

Michigan Pedestrian and Bicycle Safety Action Plan 2009-2012





Governor's Traffic Safety Advisory Commission

Improve traffic safety in Michigan by fostering communication, coordination, and collaboration among public and private entities.

Member Agencies:

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

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Action Plan Development

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 assistance of the Federal Highway Administration, the National Highway Traffic Safety Administration, and the Transportation Research Board Committee on Transportation Safety Management. The aim of the plan was to identify emphasis areas and strategies that would substantially reduce the incidence of vehicle-related fatalities and injuries. The overarching goal of the plan is to reduce the annual crash fatality rate to no more than 1.0 fatality per 100 million vehicle miles traveled (100M VMT) by 2008.



The National Cooperative Highway Research Program (NCHRP) provided guidance documents for the implementation of the AASHTO Strategic Highway Safety Plan. The NCHRP Report 500, Volume 10, *A Guide for Reducing Collisions Involving Pedestrians* and NCHRP Report 500, Volume 18, *A Guide for Reducing Collisions Involving Bicycles* includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process.

Pedestrian and bicycle crashes and the resulting deaths and injuries represent a serious problem on our highways and roadways.

The American Association of State Highway and Transportation Officials' (AASHTO, 2001) *A Policy on Geometric Design of Highways and Streets* (also called the Green Book) states:

"Pedestrians are a part of every roadway environment, and attention should be paid to their presence in rural as well as urban areas...pedestrians are the lifeblood of our urban areas, especially in the downtown and other retail areas."

The NCHRP Report 500, Volume 10, *A Guide for Reducing Collisions Involving Pedestrians* (Zeeger, Stutts, et al., 2004), states:

"Walking is a basic human activity, and almost everyone is a pedestrian at one time or another...Even though pedestrians are legitimate roadway users, they are frequently overlooked in the quest to build more sophisticated transportation systems. Whether building new infrastructure or renovating existing facilities, it should be assumed that people will walk, and plans should be made to accommodate pedestrians. Where people aren't walking, it is often because they are prevented or discouraged from doing so."

"Congress clearly intends for bicyclists and pedestrians to have safe, convenient access to the transportation system and sees every transportation improvement as an opportunity to enhance the safety and convenience of the two modes." Federal Highway Administration (FHWA) Program guidance on TEA-21



The National Centers for Chronic Disease and Health Promotion (CDC) is providing support to increase the number of policy and environmental changes to encourage people to be more physically active. CDC's goals are to encourage the development of pedestrian and bicycle friendly environments and promote active forms of transportation like walking and bicycling.



The transportation and health agencies have pedestrian and bicycle promotion and safety in common.

The Michigan Pedestrian and Bicycle Safety Action Plan was created using the above documents and resources as a base foundation.

Nationwide Background

Nationwide, there were 4,654 pedestrian fatalities in 2007 and 70,000 pedestrians injured in traffic crashes. On average, a pedestrian is killed in a traffic crash every 113 minutes and injured in a traffic crash every 8 minutes. Pedestrian deaths accounted for 11.3 percent of all traffic fatalities. In 2007, 698 bicyclists were killed and an additional 44,000 were injured in traffic crashes. Bicyclist deaths accounted for 2 percent of all traffic fatalities, and bicyclists made up 2 percent of all the people injured in traffic crashes during the year. One-seventh (15%) of the bicyclists killed in traffic crashes in 2007 were between 5 and 15 years old. The bicyclist fatality rate for this age group in 2007 was 2.40 per million population — about 4 percent higher than the rate for all bicyclists (2.31 per million population).

(Source: NHTSA – Traffic Safety Facts 2007 Data).



The need to reduce pedestrian/bicyclist deaths and injuries, even in the face of ongoing efforts to increase levels of walking and biking, continues to be an important goal for the highway safety and public health professions. Specific groups that do not or cannot drive depend on walking and bicycling for transportation, including children, the elderly and low-income populations. These individuals comprise up to 30 percent of the population in many communities and are particularly in need of a safe walking/biking environment to help lower their risk of injury and death.

The United States is aging- its older population will double over the next 30 years. By 2030, one in five Americans will be 65 or older. As the number of older people continues to increase, important issues affecting this population segment need to be addressed.

