

# Michigan Young Driver Action Plan 2009-2012



## **Member Agencies**

AAA Michigan  
Meridian Township Police Department  
Michigan Center for Truck Safety  
Michigan Department of Community Health  
Michigan Department of State  
Michigan Department of State Police  
Michigan Department of Transportation  
Michigan Driver & Traffic Safety Education Association  
Office of Highway Safety Planning  
Prosecuting Attorneys Association of Michigan  
Sears Driving School  
University of Michigan Transportation Research Institute

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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 the 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 19: *A Guide for Reducing Collisions Involving Young Drivers* includes a brief introduction, a general description of the problem, the strategies/countermeasures to address the problem, and a model implementation process. This report is available at:

<http://safety.transportation.org>

The Michigan Young Driver Action Plan was created using the above documents and resources as a base foundation.

## Nationwide Background

Young drivers are more likely to be involved in a motor vehicle crash than any other age group. This is the case whether crash rates are measured per population, per licensed driver, or per mile traveled. This greater crash involvement also results in additional injury risks because the youngest drivers tend to carry the largest number of passengers, typically other teens. This group—drivers and passengers alike—is least likely to wear safety belts, thereby foregoing the best protection against injury in the event of a crash. Young drivers are a hazard to other road users, as well. A recent analysis showed that the majority of fatalities in crashes involving 15- to 17-year-old drivers are to persons other than the teen driver, including occupants of other vehicles and nonmotorists.

In 2003, 6,424 teens between the ages of 15 and 20 years old were killed in motor vehicle crashes (CDC, 2006). Although 15- to 20-year-olds represented 8.4 percent of the United States population and 6.3 percent of licensed drivers, they accounted for 13.6 percent of drivers involved in fatal motor vehicle crashes and 18 percent of drivers in police-reported crashes (NHTSA, 2005). The economic cost of crashes involving young drivers amounts to nearly 41 billion dollars a year (NHTSA, 2004).

The greater involvement of younger drivers in crashes results from a variety of factors. Especially during the first few months of driving, inexperience plays a central role in elevated crash rates. Crash rates for newly licensed drivers are highest during the first six months of driving alone, after which time they rapidly decrease. This suggests that novices improve their driving relatively quickly. Lack of experience partly coincides with, and is partly responsible for, young drivers' tendency to make poor judgments about hazards in the driving environment and hazardous actions on their own part. Although "risk taking" is often cited as a problem among young drivers, "risky driving" is the more appropriate term.

## Michigan Background

Traffic crashes continue to be the leading cause of death and injury for this group. In 2007, drivers ages 16 - 24 represented 14.3 percent of all drivers, yet comprised 22.7 percent of drivers involved in all crashes and 22.8 of drivers involved in fatal crashes. Both represent involvements that are significantly higher than expected, considering the number of drivers in this age group and the mileage driven.

Where hazardous actions were assigned to crash-involved drivers in this age group, the actions mirrored those of drivers in all age groups. The leading hazardous action was Unable to stop in assured clear distance ahead, followed by Failure to yield and then by Speed too fast. All of these involve either a mismanagement of speed, or a lack of or miscommunication between drivers or other highway users.

Age	Licensed Drivers	Drivers in All crashes	Crash Rate (per licensed driver)
16	89,863	11,251	.125
17	108,988	15,300	.140
18	106,849	16,739	.157
19	116,680	15,673	.134
20	122,900	14,247	.116
21	112,918	13,494	.120
22	120,364	12,688	.105
23	122,871	11,648	.095
24	121,743	11,147	.092

Within the 16-24 age group, the 18 year olds had the most crash involvements and the highest crash rate among these drivers. This may reflect the lack of experience and the need for driver education for all new drivers, regardless of age.

Young Drivers Involved in Fatal Crashes			
Year	Ages 16 – 20	Ages 21 – 24	Ages 16 – 24
2003	237	190	427
2004	228	169	397
2005	198	152	350
2006	172	157	329
2007	199	156	355
<b>AVERAGE</b>	207	165	372

Ages of Young Drivers Involved in Fatal Crashes						
Age	2003	2004	2005	2006	2007	Average
16	40	29	25	16	28	28
17	48	50	37	35	34	41
18	60	50	53	39	52	51
19	46	55	45	39	39	45
20	43	44	38	43	46	43
<b>Total</b>	237	228	198	172	199	

Analysis: Michigan had a spike of 25 more teen fatalities in 2007 (199) than in 2006 (172), which was not out of the ordinary given the previous years. 2007 was a relatively bad year compared to 2006, which was the best in the last ten years. Also note that the 2007 increase in fatalities was entirely in the 16 – 20, not the 21 – 24 year age bracket.

