

Members

Sen. Brent Waltz, Chairperson
Sen. Allen Paul
Sen. James Tomes
Sen. James Arnold
Sen. Timothy Skinner
Sen. Greg Taylor
Rep. Robert Morris, Vice-Chairperson
Rep. Matthew Lehman
Rep. Woody Burton
Rep. Charles Moseley
Rep. Gail Riecken
Rep. Justin Moed



INTERIM STUDY COMMITTEE ON DRIVER EDUCATION

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Authority: P.L. 101-2009

MEETING MINUTES¹

Meeting Date: August 14, 2013
Meeting Time: 1:00 P.M.
Meeting Place: State House, 200 W. Washington St., Room 233
Meeting City: Indianapolis, Indiana
Meeting Number: 1

Members Present: Sen. Brent Waltz, Chairperson; Sen. Allen Paul; Sen. James Tomes; Rep. Robert Morris, Vice-Chairperson; Rep. Matthew Lehman; Rep. Charles Moseley; Rep. Gail Riecken; Rep. Justin Moed.

Members Absent: Sen. Timothy Skinner; Sen. Greg Taylor; Rep. Woody Burton; Sen. James Arnold.

Chairperson Waltz called the meeting to order at 1:06 p.m.

Presentation: William A. Warner, Oregon Department of Transportation (ODOT); Sharon Fife, Association of National Stakeholders in Traffic Safety Education (ANSTSE)

Ms. Fife, who operates a driving school in Ohio, distributed the pamphlet Novice Teen Driver (Exhibit A), and information from the Indiana Driver Education Association (Exhibit B). She also offered the Novice Teen Driver Education and Training Administrative Standards and Attachments (Exhibit C), stated that ANSTSE supports the standards, and offered the assistance of ANSTSE for any revisions to the Indiana Code regarding driver

¹ These minutes, exhibits, and other materials referenced in the minutes can be viewed electronically at <http://www.in.gov/legislative>. Hard copies can be obtained in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for hard copies may be mailed to the Legislative Information Center, Legislative Services Agency, West Washington Street, Indianapolis, IN 46204-2789. A fee of \$0.15 per page and mailing costs will be charged for hard copies.

training. She remarked that the National Highway Traffic Safety Administration also will help a state set the standards into law.

Mr. Warner presented Oregon's approach to driver education: Public Health Model of Traffic Safety Education (Exhibit D). He stated that Oregon's stance is that deaths from vehicle crashes constitute a health crisis. A graduated driver's license (GDL) requirement reduces crashes, but driver education, as an integral part of a GDL, also helps in reducing injury and death. Mr. Warner reported that Oregon introduced new teaching models in the state's traffic safety education program. Mr. Warner described the requirements for obtaining a driver's license in Oregon:

- (1) 50 hours of supervised driving if the driver completes the program; or
- (2) 100 hours of supervised driving if the driver is taught by other means.

Mr. Warner attributed Oregon's success in driver education to placing all responsibility for the program under ODOT.

The Committee discussed how Oregon funds the program with Mr. Warner who explained that an additional \$6 fee is collected on the sale of each driver's license or permit. The funds raised are used to subsidize both private and public driver education providers. Mr. Warner testified that Oregon providers also charge tuition which averages \$500 per student.

When asked whether all driver education providers are required to instruct to the national standards, Mr. Warner responded affirmatively, and added that only an ODOT approved provider can certify that a student has completed the program.

Mr. Warner described the age requirements of Oregon's driver education program:

- (1) A child may apply for an instruction permit at age 15. Instruction permits are valid for two years.
- (2) A child may apply for a driver's license at age 16 if the child has held an instruction permit for at least six months.
- (3) Various other GDL requirements apply until age 18.
- (4) A driver education provider is not eligible to receive state subsidies for students who are age 18 or older.

Mr. Warner stated that private driver education schools have come forward in Oregon to provide driver instruction as fewer high schools offer driver education. A discussion followed regarding the willingness of schools to instruct to standards. Mr. Warner's testimony was that private driver education schools in Indiana have indicated to him that they want to teach to standards set by the state and to work collaboratively to improve the industry.

Chairperson Waltz discussed with Mr. Warner the fairness of increasing the cost of every driver's license and permit. Chairperson Waltz stated that reimbursing driver education providers would be very helpful in less populated areas of Indiana.

Committee Discussion

Representative Moseley asked if the Bureau of Motor Vehicles (BMV) had designed an easier path for returning veterans to secure a commercial driver's license (CDL) and, if so, the number of veterans who have taken advantage of the new procedure. He urged the BMV to perform more outreach to find more individuals entitled to apply for this opportunity. Representative Moseley added that there are 6,000-8,000 job openings at any one time for qualified CDL drivers.

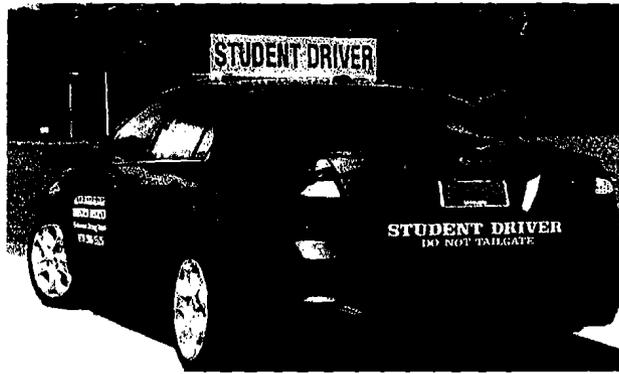
Steve Leak, Credentials Program, BMV, stated that a new procedure for veterans was implemented on November 11, 2012, which has eliminated a great deal of red tape. Chairperson Waltz commended the BMV for setting up this procedure, and asked that the BMV inform the Committee of what marketing and publicity efforts have been done, including those done through veterans' groups.

The next meeting will be held upon the call of the chairperson. There being no further business before the Committee, Chairperson Waltz adjourned the Committee at 2:06 p.m.

SUPPORT FOR NTDEETAS

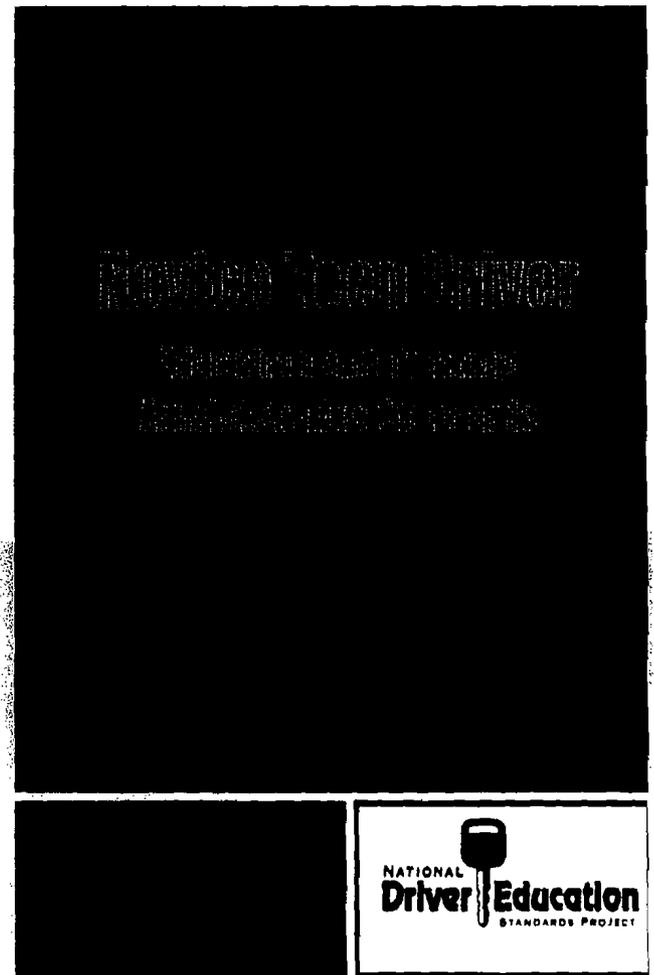
"I firmly believe that an effective driver education program – along with proven safety legislation, active law enforcement and positive engagement of parents, schools and other community members – is an important element in a program to protect these young drivers". - NHTSA Administrator David Strickland

To view these letters please visit www.anstse.info/News.html



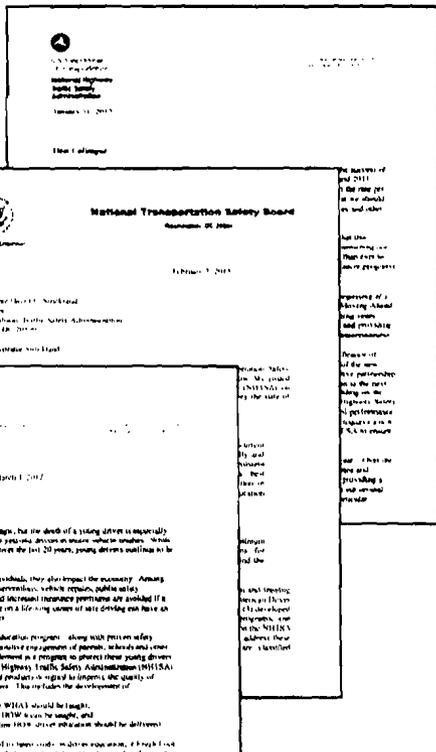
ANSTSE

The Association of National Stakeholders in Traffic Safety Education (ANSTSE) was established in 2010 to maintain and, when necessary, upgrade the NTDEETAS and to provide oversight in implementation activities. ANSTSE is an Association of voluntary Stakeholders dedicated to identifying and advocating areas of common ground for the improvement of driver education. Members of the Association include:



Setting the
Standards for
Quality in Driver
Education

www.anstse.info



Interim Study Committee
on Driver Education
August 14, 2013
Exhibit A

NTDETAS STANDARDS

The Novice Teen Driver Education and Training Administrative Standards (NTDETAS) were developed by the driver education professional community with assistance from NHTSA. The Standards were finalized in 2009 to define the future of driver education and assist in improving the delivery of driver education programs nationally.

The NTDETAS are intended to provide guidance to States striving to consistently provide quality teen driver education and training programs.

The Standards are available online at www.anstse.info/Standards.html

STATE ASSESSMENTS

The NHTSA Driver Education State Assessments are designed to evaluate how well states align with the NTDETAS, to assist states with evaluating their driver education program and to identify areas for improvement. The Assessments are conducted by experts within the driver education community. Assessments have been conducted in DE, KS, MD, OR and VT. For more information on State Assessments visit the NHTSA website at www.nhtsa.gov/DriverEducationProgram

INFORMATION SHARING SYSTEM

Novice Teen Driver Education and Training Administrative Standards			
L.O. MANAGEMENT, LEADERSHIP, AND ADMINISTRATION			
	Yes	No	Planned
1.1.1 Each State should have a single agency, or coordinated agencies, selected by an advisory board of stakeholders and charged with overseeing all novice teen driver education and training programs. Completed by:	15.15%	15.15%	12.11%
1.1.1.1 That agency should have authority and responsibility for the implementation, monitoring, evaluation, and endorsement of these standards. Completed by:	14.44%	16.67%	5.56%
1.1.1.2 That agency should also be charged with developing and executing procedures such as sharing with interim partners and the public about driver education and training issues. Completed by:	18.89%	22.22%	5.56%
1.1.1.3 In addition, the agency should inform providers in a timely fashion about changes to laws, regulations, and procedures. Completed by:	14.44%	16.67%	5.56%
	Yes	No	Planned
1.1.2 Each State should identify (choose a State agency that is best suited and stable) and direct (appoint) a driver education administrator to administer a system of education and training program. Completed by:	26.67%	22.22%	11.11%

The Information Sharing System facilitates information sharing between states and provides a tool for states to conduct a self-assessment to determine the extent to which their teen driver education and training programs align with the NTDETAS and to identify possible areas for improvement. For more information please visit www.anstse.info

MAP-21

Moving Ahead for Progress in the Twenty-First Century—To qualify for Federal Highway Safety Grants, states must incorporate driver education, that is certified by the state, as a component within their Graduated Driver Licensing (GDL) System for all drivers under the age of 21. MPA-21 encourages all states to adopt the NTDETAS.

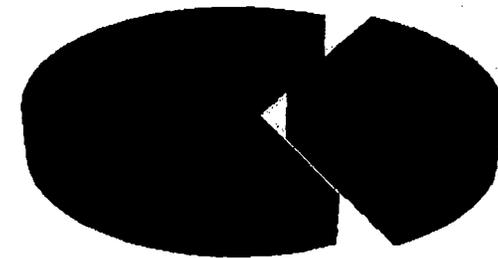


TECHNICAL ASSISTANCE

ANSTSE provides both on-site and off-site technical assistance, at no costs to the states, to assist with the adoption and implementation of the NTDETAS; and with the overall improvement of their driver education programs. The ANSTSE website provides resources to assist states with improvements to their program.

For more information on Technical Assistance and Resources visit www.anstse.info/TechnicalAssistance.html

Leading Causes of Deaths for Teens



■ Motor Vehicle ■ Homicide ■ Suicide ■ All Others

Source: Center for Disease Control 1999-2006

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*Interim Study Committee
on Driver Education
August 14, 2013
Exhibit B*



August 5, 2013

Dear Committee Members,

On behalf of the Indiana Driver Education Association (INDEA) Board of Directors, I would like to thank the members of the Summer Study Committee for their hard work and commitment to improving driver education and saving teen lives in the State of Indiana. During the past four years, there have been many positive changes made to Indiana laws with regards to driver education and Graduated Driver Licensing (GDL) laws as a result of this committee's efforts.

The INDEA Board feels that with many of these changes becoming effective in January of 2012 (the lowering of the permit age to 15, all driver education providers moving to one agency, and the establishment of an advisory committee) we have seen some progress from the implementation of the GDL, but it can only go so far. To get maximum reductions in teen crashes takes a comprehensive approach which includes the GDL restrictions, effective enforcement, and a quality driver education program implemented statewide (just as GDL is implemented statewide).

We have made great strides over the past few years in improving driver education in the State of Indiana-and for that the INDEA Board is grateful for your Dedication and Support.

Warmest Regards,


Robin S. Rabanus
President



Oregon Driver Education Program Background

April 2013

About Oregon's Driver Education Program

The goal of Oregon's Driver Education (DE) program is to develop a system that results in measurably safer new drivers with fewer injuries and deaths. The program seeks to develop safe and efficient drivers who understand that all young drivers should become competent, caring, productive and responsible traffic safety citizens, committed to continually improving their driving skills.

The Driver Education program manages statewide efforts to improve driver education by:

- coordinating driver education course curriculum
- coordinating both the instructor training curriculum and the train-the-trainer curriculum;
- certifying public driver education providers and their instructors;
- certifying private driver education providers and their instructors;
- providing public information, education programs and resources;
- overseeing the student driver training fund for provider reimbursement; and
- coordinating the student certification program for completion.

In 2000, the Legislature moved the Driver Education program from the Department of Education to the Oregon Department of Transportation's Safety Division. ODOT established four task forces that conducted public forums throughout the state looking at curriculum, instructor standards, public outreach and operation. As a result, an action plan was formulated to address the task forces' major finding that the program needs established standards.

Improving the Program (The Driver Education Timeline)

- In 2005, House Bill 2112 raised the Driver Education student reimbursement from \$150 to \$210 for public driver education providers. The student reimbursement fund continues to receive \$6.00 from every license application and renewal.
- Implementing HB 2112 required changing the Oregon Administrative Rules (OAR 737-015).
- Since efforts were undertaken to update the OAR, it was determined that additional changes to the OAR were appropriate. The aim of these changes was to:
 - create consistent statewide standards and eliminate inconsistencies in language and programming in driver education providers;
 - establish standards with the onset of new driver education programs being established throughout the state;
 - respond to non-compliance issues concerning learning, teaching and student safety;
 - align state program and providers to quality standards in light of education reform and NHTSA/ADTSEA national standards for traffic safety education;
 - add language for inspection, record keeping and legal issues; and clarify language concerning instructor training requirements.
- In 2009, Senate Bill 125 added the private driver education providers to the list of those who could receive reimbursement for providing an approved program, which required changing the Oregon Administrative Rules (OAR 737-015) again.
- In 2010, the first Private Provider in Oregon's history received a reimbursement from the Student Driver Training Fund.

The Oregon Driver Education program is saving lives, reducing injuries, dramatically reducing the impact of teen driving and making our newest drivers better and safer.

For more information, visit www.oregon.gov/ODOT/TTS/de.shtml

- In December of 2010, Oregon invited NHTSA to conduct a statewide assessment of Oregon's driver education program, including instruction, instructors, curriculum, partnerships, and outcomes of the program.
- In 2011, House Bill 2210 added Counties to list of those entities who could deliver the approved state program for reimbursement, in an effort to increase exposure across the state.
- In 2011, House Bill 2140 failed in committee. The bill was designed to mandate driver education in a pilot program focusing on the 3 largest populated counties in the Portland-Metro area. Driver education remains voluntary for those teens who choose an additional 50 hours (total of 100)
- In 2011, the driver education program began the "2010 NHTSA Assessment" planned response to the recommendations made by the NHTSA technical team. This project continues through 2014
- In 2013, House Bill 2264 is introduced and passes the House committee and floor (March 2013) and is waiting for Senate hearings. This bill introduces legislation to add an additional subsidy from the training fund to cover the "free and reduced" students. In addition, "adaptive strategies" are introduced to dramatically increase the exposure of the Oregon approved program to the state's rural and frontier areas. Finally, statute authority for sanctions is introduced. All three elements of HB 2264 will require extensive administrative rule revision if the bill passes.

