represent higher percentages of licenced motorcycle operators and lighter shades represent lower percentages.



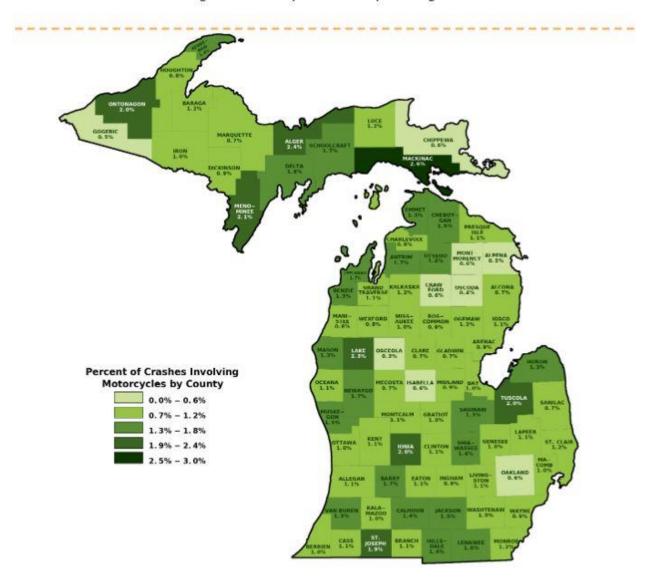
2015

This map displays shaded categories of fatalities to motorcyclists in crashes in each county as a percentage of the total fatalities for that county. Darker shades represent higher percentages of motorcyclist crash fatalities and lighter shades represent lower percentages.



2015

This map displays shaded categories of motorcycle-involved crashes in each county as a percentage of the total crashes for that county. Darker shades represent higher percentages of motorcycle-involved crashes and lighter shades represent lower percentages.



Goal

To reduce and prevent motorcycle rider crashes, serious injuries, and fatalities in Michigan through education, enforcement, engineering, and emergency response. Michigan must develop and implement comprehensive strategies such as training programs for motorcyclists, public awareness and education campaigns, emergency medical services education, safety legislation, and making roadway design and maintenance conducive to safe motorcycling.

Emphasis Areas

The National Highway Traffic Safety Administration (NHTSA) has identified eleven specific emphasis areas for each state to focus efforts and to develop and implement improvements in those areas. The eleven focus areas are:

- Program Management
- Motorcycle Operator Licensing
- Motorcycle OUI of Alcohol or Other Drugs
- Law Enforcement
- Motorcycle Rider Conspicuity & Motorist Awareness Programs
- Program Evaluation & Data

- Motorcycle Personal Protective Equipment
- Motorcycle Rider Education & Training
- Legislation & Regulations
- Highway Engineering
- Communications Program

Program Management

Goal: Manage a comprehensive motorcycle safety program in Michigan in collaboration with safety partners and stake holders.

Strategy #1 Designate a lead agency to coordinate Michigan's comprehensive motorcyclist safety program.

Strategy #2 Engage with other states and national motorcyclist safety programs through the National Association of State Motorcycle Safety Administrators (SMSA) to bring fresh perspectives and new ideas to the table from other state and national sources.

Strategy #3 Reach out and invite more partners and stake holders to the GTSAC Motorcycle Safety Action Team meetings to develop and collaborate on new creative safety initiatives to engage riders, rider groups/clubs and motorcycle dealers.

Strategy #4 Create a five year, data-driven strategic plan, supported by one-year action plans, to guide the development of a comprehensive motorcycle safety program. Plans should include input from stakeholders in all program areas identified in NHTSA Program Guideline #3, Motorcycle Safety.

Motorcycle Personal Protective Equipment

Goal: Educate motorcycle riders and passengers of the benefits of protective gear including helmets.

Strategy #1 Promote the benefits and encourage the use of all protective gear through the rider education program and the education and outreach events.

Strategy #2 Educate the public and motorcyclists about the benefits of wearing a helmet and protective gear.

Strategy #3 Enact a universal helmet law that requires all riders and passengers on motorcycles and mopeds to wear a motorcycle helmet that is compliant with Federal Motor Vehicle Safety Standard No. 218.

Strategy #4 Develop, implement, and evaluate communications strategies to promote the benefits, and encourage the use, of all protective gear including helmets. Engage new partners and stakeholders (e.g., rider groups, dealers, emergency medical services, fire department, hospitals, public health, etc.) to implement these strategies.

Motorcycle Operator Licensing

Goal: Encourage more motorcycle operators to seek out and take formal rider training and to get their cycle endorsement.

Strategy #1 Increase penalties for unendorsed motorcycle operators.

Strategy #2 Conduct regular inspections of and provide regular refresher training for third-party examiners and testers.

Strategy #3 Evaluate and update the motorcycle operator licensing, SOS branch office written test questions and Knowledge Test questions provided to students taking a waiver course.

Motorcycle Rider Education and Training

Goal: Provide rider education and training to students state wide and to provide the best professional development to rider training instructors.

Strategy #1 Ensure any increase in motorcycle license plate, endorsement, and/or registration fees must include funds being added to the "State Motorcycle Safety Fund" for rider training.