### Analysis of 2007 Traffic Crash Data

Winter Weather: Young drivers involved in fatal crashes on winter weather roads explains the 2007 increase in teens involved in fatal crashes. Michigan had a bad winter after a mild winter in 2006 and the teens were the ones who crashed more.

Day of the Week: The weekend shows higher involvement of teens and young adult drivers in all crashes when compared to older drivers.

Time of the Day: 9:00 p.m. – 2:59 a.m. shows the highest involvement for teen and young adult drivers in all crashes compared to the other two age groups.

### Trends in Young Driver Crashes

Graduated Driver Licensing (for drivers under 18) and the testing procedures in place for new drivers over 18 have placed emphasis on late night crashes; as evidenced by the Midnight-5AM restriction for drivers holding a Level 2 license. Though this is true for fatal crashes, it is less so for non-fatal crashes. This is also true for day of week, with Saturday recording the most fatalities, but a nearly even distribution when considering crashes of all types.

#### Time of Day in Crash

##### All Crashes

##### Fatal Crashes

##### Injury Crashes

Time of Day	# Drivers	% Total	# Crashes	% of Fatal	# Crashes	% of Injury
Midnight-2:59AM	6,669	5.5	53	16.2	1,707	6.2
3AM-5:59AM	3,498	2.9	30	9.2	882	3.2
6AM-8:59AM	13,055	10.8	34	10.4	2,703	9.9
9AM-11:59AM	12,162	10.1	26	8.0	2,741	10.0
Noon-2:59PM	21,326	17.7	32	9.8	5,068	18.5
3PM-5:59PM	31,579	26.2	39	11.9	7,153	26.0
6PM-8:59PM	19,002	15.7	46	14.1	4,240	15.4
9PM-11:59PM	13,080	10.8	67	20.5	2,866	10.4
Unknown	389	0.3	0	0.0	74	0.3
<b>Total Drivers</b>	<b>120,760</b>	<b>100.0</b>	<b>327</b>	<b>100.0</b>	<b>27,461</b>	<b>100.0</b>

**Day of Week in Crashes**  
**All Crashes      Fatal Crashes      Injury Crashes**

<b>Day of Week</b>	<b># Drivers</b>	<b>% Total</b>	<b>#</b>	<b>% of Fatal</b>	<b>#</b>	<b>% of Injury</b>
Sunday	12,605	10.4	51	15.6	3,169	11.5
Monday	16,349	13.5	44	13.0	3,570	13.0
Tuesday	17,521	14.5	32	14.1	3,863	14.1
Wednesday	17,536	14.5	38	11.6	4,032	14.7
Thursday	18,652	15.4	58	17.7	4,114	15.0
Friday	21,256	17.6	41	12.5	4,748	17.3
Saturday	16,841	13.9	63	19.3	3,965	14.4
<b>Total Drivers</b>	<b>120,760</b>	<b>100.0</b>	<b>327</b>	<b>100.0</b>	<b>27,461</b>	<b>100.0</b>

**Goal**

**Decrease the number of crashes involving young drivers by 5 percent per year for the next five years. This would reduce the number of inexperienced drivers involved in fatal crashes from 355 in 2007 to 274 in 2012.**

# Michigan Strategies

## Improve Graduated Driver Licensing

### Objective

Graduated driver licensing (GDL) systems provide the foundation for protecting young drivers, their passengers, and other road users. Most states have implemented GDL systems, but simply having a GDL system in place is not sufficient. It is important for GDL systems to include the most beneficial risk-reducing restrictions, including the following:

### Strategies

- **Implement a nighttime driving restriction that begins at 9 p.m.** A disproportionately high number of young driver fatal crashes occur between the hours of 9 p.m. and 6 a.m. Beginning drivers should not be exposed to the most risky driving conditions. *Michigan's Level 2 license allows driving without parent/guardian supervision except from midnight to 5 AM. Our state law doesn't meet the NCHRB recommendation, but we do encourage parents to set their own limitations; beyond what the law sets.*
- **Require at least 6 months of supervised driving for beginners, starting at age 16.** A substantial amount of practice is needed – at least 6 months – before a novice driver begins to develop the savvy required to be a proficient and safe driver. Driving with an adult supervisor enables novice drivers to gain needed “real world” driving experience in a reasonably safe fashion. *Michigan GDL law allows teens to begin Driver Education as early as 14 year, 8 months. After that, they can apply for a Level 1 license, allowing them to drive under the supervision of a parent, guardian or designated, licensed adult. It is possible to begin supervised driving before age 16. A driver must hold a Level 1 license for 6 months, after which they can apply for their Level 2 license, if they have reached 16 years.*
- **Implement a passenger restriction allowing no young passengers.** Carrying teen passengers greatly increases the risk of a serious crash for young drivers. Passenger restrictions during the first several months of unsupervised driving eliminate distractions that teen passengers inevitably create.
- *Current Michigan law has no restriction on the number or age of passengers a new driver may have in the vehicle.*
- **Prohibit cell phone use by drivers with a GDL license.** Recent research suggests that cell phone use is associated with a fourfold increase in the likelihood of a serious crash among drivers of all ages. Reducing this risk for inexperienced drivers is an appropriate goal for a GDL system. *State law in Michigan has no restrictions on cell phone use, except as it pertains to distraction in general, and falls under the heading of reckless or careless driving. Although local ordinances exist across the state, there is no statewide law prohibiting cell phone use or text messaging by inexperienced drivers. For drivers under 19 years, the Michigan Department of State may impose a restriction on cell phone use when it is determined that cell phone use played a role in a negligent crash or traffic violation.*

