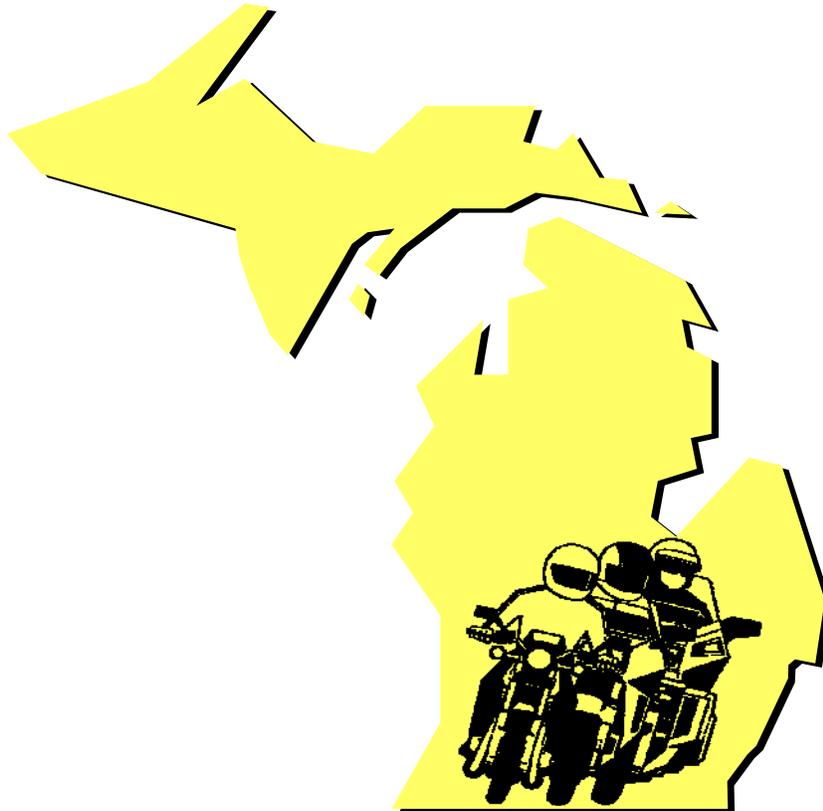


**Michigan Motorcycle Safety  
Action Plan 2009-2012**



Member agencies:

Michigan Department of Transportation  
Office of Highway Safety Planning  
Michigan Department of State  
Michigan State Police  
Office of Services to the Aging  
Michigan Department of Education  
Michigan Department of Community Health



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## **Introduction**

In 1998, the American Association of State Highway and Transportation Officials (AASHTO) approved its Strategic Highway Safety Plan, which was developed by the AASHTO Standing Committee for Highway Traffic Safety with the assistance of the Federal Highway Administration, the National Highway Traffic Safety Administration, and the Transportation Research Board Committee on Transportation Safety Management. The plan includes strategies in 22 key emphasis areas that affect highway safety. The plan's goal is to reduce the annual number of highway deaths by 5,000 to 7,000. Each of the 22 emphasis areas includes strategies and an outline of what is needed to implement each strategy.

NCHRP Project 17-18(3) is developing a series of guides to assist state and local agencies in reducing injuries and fatalities in targeted areas. The guides correspond to the emphasis areas outlined in the AASHTO Strategic Highway Safety Plan. Each guide includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process.

The Michigan Motorcycle Rider and Education Action Plan was created by using the above documents and resources as a base foundation.

## **Action Plan Development**

A Strategic Highway Safety Plan should define a system, organization, and process for managing the attributes of the road, the rider, and the vehicle to achieve the highest level of highway safety by integrating the work of disciplines and agencies involved. These disciplines include the planning, design, construction, operation, and maintenance of the roadway infrastructure (engineering); injury prevention and control (emergency response services), health education; and those disciplines involved in modifying road user behaviors (education and enforcement).

The development of the strategic highway safety plan was commissioned by Michigan's Governor's Traffic Safety Advisory Commission (GTSAC) in October 2004. The GTSAC consists of the Governor (or a designee), the Directors (or their designees) of the Departments of Community Health, Education, State, State Police, and Transportation, the Office of Highway Safety Planning, the Office of Services to the Aging, and three local representatives from the county, city, and township level.