Strategy #2 Increase funding for the motorcycle rider education program to a level that will allow it to meet current demand and to reduce the age of the motorcycle fleet.

Strategy #3 Provide annual regional professional development opportunities and periodic statewide conferences for Motorcycle Safety Foundation (MSF), certified RiderCoaches, RiderCoach Trainers, and program management staff.

Strategy #4 Evaluate program performance using metrics such as the number of sponsors, sites, ranges, courses offered, wait times, students trained, instructors trained, training bikes, instructor retention, motorcycle condition and age, and quality assurance visits.

Strategy #5 Ensure that every RiderCoach/instructor receives at least one quality assurance visit every three years.

Strategy #6 Establish an online reporting system that integrates motorcycle training course student completion data with the Michigan Department of State licensing system.

Motorcycle Operation Under the Influence of Alcohol or Other Drugs

Goal: Educate riders of the dangers of impaired riding and promote a culture of zero-tolerance.

Strategy #1 Conduct a crash-data analysis to identify priority target populations and geographic areas which are overrepresented in impaired motorcyclist crashes.

Strategy #2 Conduct outreach to motorcycle rider groups to promote a safety culture specifically with zero-tolerance policies for impaired riding.

Strategy #3 Create a high-visibility motorcycle OWI enforcement campaign conducted by motor officers. Promote this effort to the news media and include impaired-riding training during police motor officer recertification.

Legislation and Regulations

Goal: Enact laws and regulations that will influence and promote motorcycle safety among motorcycle operators and motorists.

Strategy #1 Update the current "eye protection law" to require motorcycle operators and passengers to wear compliant eye protection and eliminate windshields as an acceptable form of eye protection.

Strategy #2 Create legislation to impose strict fines and penalties on motorcycle owners who allow unendorsed operators to operate their motorcycle illegally on Michigan roads.

Strategy #3 Create legislation to enact a mandatory universal motorcyclist helmet law that requires all riders and passengers on motorcycles or mopeds to wear a DOT compliant helmet.

Law Enforcement & Emergency Medical Services

Goal: Encourage and support law enforcement agencies to enforce laws, educate riders and motorists, and to promote motorcycle safety. Support and educate EMS staff on the unique nature of motorcycle crash scene trauma and response.

Strategy #1 Train EMS personnel to specifically address the types of crash trauma caused by motorcycle crashes and how to provide optimal on-scene care to those injured.

Strategy #2 Promote and provide training in motorcycle accident scene management. Increase EMS and public awareness of proper procedures for reducing injuries and fatalities at the scene of a motorcycle crash.

Strategy #3 Collaborate with the State EMS Director to provide annual EMS training to licensed EMS personnel. Develop a training program to incorporate training as part of the State EMS licensing of new EMS candidates.

Strategy #4 Continue to educate law enforcement, prosecutors, and courts about the important role they play in helping to reduce the unendorsed rider population and save motorcyclist lives.

Strategy #5 Encourage all law enforcement agencies with motorcycle units to combine outreach and enforcement strategies to promote motorcycle safety.

Strategy #6 Continue to support law enforcement agencies with data to target outreach, education, and high-visibility enforcement strategies.

Highway Engineering

Goal: Design, build and maintain a roadway infrastructure that is conducive and safe for motorcyclists and all road users.

Strategy #1 Examine and enforce the policies and practices of the following maintenance activities: Excessive use of low friction joint sealants and crack fillers, low friction pavement markings, and excessive grooving of concrete pavement. Ensure that surface treatments to control traction are applied immediately if needed, with particular attention to ramps and curves.

Strategy #2 Collaborate with state, county, and local road maintenance and work zone personnel on safety concerns of motorcyclists have such as: pothole maintenance, raised manhole covers, uneven pavement conditions, gravel or debris on roadway, chip sealers used on roadways, excessive over-band crack fillers and joint sealants, and stop light loop detection systems that do not detect a motorcycle.

Strategy #3 Educate transportation professionals of the operational characteristics of motorcycles and the roadway design and maintenance needs specific to motorcyclists, and continue to involve motorcyclists in the new designs, treatments, and materials.

Strategy #4 Study the impact of the new "Safety Edge" roadway shoulder edge-drop treatments.

Motorcycle Rider Conspicuity and Motorist Awareness Programs

Goal: Promote increased use of high-visibility riding gear to operators and passengers. Develop targeted motorist awareness campaigns to increase their awareness of motorcyclists.

Strategy #1 Promote increased use of high-visibility gear among instructors, especially when conducting training and representing their training program.

Strategy #2 Analyze crash data to determine the location, type, and severity of multiple-vehicle motorcycle crashes in which the other driver was found to be at fault. Use the data from this analysis to develop targeted motorist awareness campaigns.

Strategy #3 Engage motorcycle clubs and organizations in the planning and implementation of protective gear campaigns.

Communication Program

Goal: Identify and develop specific messaging to address priority problem areas supported by available data.