**Long and short-term objectives for the improvement to GDL in Michigan include:**

1. Participate with national advocacy groups to promote: entering GDL no earlier than 16 years of age, nighttime driving restrictions starting at 9:00PM, passenger restrictions and cell phone restrictions.
2. Provide for an in-depth analysis of crash causation for drivers in the GDL process, as well as those 18 and over who do not go through this process.
  - a. Explore the potential funding sources to continue this valuable research
  - b. Specifically consider passenger numbers in teen crashes, for KABC and PD only.

<b>Publicize, Enforce, and Adjudicate Laws Pertaining to Young Drivers</b>
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**Objective**

Some laws pertain specifically to young drivers. Other laws that govern all drivers are particularly important for young drivers. Enhanced publicity, enforcement, and adjudication of these laws, including the following measures, will benefit young drivers:

• **Publicize and support the enforcement of GDL restrictions.** To the extent that teens do not comply with protective restrictions under GDL systems, the safety benefits of GDL will be reduced.

*Teens, parents and law enforcement need to be more completely informed as to the laws surrounding GDL and novice drivers. Michigan has provided materials to instructors, law enforcement and a parent orientation package in support of this strategy.*

• **Publicize and support the enforcement of laws pertaining to underage drinking and driving.** Both minimum drinking age laws and “zero tolerance” laws have proven effective in reducing alcohol-related crashes and fatalities involving young drivers.

*Michigan’s “Zero Tolerance” law has been widely promoted and publicized, as well as enforced – with special emphasis during the prom, fall sports and graduation seasons.*

• **Publicize and support the enforcement of safety belt laws.** Safety belt use is lower among young drivers than among adult drivers. Well-publicized enforcement programs and primary safety belt laws have increased belt usage for all drivers, including teen drivers.

*Michigan’s safety belt usage is among the highest in the United States, yet teenage drivers lag slightly behind in usage rates.*

**Long and short-term objectives for publicizing, enforcing and adjudicating laws pertaining to young drivers:**

1. Publicize, Enforce and Adjudicate Laws Pertaining to Young Drivers
  - a. Publicize and support the enforcement of GDL restrictions
  - b. Publicize and support the enforcement of laws pertaining to underage drinking and driving (Impaired Driving Action Team)
  - c. Publicize and support the enforcement of safety belt laws (Occupant Protection Action Team and OHSP)

d. Engage Law Enforcement

- i. Determine strategy to keep law enforcement statewide informed about young driver issues
- ii. Enhance the capability and knowledge base for the law enforcement community to better monitor the actions of new drivers
- iii. Include the law enforcement community in all changes to GDL, driver education and licensing that make their job easier. This may include public information and education (PI&E) efforts, training opportunities and inclusion on appropriate committees, in order that information and tools can be more effectively disseminated
- iv. Use data to target locations where young driver crashes are highest, and develop strategy to help focus activities there

<b>Assist Parents in Managing Their Teens' Driving</b>
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**Objective**

Parents are inescapably involved in the licensing process of their children, even though they may not recognize the extent of their potential influence. Efforts to assist parents in this role, including the following, can benefit teen drivers:

• **Facilitate parental supervision of learners.** More effective supervision of teen drivers holds substantial promise for further reducing young driver crashes. Simply distributing educational/advisory materials to parents is insufficient. Persuasive techniques that encourage parents to make use of materials and guidance are needed.

*Many driving schools offer parent orientations to parents of new drivers. Most often these are optional, though some are mandatory and are included in the 24 hour Segment 1 Driver Education curriculum.*

• **Facilitate parental management of intermediate drivers.** Teen drivers experience a dramatic increase in crashes when they first begin driving alone. Parent-teen driving agreements and new technologies for monitoring teen drivers have the potential to reduce young driver crashes during this high-risk period.

*During the Level 2 experience, parents/guardians manage new drivers, often with little information on how to do so. More information can be provided to better prepare parents for this responsibility.*

• **Encourage selection of safer vehicles for young drivers.** Teens often drive vehicles that are less likely to have important safety features. A program that encourages the greatest possible use of safer vehicles by young drivers holds substantial promise for reducing deaths and injuries among teen drivers and their passengers.