- **Successes and Accomplishments**

1. Created the Oregon Parent Involvement Resource Guide: developed in partnership with the Oregon Driver and Traffic Safety Education Association, this guide provides material for teachers and guidance for parents.
2. Developed the Oregon Driver Education Risk Prevention Curriculum CD: this resource includes classroom and in-car lesson plans, homework assignments, entrance and exit exams and more. It brings together materials from the WOU-ODOT Trainer of Trainers Curriculum, National Driver Training Credentialing Program of the American Driver and Traffic Safety Education Association (ADTSEA), and the National Institute for Driver Behavior (NIDB) Driver Risk Prevention Curriculum.
3. Established the Driver Education Advisory Committee: to give advice on driver education issues; the duties of the committee include reviewing and updating guidelines for the operation of the program and stimulating public awareness of driver education needs.
4. Created instructor training standards: Every approved instructor in the state has completed the 120 hour training course established by minimum standards of competency; regardless of whether or not they hold a teaching credential.
5. Increased safety in teen driving: a national study completed in January 2005 showed the crash rate for teens taking formal driver education was 11-21% lower than those taking 100 hours of practice time with their parents; the traffic conviction rate for teens taking formal driver education was 39-57% lower than those taking 100 hours of practice time with their parents; and the driver license suspension rate for teens taking formal driver education was 51-53% lower than those taking 100 hours of practice time with their parents. These numbers of reduction continue to increase annually.

The Oregon Driver Education program is saving lives, reducing injuries, dramatically reducing the impact of teen driving and making our newest drivers better and safer.

For more information, visit www.oregon.gov/ODOT/TS/de.shtml

6. Increased funding for driver education: in 2005, the legislature increased funding to \$210 per student completing an approved driver education program.
7. In 2006 “The Oregon Parent Guide to Teen Driving” was completed in a joint partnership with Transportation Safety Division and Driver and Motor Vehicles Services. The Guide supports the important partnership between state driver licensing, driver education, teen drivers and their parents.
8. In 2007 the Legislature provided ODOT-TSD with two new staff members to support the vision and mission of the driver education program. One position was a full-time administrative assistant and the other was a quality assurance specialist responsible for compliance auditing of the new OARs governing driver education.
9. In 2007 the Oregon Transportation Safety Committee recommended two concepts dealing with driver education for the 2009 legislature session. The concepts requiring driver education as part of the state’s GDL program and reimbursement for all ODOT-TSD approved providers of driver education were approved.
10. In the AASHTO Strategic Highway Safety Plan Volume 19: A Guide for Reducing Collisions Involving Young Drivers, Oregon was featured as an agency or organization implementing the strategy of improving the content and delivery of driver education and training.
11. As of 2009, four states; Vermont, Washington, New Hampshire and North Dakota have modified the Oregon Driver Risk Prevention Curriculum to their state. Additionally other states have included elements of the ORPC in their state’s curriculum plan.
12. In 2007 Washington’s Department of Licensing has completely adopted and modified the Oregon Parent Guide to Teen Driving printing 150,000 copies.
13. In 2007 ODOT reviewed the latest fatal and injury crashes of 16 year-old teens and found a 48% reduction of fatal and injury crashes. Since the implementation of the new driver education standards (curriculum, instructors, and instructor preparation training) and the full implementation of the graduated driver license, the number of 16 year-olds in fatal or injury crashes has declined. In 1998, the year prior to these changes, almost 1,200 16 year-old drivers were involved in a crash in which someone was killed or injured. That number has dropped to 621 in 2007. This is nearly 20 percentage points better than the national data model predicted.
14. In 2008 compliance reviews were performed for 36% of Oregon’s driver education programs. These reviews identified areas of non-compliance with Oregon Administrative Rule. Follow up and corrective actions were initiated for those programs lacking any required elements.
15. In 2008 ODOT Transportation Safety Division gave Oregon teens the opportunity to demonstrate their driving skills, competing for scholarships valued up to \$2000. The Oregon Driver Excellence Scholarship Challenge was funded through a grant from the Ford Motor Company’s Driving Skills for Life Program.
16. In 2009, all remaining approved driver education programs were reviewed for compliance. The second round of inspections began, with the majority of providers showing improvement when compared with their initial visit.

The Oregon Driver Education program is saving lives, reducing injuries, dramatically reducing the impact of teen driving and making our newest drivers better and safer.

For more information, visit www.oregon.gov/ODOT/TSD/de.shtml

17. In 2009, Legislation was enacted to provide the “parent portion” of driver education to the Department of Human Services on behalf of Foster children who wished to take driver education.
18. In 2010 ODOT Transportation Safety Division was awarded The Allstate Foundation 2010 Teen Driver Safety Grant. Oregon’s two-phase project was to address peer-to-peer networking as it builds awareness for teen driving safety.
19. In 2010 the National Highway Traffic Safety Association selected Oregon as the first state to officially participate in a national driver education program assessment. Oregon’s program was measured against the national driver education standards.
20. In 2011 Compliance reviews were conducted in 100% of all providers and since the compliance was so high, visits were reduced to 2-3 years depending on the provider’s most recent review.
21. In 2011, one of the recommendations made by the NHTSA Assessment team was to improve the curriculum guide’s use of content as it related to instructor delivery, an interface project was started, called “**Playbook®**” to guarantee a minimum standard of performance from the instructors in addition to the high standards of the state curriculum guide. This project is due for release in Oct 2013 and includes all new animations, videos, student activities and reduced slide Power Points®.
22. In 2012, one of the recommendations made by the NHTSA was to formally implement instructor certification instead of just offering training. Western Oregon University was tasked to organize and certify all state instructors as well as maintain the instructor database for renewals. December 1, 2012 all active instructors were certified through the new system.

Recommendations

The Oregon Transportation Safety Action Plan (OTSAP) envisions a future where Oregon’s transportation-related death and injury rate continues to decline. The OTSAP encourages partnerships among state and local governments, community groups and businesses to achieve a safer transportation system. Its comprehensive list of actions can be considered Oregon’s transportation safety agenda for the next 20 years. Driver education is highlighted as one of the nine key actions and it was scheduled to receive the highest priority for implementation by the year 2010. Specifically, ODOT will focus on these priorities:

- Complete the OAR Revision Process. **Done 4/07**
- Assist providers in marketing, curriculum development and instructor training. **On going**
- Continue to partner with DMV to support quality driver and traffic safety education. **On going**
- Promote and work with school/communities to offer driver education through schools, community colleges and/or educational service districts. **On going**
- Update the Oregon Driver Risk Prevention Curriculum. **Done 6/08 Revised 10/13**
- Conduct regional curriculum workshops in the spring. **Ongoing**
- Conduct and monitor Trainer of Trainers activities. **Ongoing**
- Monitor providers of driver education (conduct at least 30 on-site inspections). **100% Completed by 2010**
- Implement strategies of the Oregon Transportation Safety Action Plan for improving the quality and delivery of driver education. **Ongoing**

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For more information, visit www.oregon.gov/ODOT/TS/de.shtml

- Provide a public awareness campaign to gain support for requiring driver education by using the recent research studies and data analysis. **Ongoing**
- Create legislative concepts:
 1. Requiring Driver Education for all new young drivers under 18; **2009 Failed**
 2. Providing reimbursement for all approved Driver Education providers; **2009**
 3. Extending GDL restrictions from 6 to 12 months; **Ongoing**
 4. Providing low income incentives for the Driver Education Program; **2013** and
 5. Regulating cell phone usage in GDL. **Done 1/2008**
 6. Implementing sanctions for accountability **2013**
 7. Developing frontier and rural "Adaptive Strategies" for delivery options **2013**

Additional

2007 - Research on Parent Taught Driver Education - Teenagers taught to drive by their parents are nearly three times more likely to be involved in serious accidents than young drivers taught by professionals, a study unveiled by the Texas Transportation Institute (TTI) concludes. Since 1997, Texas moms and dads have had the option of teaching their kids how to drive using state-approved curriculum, rather than relying upon public or private driving schools. "What this research means is that the very popular Parent-Taught Driver Education Program may not be the wisest public policy for Texas and is not in the best interest of traffic safety," TTI researcher Val Pezoldt said in a statement. "This is not to say that all parents are poor driving instructors," he said. "But the evidence suggests that without some significant modifications to the program, granting parents the sole responsibility for meeting the education and training requirements of our youngest novice drivers serves neither highway safety, parents nor, especially, young drivers well. The institute based at Texas A&M analyzed 1.4 million driver records, conducted a mail survey of young drivers and held teen-driver focus groups. The study was conducted for the National Highway Traffic Safety Administration, and is online at <http://www.nhtsa.dot.gov/> (keyword "parent-taught").

2007 NHTSA's Oregon GDL Study - NHTSA released the results of the Oregon GDL Study. Details are found at <http://www.oregon.gov/ODOT/TS/de.shtml> under Program News and Information.

2008 A Secondary Review of the 2005 Oregon GDL Study - Dr. Jessica Hartos completed the study that provides analysis and implication for policy changes. Details are found at <http://www.oregon.gov/ODOT/TS/de.shtml> under Program News and Information.

2008 AAA Foundation Driver Education Research Study - Oregon was selected to participate in a five-year study (Large Scale Evaluation of Driver Education or *LSEDE*) to review elements of the Oregon Driver Education Program. **Results tentative 2013**

Thank you for taking time to read about the excellence of Oregon Driver Education!



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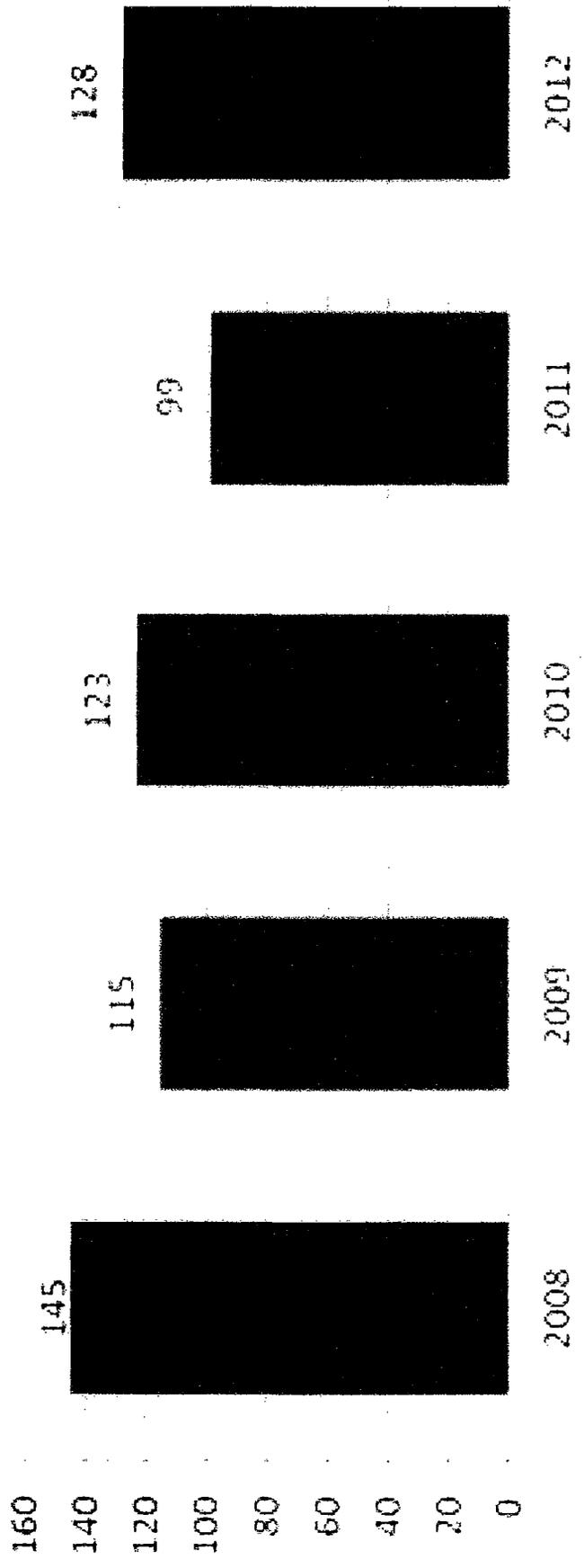


It's an Economic Issue

Average Comprehensive Cost (2010\$)

- \$4,360,000 Per Death
- \$220,300 Per Incapacitating Injury
- \$56,200 Per Non-incapacitating injury
- \$2,400 Per Property Damage Crash

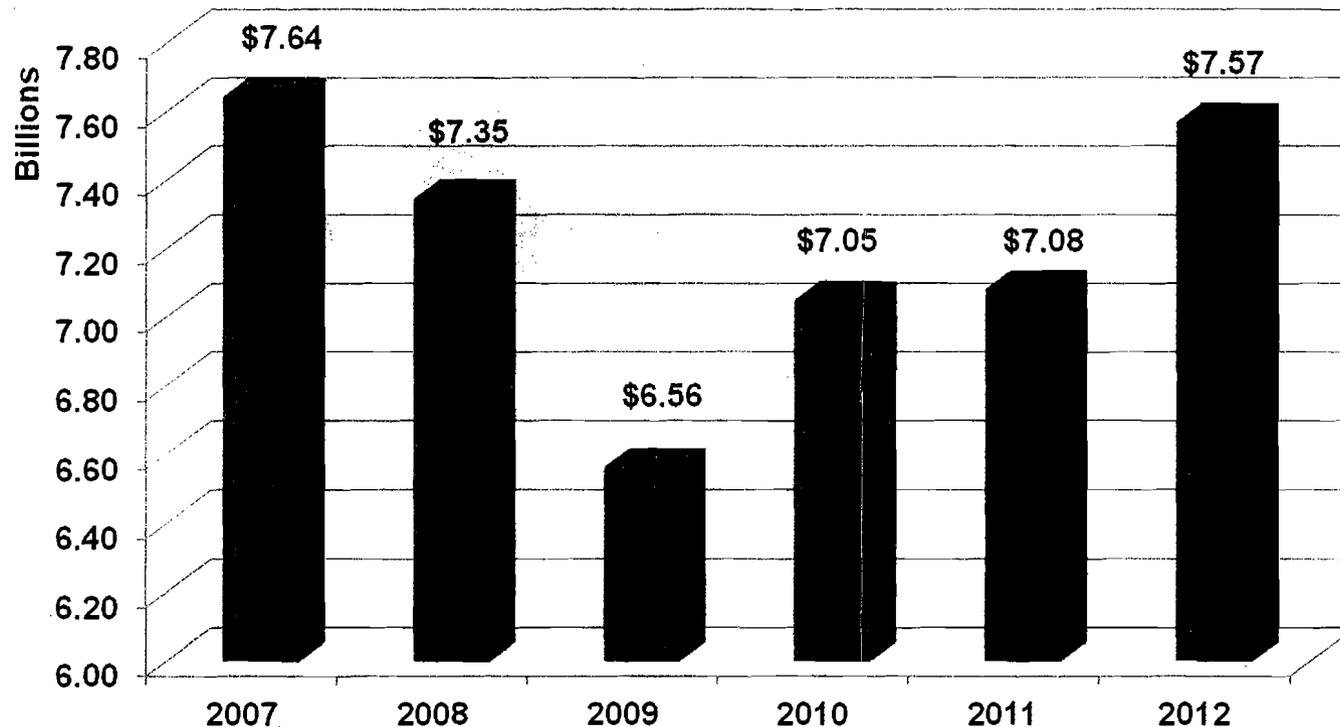
Number of Fatal Crashes Involving a Young Driver(s)





It's an Economic Issue

In 2012, medical and productivity costs associated with crashes in Indiana cost us over \$7.5 billion



INDIANA

TRAFFIC SAFETY FACTS

YOUNG DRIVERS, 2012

JUNE 2013 • ISSUE 13-C02

SUMMARY

Motor vehicle accidents are the leading cause of death for teenagers (Centers for Disease Control, 2010). Nationwide in 2010 (most recent data available), 10 percent of drivers in fatal crashes were ages 15 to 20; nearly 2,000 of these young drivers were killed (NHTSA, 2012). Per mile driven, young drivers are three times more likely than older drivers to be involved in fatal crashes, a result of less driving experience, lower seat belt use rates, alcohol use, speeding, and passenger distractions (NHTSA, 2006; McCartt, Mayhew, Braitman, Ferguson, & Simpson, 2009).

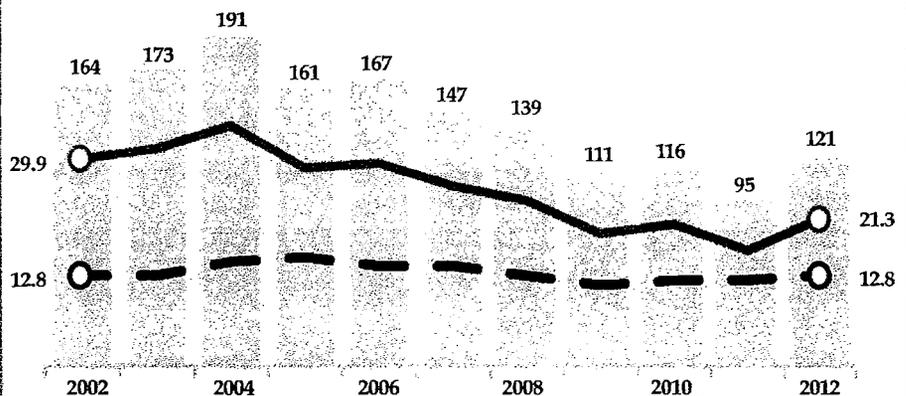
By most measures, young driver (ages 15 to 20) involvement in motor vehicle collisions in Indiana has improved. There were 50,928 young drivers involved in 46,347 collisions in Indiana in 2008. By 2012, there were 40,417 young drivers involved in 37,325 collisions, a 5.6 percent annual decline in young drivers and 5.3 percent annual decline in young driver collisions. Comparatively, the number of older drivers (ages 21+) in collisions decreased 0.8 percent annually (see last page for definition of 'annual rate of change').¹ The decline in young driver involvement in collisions outpaced declines in the 15 to 20 population and licensed drivers, which fell only 0.2 and one percent, respectively, from 2008 to 2012.