Motorcycle Rider and education issues were identified as an emphasis areas in both the AASHTO and GTSAC Strategic Highway Safety Plans. A sub-committee consisting of a multi-disciplinary group of agencies and disciplines was formed and conducted a kick off meeting on May 3, 2005.

## The Issue: Motorcycle Rider Education and Safety

There have been little public education/awareness efforts to prevent crashes. Knowing how to prevent crashes will offer a method to reduce crashes and fatalities.

In 2007, Michigan's continued fatal crash reductions contributed to a record low fatality rate of 1.04 per 100 million Vehicle Miles Traveled (VMT), well below the 1.40 national average. Despite this, there was a 63 percent increase in motorcycle fatalities from 2003 to 2007.

An examination of the 2008 Michigan Traffic Crash Facts annual report and data from the Michigan State Police reveals the following:

Year	2008	2007	2006	2005	2004
Motorcycle Crashes	3969	3386	3821	3504	3276
Motorcycle Injuries	3462	2706	3026	3053	2679
Total Fatalities	980	1084	1084	1129	1159
Motorcycle-Related	127	120	110	122	79
% Motorcycle-Related Fatalities (of all motorcycle crashes)	13%	11.1%	10.1%	10.8%	6.8%

Motorcycle involvement in traffic crashes increased from 3,276 to 3,969 from 2004 to 2008. Additionally, fatalities as a percentage of all motorcycle crashes increased significantly by in 2008, and the general trend represents a collective increase over the last eight years for which data are available. Studies of Michigan's motorcycle-related traffic fatalities indicate that unendorsed drivers are over-represented. A recent trend also shows an increase in fatalities among motorcyclists 40 years and older.

The Hurt Report published in 1981 identified several factors involved in motorcycle crashes. A comprehensive study of Michigan's serious motorcycle crashes shows that nearly thirty years later, those same factors are still present in today's crashes. Successfully reducing Michigan's motorcycle crashes will require serious, dedicated, and undoubtedly controversial measures.

Enforcement, education, public information, judicial, legislative, engineering/roadway management and program administration will be emphasized in the corresponding strategies.

Michigan should have a comprehensive program to promote motorcycle safety and prevent motorcycle crashes and related injuries. Some of the ways to accomplish this are:

- Expand the availability of motorcycle rider and safety education courses through public and private sponsors and increase public awareness.
- Implement the motorcycle safety assessment program.
- Decrease the number of unendorsed motorcycles.
- Maintain helmet laws and enforce the use of Federal Motor Vehicle Safety Standard (FMVSS) 218 compliant helmets.

# Michigan Motorcycle Safety Strategies

*This action plan suggests several strategies for addressing the problems. These strategies combine the elements of enforcement, education, and engineering. The strategies are suggested recognizing that, with few exceptions, programs that depend upon only one of these elements are not likely to be successful.*

## **1. Maintain helmet laws and enforce the use of FMVSS 218 compliant helmets**

- a) Department of Michigan State Police Traffic Safety Division will provide education to law enforcement, as it relates to motorcycle safety and licensing. [Near Term]

The department assisted the Office of Highway Safety Planning in reviewing and distributing a law enforcement role call video to all law enforcement agencies in the state educating law enforcement on checking for proper endorsement, impaired riding and proper helmet use. The department serves as an expert legal and enforcement resource for all legislative and law related issues.

- b) Enforce the use of FMVSS 218 compliant helmets. [NT – MSP]

MSP Traffic Safety Division web site was upgraded in 2008 to provide enhanced resources for identifying between Department of Transportation approved and novelty helmets.