Michigan Background

Pedestrian and bicycle issues were identified as emphasis areas in both the AASHTO and GTSAC Strategic Highway Safety Plans. The Pedestrian and Bicycle Action Team, a GTSAC sub-committee consisting of multiple agencies and disciplines was asked to address this

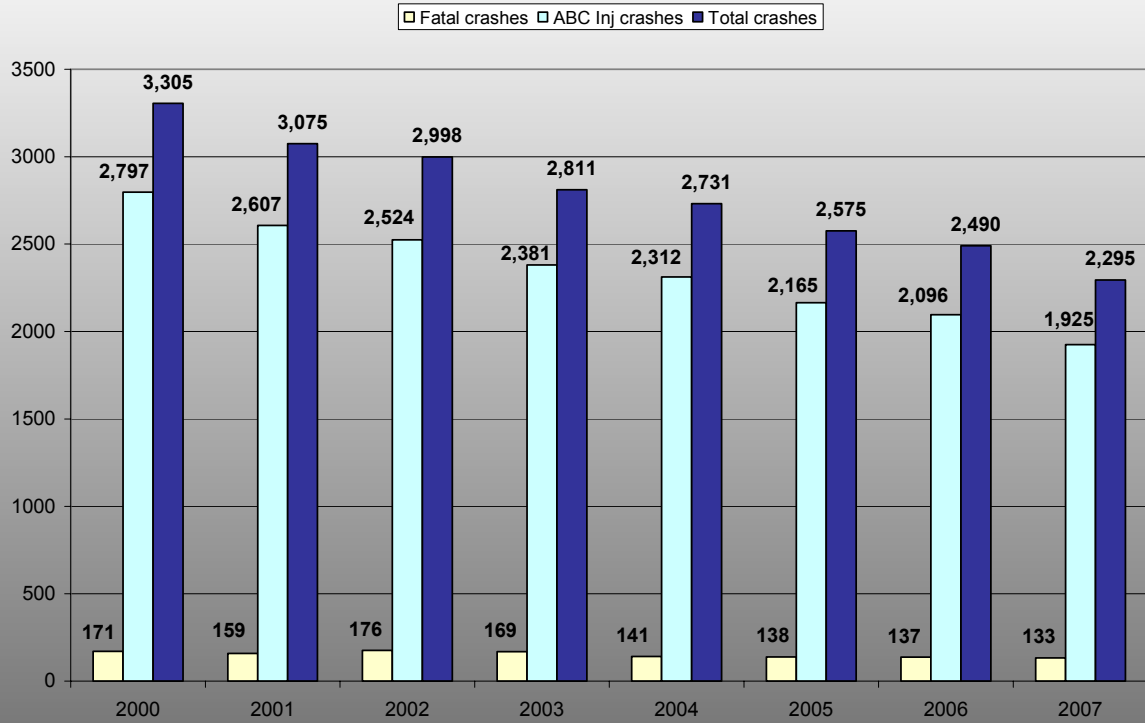
emphasis area. Many issues and strategies from the national and state agenda are incorporated into this Michigan Pedestrian and Bicycle Safety Action Plan.

As the importance of physical activity, safety and accessibility has been realized, the State of Michigan has become focused on creating multi-modal routes that are safe for pedestrians, bicyclists and motor vehicle drivers of all ages and abilities. The following statistics provide a snapshot of the pedestrian/bicyclist safety issues within Michigan in 2007:

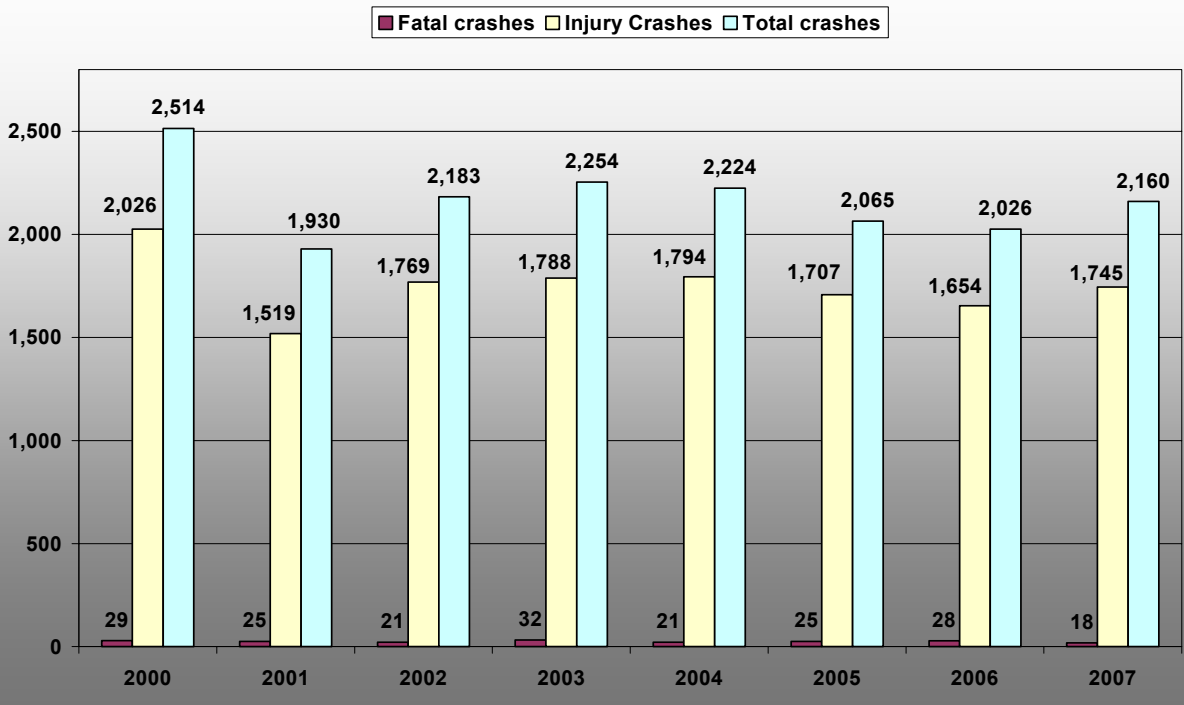
- 2,437 pedestrians involved in motor vehicle crashes, with 134 pedestrians killed and 2,013 injured. Of all pedestrians killed, 16.4% were under the age of 21 and 31.3% were 55 and older. (Source: Office of Highway Safety Planning).
- 2,214 bicyclists involved in motor vehicle crashes, with 18 bicyclists killed and 1,760 injured. Children under 21 years of age accounted for 16.4% and persons aged 55 and older accounted for 31% of the bicycle deaths. (Source: Office of Highway Safety Planning).
- 30 (22.4%) pedestrian fatalities and 115 pedestrian injuries occurred in the City of Detroit. For perspective, the city of Detroit has a population that is approximately 10% of the statewide population.
- 45 (33.6%) pedestrian fatalities and 179 serious pedestrian injuries occurred in Wayne County.



Pedestrian Crashes



Bicycle Crashes



Goal

In coordination with the GTSAC, the Pedestrian and Bicycle Safety Action Team adopted the following goals:

- To reduce the trailing five year average of pedestrian fatalities by 5% per year from 144 in 2007 to 125 in 2012
- To reduce the trailing five year average of pedestrian serious injuries by 5% per year from 533 in 2007 to 450 in 2012
- To reduce the trailing five year average of bicycle fatalities by 5% per year from 25 in 2007 to 20 in 2012
- To reduce the trailing five year average of all bicycle injuries by 5% per year from 1738 in 2007 to 1555 in 2012

MICHIGAN STRATEGIES

BEST PRACTICES

Objective

Increase the number and improve the operation of pedestrian and bicycle facilities in the state of Michigan.

Strategies

Promote the use of best practices when designing and operating facilities by facilitating training, making presentations to local and state agencies and researching and promoting Michigan successes.