The downward trend in young driver involvement appears to be at least partially linked to the changes to Indiana's Graduated Driver Licensing (GDL) system, which were implemented in two phases in 2009 and 2010 and focused primarily on teen drivers between the ages of 15 and 17. Since implementation of phase I in 2009, the number of teen drivers in collisions has dropped from a quarterly average of nearly 5,000 to just over 3,500, a 29 percent decrease. Conversely, the average number of older drivers (ages 18+) dropped only 2 percent.

This fact sheet uses data from several sources (see last page for complete list of data sources). Indiana crash data come from the Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of April 9, 2013.

Indiana crash data show that those drivers who took driver education were slightly less likely to have engaged in unsafe driving actions (e.g., following too closely, speeding, etc.) but there was not a significant difference in the risk of losing control of the vehicle.

There were **121** fatal collisions involving young drivers in Indiana in 2012 or **21.3** per 100,000 population. This rate has dropped sharply since 2002, moving closer to the rate for older drivers, which has hovered around 12.8 since 2002.





INDIANA TRAFFIC SAFETY FACTS

INDIANA COMPARED TO REGION 5 AND THE UNITED STATES

Historically, Indiana has experienced higher rates of fatal collisions (per 100,000 population) involving young drivers than Region V (Indiana, Illinois, Michigan, Minnesota, Ohio, Wisconsin) and the United States

overall (Table 1). Rates have decreased for all areas, but the rate of decline for Indiana (-6.3 percent from 2002 to 2011) has been slightly slower than Region V and nationally (-7.4 percent each). For all areas, rates of fatal collisions involving young drivers have been nearly double those of fatal collisions involving older drivers. In 2011, 10 percent (54 of 524) of all drivers killed in Indiana collisions were young drivers, down from 17 percent in 2002 (Table 2).

Table 1. Fatal crashes, by young driver involvement, 2002-2011

Geography	Count of fatal crashes										Annual rate of change		
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-11	2007-11	2010-11
Involving young drivers (ages 15 to 20)													
Indiana	164	173	191	161	167	147	139	111	116	95	-5.9%	-10.3%	-18.1%
Region 5	1,286	1,246	1,163	1,054	1,022	1,022	784	684	698	644	-7.4%	-10.9%	-7.7%
United States	7,968	7,585	7,599	7,161	7,180	6,711	5,651	4,962	4,423	4,211	-6.8%	-11.0%	-4.8%
Not involving young drivers (ages 21+)													
Indiana	548	576	661	689	649	653	586	519	582	578	0.6%	-3.0%	-0.7%
Region 5	4,438	4,462	4,344	4,459	4,186	4,172	3,872	3,394	3,592	3,484	-2.7%	-4.4%	-3.0%
United States	30,277	30,636	30,595	31,877	31,292	30,526	28,360	25,737	25,623	25,398	-1.9%	-4.5%	-0.9%
Fatal crashes per 100,000 population (ages 15 to 20)													
Indiana	29.9	31.6	34.8	28.8	29.6	25.8	24.2	19.3	20.3	16.7	-6.3%	-10.3%	-17.7%
Region 5	29.1	28.2	26.2	23.5	22.7	22.6	17.3	15.2	15.7	14.6	-7.4%	-10.4%	-6.9%
United States	32.2	30.4	30.1	27.8	27.6	25.5	21.3	18.7	16.7	16.0	-7.4%	-10.9%	-3.8%
Fatal crashes per 100,000 population (ages 21+)													
Indiana	12.8	13.3	15.1	15.6	14.6	14.6	13.0	11.4	12.7	12.5	-0.2%	-3.7%	-1.5%
Region 5	12.5	12.5	12.1	12.4	11.5	11.4	10.6	9.2	9.7	9.3	-3.2%	-4.9%	-3.6%
United States	15.0	15.0	14.8	15.2	14.8	14.2	13.1	11.7	11.6	11.3	-3.0%	-5.6%	-2.0%

Sources: Fatality Analysis Reporting System (2002-11); U.S. Census Bureau

Note: Region 5 defined by the National Highway Traffic Safety Administration (NHTSA) and includes Indiana, Illinois, Michigan, Minnesota, Ohio, and Wisconsin.

Table 2. Young drivers killed in fatal collisions, 2002-2011

Geography	Count of fatalities										Annual rate of change		
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-11	2007-11	2010-11
Young drivers killed (ages 15 to 20)													
Indiana	92	84	98	82	89	70	78	47	56	54	-5.7%	-6.3%	-3.6%
Region 5	629	591	555	516	499	497	390	313	303	306	-7.7%	-11.4%	1.0%
United States	3,838	3,675	3,634	3,474	3,490	3,190	2,742	2,343	1,963	1,987	-7.1%	-11.2%	1.2%
Total drivers killed													
Indiana	546	549	639	661	612	621	556	492	522	524	-0.5%	-4.2%	0.4%
Region 5	4,162	4,118	3,986	4,045	3,833	3,843	3,379	2,971	3,132	2,994	-3.6%	-6.1%	-4.4%
United States	26,562	26,667	26,755	27,413	27,284	26,503	24,197	21,767	20,970	20,701	-2.7%	-6.0%	-1.3%
Young drivers as % total													
Indiana	16.8%	15.3%	15.3%	12.4%	14.5%	11.3%	14.0%	9.6%	10.7%	10.3%	-5.3%	-2.2%	-3.9%
Region 5	15.1%	14.4%	13.9%	12.8%	13.0%	12.9%	11.5%	10.5%	9.7%	10.2%	-4.3%	-5.7%	5.6%
United States	14.4%	13.8%	13.6%	12.7%	12.8%	12.0%	11.3%	10.8%	9.4%	9.6%	-4.4%	-5.5%	2.5%

Source: Fatality Analysis Reporting System (2002-11)

Note: Region 5 defined by the National Highway Traffic Safety Administration (NHTSA) and includes Indiana, Illinois, Michigan, Minnesota, Ohio, and Wisconsin.

AGE OF DRIVERS IN COLLISIONS

The number and proportion of drivers between the ages of 15 and 20 in collisions continues to decline at a faster rate than all other age groups, and faster than the number of licensed drivers and population between the ages of 15 and 20. Since 2008, the number of young drivers in collisions has dropped 5.6 percent annually (Table 3), substantially more than older drivers (0.8 percent annual decrease). The greatest decrease (-10.3

percent annually) occurred for drivers 15 to 17 years of age. Based on an analysis of Indiana population and licensing counts (not shown), these declines are not necessarily explained by similar declines in young driver "exposure" to collisions as the 15 to 20 population and licensed drivers fell only 0.2 and one percent, respectively, from 2008 to 2012. In 2008, 16.5 percent of all drivers in collisions were 15 to 20 years of age and 6.3 percent were 15 to 17. By 2012, these proportions had dropped to 14 and 4.3 percent, respectively.

Table 3. Drivers in Indiana crashes, 2008-2012

Driver age	Count of drivers					Annual rate of change	
	2008	2009	2010	2011	2012	2008-12	2011-12
Total drivers	308,412	287,738	294,023	287,274	289,281	-1.6%	0.7%
Young (15-20)	50,928	48,015	45,376	40,537	40,417	-5.6%	-0.3%
15-17	19,420	17,531	15,472	12,471	12,570	-10.3%	0.8%
18-20	31,508	30,484	29,904	28,066	27,847	-3.0%	-0.8%
Older (21+)	257,484	239,723	248,647	246,737	248,864	-0.8%	0.9%
21-24	32,276	30,205	31,171	31,041	31,672	-0.5%	2.0%
25-44	114,663	104,314	107,155	105,510	105,236	-2.1%	-0.3%
45-64	83,967	78,723	82,613	82,627	82,793	-0.4%	0.2%
65+	26,578	26,481	27,708	27,559	29,163	2.3%	5.8%
% of all drivers							
Total drivers	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%
Young (15-20)	16.5%	16.7%	15.4%	14.1%	14.0%	-4.1%	-1.0%
15-17	6.3%	6.1%	5.3%	4.3%	4.3%	-8.9%	0.1%
18-20	10.2%	10.6%	10.2%	9.8%	9.6%	-1.5%	-1.5%
Older (21+)	83.5%	83.3%	84.6%	85.9%	86.0%	0.8%	0.2%
21-24	10.5%	10.5%	10.6%	10.8%	10.9%	1.1%	1.3%
25-44	37.2%	36.3%	36.4%	36.7%	36.4%	-0.5%	-1.0%
45-64	27.2%	27.4%	28.1%	28.8%	28.6%	1.3%	-0.5%
65+	8.6%	9.2%	9.4%	9.6%	10.1%	4.0%	5.1%

Source: Indiana State Police



TRAFFIC SAFETY FACTS

INJURIES IN YOUNG DRIVER COLLISIONS

As the number of young drivers in collisions has decreased, so too has the number of injuries to people (occupants of young driver vehicles, occupants of other vehicles, or non-motorists) in crashes involving young drivers. In 2008, there were 13,535 injuries (156 fatal, 808 incapacitating, 12,571 non-incapacitating) in collisions involving young drivers, 62 per-

cent of which were suffered by young drivers and occupants riding with young drivers (calculated from Table 4). By 2012, total injuries had dropped to 11,434 (4 percent annually), with 59 percent sustained by young drivers and their occupants. Most of this decrease (59 percent) is explained by fewer injuries to occupants in vehicles driven by persons 15 to 17 years of age, which fell from 3,334 in 2008 to 2,101 in 2012 or 11 percent annually (Table 5). Further, most of these declines (53 percent) occurred from 2010 to 2011, the year after implementation of Phase II GDL changes.

Table 4. Injuries to people in crashes involving a young driver, by location of person, person type, and injury severity, 2008-2012

Location	Person type	Injury severity	Count of occupant and non-motorist injuries					Annual rate of change	
			2008	2009	2010	2011	2012	2008-12	2011-12
All	All	Fatal	156	129	128	112	128	-4.8%	14.3%
		Incapacitating	808	757	779	682	792	-0.5%	16.1%
		Non-incapacitating	12,571	12,757	12,177	10,542	10,514	-4.4%	-0.3%
In young driver vehicle	Young drivers	Fatal	75	48	56	55	54	-7.9%	-1.8%
		Incapacitating	339	311	289	263	329	-0.7%	25.1%
		Non-incapacitating	5,320	5,197	4,911	4,161	4,281	-5.3%	2.9%
	Injured occupants	Fatal	44	40	36	22	28	-10.7%	27.3%
		Incapacitating	165	152	168	140	169	0.6%	20.7%
		Non-incapacitating	2,440	2,424	2,279	1,938	1,922	-5.8%	-0.8%
Not in young driver vehicle	Other drivers	Fatal	27	33	25	22	31	3.5%	40.9%
		Incapacitating	215	193	204	184	196	-2.3%	6.5%
		Non-incapacitating	3,211	3,415	3,328	2,947	2,874	-2.7%	-2.5%
	Injured occupants	Fatal	4	5	8	5	2	-15.9%	-60.0%
		Incapacitating	58	64	77	55	61	1.3%	10.9%
		Non-incapacitating	1,351	1,464	1,402	1,264	1,269	-1.6%	0.4%
Non-motorists	Fatal	6	3	3	8	13	21.3%	62.5%	
	Incapacitating	31	37	41	40	37	4.5%	-7.5%	
	Non-incapacitating	249	257	257	232	168	-9.4%	-27.6%	
% In young driver vehicle	All	Fatal	76.3%	68.2%	71.9%	68.8%	64.1%	-4.3%	-6.8%
		Incapacitating	62.4%	61.2%	58.7%	59.1%	62.9%	0.2%	6.4%
		Non-incapacitating	61.7%	59.7%	59.0%	57.9%	59.0%	-1.1%	2.0%

Source: Indiana State Police

Table 5. Injuries to people in crashes involving a young driver, by age of person driving vehicle and injury severity, 2008-2012

Age of person driving vehicle	Injury severity	Count of occupant injuries					Annual rate of change	
		2008	2009	2010	2011	2012	2008-12	2011-12
15-17	Fatal	37	27	21	17	21	-13.2%	23.5%
	Incapacitating	194	169	168	136	138	-8.2%	1.5%
	Non-incapacitating	3,103	2,957	2,611	1,997	1,942	-11.1%	-2.8%
	Total	3,334	3,153	2,800	2,150	2,101	-10.9%	-2.3%
18-20	Fatal	82	61	71	60	61	-7.1%	1.7%
	Incapacitating	310	294	289	267	360	3.8%	34.8%
	Non-incapacitating	4,657	4,664	4,579	4,102	4,261	-2.2%	3.9%
	Total	5,049	5,019	4,939	4,429	4,682	-1.9%	5.7%
21+	Fatal	31	38	33	27	33	1.6%	22.2%
	Incapacitating	273	257	281	239	257	-1.5%	7.5%
	Non-incapacitating	4,562	4,879	4,730	4,211	4,143	-2.4%	-1.6%
	Total	4,866	5,174	5,044	4,477	4,433	-2.3%	-1.0%

Source: Indiana State Police

INDIANA GDL: IMPACT ON YOUNG DRIVERS

One factor that likely contributed to the sharp decline in young driver involvement in collisions from 2008 to 2012 is the series of changes to Indiana's graduate driver licensing system (GDL) implemented in two phases in 2009 (Phase I) and 2010 (Phase II) (see text box for summary of GDL changes). The GDL changes effectively reduced teen driver exposure to the opportunity for involvement in a collision, as many teen drivers that previously qualified for permits and licenses no longer do, and many who do now face restrictions that limit their driving time and activities while driving.

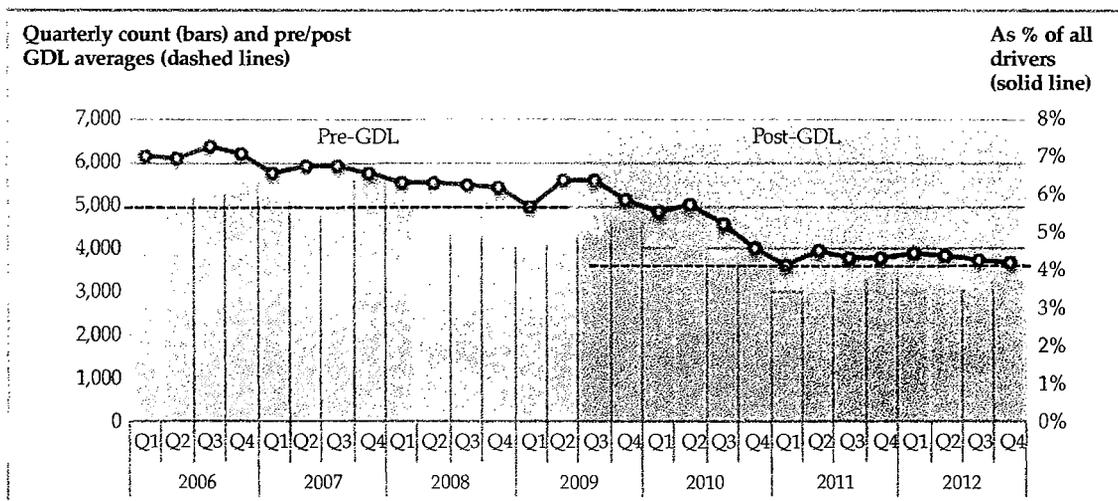
An impact evaluation has not been completed to systematically measure the effects of the changes to Indiana's GDL system on crash outcomes. However, as shown in Figure 1, comparing the three-and-a-half year period (January 2006 – June 2009) before Phase I GDL implementation to the three-and-a-half year period (July 2009 – December 2012) after GDL implementation suggests favorable changes in teen driver (ages 15 to 17) involvement in collisions. Prior to implementation, there were around 5,000 teen drivers involved in collisions on average each quarter (6.6 percent of all drivers in collisions). After implementation, the average dropped to just over 3,500 (4.9 percent of all drivers), a 29 percent decrease in the average number. Comparatively, the average for older drivers (ages 18+) dropped only 2 percent.

Indiana graduated driver licensing system				
	Existing law	New law		
Applies to probationary license issued:				
	Before 7/1/2009	After 6/30/2009	After 6/30/2010	Net GDL impact
Stage 1: Learner Permit				
Minimum age				
<i>With Driver Ed</i>				+ 180 days
<i>Without Driver Ed</i>				
Minimum holding period				+ 120 days
Stage 2: Probationary license				
Minimum age				
<i>With Driver Ed</i>	16 years, 30 days	16 years, 30 days		+ 150 days
<i>Without Driver Ed</i>	16 years, 90 days	16 years, 90 days		+ 90 days
Minimum holding period				+ 120 days
Supervised driving	10 hours	10 hours		+ 50 hours
Cell phone use while driving	No restrictions			Total prohibition
Nighttime driving restrictions	11pm-5am	11pm-5am	11pm-5am, Sun-5am	More restrictive for first six months
Passengers (see note below for exceptions)	30 days, No passengers unless licensed adult		30 days, No passengers unless licensed adult	+ 90 days
Stage 3: Unrestricted license				
Minimum age				--

Sources: IC 9-24-3, IC 9-24-11, IC 31-37-3

Note: Exceptions for passenger restrictions include transporting children, siblings, spouses and for work, school, or religious functions.