## **2. Continue to enhance the Michigan Motorcycle Safety Program**

- a) Educate motorcycle riders in the necessary crash avoidance techniques. [Department of State, ongoing]
- b) Prioritize relevant Motorcycle Rider & Education Assessment recommendations. [DOS & OHSP, ongoing]
- c) Expand the availability of motorcycle rider and safety education courses through public and private sponsors and update motorcycle inventory offered in the grant programs. [NT – DOS/OHSP]
- d) Train more Motorcycle Safety Foundation certified RiderCoaches. Allow RiderCoach training to be offered through educational institutions as part of their continuing education offerings, funded by individual tuition and not by the State's Motorcycle Safety Education Fund. This would result in increased availability of

instructor training options, serious commitment of coach candidates, and an opportunity to re-focus the State's funding to the motorcycle rider. [Ongoing, DOS]

- a. DOS has four annual instructor prep courses in FY09.
- e) Encourage legislation allowing public training sites to offer non-grant-funded classes once grant funding is used up for the year. Not only would this help to service the huge demand in many areas of Michigan, but it would also make it more fiscally responsible to offer safety education classes targeted for groups with special learning needs. [Long Term, DOS]
- f) Expand training availability by offering more available courses in both the public and private sector. [NT – DOS]
- g) Provide statewide ongoing professional development training for all Motorcycle Safety Foundation certified RiderCoaches. [NT – OHSP/DOS] DOS has hosted professional development training in FY07 and will again in FY09.

### **3. Decrease the number of unendorsed and/or impaired motorcyclists**

- a) Department of State Police Traffic Safety Division will provide education to law enforcement, as it relates to motorcycle safety and licensing. [LT, MSP]
  - a. MSP began distributing a law enforcement update to all officers in the state before the 2009 riding season started. The department assisted OHSP in reviewing and distributing a law enforcement role call video to all law enforcement agencies in the state educating law enforcement on checking for proper endorsement, impaired riding and proper helmet use. The department serves as an expert legal and enforcement resource for all legislative and law related issues.
- b) Continued/updated training for law enforcement officers in detecting impaired riders. Include "Knowing What to Look" for in regular training and in-services. [LT – OHSP]
- c) Recommend that the Office of Highway Safety Planning (OHSP) and DOS produce informational materials dealing with impaired riders of which the recent "Knowing What to Look For" video is a good example. [Ongoing]
- d) Incorporate impaired riding and protective equipment themes in to the "Over the Limit. Under Arrest." and "Click It or Ticket" mobilizations. [NT – OHSP]
  - a. The National Highway Traffic Safety Administration produced PSAs which included motorcycle riders for the Over the Limit. Under Arrest crackdown.
- e) Judges, Magistrates and prosecutors do not receive any specialized training for addressing the issue of impaired motorcyclists and other motorcycle related cases. Include training for these groups. [LT]

#### **4. Increase public awareness of motorcycle safety issues**

- a) Encourage all new applicants for a motorcycle endorsement regardless of age, to attend and pass at a minimum, the BRC or its equivalent. While providing adequate information on how to located and sign up for the class. [LT]
- b) Include safety and awareness questions on driver's license testing. [NT – DOS]
  - a. The drivers test has been revised to include motorcycle safety questions. DOS website has been upgraded to include more course information. Brochures and posters are also available in each branch.
- c) Educate the rider on the importance of motorcycle conspicuity. [LT]
  - a. Motorcycle conspicuity highlighted at May motorcycle awareness kickoff events.
- d) Include a motorcycle awareness class/module as part of driver's education segment 2 and for classes offered to elderly driver commissions, senior centers, senior groups, community centers, fraternal organizations, church groups, motorcycle groups (those with out an organized program), provided by "trained presenters" from different motorcycle associations/clubs. [LT]
  - a. The writing portion of the drivers test includes 2 questions on motorcycle safety.
- e) Request grant funds or earmark a portion of the Motorcycle Safety Education fund and other funding sources for continued PI&E. [NT – OHSP/DOS]
- f) Include motorcycle safety information such as posters and brochures which highlight the share the road message, protective gear, and the state requirements for riding with a legal endorsement at all welcome centers, visitor centers and rest areas. [NT – OHSP/DOT ]
- g) Recruit auto insurance companies to include motorcycle awareness information in premium notices and invoices to their members. [LT]
- h) Provide copies of MSF's 'Common Road' or similar current, quality, motorcycle safety and awareness videos to branch offices to be used on the television monitors at licensing centers. [NT – DOS]
- i) Increase animal collision awareness. [NT – Deer Crash Coalition]
- j) Encourage the use of proper clothing including gloves, boots, long pants, a durable long-sleeved jacket, eye and face protection, and an approved helmet. [NT – DOS/OHSP]