*Often parents purchase vehicles inappropriate for their new driver. Older, smaller vehicles may not provide the best crash protection available and may not have the latest safety equipment included in the vehicle. More information on how to buy an appropriate vehicle for a novice driver should be disseminated to parents and other stakeholders.*

### **Long and short-term objectives for assisting parents in managing their teen's driving:**

1. Assist Parents in Managing Their Teens Driving
  - a. Facilitate parental supervision of learners
    - i. Develop strategy to educate and engage parents in their teen's driving.
  - b. Facilitate parental management of intermediate drivers
    - i. Develop strategy to educate and engage parents in their teen's driving.
  - c. Encourage selection of safer vehicles for young drivers
  - d. Determine knowledge level, attitudes of parents regarding risk and perceived parental role in driving training and traffic safety education.

<b>Improve Young Driver Training</b>
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#### **Objective**

Although there is no evidence that formal driver education classes are effective in reducing subsequent crash rates among novice drivers, there are a number of promising improvements that can be made in the training of young drivers administered by states:

• **Improve content and delivery of driver education/training.** The model followed by current driver education programs in the United States was developed in the late 1940s. There is widespread belief that both what is taught and how it is taught can be improved significantly, with the promise that young driver crashes can be reduced as the result. Doing so will require a substantially more ambitious effort than simply adding content to the current curriculum. *Michigan has recently enacted changes to driver education that will improve the consistency of educational content, instructor competence and teaching technique. Evaluation of these changes will determine the level of improvement and subsequent activities.*

### **Long and short-term objectives for assisting parents in managing their teen's driving:**

1. Improve Young Driver Training
  - a. Continue to improve content and delivery of driver education & training
    - i. Support the increase of monitoring of new and existing driver education training programs.
    - ii. Upgrade the driver education teacher preparation and continuing education programs.
  - b. Assist new drivers, of all ages, in gaining knowledge and behaviors necessary to become a safe, defensive driver
    - i. Further work toward a statutory requirement for driver education & GDL, regardless of age.
    - ii. Explore the feasibility of and the options available for a driver education program aimed at all new drivers not currently being served by the GDL process.
  - c. Provide the high-risk driver education programs; including injury prevention, occupant protection, DUI, speed, and distraction messages.
  - d. Develop public information and education campaigns with activities targeting behaviors that endanger younger drivers. Employ selective targeting of ages with tailored messages.

## Employ School-Based Strategies

### Objective

Nearly all beginning drivers are in high school. This affords an opportunity to adopt strategies to reduce young driver crashes by implementing policies that take advantage of this natural grouping in both space and time to alter that environment:

- **Eliminate early high school start times.** Recent developments in understanding human sleep needs indicate that teenagers need to be asleep in the early morning hours. As a result, school systems in the United States have begun to move school start times back to 8:30 or later. This has been shown to reduce young driver crashes.

*Several Michigan school districts have changed their start times; with elementary students starting earlier and high school students starting later. Research suggests that later start times for adolescent students will favorably affect learning, in general, and perhaps a better rested driver will be less likely to be involved in a crash.*

- **Review transportation plans for new/expanded high school sites.** When new schools are built, transportation plans should take into account that there will be a high concentration of inexperienced teens driving in the vicinity of the high school.

*Many crashes involving young drivers occur in and around school properties.*

### Long and short-term objectives employing school-based strategies:

#### 1. Employ School-Based Strategies

- a. Support later high school start times (i.e., after 8:30 a.m.)
- b. Support the review of transportation plans for new and/or expanded high school sites, with the goal of reducing conflict points in and around these sites.

Continue work with other SHSP Action Teams, as appropriate, to explore and recommend countermeasures to further reduce crashes, injuries and deaths within the 16-24 age group.

## Acronyms

AAA	American Automobile Association
AASHTO	American Association of State Highway and Transportation Officials
ASLA	American Society of Landscape Architects
CDC	Centers for Disease Control and Prevention
DUI	Drove while Under the Influence of alcohol/drugs
GDL	Graduated Driver Licensing
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
GTSAC	Governor's Traffic Safety Advisory Commission
ITE	Institute of Transportation Engineers
MADD	Mothers Against Drunk Driving
MDCH	Michigan Department of Community Health
MDIT	Michigan Department of Information Technology
MDOS	Michigan Department of State
MDOT	Michigan Department of Transportation
MSA	Michigan Sheriff's Association
MSP	Michigan State Police
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
OHSP	Office of Highway Safety Planning
SEMCOG	Southeast Michigan Council of Governments
UMTRI	University of Michigan Transportation Institute
VMT	Vehicle miles traveled

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