Figure 1. Drivers under age 18 involved in Indiana crashes, 2006-2012



Source: Indiana State Police



INDIANA TRAFFIC SAFETY FACTS

INDIANA GDL: IMPACT ON YOUNG DRIVERS *(Continued)*

Similarly, as shown in Table 6, the number of teen drivers in collisions declined at a quarterly rate of 0.7 percent before GDL implementation, but accelerated to a 1.9 percent rate of decline after implementation. Comparatively, the number of older drivers (21+) in collisions *grew* at a quarterly rate of 1.6 percent post-GDL. When grouped by ages corre-

sponding to GDL provisions, it is clear that much of the decline in teen driver involvement in collisions came from drivers aged 16 to 16.5 years, a group formerly eligible for a probationary license (if the teen took a driver education course) but not eligible after implementation of Phase II (Jul. 2010) of the GDL statute. There was an average of 708 drivers aged 16 to 16.5 years in collisions each quarter before GDL implementation, but only 267 after (Table 6). This group experienced the greatest quarterly rate of decline post-GDL, 15.1 percent.

Table 6. Drivers involved in Indiana crashes by age, 2006-2012

Year	Quarter	15 years, 1-5 months	15 years, 6-11 months	16 years, 1-5 months	16 years, 6-11 months	17 years	Under 18 total	18-20 years	21 years +
2006	Q1	37	47	716	1,367	2,663	4,830	7,086	56,503
	Q2	65	92	763	1,434	2,917	5,271	8,052	61,861
	Q3	62	106	846	1,472	2,832	5,318	7,656	59,883
	Q4	39	67	861	1,670	3,091	5,728	8,159	66,258
2007	Q1	25	73	726	1,475	2,961	5,260	8,417	66,014
	Q2	63	86	723	1,239	2,667	4,778	7,455	58,297
	Q3	57	100	751	1,369	2,795	5,072	7,577	61,861
	Q4	41	63	806	1,550	3,275	5,735	8,730	72,213
2008	Q1	27	44	661	1,358	3,054	5,144	8,481	67,370
	Q2	52	78	575	1,219	2,532	4,456	7,379	58,341
	Q3	56	73	654	1,121	2,432	4,336	6,872	57,778
	Q4	39	61	693	1,482	3,209	5,484	8,776	73,995
2009	Q1	19	67	527	1,068	2,409	4,090	7,449	60,012
	Q2	50	75	607	1,172	2,486	4,390	7,489	56,666
	Q3 - Phase I GDL	54	96	671	1,100	2,397	4,318	7,310	55,602
	Q4	29	60	715	1,255	2,674	4,733	8,236	67,443
2010	Q1	29	44	500	1,035	2,325	3,933	7,186	59,723
	Q2	44	74	584	1,117	2,211	4,030	7,444	58,321
	Q3 - Phase II GDL	38	57	454	986	2,185	3,720	6,978	59,911
	Q4	18	43	133	1,012	2,583	3,789	8,296	70,692
2011	Q1	11	31	54	730	2,110	2,936	6,859	60,944
	Q2	23	64	95	831	2,048	3,061	6,790	57,540
	Q3	31	64	101	786	2,048	3,030	6,960	59,707
	Q4	13	35	77	897	2,422	3,444	7,457	68,546
2012	Q1	19	46	83	781	2,191	3,120	6,868	59,697
	Q2	41	74	112	757	2,109	3,093	6,822	60,059
	Q3	31	76	85	753	2,066	3,011	6,729	60,428
	Q4	16	41	80	788	2,421	3,346	7,428	68,667
Quarterly average									
Pre-GDL (Q1 2006 - Q2 2009)		45	74	708	1,357	2,809	4,992	7,827	62,647
Post-GDL (Q3 2009 - Q4 2012)		28	58	267	916	2,271	3,540	7,240	61,949
Quarterly rate of change									
Pre-GDL (Q1 2006 - Q2 2009)		2.3%	3.7%	-1.3%	-1.2%	-0.5%	-0.7%	0.4%	0.0%
Post-GDL (Q3 2009 - Q4 2012)		-8.9%	-6.3%	-15.1%	-2.5%	0.1%	-1.9%	0.1%	1.6%

Source: Indiana State Police

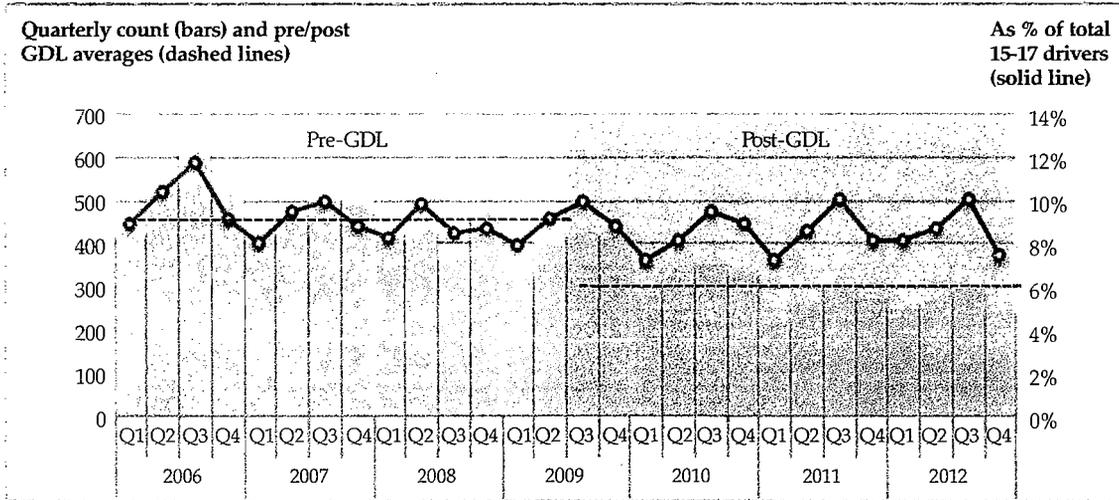
INDIANA GDL: IMPACT ON YOUNG DRIVERS

(Continued)

The Phase I GDL provisions restricting teen driving at night (10pm-5am) and with passengers appear to have contributed to fewer teen drivers in collisions with these circumstances. On average, there were 461 teen drivers in collisions during restricted hours each quarter before GDL

implementation and 307 after, a 33 percent decrease (Figure 2). Additionally, the quarterly rate of decline was nearly eight times faster post-GDL (4.1 versus 0.5 percent decrease). The average number of teen drivers in collisions with passengers (ages 13 to 20) also declined from 211 before GDL implementation to 136 after, a 36 percent decrease (Figure 3). The quarterly rate of decline was more than four times faster post-GDL (5 versus 1.1 percent decrease).

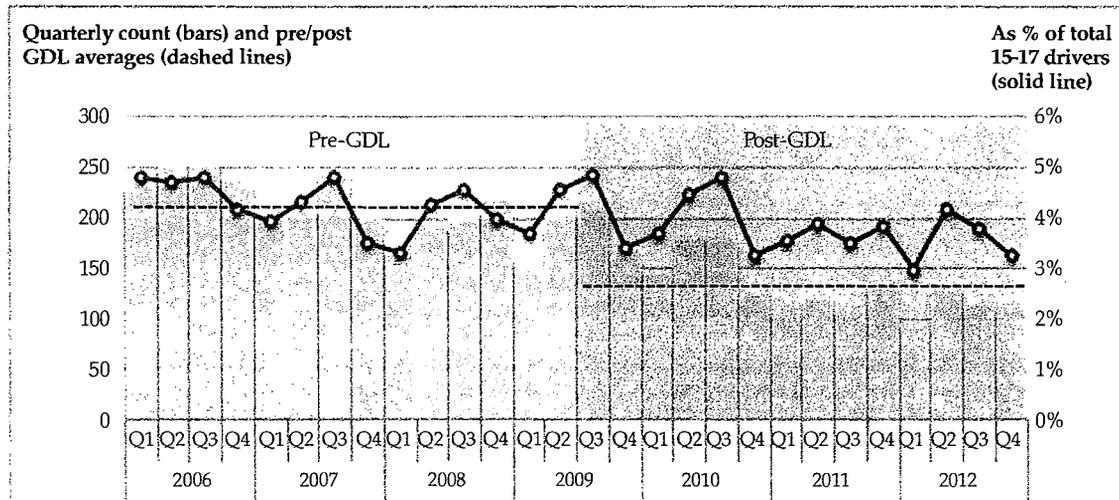
Figure 2. Drivers under age 18 in Indiana crashes between 10pm and 5am, 2006-2012



Source: Indiana State Police

Notes: Excludes invalid times
Effective July 1, 2009, drivers with probationary licenses are restricted from driving between 10pm and 5am (see summary of GDL changes).

Figure 3. Drivers under age 18 with passengers (ages 13-20) in Indiana crashes, 2006-2012



Source: Indiana State Police

Note: Effective July 1, 2009, drivers with probationary licenses are restricted from driving with passengers (see summary of GDL changes).



TRAFFIC SAFETY FACTS

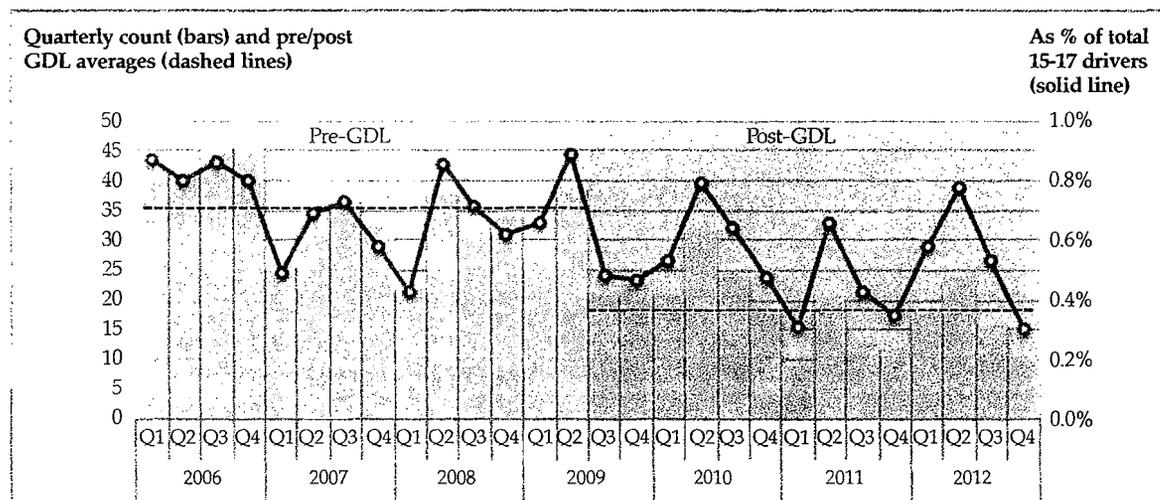
INDIANA GDL: 'IMPACT ON YOUNG DRIVERS' (Continued)

The Phase I provision prohibiting cell phone use for teen drivers also appears to have had a favorable impact. On average, there were 35 teen drivers in collisions using cell phones each quarter before GDL implementation and 19 after, a 48 percent decrease (Figure 4). Further, the quarterly rate of decline was nearly ten times faster post-GDL (5.5 versus 0.6 percent decrease).

The changes to Indiana's GDL system are intended to increase driving experience and reduce risky driving behaviors among teen drivers. If effective, the teen driver rate of re-involvement in collisions might be expected to decrease as their driving improves. Comparing collision

involvement during a 30-month period for two different groups of drivers of the same age—one tracked before GDL changes, the other after—shows favorable differences in crash re-involvement rates. Of the 4,845 15 to 17 year old drivers in group 1 (tracked pre-GDL), 30.2 percent were involved in multiple collisions during the 30-month period before GDL implementation (Table 7). Conversely, only 27.5 percent of the 3,962 15 to 17 year old drivers in group 2 (tracked post-GDL) were involved in multiple collisions during an equivalent 30-month period after GDL implementation. Notably, rates of re-involvement were also lower for older drivers (18 to 20 and 21+) in group 2 compared to older drivers in group 1. For each age group, the decline in the rate of multiple collision re-involvement was statistically significant ($p < 0.05$). In addition, considering both groups, rates of multiple collision involvement were highest for 15 to 17 year old drivers.

Figure 4. Drivers under age 18 in Indiana crashes who were using a cell phone, 2006-2012



Source: Indiana State Police

Effective July 1, 2009, drivers under 18 are prohibited from using a cell phone while driving (see summary of GDL changes).

Table 7. Young driver crash re-involvement rates before and after changes to Indiana's graduated driver licensing (GDL) system

Group	Collision tracking period	Driver age	Count of drivers, by number of times in a collision during tracking period						Number of times in a collision, as % of total				
			TOTAL	In one	In two	In three	In four or more	In multiple (2+)	In one	In two	In three	In four or more	In multiple (2+)
#1: Drivers in collisions Jan 2007 - Mar 2007	Pre-GDL: Jan 2007 - Jun 2009 (30 months)	15-17	4,845	3,382	1,110	289	64	1,463	69.8%	22.9%	6.0%	1.3%	30.2%
		18-20	7,287	5,415	1,498	309	65	1,872	74.3%	20.6%	4.2%	0.9%	25.7%
		21+	55,783	46,088	8,208	1,218	269	9,695	82.6%	14.7%	2.2%	0.5%	17.4%
#2: Drivers in collisions Jul 2009 - Sep 2009	Post-GDL: Jul 2009 - Dec 2011 (30 months)	15-17	3,962	2,871	891	161	39	1,091	72.5%	22.5%	4.1%	1.0%	27.5%
		18-20	6,148	4,719	1,174	216	39	1,429	76.8%	19.1%	3.5%	0.6%	23.2%
		21+	45,886	38,619	6,185	875	207	7,267	84.2%	13.5%	1.9%	0.5%	15.8%

Source: Indiana State Police

Notes: Includes drivers in collisions with valid Indiana licenses.

Driver age represents the minimum age at which a driver was first involved in a collision during the three-month selection period (age groups are mutually exclusive).

Groups are mutually exclusive; drivers in Group 1 are not in Group 2.

Differences in the proportions of multiple collision involvement by age group between cohort 1 and 2 (e.g., for 15-17 years, from 30.2 percent to 27.5 percent) are statistically significant ($p < 0.05$).

GENERAL RISK FACTORS – ALCOHOL USE, SPEEDING, AND RESTRAINT USE

Alcohol use and speeding increase the risk of collisions and improper restraint use increases the risk of injury if a collision occurs. Despite a minimum drinking age of 21, 10 percent of 15 to 17 year old drivers and 15 percent of 18 to 20 year old drivers in fatal collisions in 2012 tested positive for alcohol (Table 8). Rates have climbed for 15 to 17 year old drivers since 2009 while decreasing for 18 to 20 year old drivers. Although only a small percentage of young drivers in non-fatal collisions were tested for alcohol in 2012, 36 percent of 15 to 17 year old drivers who were tested returned positive results. The proportion of (tested) drivers (in non-fatal collisions) who have tested positive for alcohol has generally climbed since 2008.

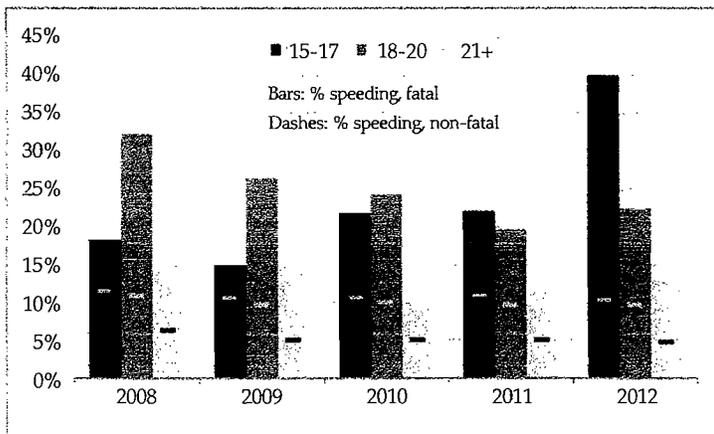
A greater share of 15 to 17 year old drivers in fatal collisions have also been speeding, increasing from 18 percent in 2008 to 40 percent in 2012; in contrast, the share of older drivers who were speeding in fatal collisions has generally decreased (Figure 5). Restraint use rates are 25 to 30 percentage points higher for drivers in collisions who suffer less serious injuries, stabilizing around 98 percent for all age groups since 2008 (Figure 6). Restraint use rates among drivers suffering serious injuries have historically been highest for those 15 to 17 years of age. However, since 2008 rates for these younger drivers have declined—from 74 percent in 2008 to 69 percent in 2012—while stabilizing for 18 to 20 year olds and increasing slightly for those 21 and older.