Near-term Action Plan

Objective	Lead Agency/Person	Action Steps	By When
Conduct state and local trainings highlighting best practices.	MDOT/Deb Alfonso	Training Wheels, ADA Training, Pedestrian Safety	12/31/09
Provide learning opportunities for PBSAT and local and state agencies throughout the year.	MDOT/Deirdre Thompson	Promote national webinars and trainings, including ITE, APBP, Focus State Conference Calls	12/31/09
Encourage best practices including CPS, refuge islands, road diets	MDOT and FHWA / Deirdre Thompson and Dave Morena	Conduct site visits to locate best practices in Michigan	12/31/09
	MDOT and MDCH/Deirdre Thompson and Lisa Grost	Develop and submit abstracts on pedestrian and bicycle safety priorities to the Michigan Traffic Safety Summit.	3/09

	FHWA/Dave Morena	Deliver presentations to state and local agencies and consultants regarding liability, best practices, roundabouts and RSA, pedestrian and bicycle safety priorities.	12/31/09
Promote and Support Road Safety Audits	FHWA/MDOT	Provide educational opportunities throughout Michigan and to PBSAT on Road Safety Audits.	12/31/09
Develop college campus toolkit	MDOT, FHWA, MDCH	Research and conduct site visits to colleges successfully implementing pedestrian and bicycle safety practices	12/31/09

Medium Term

Objective	Lead Agency	Action Steps	By When
Encourage best practices including CPS, refuge islands, road diets	MDOT and FHWA / Deirdre Thompson and Dave Morena	Conduct site visits to locate best practices in Michigan	12/31/10
	MDOT	Implement research recommendations to locations of need.	12/31/10
	MDOT	Promote innovative pedestrian and safety design within MDOT and local agencies.	12/31/10
Develop college campus toolkit	MDOT, FHWA, MDCH	Develop presentation and best practices toolkit	12/31/10

BEHAVIOR

Objective

Improve motorist, bicyclist and pedestrian behavior when sharing facilities.

Strategies

Raise awareness of pedestrian and bicycle safety by developing public service announcements and a media campaign and developing and providing educational materials for law enforcement. Educate motorists, bicyclists and pedestrians on proper and predictable behavior by developing and distributing educational materials.

Near-term Action Plan

Objective	Lead Agency	Action Steps	By When
Educate bicyclists on safe behavior and laws	LMB / Rich Moeller	Update and distribute 5,000 What Every Bicyclist Must Know Booklets	12/31/09
Educate public on pedestrian and bicycle safety and laws	PBSAT (MDOT, DOS, MDCH, LMB, OHSP)	Develop and implement PSA's regarding ped/bike safety	5/31/09
Fund pedestrian and bicycle safety projects	OHSP, MDOT and MDCH / Pat Carrow, Jim D'Lamater, and Lisa Grost	Expand OHSP grant opportunities	12/31/09
Educate motorists on pedestrian and bicycle safety and laws	OHSP	Develop PSA's about the Vulnerable User Law	12/31/09
Engage and educate law enforcement personnel on pedestrian and bicycle laws and data in Michigan	LMB / Rich Moeller	Provide and promote education to law enforcement. Develop and promote law enforcement web site.	12/31/09
	LMB / Rich Moeller	Develop ticket book cheat sheet	12/31/09

Medium Term

Objective	Lead Agency	Action Steps	By When
Educate public on pedestrian and bicycle safety	MDOS and MDCH / Carol Reagan and Lisa Grost	Identify and distribute pedestrian and bicycle safety information to Secretary of State offices and local public health departments.	12/31/10
Implement statewide pedestrian and/or bicycle safety media campaign.	PBSAT	Develop and locate funding for a statewide media campaign (share the road)	12/31/10
		Investigate potential national demonstration project	12/31/10
Increase compliance of pedestrian and bicycle behavior on campuses	PBSAT	Educate and assist college campuses to increase safety	12/31/10
	WSU	Promote NHTSA study at WSU	12/31/10
	WSU/WMU	Promote best college practices	12/31/10
Increase compliance of youths' bicycle behavior and knowledge of bicycle safety	LMB / Rich Moeller	Educate youth and develop Youth "What Every Bicyclist Must Know"	12/31/10

POLICIES AND LEGISLATION

Objective

Enhance, clarify and develop Michigan and local laws and policies to improve pedestrian and bicycle safety.

Strategies

Identifying and proposing policies and legislation to improve pedestrian and bicycle safety.