- k) Include mention of motorcycle conspicuity in Intersection Safety, Elderly Mobility and Safety, Commercial Vehicle Safety and Drivers Age 24 and Younger plans. [LT]

## **5. Support legislation to improve motorcycle safety in Michigan**

- a) Progressive penalties for repeat offenders convicted of riding without proper endorsement or helmet. [LT]
- b) Revise the current operator licensing system for motorcycles. [LT]
  - a. Temporary Instruction Permit Restrictions should include .00 Blood Alcohol Content levels.
  - b. Require rider to be crash and violation free during TIP period
  - c. Limit TIP to 90 day period, with one additional renewal.
- c) Explore legislative options to increase endorsement levels, including mandatory suspensions of endorsement until satisfactory completion of a BRC or greater for each at-fault crash. [LT]
- d) Recommend the requirement that the registered owner to possess a motorcycle endorsement for all motorcycle registrations. Include waiver for purchasers who certify that they will not operate the motorcycle. [LT]
- e) Investigate feasibility of implementing a graduated rider endorsement program. [LT]
- f) Require daytime headlight use for all motorcycles and encourage riders to use advances in technology such as headlight modulators. [LT]
  - a. Legislation passed to allow headlight modulators passed in 2007.
- g) Maintain helmet laws and the use of FMVSS 218 compliant helmets. [LT]
  - a. Letter from GTSAC in support of Gubernatorial veto of helmet repeal sent.

## **6. Develop relationships with EMS to improve motorcycle safety in Michigan**

- a) Integrate/invite State EMS coordinator in to current action team
- b) Investigate training opportunities regarding unique needs for motorcycle crash victims with State EMS coordinator

**7. Consider the effects on motorcycle riders during all operations of the transportation infrastructure.**

**Enhance relationships with the County Road Association of Michigan (CRAM) and the Michigan Municipal League (MML) to increase their involvement in the process of this action plan development and implementation.**

- a) Investigate the issues of raised manhole covers in construction zones and the concerns motorcyclists have with them. [NT – MDOT/CRAM/MML]
- b) Examine the practices and effects on motorcyclists of the following maintenance and construction activities:
  - Overband crack sealing
  - Longitudinal joint sealing
  - Longitudinal grinding on concrete pavement [LT – MDOT/CRAM/MML]
- c) Examine the practice and effects on motorcyclists of using Calcium Chloride for dust control on gravel roadways which is inadvertently spread onto paved surfaces. [CRAM]
  - MDOT does not have any gravel roads
- d) Evaluate the possibility of signing to warn motorcyclists of special conditions in construction zones. [NT - MDOT/CRAM/MML]
- e) Minimize the effects of transverse rumble strips on motorcyclists. [CRAM/MML]
  - MDOT does not use transverse rumble strips, other than in construction zones, and have had no complaints or issues with using the existing standards.

**8. Research**

- a) Recommend the enhancement of the UD-10 vehicle crash form to accurately report bodily injury location and severity. [NT-MSP/Criminal Justice Information Center]
- b) Recommend support of survivor studies and graduate rider course study for those riders who took a Basic Rider Course vs third party training vs those without training but still have an endorsement
- c) Evaluate the effectiveness of awareness programs in reducing the motorcycle fatalities and injuries.
- d) Review results of current studies by the Motorcycle Safety Foundation which evaluate the effectiveness and impact of rider training in reducing motorcycle fatalities and injuries.

## ACRONYMS

AAA	American Automobile Association
AASHTO	American Association of State Highway and Transportation Officials
CJIC	Criminal Justice Information Center
FHWA	Federal Highway Administration
GTSAC	Governor's Traffic Safety Advisory Commission
GVWR	Gross Vehicle Weight Rating
ITS	Intelligent Traffic System
IVI	Intelligent Vehicle Initiative
LT	Long Term
MDE	Michigan Department of Education
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MMSAP	Michigan Motorcycle Safety & Awareness Program
MSF	Motorcycle Safety Foundation
MSP	Michigan State Police
NCHRP	National Cooperative Highway Research Program
NHI	National Highway Institute
NT	Near Term
OHSP	Office of Highway Safety Planning
PI&E	Public Information and Education
PSA	Public Service Announcement

*\*This is not a complete list*

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