Table 8. Alcohol use among drivers in Indiana crashes, by crash severity and driver age, 2008-2012

Crash severity	Driver age	2008	2009	2010	2011	2012
Percent tested for alcohol						
Fatal	15-17	79.6%	75.0%	75.0%	61.1%	80.0%
	18-20	78.5%	78.9%	69.2%	78.0%	79.6%
	21+	71.7%	61.7%	69.5%	72.7%	69.8%
Non-fatal	15-17	1.5%	1.5%	1.5%	1.5%	1.7%
	18-20	3.2%	3.1%	2.8%	3.0%	3.3%
	21+	3.6%	3.7%	3.5%	3.8%	3.9%
Positive results as % total tested						
Fatal	15-17	15.4%	6.7%	8.3%	9.1%	10.0%
	18-20	23.3%	20.0%	11.1%	17.2%	14.6%
	21+	23.7%	25.4%	21.5%	21.3%	23.4%
Non-fatal	15-17	27.0%	35.6%	39.8%	41.5%	36.2%
	18-20	40.4%	47.6%	53.2%	53.4%	46.9%
	21+	41.1%	50.6%	58.6%	54.5%	54.9%

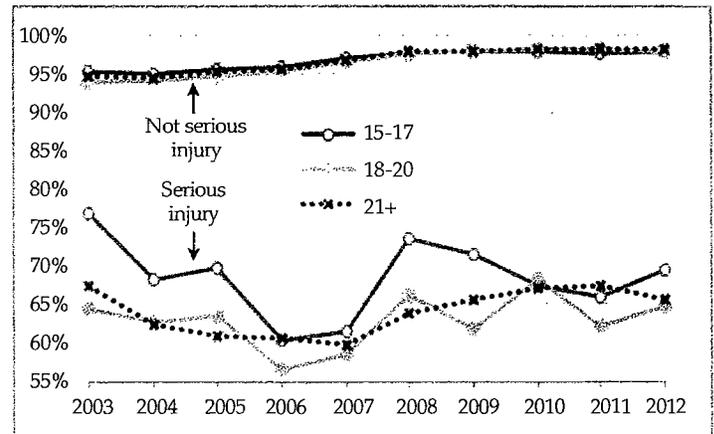
Source: Indiana State Police

Figure 5. Percent of drivers speeding in fatal and non-fatal Indiana crashes, by driver age, 2008-2012



Source: Indiana State Police

Figure 6. Restraint use rates among drivers with and without serious injuries in Indiana crashes, by age, 2003-2012



Source: Indiana State Police

Note: Excludes drivers where restraint use was unknown.



TRAFFIC SAFETY FACTS

DRIVER EDUCATION

Though not required by state law, teens who take a driver education course are eligible to receive their probationary license earlier than those teens who do not (IC 9-24-3, IC 9-24-11, IC 31-37-3). In 2012, 56 percent of drivers ages 16 to 20 that were involved in Indiana crashes had taken a

driver education course (Table 9). Indiana crash data show that those drivers who took driver education were slightly less likely to have engaged in unsafe driving actions (e.g., following too closely, speeding, etc.) but there was not a significant difference in the risk of losing control of the vehicle (Table 10).

Table 9. Indiana resident young drivers in crashes who completed a driver education course, 2012

Driver age	Crash severity	Took driver education course	Total involved	% Took driver education course
16	Fatal	3	5	60.0%
	Non-fatal	457	671	68.1%
	Property damage	2,030	2,681	75.7%
	Subtotal	2,490	3,357	74.2%
17	Fatal	14	20	70.0%
	Non-fatal	978	1,685	58.0%
	Property damage	4,591	6,918	66.4%
	Subtotal	5,583	8,623	64.7%
18-20	Fatal	52	99	52.5%
	Non-fatal	2,583	5,481	47.1%
	Property damage	10,662	20,651	51.6%
	Subtotal	13,297	26,231	50.7%
16-20	Fatal	69	124	55.6%
	Non-fatal	4,018	7,837	51.3%
	Property damage	17,283	30,250	57.1%
	Total	21,370	38,211	55.9%

Sources: Indiana State Police; Indiana Bureau of Motor Vehicles

Table 10. Risk of driving actions associated with driver education for young drivers in Indiana crashes, 2012

Took driver education?	Unsafe driving actions?			% Unsafe	Relative risk	95% Conf. interval
	Yes	No	Total			
Yes	10,515	10,855	21,370	49.2%	0.93	0.92 - 0.95
No	8,879	7,962	16,841	52.7%		
Total	19,394	18,817	38,211	50.8%		
Took driver education?	Lost control of vehicle?			% Lost control	Relative risk	95% Conf. interval
	Yes	No	Total			
Yes	2,386	18,984	21,370	11.2%	0.97	0.92 - 1.03
No	1,934	14,907	16,841	11.5%		
Total	4,320	33,891	38,211	11.3%		

Sources: Indiana State Police; Indiana Bureau of Motor Vehicles

Notes: *Unsafe driving actions* includes speeding, following too closely, disregarding signal, failure to yield right of way, improper road usage, and wrong way on one way. *Lost control of vehicle* includes overcorrecting, ran off road right, ran off road left.

Relative risk is the ratio of % driving action for drivers who took driver education versus those that did not. Values over 1 indicate that driver education increases risk of action; values under 1 indicate a reduction in risk.

Relative risk of unsafe driving actions is significant ($p < 0.05$).



INDIANA TRAFFIC SAFETY FACTS

END NOTES

Data presented in this fact sheet are limited to drivers between the ages of 15 and 109.

DEFINITIONS

Annual Rate of Change (ARC) — The rate that a beginning value must increase/decrease each period (e.g. month, quarter, year) in a time series to arrive at the ending value in the time series. ARC is a "smoothed" rate of change because it measures change in a variable as if the change occurred at a steady rate each period with compounding. For example, to measure change in a variable from 2008 to 2012, it is calculated as $(\text{Value in 2012} / \text{Value in 2008})^{1/4} - 1$.

REFERENCES

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS). (2010). Leading causes of death reports, national and regional, 1999 – 2010. Retrieved April 1, 2013 from http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html

McCartt, A.T., Mayhew, D.R., Braitman, K.A., Ferguson, S.A., & Simpson, H.M. (2009). Effects of age and experience on young driver crashes: review of recent literature. *Traffic Injury Prevention, 10*, 209-19

National Highway Traffic Safety Administration (NHTSA). (2012). Traffic safety facts 2010: Young drivers. Department of Transportation, DOT HS 811 622. Retrieved April 1, 2013 from <http://www-nrd.nhtsa.dot.gov/Pubs/811622.pdf>

_____. (2006). Teen unsafe driving behaviors: Final report. Department of Transportation. DOT HS 810 670. Retrieved April 1, 2013 from <http://www.nhtsa.gov/people/injury/NewDriver/TeenUnsafeDriving/images/TeenUnsafeDriving.pdf>

DATA SOURCES

Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of April 9, 2013

Indiana Bureau of Motor Vehicles, current as of April 9, 2013

Fatality Analysis Reporting System, National Highway Traffic Safety Administration, current as of April 9, 2013. <http://www-fars.nhtsa.dot.gov/Main/index.aspx>

U.S. Census Bureau, Intercensal Estimates of the Resident Population by Single Year of Age and Sex for States and the United States: April 1, 2000 to July 1, 2010 <http://www.census.gov/popest/data/intercensal/state/state2010.html>

U.S. Census Bureau, State Single Year of Age and Sex Population Estimates: April 1, 2010 to July 1, 2011 – RESIDENT <http://www.census.gov/popest/data/state/asrh/2011/index.html>



TRAFFIC SAFETY FACTS

This publication was prepared on behalf of the Indiana Criminal Justice Institute (ICJI) by the Indiana University Center for Criminal Justice Research (CCJR). Please direct any questions concerning data in this document to ICJI at 317-232-1233.

This publication is one of a series of fact sheets that, along with the annual Indiana Crash Fact Book, form the analytical foundation of traffic safety program planning and design in the state of Indiana. Funding for these publications is provided by ICJI and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the CCJR website (www.ccjr.iupui.edu), the ICJI website (www.in.gov/cji/), or you may contact the Center for Criminal Justice Research at 317-261-3000.



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Traffic Safety Project

A collision produces three levels of data: collision, unit (vehicles), and individual. For this reason, readers should pay particular attention to the wording of statements about the data to avoid misinterpretations.

Designing and implementing effective traffic safety policies requires data-driven analysis of traffic collisions. To help in the policy-making process, the Indiana University Center for Criminal Justice Research is collaborating with the Indiana Criminal Justice Institute to analyze 2012 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the seventh year of this partnership. Research findings are summarized in a series of fact sheets on various aspects of traffic collisions, including alcohol-related crashes, trucks, dangerous driving, children, motorcycles, occupant protection, and drivers. An additional publication provides information on county and municipality data, and the final publication produced is the annual Indiana Crash Fact Book. These publications serve as the analytical foundation of traffic safety program planning and design in Indiana.

Indiana collision data are obtained from Indiana Crash Reports, as completed by law enforcement officers. As of December 31, 2012, approximately 99 percent of all collisions are entered electronically through ARIES. Trends in collisions incidence as reported in these publications incorporate the effects of changes to data elements on the Crash Report, agency-specific enforcement policy changes, re-engineered roadways, driver safety education programs, and other unspecified effects. If you have questions regarding trends or unexpected results, please contact the Indiana Criminal Justice Institute, Traffic Safety Division for more information.

The Indiana Criminal Justice Institute

Guided by a Board of Trustees representing all components of Indiana's criminal and juvenile justice systems, the Indiana Criminal Justice Institute serves as the state's planning agency for criminal justice, juvenile justice, traffic safety, and victim services. ICJI develops long-range strategies for the effective administration of Indiana's criminal and juvenile justice systems and administers federal and state funds to carry out these strategies.

The Governor's Council on Impaired & Dangerous Driving

The Governor's Council on Impaired & Dangerous Driving, a division of the Indiana Criminal Justice Institute, serves as the public opinion catalyst and the implementing body for statewide action to reduce death and injury on Indiana roadways. The Council provides grant funding, training, coordination, and ongoing support to state and local traffic safety advocates.

Indiana University Public Policy Institute

The Indiana University Public Policy Institute (PPI) is a collaborative, multidisciplinary research institute within the Indiana University School of Public and Environmental Affairs (SPEA), Indianapolis. PPI serves as an umbrella organization for research centers affiliated with SPEA, including the Center for Urban Policy and the Environment and the Center for Criminal Justice Research. PPI also supports the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

The Center for Criminal Justice Research

The Center for Criminal Justice Research (CCJR), one of two applied research centers currently affiliated with the Indiana University Public Policy Institute, works with public safety agencies and social services organizations to provide impartial applied research on criminal justice and public safety issues. CCJR provides analysis, evaluation, and assistance to criminal justice agencies; and community information and education on public safety questions. CCJR research topics include traffic safety, crime prevention, criminal justice systems, drugs and alcohol, policing, violence and victimization, and youth.

The National Highway Traffic Safety Administration (NHTSA)

NHTSA provides leadership to the motor vehicle and highway safety community through the development of innovative approaches to reducing motor vehicle crashes and injuries. The mission of NHTSA is to save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity.

Author: Bill Newby, Senior Policy Analyst

I am pleased to forward the recently published **Novice Teen Driver Education and Training Administrative Standards**. This new document represents the best efforts of professionals from a wide spectrum of interests to provide guidance that will enhance both the uniformity and professionalism of driver education across the Nation.

These administrative standards complete a set of three guidance documents that will assist States in planning and implementing effective driver education systems. Together with the model curriculum developed by the National Highway Traffic Safety Administration and the American Driver and Traffic Safety Education Association in 2005, and the model education standards introduced by the two organizations in 2007, these new administrative standards provide a comprehensive framework for State driver education systems. The framework follows a professional education approach, allowing flexibility for local conditions and efficiency for periodic technical updates, while promoting consistency and quality assurance across programs and among States.

We called on leading experts in the driver education professional community to take on the task of creating these administrative standards – and we look for their assistance in implementing them. Ultimately, it will be the driver education professional community that will play the key role in promoting and implementing the standards. The driver education state administrators, teachers (both private and public), curriculum developers, researchers, school owners, and association members must recognize the importance of agreeing on common principles in order to move forward.

NHTSA will help. We will encourage the highway safety community to promote these standards and to support efforts to maintain, upgrade and expand their State driver education system. NHTSA will also take part in efforts to bring the wide spectrum of driver education professionals and organizations together to coordinate uniform delivery of driver education and acceptance of professional standards.

NHTSA supported the development of this document, but these standards are not NHTSA's creation. They represent the best thinking of the driver education community. As a highway safety professional, you can play an important role in implementing these standards and improving driver education systems across the Nation. I thank you in advance for your efforts.

Brian McLaughlin, Senior Associate Administrator
National Highway Traffic Safety Administration

*Interim Study Committee
ON DRIVER Education
August 14, 2013
Exhibit C*

Novice Teen Driver Education and Training Administrative Standards



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Novice Teen Driver Education and Training Standards

Forward

A driver's license represents considerable freedom to a young person. Parents, too, may eagerly look forward to the additional help that a teen driver provides to an American household. In addition, mobility is an important factor for today's teens as well as a key factor in the economic and social growth of our country. Teens view this mobility as evidence of becoming adults. Unfortunately, these freedoms and conveniences come at a high price, which continues to be paid via traffic-related fatalities, life-altering injuries, and economic costs. Crashes continue to be the leading cause of death among American teens, accounting for more than one third of all deaths of 16- to 19-year-olds. The crash rate is greatest among 16-year-olds, who have the most limited driving experience and an immaturity that often results in risk-taking behind the wheel.¹ This segment of new drivers has been over-represented in U.S. crash statistics since tracking began and continues this distinction in current driving population demographics. The social costs of these senseless tragedies are immeasurable.

While the value of novice teen driver training and education has long been a subject of debate among researchers,² educators, and others in the transportation and traffic safety community, it continues to be the primary introduction to the driving task for American teens. McKnight³ (1985) writes, "...it is clearly something of a distortion to attribute accidents to driver education just because it leads to driving. Any group of people that drive will have accidents. By agreeing to license them, society accepts that risk. Driver education is simply a means of achieving a socially accepted goal." Enhancing consistency and providing guidance to States seeking to improve the novice teen driver education and training experience was the goal of the Working Group as it convened to craft the Novice Teen Driver Education and Training Administrative Standards.

The implementation of the resulting standards is a first step and is intended to assist driver education and training professionals in providing the administrative framework to teach novice teen drivers the skills and transfer the knowledge necessary to perform as safe and competent drivers, thereby contributing to the reduction of crashes, fatalities, and injuries. The Working Group deliberated, considered the current evidence, and reached consensus on the material that follows. It reflects the collective knowledge and experience of both research and practice in driver education and training today. This document represents a collaborative process by public, private professional, parental, government, nonprofit, and research organizations to identify and

¹ NHTSA & the Insurance Institute for Highway Safety. (2006, September). Beginning Teenage Drivers. Report No. DOT HS 810 651. Washington, DC: National Highway Traffic Safety Administration.
<http://www.nhtsa.dot.gov/people/injury/NewDriver/BeginDrivers/index.htm>

² Mayhew, D. R., & Simpson, H. M. (1996) *Effectiveness and role of driver education and training in a graduated licensing system*. Ottawa: Traffic Injury Research Foundation. Available at: <http://www.drivers.com/article/305/>. See also: Mayhew, D. R., Simpson, H. M., Williams, A. F., & Ferguson, S. A. (1998). Effectiveness and role of driver education and training in a graduated licensing system. *Journal of Public Health Policy* 19, 51-67.

³ McKnight, A. J. (1985). Driver education - when? In *Young driver accidents: In search of solutions, Proceedings of an International Symposium*, D.R. Mayhew, H. M. Simpson, & A. C. Donelson (Eds.), 109-115. Ottawa: Traffic Injury Research Foundation of Canada. Cited in Mayhew & Simpson, 1996.

develop standards for an ideal State driver education and training program. This document is a **starting point**, and the Working Group recognizes that in some standard areas there is insufficient research and data to determine the ideal standard. In these instances, the standards represent the highest level of expert design upon which the Working Group could agree.

Much like the initiation and evolution of best graduated driver licensing (GDL) practices, these driver education and training administrative standards must be accompanied by a commitment for ongoing funding and research to test, refine, and redefine the best practices for the ideal State driver education and training program. The next step should include consensus curriculum content standards and benchmarks.

Preamble

The Novice Teen Driver Education and Training Administrative Standards set forth in this document serve to guide all novice teen driver education and training programs in States striving to provide quality, consistent driver education and training. While noting that administering education standards and policies are a State's right, these standards were created to serve as an anchor for State policies on driver education and training with the following understandings:

- The goal of driver education and training is to transfer knowledge, develop skills, and enhance the disposition of the teen, so he/she can perform as a safe and competent driver, thereby contributing to the reduction of crashes, fatalities, and injuries.
- Driver education and training should be an integral part of the GDL system.
- Driver development should be a lifelong learning process.
- Driver education and training should be a phased education process.
- Driver education and training standards should help an organization be successful in administering and/or providing quality and uniform driver education and training, consistent with the latest advances in methodology, subject matter, and technology.
- Any standard promulgated for driver education and training must be supported with a communication strategy for all stakeholders.

Background

These standards were developed by representatives from the driver education professional community with assistance from NHTSA. The approach to developing these standards was as follows:

- Review a cross-section of State-level driver education and training standards, curriculum content, and delivery requirements to determine how they can help shape national standards of oversight, delivery, monitoring, and evaluation of State and local driver education and training programs. Research, review, and compare driver education and training-related documents from the following stakeholder organizations:
 - NHTSA;
 - American Driver and Traffic Safety Education Association (ADTSEA);
 - AAA Foundation for Traffic Safety; and
 - Driving School Association of the Americas (DSAA).
- Identify differences in the approaches currently used by States and other programs to determine what modifications are needed to ensure uniformity and acceptance by public and private driver education and training programs.
- Assemble a Working Group consisting of program administrators and driver education and training specialists, both public and private, as well as other stakeholders, to develop draft standards, guidelines, monitoring and evaluation approaches, and oversight techniques.
- Devise standards and guidelines for overseeing public and private driver education and training programs to ensure program quality upon delivery, including monitoring and evaluation recommendations.
- Present the Working Group material at a national conference on driver education and training attended by key driver education and training providers from State government driver education and training administrators and private entities. Ensure conference attendees have the opportunity to comment and provide feedback on the draft standards; discuss implementation strategy development; and recommend mechanisms for update, change, and follow-through on the maintenance of the standards.