Near-term Action Plan

Short Term

Objective	Lead Agency	Action Steps	By When
Implement Michigan Complete Streets resolution	Healthy Kids/Healthy MI Coalition	Have the Governor endorsement a complete streets resolution	12/31/09
Increase the number of Michigan communities implementing Complete Streets resolutions and policies.	Healthy Kids/Healthy MI Coalition, MDCH and LMB / Andrea Brown, Lisa Grost, Rich Moeller	Education, encourage and fund local communities to adopt resolution	12/31/09

Medium Term

Objective	Lead Agency	Action Steps	By When
Identify inconsistencies in current law pertaining to pedestrian and bicycle safety	LMB, Greenways Collaborative and MSP / Rich Moeller, Norm Cox	Review current Motor Vehicle Code	12/31/10
		Identify areas that need to be strengthened	12/31/10
		Propose changes to MI law	12/31/10
Increase the number of Michigan communities implementing Complete Streets resolutions and policies.	Healthy Kids/Healthy MI Coalition, MDCH and LMB / Andrea Brown, Lisa Grost, Rich Moeller	Education, encourage and fund local communities to adopt resolution	12/31/10

Long Term

Objective	Lead Agency	Action Steps	By When
Develop and introduce a "Yield" law		Develop proposed language	12/31/11

AWARENESS

Objective

Elevate awareness of pedestrian and bicycle safety in state and local agencies

Strategies

Recognize successful pedestrian and bicycle safety initiatives, distribute pedestrian and bicycle crash data statewide and publish quarterly newsletter.

Near-term Action Plan

Objective	Lead Agency	Action Steps	By When
Provide recognition of jurisdictions with annual awards	PBSAT	Research and nominate local agencies for Michigan Traffic Safety Award	11/30/09
Analyze and distribute pedestrian and bicycle crash data	OHSP / Steve Schreier	Collect pedestrian and bicycle crash data	12/31/09
Publish PBSAT quarterly newsletter	MFF, MDCH, MDOT / Sarah Panken, Lisa Grost, Deirdre Thompson	Call for article, develop newsletter, distribute and post on website.	1/31/09, 4/30/09, 7/31/09, 10/31/09

Medium Term

Objective	Lead Agency	Action Steps	By When
Incorporate pedestrian and bicycle safety planning into MPO safety planning process	MDOT/FHWA	Promote ped/bike safety presentations at Safety Summit and annual MPO Safety Forums	12/31/10

Resources

Websites:

- ❖ www.pedinfo.org
- ❖ www.walkinginfo.org
- ❖ saferoutesmichigan.org
- ❖ Google of DOT's:
<http://www.google.com/coop/cse?cx=006511338351663161139%3Acnk1qdck0dc>

Pedestrian and Bicycle Crash Analysis Tools:

- ❖ SEMCOG Crash Analysis Tool
- ❖ Roadsoft tools for use by local agencies
- ❖ Current MDOT tools and practices
- ❖ PBCAT, available from walkinginfo.org
- ❖ PedSafe available from www.walkinginfo.org
- ❖ Crossroads Software – www.crossroadsoftware.com – similar to PBCAT
- ❖ Michigan Crash Facts Site: <http://www.michigantrafficcrashfacts.org/>

Community Assessment Tools:

- ❖ Promoting Active Communities Assessment and Award. www.mihealthtools.org/communities
- ❖ Healthy Communities Checklist. www.mihealthtools.org

Acronyms

AAA	American Automobile Association
AASHTO	American Association of State Highway and Transportation Officials
APBP	Association Pedestrian and Bicycle Professionals
CDC	Centers for Disease Control and Prevention
CPS	Countdown Pedestrian Signal
FHWA	Federal Highway Administration
GTSAC	Governor's Traffic Safety Advisory Commission
ITE	Institute of Transportation Engineers
MDCH	Michigan Department of Community Health
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MFF	Michigan Fitness Foundation
MPO	Metropolitan Planning Organization
MSP	Michigan State Police
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
OHSP	Office of Highway Safety Planning
PBSAT	Pedestrian and Bicycle Safety Action Team
PROWAG	Public Rights of Way Accessibility Guidelines
PSA	Public Service Announcement
RSA	Road Safety Audits
SEMCOG	Southeast Michigan Council of Governments
VMT	Vehicle miles traveled
WMU	Western Michigan University
WSU	Wayne State University

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