Strategy #1 In advance of the riding season, the "*Michigan Motorcycle Safety Action Team*" (MMSAT) should coordinate and develop an explicit, annual strategic communication plan. The plan should identify priority problem areas and messaging supported by available data. The plan should articulate measurable communication objectives, and assign responsibility for specific actions for critical stakeholders.

Strategy #2 Following the riding season, convene a meeting of the MMSAT to review communication campaign outcomes, evaluate new data on each problem area, and propose improvements for the following riding season.

Strategy #3 Raise public awareness of motorcyclist training opportunities, motorcycle rider endorsement requirements, motorist awareness of motorcycles, and use of High-Viz riding gear through the "May is Motorcyclist Safety Awareness Month" campaign and promote at motorcyclist events around the State of Michigan.

Strategy #4 Through the "Ride Safe to Ride Again" campaign, continue to promote the importance of a comprehensive safe motorcycling mindset. Foster the acceptance and use of High-Viz riding gear, expand access to and awareness of training opportunities for motorcyclists, and communicate to unendorsed motorcycle owners the benefits of being trained and endorsed.

Strategy #5 Through the "Look Twice Save a Life" campaign, educate motorists, making them more aware of motorcyclists by speaking at and distributing literature in driver's education classrooms and placement of motorcyclist awareness signs.

Program Evaluation and Data

Goal: Conduct regular analysis of data to identify problem areas and to continually evaluate initiatives for effectiveness.

Strategy #1 Analyze motorcycle crash data to determine if there are high crash locations and if crashes are related to design characteristics or pavement conditions that might impact motorcycle safety. Investigate for potential solutions.

Strategy #2 Conduct a follow-up analysis to previous crash-causation studies to identify the most prevalent causal and correlated factors in serious single-vehicle and multiple-vehicle motorcycle crashes.

Strategy #3 Convene a multidisciplinary team to review the causation study and develop specific recommendations for countermeasures to address the most frequent causal factors. Team members should include the disciplines of crash reconstruction, highway safety programs, motorcyclist training, highway design, operations and maintenance, injury prevention/epidemiology, and experienced motorcycle riders.

Strategy #4 Develop specific statewide goals for motorcycle safety that are consistent across all related safety plans, including the Strategic Highway Safety Plan, Highway Safety Plan, and Michigan Motorcycle Action Plan.

Conclusion

In all, the 2016 assessment of Michigan's comprehensive motorcycle safety program identified many strong areas and identified several with recommendations to improve upon. Leaders in Michigan's motorcycle safety program strive to incorporate data driven countermeasures to address Michigan's greatest areas of need and use the "NHTSA Guideline #3" to identify those aspect areas to include in a comprehensive plan. Many of the described "major recommendations" from the assessment have already begun to be addressed by one or more Departments, agencies, or organizations. Many of the recommendations laid out in the assessment will require greater team effort by several motorcycle safety partners, stake holders, and advocates to effectively address these areas of concern.

<u>Acronyms</u>

A-Injury Incapacitating Injury

ABATE American Bikers Aiming Toward Education

AMA American Motorcyclist Association

B-Injury Non-Incapacitating Injury
BAC Blood Alcohol Concentration

CE Continuing Education

CRAM County Road Association of Michigan

CY Cycle

DMS Digital Message Signs
EMS Emergency Medical Services

GTSAC Governor's Traffic Safety Advisory Commission

HB House Bill High-Viz High Visibility

K Killed

KA Killed, A-Injury

KAB Killed, A-Injury, and B-Injury Combined

LE Law Enforcement

LEAK Law Enforcement Action Kit MCL Michigan Compiled Law

MCRCSIP Michigan County Road Commission Self Insurance Pool

MDOS Michigan Department of State

MDOT Michigan Department of Transportation
Mi-REP Michigan Rider Education Program

MML Michigan Municipal League
MSF Motorcycle Safety Foundation

MSP Michigan State Police MVC Motor Vehicle Code

NHTSA National Highway Traffic Safety Administration
OHSP Michigan Office of Highway Safety Planning

OUI Operation Under the Influence
OWI Operating While Impaired

PAAM Prosecuting Attorneys Association of Michigan

PACT Prevent, Assess, Contact, Treat

RCP RiderCoach Preparation

SB Senate Bill

SHSP Strategic Highway Safety Plan

SMARTER Skilled Motorcyclist Association Responsible, Trained, & Educated Riders

SMSA National Association of State Motorcycle Safety Administrators

SOS Secretary of State

TIP Temporary Instruction Permit
TRCP Transitional RiderCoach Preparation
TRCTP Transitional RiderCoach Trainer Preparation

UMTRI University of Michigan Transportation Research Institute

Acknowledgements

The Michigan Motorcycle Safety Action Team consists of members of the following agencies:

ABATE of Michigan

Accident Scene Management

AMA/D14

American Legion

American Legion Riders Detroit Police Department

Michigan Motorcycle Safety Action Team 2017-2022

Grand Blanc Twp Police Department
Grand Rapids Community College
Grand Rapids Police Department
Lansing Community College
MCRCSIP
MDOS
MDOT
MSF
MSP
OHSP
Schoolcraft College
SMARTER
SMSA
United States Air Force
United States Army
University of Michigan