The Working Group determined that standards should be established for the following topic areas:

- Program Administration;
- Education/Training;
- Instructor Qualification;
- Parent/Guardian Involvement; and
- Coordination with Driver Licensing.

The comments from conference attendees were considered by the Working Group and were included where appropriate. Standards for each topic area are presented on the following pages.

Dedication

The organizations involved in creating these National Standards acknowledged the exemplary contributions of one of the authors, Mr. John Harvey. Of all those involved in the development of the following National Standards, John Harvey embodied the collective effort of all those who have toiled to elevate the status and effectiveness of driver education. John labored mightily for more than 40 years in numerous States and at the national level to make young drivers safe, as he did as the Driver Education Program Manager in Oregon. He inspired us to put aside differences, work together and find common ground, for the sake of the Nation's youth. We remain thankful for his leadership and for this we dedicate these national standards to "Harv."

1.0 Program Administration

All entities delivering driver education and training should be treated fairly and equitably, meet the same quality standards, and have equitable access to State driver education and training resources.

Most States may have a multitude of public and private novice teen driver education and training programs. Each State may have different administrative and provisional structures. Alternative delivery (e.g., online, parent-taught, and correspondence) programs can be either public or private, may not have a physical location, and are subject to varying requirements set forth by the State.

1.1. Management, Leadership, and Administration

Each State should:

1.1.1 have a single agency, or coordinated agencies, informed by an advisory board of stakeholders and charged with overseeing all novice teen driver education and training programs. That agency should have authority and responsibility for the implementation, monitoring, evaluation, and enforcement of these standards. This agency should also be charged with developing and executing communication strategies to inform parents and the public about driver education and training issues. In addition, the agency should inform providers in a timely fashion about changes to laws, regulations, and procedures.

1.1.2 carefully choose a State agency that is best suited and ideally not a direct provider of driver education to administer a statewide education and training program that can provide needed and appropriate regulatory environment, oversight, monitoring, evaluation, review and approval processes, professional development, and all other administrative actions that make available a quality driver education and training program to all age-eligible residents.

1.1.3 have a full-time, funded State administrator for driver education and training. This individual should meet or exceed the qualifications and training required by the State for a novice teen driver education and training instructor and/or school owner or possesses equivalent experience or qualifications. This administrator should be an employee of the agency that has oversight of driver education and training.

1.1.4 have standardized monitoring, evaluation/auditing, and oversight procedures to ensure that every driver education and training program uses a curriculum with written goals and objectives.

1.1.5 have a program renewal process to ensure that curriculum material and procedures are current.

1.1.6 adopt an instructor certification renewal process.

- 1.1.7 approve driver education and training programs that conform to applicable State and national standards.
- 1.1.8 deny or revoke approval of driver education and training programs that do not conform to applicable State and national standards.
- 1.1.9 ensure that programs reflect multicultural education principles and are free of bias.
- 1.1.10 administer applications for licensing of driver education and training instructors, including owner/operators of public and private providers.
- 1.1.11 develop and execute monitoring, evaluation, and auditing procedures to ensure standards are met by public and private providers.
- 1.1.12 adopt goals, objectives, and outcomes for learning.
- 1.1.13 develop criteria to assess and approve programs, curricula, and provider effectiveness. Financial and/or administrative sanctions for non-compliance with the State application and approval processes and/or standards should be provided to all applicants and provide remediation opportunities to driver education and training programs when sanctions are issued.
- 1.1.14 establish and maintain a conflict resolution system for disputes between the State agency and local driver education and training programs.
- 1.1.15 require, provide, or ensure the availability of ongoing professional development for instructors to include updates in best education and training methods and material.
- 1.1.16 require all public and private driver education and training providers to report program data to the designated State agency so that periodic evaluations of the State's driver education and training programs can be completed and made available to the public.
- 1.1.17 ensure that student information submitted to the agency or used by the agency remains confidential, as required by applicable State and Federal regulations.
- 1.1.18 ensure that all novice teen driver education and training programs, instructors, and associated staff possess necessary operating licenses and credentials required by the State.
- 1.1.19 ensure that each driver education and training provider has an identified person to administer day-to-day operations, including responsibility for the maintenance of student records and filing of reports with the State in accordance with State regulations.
- 1.1.20 ensure that all materials, equipment, and vehicles are safe and in proper condition to conduct quality, effective driver education and training.

1.1.21 refer to a general standard for online education such as those established by the North American Council for Online Learning in the absence of national standards specific to the delivery of online driver education or online teacher preparation.

1.1.22 ensure that the instruction of novice teen drivers is completed using concurrent and integrated classroom and in-car instruction where the bulk of the classroom instruction occurs close in time to the in-car instruction to ensure the maximum transfer of skills.

2.0 Education/Training

2.1 Each State should:

2.1.1 have driver education and training that meets or exceeds current nationally accepted content standards and benchmarks.

2.1.2 approve curricula that are based on nationally recognized standards such as ADTSEA and DSAA – Attachments E and F. Each State retains authority in determining what curricula meet its State standards. Other resources include AAA⁴ and NIDB.⁵

2.1.3 regulate the use of simulation and driving ranges.

2.1.4 require an approved end-of-course knowledge and skill assessment examination based on the stated goals and objectives to graduate from the driver education and training program.

2.1.5 require a course provider to conduct valid post-course evaluations of driver education and training programs to be completed by the students and/or parent for the purpose of improving the effectiveness of the program (a resource for help in conducting these evaluations is the AAA Foundation for Traffic Safety⁶).

2.1.6 require core driver educational hours that focus on the driving task and safe driving practices sufficient to meet the criteria established by the end-of-course examination. To enable States to select the appropriate guidelines for contact hours to meet the desired outcomes, the following instructional time should be:

- First stage education:
 - Minimum of 45 hours of classroom/theory;
 - Minimum of 10 hours of behind the wheel instruction;
 - 10 hours in-car observation;
- Second stage education;

⁴ Lonero, L., Clinton, K., Brock, J., Wilde, G., Laurie, I., & Black, D. (1995). Novice Driver Model Curriculum Guidelines. Washington, DC: AAA Foundation for Traffic Safety. .
<http://www.aaafoundation.org/resources/index.cfm?button=lonero>

⁵ Mottola, F. R. (n.d.). Standards for a Risk Management Program. Chesire, CT: National Institute for Driver Behavior. <http://www.nidb.org/>

⁶ Clinton, K., & Lonero, L. (2006, October). Evaluating Driver Education Programs: Comprehensive Guidelines Washington, DC: AAA Foundation for Traffic Safety.
<http://www.aaafoundation.org/pdf/EvaluatingDriverEducationProgramsGuidelines.pdf>

- Minimum of 10 hours; and
- The in-car instruction can be enhanced with simulation or driving range instruction.

2.1.7 require distributive learning.

3.0 Instructor Qualifications

3.1 *Each State should:*

3.1.1 require the following prerequisites for instructors receiving certification and recertification:

- a) possession of a valid driver's license, as recognized by the State.
- b) have an acceptable driving record as determined by the State.
- c) pass a Federal and State criminal background check.
- d) meet health or physical requirements as determined by the State.
- e) achieve a minimum academic education requirement as determined by the State.
- f) meet a minimum age requirement as determined by the State.

3.1.2 require instructors to complete approved standardized instructor training that applies to instructors and teachers in all public and private driver education and training programs. This preparation should include a course of study that is no less than 120 hours of preparatory time. (See Attachment B, Instructor Qualifications Statement)

3.1.3 require instructors to receive training in accepted best practices in course delivery and evaluations using various delivery modalities.

3.1.4 require that an instructor pass a State-approved practical and/or written exam (e.g., Praxis II, National Teacher Certification Program [available at www.ADTSEA.org]).

3.1.5 require annual continuing education and professional development hours for instructors.

3.1.6 require an annual driving record review for instructors.

4.0 Parent Involvement

4.1 Each State should:

4.1.1 require the parent of a teen driver education and training student to attend a parent seminar, pre-course, or the initial session of the teen's driver education and training course. This session should outline the parent's responsibility and opportunity to reduce his or her teen's crash risk in several ways, including modeling safe driving behavior. Information conveyed to the parent in this session should include, but not be limited to, the following known best practices of GDL and parental involvement:

- a) Manage the novice driver's learning-to-drive experience to determine the readiness of the teen to begin the process, and supervise the teen's driving so that the parent can better determine the teen's readiness to advance to the next licensing stage and assume broader driving privileges;
- b) Supervise an extended learner permit period of at least six months that provides at least weekly opportunities for the novice driver to accumulate a minimum of 50 hours of supervised practice driving in a wide variety of increasingly challenging circumstances. Hours of supervised practice driving required in GDL should not be reduced by a novice driver's participation in other driver education and training programs, nor should any other activity be considered a substitute.
- c) Supervise an extended intermediate license period that temporarily restricts driving unsupervised with teen passengers and during nighttime hours until the State's GDL requirements have been met **and** the parent determines the teen's readiness to drive unsupervised in these high risk conditions; and
- d) Negotiate and adopt a written agreement between the teen and parent that reflects the expectations of both teen and parent and clearly defines the restrictions, privileges, rules, and consequences that will serve as the basis for the teen to earn and for the parent to grant progressively broader driving privileges.

4.1.2 require a parent to complete a debriefing with the driver training instructor to inform the parent of the progress and proficiency of the teen driver. This final session should include a reminder that it is the parent who must ultimately determine the teen's readiness to obtain a license with full driving privileges and of the parent's responsibility and important role in helping the teen to become a safe driver.

5.0 Coordination With Driver Licensing

5.1 Each State should:

5.1.1 have a formal system for communication and collaboration between the State driver education and training agency and the State driver licensing authority. This system should allow sharing of information between driver education and training program/course administrators and the State's driver licensing authority.

5.1.2 have a GDL system that includes, incorporates, or integrates driver education and training. Completion of driver education and training should not reduce the time requirements in the GDL process.

5.1.3 provide information and education on novice teen driving requirements and restrictions to judges, courts, and law enforcement officials charged with adjudicating or enforcing GDL laws.

5.1.4 ensure that sanctions for noncompliance with GDL requirements by novice teen drivers are developed and enforced uniformly.

5.1.5 require a parent to submit State-specified documentation that certifies completion of required supervised hours in a manner that reduces the possibility of fraudulent entries.

5.1.6 ensure that State licensing tests are empirically based and reflect performance competencies of the standards-based driver education and training program outlined in the previous sections of this document.

5.1.7 develop and implement a valid and reliable driver's knowledge and skills test that assesses factors associated with the novice teen driver's ability to reduce driving risks.

Attachments

This section of the document includes the following attachments:

- Attachment A – Definitions of Key Terms, page 15
- Attachment B - Instructor Qualifications Statement, page 19
- Attachment C - The Working Group, page 23
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Attachment A – Definitions of Key Terms

Administrator – *manager (affairs, a government, etc.); having executive charge of.*

Advanced driving skill program – *an additional driving program designed to promote safe driving skills outside of the novice training.*

Alternative delivery – *delivery of the theory portion of driver education using channels other than the traditional classroom, such as Internet-based, correspondence-based, and parent-taught.*

Behind-the-wheel – *actual instructional driving time during which the novice teen driver drives on streets and highways, and is guided by an instructor in the front passenger seat. Observation is not included in behind-the-wheel time.*

Certification – *to award a certificate to a person attesting to the completion of a course of study or the passing of a qualifying examination.*

Classroom content – *that part of the driver education and training program that imparts the knowledge, theory, principles, laws, rules, best practices, and related curriculum content through student-centered activities, lecture, media, programmed instruction, independent study, correspondence, and other effective techniques.*

Classroom setting – *the delivery of the classroom portion of the curriculum is not limited to a traditional physical location, but includes the services of a professional instructor/facilitator in a variety of physical, real-time, online, and video settings. It may include home-based and parent-taught or parent-facilitated venues in which case the services of a professional instructor may or may not be required depending on State law. It does not include observation time or behind-the-wheel instruction.*

Concurrent instruction – *the practice of using in-vehicle, classroom, simulation, and driving range-based teaching methods simultaneously.*

Confidential – *spoken, written, acted upon, etc., in strict privacy.*

Consistent – *agreeing or accordant; compatible; not self-contradictory; constantly adhering to the same principles, course, form, etc.*

Content – *the subject matter taught in driver education and training.*

Correspondence-based driver education – *a driver education program in which the classroom/theory portion is completed by the student at the student's home location and at the student's personal pace.*

Credential(s) – *evidence of authority, status, rights, entitlement to privileges, or the like, usually in written form.*

Curriculum – *the overall program of instruction, including classroom, behind-the-wheel, observation, simulation, or driving range instruction. Generally required to be approved by the State in which the program is delivered.*

Distributive learning – where the acquisition of knowledge and skills is spread over a longer period of days and weeks with fewer hours of instruction in a day, as opposed to fewer days and weeks, but more daily hours of instruction resulting in the same amount of hours.

Driving log – a written record of supervised motor vehicle operation time maintained by the student and authenticated by the parent/driving supervisor.

Driving range – a defined roadway course closed to public traffic and allowing for the re-creation of various basic driving scenarios, used for driver training.

Driving range instruction – use of a closed course to instruct novice teen drivers.

Evaluate (evaluation) – to examine and judge carefully; appraise, usually applied to students throughout their driver and education and training program.

Graduated driver licensing (GDL) – a State-run and enforced system under which novice teen driver privileges are granted in phases to restrict beginners' initial experience behind the wheel to lower-risk situations. The restrictions gradually are lifted, as experience is gained so novice teen drivers are more experienced and mature when they get their full, unrestricted licenses.

Immediately sequential – occurring within 72 hours of the first phase.

In-car instruction – consists of behind-the-wheel training and observation training time.

In-vehicle assessment techniques – approach used by an instructor to monitor and objectively measure student vehicle operation and safe driving behaviors.

Instruction techniques – approach used by an instructor to transmit information to students.

Instructor – the person who delivers the curriculum; includes certified classroom and behind-the-wheel instructors.

Intermediate permit – the mid-phase driving permit in the GDL system.

Knowledge – the fact or state of knowing; the perception of fact or truth; clear and certain mental apprehension; acquaintance with facts, truths, or principles, as from study or investigation.

Learner permit – the initial driving permit in the GDL system.

Licensing (for novice teen drivers) – formal permission from a governmental authority to operate a motor vehicle on public roadway.

Licensing (for driving schools) – formal permission from a governmental or other constituted authority to operate a driving school.

Lifelong learning – the ongoing formal and informal acquisition of knowledge or skills.

Measure – to ascertain the extent, dimensions, quantity, capacity, etc., of, especially by comparison with a standard; to judge or appraise by comparison with something or someone else.

Monitoring, evaluation/auditing – *recording, regulating, or controlling a process or system.*

Multistage driver education – *a system where combined phases of classroom/theory and behind-the-wheel instruction are delivered at different times to enhance learning. That is, a portion of the required classroom and behind-the-wheel instruction is completed, then the parent conducts supervised driving for a specified time or amount, then the novice teen driver returns for the remaining classroom and behind-the-wheel instruction.*

Novice teen driver – *any teen who falls under the jurisdiction of the State’s GDL system.*

Novice teen driver education and training – *classroom instruction and supervised driving practice with instructors, training material, and procedures to reduce risk-taking and improve safety decision-making for these drivers.*

Observation time – *instructional time whereby novice teen drivers observe a behind-the-wheel lesson and receive perceptual practice in how to manage time and space for risk reduction outcomes.*

Online – *a driver education program in which the classroom/theory portion is delivered via the Internet.*

Parent – *a parent, guardian or other mentor responsible for managing a novice teen driver’s learning-to-drive experience*

Parent-taught driver education – *a system whereby parents/guardians are authorized to be their novice teen drivers’ driving instructors and able to perform either or both the classroom and behind-the-wheel instruction responsibilities.*

Phased education – *the incremental introduction of concepts, skills, and techniques based on the acquisition of foundational knowledge.*

Private driving school – *a driver education program that is delivered by a business entity.*

Professional development – *the ongoing acquisition of knowledge, skills, and awareness of new or emerging issues by driving instructors, generally required as a condition of certification as an instructor by a State.*

Program – *the full scope of delivery of novice teen driver education, including both classroom/theory and behind-the-wheel instruction.*

Provider – *the legal entity (“private” or “public”) that offers a driver education program.*

Public driving school – *a driver education program that is delivered by a political subdivision of the State.*

Report – *to give or render a formal account or statement of.*

Second-stage driver education and training – *education and training that occurs after formal driver education and training is completed. This can include classroom and/or behind the wheel and is conducted under the supervision of a qualified driver education and training instructor.*

Simulation – using interactive computer programs which imitate real or imaginary driving scenarios. Often used to create events that would normally be impossible, difficult, or dangerous to the novice teen driver (www.learning.ac.nz/mod/glossary/view.php).

Simulator – a replica of basic vehicle controls and instruments that allows student response to driving situations. An electromechanical device designed to represent the driver's compartment of the automobile and with the use of films, video programs, or computer-generated multimedia attempts to develop judgment, decision-making skills, behavior response, and manipulative skills essential in learning to drive.

Skill – the ability, coming from one's knowledge, practice, aptitude, etc., to do something well; competent excellence in performance.

Standard – something considered by an authority or by general consent as a basis of comparison; an approved model; a rule or principle that is used as a basis for judgment.

Standardized – to bring to or make of an established standard size, weight, quality, strength, or the like.

Theory – while "theory" specifically refers to the general principles of the body of knowledge related to driving, including the ideal set of facts, principles and circumstances for driving, it is sometimes used as a substitute for "classroom" when referring to driver education - as in "...the classroom or theory portion of driver education."

Attachment B - Instructor Qualifications Statement

Quality instructor training is the backbone of quality driver education and training; therefore it is an important component for helping to produce a safe teen driver.

1.1 Instructors should be required to complete approved standardized instructor training that applies to instructors/teachers in all public and private driver education and training programs. This preparation should include a course of study that is no less than 120 hours of preparatory time.

1.2 Courses to prepare instructor/teachers should include both theory and laboratory education. The following competencies for classroom and in-car instruction should be achieved:

- Ability to recognize and explain the general nature of the drivers' task within the highway transportation system and the consequences of system failures;
- Ability to apply risk management skills to the task of driving as a driver or passenger;
- Ability to apply and explain the principles of perception to risk management when operating a motor vehicle;
- Ability to apply and explain the techniques for managing risk when operating a motor vehicle over pre-selected on- and off-street activities;
- Ability to recognize and identify physical, social, and psychological influences that can affect motor vehicle operator performance;
- Ability to demonstrate concepts and generalizations that enable one to make objective decisions regarding the:
 - ✓ use of alcoholic beverages and drugs;
 - ✓ use of occupant restraints and protective devices;
 - ✓ consequences of speed selection;
 - ✓ consequences of fatigue, drowsy driving, and road rage;
 - ✓ environmental factors that influence the decision-making process;
 - ✓ use of visual skills to obtain appropriate information to make reduced-risk decisions in low, moderate, and high risk driving environments;
 - ✓ management of time, space, and visibility when operating a motor vehicle;
 - ✓ interaction with other roadway users in a positive manner;
 - ✓ demonstration of balanced vehicle movement;
 - ✓ additional skills practice with parents/guardians/mentors;
 - ✓ identification of laws, rules, and regulations that govern the smooth movement of traffic;
 - ✓ use of current methodologies for providing classroom instruction in driver education including organization, classroom management, and technologies; and

- ✓ use of current methodologies for providing in-car instruction in driver education including route development, giving directions, positive evaluation feedback, and evaluating driver performance;
- Ability to identify and support rules and regulations governing a State's GDL program;
- Ability to demonstrate knowledge of the State-specific rules of the road;
- Ability to demonstrate vehicle operation and control from the right passenger position;
- Ability to provide oral instruction;
- Ability to develop training routes;
- Ability to develop task breakdown explanations;
- Ability to conduct performance assessments and evaluations; and
- Ability to contact first aid resources in the event of an emergency.

1.3 Each State should require that courses offered to fulfill instructor preparatory requirements include the following outline and topics:

1.3.1 Driver task analysis: a course that is designed as a prerequisite to provide instructors with the content knowledge and skills necessary to teach driver education and to attain established instructor competencies. These suggested topics are a minimum and may be expanded:

- ✓ Preparing for State-administered written examination;
- ✓ The task of the driver in the highway transportation system (HTS);
- ✓ Personal factors influencing operator performance;
- ✓ Motor vehicles laws, regulations, and their application;
- ✓ Managing risk within the HTS;
- ✓ Sensory perception and performance of the driving task;
- ✓ Improving driver performance;
- ✓ Motor vehicle performance capabilities and maintenance;
- ✓ Legal and moral obligations relative to using the HTS;
- ✓ Trip-planning;
- ✓ Student learning styles;
- ✓ Instructional technique and pedagogy;
- ✓ Student evaluation and management;
- ✓ Instructor/ student-centered activities; and
- ✓ Preliminary driver performance audit.

1.3.2 Vehicle operational and instructional skills: a course that is designed to provide instructors with the knowledge and skills necessary to successfully conduct in-car instruction, provide a safe learning environment while doing so, and evaluate new driver performance.

- ✓ Risk management principles in driving situations;
- ✓ Factors that influence learning and habit development;
- ✓ Standards for driver performance;
- ✓ Laboratory learning environments;
- ✓ Planning and preparing for instructional performances and outcomes;
- ✓ Planning vehicle operational experiences;
- ✓ Planning off-street laboratory experiences;
- ✓ Planning on-street laboratory experiences;
- ✓ Techniques for student performance assessment;
- ✓ Involving mentors in the learning process;
- ✓ Local curriculum and program needs; and
- ✓ Crash avoidance.

1.3.3 Classroom knowledge: a course designed to provide the instructor with the knowledge and skills necessary to provide quality student centered classroom instruction, successfully manage the classroom, and provide for appropriate student evaluation and assessment.

- ✓ Course introduction, scheduling and grading;
- ✓ Risk management principles in all driving situations;
- ✓ Influencing learning and habit development;
- ✓ Standards of driver performance;
- ✓ Classroom learning environments;
- ✓ Planning for classroom experiences;
- ✓ Planning for computer-assisted instruction;
- ✓ Instructor characteristics and techniques;
- ✓ Planning for simulation-based instruction;
- ✓ Assessment of student performances;
- ✓ Course assessments;
- ✓ Planning for local curriculum and program needs;
- ✓ Classroom lesson plan development;
- ✓ Classroom lesson presentation; and

- ✓ Knowledge of State rules of the road, driver licensing, and penalties for improper driver behavior.

Attachment C - The Working Group

Bud Chauncy, Owner, First Class Driving School, Bossier City, LA; Past President, Driving School Association of the Americas (DSAA)

Troy Costales, Governor's Representative and Director, Oregon DOT, Traffic Safety Division

Barbara Harsha, Executive Director, Governor's Highway Safety Association (GHSA)

John Harvey, Program Manager, Driver Education, Oregon DOT, Traffic Safety Division; Past Chairman of the Board, Driver Education and Training Administrators (DETA)

David Huff, Director, Montana Office of Public Instruction, Traffic Education Program/Driver Education; Chairman of the Board, DETA

Brian Johns, Driver Education Coordinator, Idaho State Department of Education

John Kennedy, Group Vice President, National Safety Council

Kevin Lewis, Vice President of Driver Programs, American Association of Motor Vehicle Administrators (AAMVA)

Dan Mayhew, Senior Vice President, Traffic Injury Research Foundation

Jim Nichols, Highway Safety Researcher

Debbie Prudhomme, Owner, Training Wheels Driver Education, Maple Grove, MN; Central Vice President, DSAA

Kevin Quinlan– National Transportation Safety Board (NTSB)

Marshal Rafael – NTSB

Allen Robinson – Chief Executive Officer, American Driver and Traffic Safety Educator Association (ADTSEA)

John Svensson, President, Training & Research Institute of Advanced Driver Development (TRIADD); President, DSAA

William Van Tassel, Manager of Driver Training Operations, AAA

Attachment D – Working Group and Conference Attendees Bios

Walter J. Barta consults on matters of driver training and assessment and develops and manages driver education programming for the Driver Performance Group. He has worked as a product manager for CAA Alberta, one of the largest driving schools in North America. In that capacity he developed and administered Novice, Fleet, Problem and Aging driver programming throughout western Canada. He also administered the impaired-driving programs in Alberta and has been conducting research on new approaches to driver assessment.

Barbara E. Brody, M.ED., has been in the driver and traffic safety field for over 30 years. Brody is currently a full-time driver education teacher at Peoples Academy in Morrisville, Vermont. She has been a State consultant for the Vermont Department of Education, a faculty member at Saint Cloud State University Highway Safety Center, proprietor of a private driving school, and associate principal of a grade 7-12 high school. She is a past recipient of an “Outstanding Teacher of the Year Award” given annually by school districts. She has presented at national and State-level workshops on parent involvement, teen drowsy driving, and recently on “How Students Learn Using Student Learning Projects.” She is a past president of the Vermont Driver and Traffic Safety Association, past president of ADTSEA, and currently is serving as vice president of the New England Driver and Traffic Safety Association and a member of the Vermont Driver and Traffic Safety Curriculum Team. In 2009, she was awarded ADTSEA’s Richard Kaywood Award for her significant contribution to traffic safety education.

Charles “Bud” Chauncy owns and operates a professional driving school in Bossier City, Louisiana. He is certified by the Department of Public Safety to teach both classroom and behind-the-wheel training, and has over 20,000 hours of behind-the-wheel training experience. He is also certified by the Office of Motor Vehicles to administer third-party road skills tests. He has been trained as a NHTSA passenger safety expert, Operation Lifesaver presenter, Louisiana Tech driver rehabilitation specialist, and a NSC instructor. He is currently president of First Class Driving School, president of the Driving School Association of Louisiana, and past president of DSAA.

Bill Combs is executive director of the Driver Education & Training Administrators, is a Maryland-certified driver education instructor associated with the driver education programs at Montgomery County Community College. He was formerly project director of the National Safety Council’s Teen Driver Safety Project (2001-2005) that included the 2002 Chatam Symposium documenting the science of GDL, and then the 2005 publication of the NSC’s Family Guide to Teen Driver Safety. He was manager of public affairs at NHTSA from 1996 to 2001. Combs is active in various national, State, and local task forces developing programs, curricula, evaluations, and legislation for driver education, GDL, and teen driver safety.

Richard P. Compton, Ph.D., is the Director of the Office of Behavioral Safety Research, Research and Program Development, Traffic Injury Control, at the National Highway Traffic Safety Administration, U.S. Department of Transportation. He joined NHTSA over 30 years ago as a Research Psychologist in the Office of Research and Development. Over the years he has directed and authored numerous research studies in the areas of alcohol and drug impaired driving, occupant protection, young drivers, older drivers, and speeding and other unsafe driving actions, especially the evaluation of new technology, sanctions, enforcement and public

safety programs to determine their effectiveness. He is a member of the American Psychological Association and the Human Factors Society. He is on the Executive Board of the International Council on Alcohol, Drugs and Traffic Safety. He is also a member of the Transportation Research Board's Committee on Alcohol, Other Drugs and Transportation, Committee on Operator Education and Regulation, and the Subcommittee on Young Drivers, Strategic Highway Research Program Safety Technical Coordinating Committee, as well as the Executive Board of the National Safety Council's Committee on Alcohol and Other Drugs.

Troy E. Costales has more than 20 years experience in Transportation Safety as a member of the executive management team of the Oregon Department of Transportation. He served five terms as a member of the board of the Governors Highway Safety Association. He is currently a member of the American Association of State Highway and Transportation Officials Standing Committee on Highway Safety. He served as the chairman of ODOT's Diversity Council for two years. He is a member of the Transportation Safety Management Committee and the NCHRP Panel 17-18 for the Transportation Research Board. He is the task group chairman for the AASHTO Strategic Highway Safety Plan initiative, a member of the TRB Committee for the Study of Traffic Safety Lessons from Benchmark Nations, a member of the 2008 Indiana Impaired Driving Assessment (January 27 – February 1), 2006 Kansas Impaired Driving Assessment (chair), 2005 Massachusetts Impaired Driving Assessment (chair), 2004 Nevada Impaired Driving Assessment, and 2000 Maryland Impaired Driving Assessment (chair) in cooperation with NHTSA. He is a member of the International Association of Chiefs of Police's Drug Evaluation and Classification Program Technical Advisory Panel. He has received many awards including "Administrator of the Year" in 2000 by the Oregon Traffic Safety Education Association. He was a member of the USDOT-sponsored international scanning trip "Managing and Organizing Highway Safety" that visited Sweden, the Netherlands, Germany, and Britain. He was a team member for the revisions to the NHTSA Impaired Driving program management course.

Patty Ellison-Potter, Ph.D., manages the young driver research areas at NHTSA, including graduated driver licensing, driver education, and risk-taking behaviors. As a Research Psychologist, She has worked for NHTSA's Office of Behavioral Safety Research for approximately 12 years. Most of her research has focused on aggressive driving and young drivers, but she has also managed research in Occupant Protection, Emergency Medical Services, and Impaired Driving. Current research focuses on driver education and GDL components.

Sharon R. Fife, (nee Postigo), is president of a family-owned business in operation since 1952. She supervises programs for basic teen driver education, and adult/juvenile driver improvement. She also teaches owner/manager preparation programs in conjunction with Ohio Department of Public Safety and is involved in various instructor training programs (ADTSEA, AAA-Licensed to Learn, ODPS) and traffic safety associations such as DSAA, where she is currently executive vice president).

Wendy C. Forbes oversees driver education in the Ohio Traffic Safety Office of the Department of Public Safety. These programs include teen novice driver education, CDL schools, and remedial and disability schools. These programs require licensing, educating, investigating complaints, and inspecting new prospective schools. She started her career as an Ohio State

Highway Patrol driver's examiner, was promoted to an administrative position in the division, was promoted to driver training manager in the Ohio Traffic Safety Office.

Robert Foss, Ph.D., is director of the Center for the Study of Young Drivers and senior research scientist at the University of North Carolina Highway Safety Research Center. He and his colleagues have been studying young-driver crash risks since 1994. They have developed and evaluated a number of programs and policy approaches to reduce young-driver crashes and have assisted numerous States in designing and implementing graduated driver licensing systems. He is the founding chairman of the Transportation Research Board subcommittee on young drivers.

Philip R. Fujawa is an educational consultant at the Office of Safety and Driver Education, Division of Program Support, New Hampshire Department of Education; adjunct professor for Keene State College's driver education intro and methods courses; a New Hampshire "Driver Education Teacher of the Year" recipient, and president of the Driver Education Teachers Association. He is a member of the Driver Education Curriculum Development Team for the State's first curriculum published in September 1991. In 2005, he began implementing a three-year program to observe and evaluate all New Hampshire driver educators conducting classroom and behind-the-wheel instruction and their programs, organized and began conducting professional development workshops monthly for driver educators based on needs observed while observing instruction.

Jerry L. Gaines, M.A., serves on the board of directors of the California Association for Safety Education (CASE). He is past president of CASE and chairs its governmental relations committee. He is retired from a Los Angeles suburban school district where he coordinated the district's driver education/training program. He served on the American Driver and Traffic Safety Education board of directors for six years, leading in the effort to pass the State's GDL law, the Brady-Jared Teen Driver Safety Act. He is a coauthor of a workbook included in the Pearson Publishing's Drive Right program.

Carol Hardin, M. Ed., worked for 35 years in the Fairfax County, Virginia, Public Schools (FCPS) as a classroom teacher, curriculum resource specialist, administrator, supervisor for driver and traffic safety classroom and in-car education, and as an FCPS coordinator for the Virginia Standards of Learning and Student Accountability Office. She was a consultant for the Virginia Department of Education helping write the State's driver and traffic safety curriculum guide, as well as consulting for the U.S. Department of Health and Human Services for driver and traffic safety education. She served as the president of the Virginia Association for Driver and Traffic Safety, secretary and president of the Southeast Region of the American Driver and Traffic Safety Education Association (ADTSEA), and was on the ADTSEA board of directors.

John Harvey was the program manager of Driver Education in the Transportation Safety Division of the Oregon Department of Transportation in Salem. He helped create the Oregon Risk Prevention Curriculum used in five States. In 2005, he was awarded ADTSEA's Richard Kaywood Award for his significant national and international contribution to traffic safety education. He recently completed four years as the president of the Association of State Supervisors of Safety and Driver Education, recently reorganized and renamed the Driver Education and Training Administrators (DETA).

Stanley Lewis Henderson is a member of the Indiana Department of Education and Indiana State University Rider Education Program, as well as a former committee member of the Indiana Department of Education. He is a member of the Coalition for Indiana Graduated Driver License and the Traffic Safety Education Association, the Indiana Driver Education Association, and the American Driver and Traffic Safety Education Association. He was a member of the Indiana Department of Education's Motorcycle Safety Advisory Committee.

Rick Hernandez has worked in high-tech management as well as Internet technology since 1994. Prior to co-founding I DRIVE SAFELY in 1998, He led the IT division for Dawson Information Quest, a subsidiary of British firm Dawson Holdings, a billion-dollar publishing company. Since founding I DRIVE SAFELY, he has advocated at the legislative level for high standards in alternative delivery methods of instruction within the driver training industry. He has established working relationships with State motor vehicle and education agencies across the country, and has been called upon by both legislative committees and State agencies as a resource in the development of statutory and regulatory language relating to alternative delivery methods of instruction in driver education. He serves as a charter member and executive officer of the National Association of Driving Safety Educators, a nonprofit association that advocates for the adoption of high-quality standards and course effectiveness within the alternative delivery method driver training industry. He received his bachelor's degree from California State University San Marcos.

David C. Huff, M.S., directs traffic education programs for the Montana Office of Public Instruction. He administers two distinctly different driver education/training programs—the teen novice driver education program and Montana DRIVE, a user-fee-funded, advanced behind-the-wheel crash-avoidance training for licensed drivers. His background includes statewide management in pupil transportation and adult basic education. He is presently chairman of DETA.

Lynne Judd is the administrator of the Division of Motor Vehicles, Wisconsin Department of Transportation, responsible for all driver and vehicle services, as well as motor carrier and auto/truck dealer regulation. She serves on the board of directors of AAMVA International, currently as its secretary, and is a member of the AASHTO Standing Committee on Highway Traffic Safety.

Kathy Kelly is manager of Commercial Licensing Policy at the California Department of Motor Vehicles. This section has policy and oversight responsibility for the commercial driver license program, driver education and training standards, commercial driving schools, and traffic violator schools. She is presently a co-chair of the team established to reduce young-driver fatalities under California's State Highway Safety Implementation Plan.

J. Peter Kissinger has over 35 years of experience in transportation safety. He has been president and CEO of the AAA Foundation for Traffic Safety since May 2002. He has 10 years experience with the Civil Engineering Research Foundation, where he managed "Innovation Centers" that evaluated new technologies for the public works and transportation community, and 8 years as the managing director of the National Transportation Safety Board. Previously, he served as a transportation safety specialist with the NTSB, conducting evaluations of transportation safety programs, and was an operations research analyst with the U.S. Coast Guard, where he evaluated proposed Federal safety standards and managed a research and

development program. An engineering graduate of the U.S. Coast Guard Academy, he has master's degree in operations research from George Washington University.

Terry Lee Kline, Ed. D., is an associate professor at Eastern Kentucky University since August 1997 and is program coordinator for the ECU Traffic Safety Institute since July 2007. He is project director for Kentucky Transportation Cabinet Contracts for the Kentucky Motorcycle Program, State Traffic School. He has developed curriculum for highway-railroad grade crossings, elementary bicycle education, junior high school traffic safety, secondary alcohol and driver education, adult commercial driver skill enhancement, and adult alcohol education programs. He has been the editor of *The Chronicle of ADTSEA* and *ADTSEA News and Views*, a refereed national journal for traffic safety education. He has served as editor for State associations in Kentucky, Pennsylvania, Washington, and Texas. Publications include more than 40 articles on related driver and traffic safety issues, contributions to several national magazines and the Encyclopedia of Education concerning driver and traffic safety education.

Chuck Lehning is a teacher and certified driver education instructor who retired with 30 years of service. For the past 14 years, he has been director of operations for Jordan Driving School, Inc. He oversees the Charlotte-Mecklenburg Schools contract that teaches driver education to over 10,000 students per year. He is president-elect of ADTSEA.

Kevin R. Lewis is the director of Driver Programs for the American Association of Motor Vehicle Administrators (AAMVA) and is responsible for the overall operation of the driver program area in the AAMVA Programs Division. He is also responsible for the development, coordination, monitoring, and disseminating of information for driver licensing, driver improvement, traffic safety, and financial responsibility.

Larry Lonero is a Northport Associates partner with primary responsibility for road safety R&D. He is an internationally recognized expert on the driving task and methods of influencing road user behavior. Prior to becoming a consultant he held senior government positions in safety research and program development. As a consultant, he has led major driver R&D projects and safety strategy implementation including the AAA Foundation project to develop guidelines for evaluation of driver education, which he is currently helping implement across multiple jurisdictions. He is an expert witness in driver factors for civil litigation. He is a judge for the *Automotive News* PACE Awards for automotive innovation and a consultant to the WHO/World Bank's road safety initiatives. He is a member of the TRB Committee on Operator Education and Regulation, the American Evaluation Association, and ADTSEA.

Dan Mayhew, M.A., is senior vice president with the Traffic Injury Research Foundation of Canada. Since joining the foundation in 1980, he has conducted research in the areas of driver licensing and improvement systems; motorcycle safety; young-driver accident prevention; senior drivers; motor vehicle accident data systems; driver competency and experience; commercial vehicle driver licensing; driver education and training; enforcement; fuel-efficient driving; and alcohol, drugs and traffic safety.

Kathleen J. McHale, M.S. Ed., is the director of driver training programs for the New York State Department of Motor Vehicles. As such, she is responsible for a number of programs, including the Office for the Younger Driver, the Office for the Older Driver, the Motorcycle Training Program, the Point and Insurance Reduction Program (the State's defensive driving

course), the Internet Point and Insurance Reduction Program, the 5-Hour Pre-licensing Course, and the Drinking Driver Program. Kathy participated in the work group that delivered a report on Driver Education Availability and Curriculum Enhancement to New York's Governor and Legislature in December 2008. She is currently developing strategies to implement the report recommendations as well as serving on the State's Task Force on Impaired Driving.

Brian M. McLaughlin is Senior Associate Administrator for Traffic Injury Control at the National Highway Traffic Safety Administration. Joining the Department in 1979 as a Presidential Management Intern, he has thirty years experience dealing with highway and traffic safety issues and policy. He has served in a variety of executive, behavioral, regulatory, policy and administrative positions in the National Highway Traffic Safety Administration, the Federal Highway Administration and the Federal Motor Carrier Safety Administration. He assumed his current duties responsible for the development of NHTSA behavioral safety programs in May 2003.

Jeffrey P. Michael, Ed.D., is Associate Administrator for Research and Program Development at the National Highway Traffic Safety Administration with responsibility for the development of programs to increase seat belt use, decrease impaired driving, and improve the safety of motorcyclists, bicyclists, pedestrians and older drivers. Previously he served as Director of the Impaired Driving and Occupant Protection Office, with responsibility for developing and promoting programs to reduce alcohol and drug-impaired driving and increase the use of safety belts and child safety seats. During his tenure, he also served as Chief of the agency's Emergency Medical Services Division, where he supported the national EMS system by developing and maintaining consensus guidelines for educating emergency medical technicians and improving EMS operations. He has served in the Federal government for twenty years.

Kathy Moffat, a former teacher, has served as president of local PTA organizations, the Orange USD Legislative Coalition, Toastmasters, and the Orange YMCA Board of Directors. She is a graduate of Leadership Orange, and past director of that leadership development program for the Orange Chamber of Commerce. She is currently PTA council scholarship chair, and vice president for community concerns for the California State PTA. She is also a member of the State PTA's Legislation and Legislation Action Committees. She served as Orange County PTA vice president for legislation, vice president for education, and vice president for community concerns. On the State PTA Board of Managers, she has been a member of the Advocacy Team for four years, serving as health advocate and community concerns advocate. Prior to that, she was an education commissioner for two terms

Frederik R. Mottola, Professor Emeritus, is a traffic-safety educator, scientist, inventor, and author. He is executive director of the National Institute for Driver Behavior. He is the creator of the Reference Points method for vehicle placement, targeting for visual skill development, the Zone Control System, for space-management habit development and many other techniques commonly found in risk-reduction curricula. He has developed and conducted crash-reducing programs for corporations, municipalities, police, military, emergency vehicle operators, and traffic safety educators, on local, national, and international levels. He has written several books, videos, CD-ROMs, and interactive computer programs to help drivers gain perceptual skills to reduce risk.

Fred Nagao is the education compliance officer of Hawaii's Department of Transportation and Department of Education. He oversees the monitoring of the driver education program for teen novice driver education for the past 8 years. His background includes 35 years of teaching for the Department of Education, of which 30 years was spent in driver education. He is currently the secretary-treasurer of ADTSEA.

Thomas A. Opalka, B.S., directs Arizona's driver education programs for the Arizona Motor Vehicle Division. The programs include the State's traffic survival school, which is designed to improve the safety and habits of drivers required to attend the course, and professional driver training schools that train and educate drivers for a fee. He also works in conjunction with the Arizona Department of Education in monitoring the State's high school driver education programs. In addition to being a former United States Army officer, he has extensive experience in project and personnel management.

John W. Palmer has primary scholarly, curricular, and research interests in the field of driver and traffic safety education. As a former high school driver educator in Kenosha, Wisconsin, and Park Ridge, Illinois, and as a university professor, he has pursued numerous projects designed to improve the quality and effectiveness of high school driver education. As a researcher, he has evaluated the effectiveness of a variety of approaches to educating drivers, and as a public policy analysis and advocate, he has extensive experience with the process of legislative and administrative rule making.

Jeff Payne, CEO, has over 20 years of experience in the automotive and motorsports world, beginning his racing career at age 17. By age 21, he was driving competitively in Europe and Japan, driving with some of the top drivers in the world, including Michael Schumacher, Mika Hakkinen, and David Coulthard. When he wasn't driving, he was operating his own exclusive driving school that catered to an elite clientele. His list of students has included celebrities such as Tom Cruise, Charlie Sheen, Walter Payton, Jon Bon Jovi, and Emilio Estevez; and national organizations such as the PGA Tour, Hilton Hotels, the Walt Disney Company, McDonalds, and the United States Air Force. Throughout his career, he has trained thousands of students in a variety of driving programs including performance driving, defensive driving, and anti-terrorist training, along with teen-related driver education programs.

Debbie Prudhomme has operated a driving school, Training Wheels Driver Education, in the Minneapolis/Saint Paul metro area and east central Minnesota since 1996. She founded the Association for Professional Driving Instruction of Minnesota in 1997 and has served as an advocate for the driving school industry since then. She also has been a board member of the Driving School Association of the Americas since 2002, and currently serves as secretary and legislative coordinator for the organization. In addition to her vocation of traffic safety education, she is currently working on her master's degree in theology and serves her local Catholic parish as director of religious education.

Dale O. Ritzel, Ph. D., is director and professor emeritus of the Safety Center at Southern Illinois University Carbondale (SIUC). In his 41 years teaching at SIUC (he still teaches two to four Web-based, distance-learning courses per semester) he was a university administrator, directed the driver education teacher preparation program, and was involved in research activities. He is a coauthor of the latest edition of *Responsible Driving* driver education textbook for driver education students. He has published over 150 articles on traffic safety and

occupational safety and health issues. He is current president-elect of the Illinois High School and College Driver Education Association.

Gabriel R. Roberson has directed legislative affairs for the Driving School Association of California, Inc., since 1986. He is responsible for the introduction of legislation in the California Legislature adopted by the board of directors of the association that occurs almost annually. Prior to his retirement in 1985, following a 30-year career with GTE (now Verizon Communications), he was the chief lobbyist for General Telephone Company of California. Since September 2006, he has served as vice chair of the California Strategic Highway Safety Plan, Challenge Area 6: Reduce Young Driver Fatalities.

Dr. Allen Robinson has been an educator for over 30 years. He has a Ph.D. from Michigan State University, where his studies centered on curriculum development and instructor training. He began his career as a driver education teacher in Wheaton, Illinois. He developed a train-the-trainer program for the American Association of Motor Vehicle Administrators to train trainers of State commercial driver license examiners in the proper implementation of State licensing programs. These programs are conducted regionally to certify State license examiner trainers. In 1994, the Board of Directors selected the Highway Safety Center at IUP to provide management services for ADTSEA. Dr. Robinson provides the management services and is the CEO of ADTSEA. Under a cooperative agreement with NHTSA, Dr. Robinson provides consulting service to States initiating improvements in driver education programs and to support State efforts for graduated driver licensing for new drivers. Dr. Robinson is a professor in the Department of Physical Education, Safety and Health at Indiana University of Pennsylvania.

Nina Jo Saint is a manager for the Texas Education Agency, Driver Training Division. She oversees the approval and compliance of three different driver education/training programs — driving safety (defensive driving) courses; drug and alcohol driving awareness programs; and teen and adult novice driver education programs. In addition, she is the administrator for the Texas Model Curriculum for Driver Education Classroom and In-Car Instruction, teacher preparation programs, and TXDOT grants for defensive driving instructor workshops and middle school traffic safety prevention curriculum (6th-8th grades). Her background includes over 30 years in education with over 25 years in driver education/training.

J. Barry Schrenk is president and owner of Taggart's Driving School, which provides teenage driver education programs at eight Taggart classroom locations, for approximately 20 independent schools and several school districts in Georgia. Taggart's Driving School also provides licensed DUI/risk reduction programs and driver improvement programs, and an online 30-hour Driver Education Program in partnership with the American Safety Council and AAA Automobile Club South. He is also a registered lobbyist with the State of Georgia for over 25 years and has assisted members of the Georgia General Assembly with numerous bills regarding driver licensing, traffic safety, and graduated licensing. He purchased Taggart's Driving School in 1976 and previously served for four years as assistant director of motor vehicles in New Jersey.

Gary Scott has a bachelor's degree in education and a master's degree in administration from the University of Kansas. He is executive director of the Kansas Driver Safety Education Association, and a past president of ADTSEA. He has been teaching since 1972 in Australia and Kansas.

Connie Sessoms Jr. is the Charlotte Mecklenburg Schools (CMS) education specialist and directs all phases of the driver education program for CMS, the 22nd largest school district in the country with 135,000 students served annually. Of that number, 15,000 will learn to drive through the driver education program this year. Sessoms is a member of the board of directors of ADTSEA and is also the president-elect of the North Carolina Driver and Traffic Safety Education Association. He is also a member of the North Carolina Unintentional Death Subcommittee, a subcommittee of the Governor's Highway Task Force. One of his degrees from Appalachian State University is in driver education and traffic safety. He has worked in this field for 33 years.

Jean Thatcher Shope, M. S. P. H., Ph. D., is research professor and associate director at the University of Michigan Transportation Research Institute, research professor in the Department of Health Behavior and Health Education at the University of Michigan School of Public Health, and director of the UM Center for Injury Prevention Among Youth. Her research has involved school health education, adolescent substance use, adolescent and young adult driving, at-risk drinking, drink/driving, and graduated driver licensing.

Christine Sicinski is a consulting highway safety specialist whose clients include government agencies and corporations. She previously worked for NHTSA, where she led the Impaired Driving Division's screening and brief intervention programs as well as its medication-impaired-driving efforts. Sicinski started her career in highway safety as the interim director of a community traffic safety program in 1998.

Karen Sprattler is a nationally recognized highway safety professional who has worked in the field for more than 20 years. She has experience working in four levels of government, nonprofit leadership, and private consulting. She has evaluated, developed, managed, and advocated for various traffic safety policies, programs, and countermeasures in her work with the Minnesota Department of Public Safety, NHTSA and Mothers Against Drunk Driving. She formed Sprattler Group to assist government and private sector clients in developing strategic responses to highway safety concerns through program, research, and policy solutions.

John Svensson is president of the Driving School Association of the Americas (DSAA). A driving school owner and road safety consultant, he has been actively involved in road safety since 1970 and his credentials encompass virtually all vehicle classifications and instructor qualifications. His expertise in road safety has been widely sought by organizations throughout North America and abroad, providing training and consulting services to governments, agencies, and corporations in Australia, Hong Kong, Japan, United Kingdom, Germany, the United States, and Canada.

Barry Thayer retired from the Danbury, Connecticut, public school system after 40 years in the music department. He was head of the driver education department at Danbury High School from 1985 to 2003. In 2003, he opened Thayer Driver Education Center, which now has a main office in Danbury and branch offices in New Milford and in New Fairfield High School. He has been an active member of ADTSEA since 1987 and is serving his second term on the North East Board of Directors, and is also a member of the board of directors of the New England Traffic and Safety Education Association.

William E. Van Tassel, Ph. D., oversees driver training programs for the AAA National Office. He is responsible for the development, implementation and evaluation of driving safety programs for drivers of all ages. His research interests include advanced driver training, the psychology of driving, and the effects of alcohol on driving ability. He has been quoted in *The New York Times* and *USA Today* on driver training and safety issues, and races sports cars as a hobby.

Vanessa C. Wigand is the principal specialist for health education, physical education, driver education, and athletics for the Virginia Department of Education. She is responsible for establishing a standardized program of driver education for public, private, and commercial schools in the Commonwealth of Virginia. She presently is the immediate past chairman of DETA.

Shannon Woods is the current president of the California Association for Safety Education. She is a driver education classroom teacher at River City High School in West Sacramento where she has built up the program. She also is a member of the American Driver Traffic Safety Education Association and on the board as a regional representative.

Fred Wright is CEO of the Driver Training Group, the parent company of SWERVE Driver Training and SWERVE Fleet Training. Since taking the helm in 2004, he has guided the company from a “cardboard box desk” start-up to a leader in the driver education field with 30 classrooms throughout the Puget Sound region and over 75 employees. The Driver Training Group’s mission—and Fred’s personal passion—is to change the way people drive. The Driver Training Group, based in Redmond, Washington, has experienced 2,600 percent growth since 2005 and expects to grow 100 percent in 2009. SWERVE Driver Training has trained thousands of teen drivers, preparing them not just for their license exams but a lifetime of collision-free driving.

James B. Wright, M. A., manages the driver licensing/driver education program at NHTSA. This program provides support to the States and national organizations to ensure that drivers are properly trained and legitimately licensed. It covers a range of issues and programs involving new, problem, and foreign drivers. He has worked at NHTSA for almost 30 years, primarily involved in impaired driving/underage drinking, young drivers and driver licensing. Life before NHTSA included work as a juvenile probation officer and high school teacher and coach.

We would like to gratefully acknowledge the editorial assistance of Elizabeth Shepard.

Elizabeth Weaver Shepard, M. Ed., has over 32 years experience in the field of traffic safety. She has developed traffic safety curricula for administrators, students, and instructors in both motorcycle safety education and driver and traffic safety education. She is retired from the Idaho Department of Education where she had responsibility for providing services for public and commercial driver education programs. Currently, she is a traffic safety education consultant and a coauthor of the newest edition of the textbook *Drive Right*.

Attachment E

American Driver and Traffic Safety

Education Association National Curriculum Standards

Prepared by

American Driver and Traffic Safety Education Association
Curriculum and Standards Committee

Approved by

ADTSEA Executive Committee

2006

American Driver and Traffic Safety Education Association National Curriculum Standards

Driving is a complex task and takes time to learn. Motor vehicle crashes are the leading cause of death for teenagers. Novice drivers are inexperienced and immature which are two factors contributing to teenage drivers being over-represented in traffic crashes. There is no simple solution to reducing the crash involvement of the novice and experienced driver. In many cases crashes are not caused by lack of knowledge of basic traffic laws, or the lack of basic vehicle handling skills. The issue is more complex. The problem appears to be more a function of the developmental characteristics of youth, taking unnecessary risks, lack of respect for mortality, and the influence of peer pressure and environment. Novice drivers have limited experience, questionable driver attitude, misrepresent risk acceptance, and display a lack of judgment in critical situations. The consequence is the increased probability of unsafe driving behaviors that can result in a traffic crash with injuries or death to the driver or the passenger in the motor vehicle.

In 1993, NHTSA convened a panel of national experts in traffic safety to identify research for training programs designed to reduce young driver risk taking and heighten the decision making skills. In 1994, NHTSA was requested by Congress to review novice driver education and recommend procedures for improving the training of drivers. The report documented NHTSA efforts in the novice driver education program. It discussed why novice driver education may not be as effective as it promises. The report documents the arguments for an improved program as an important part of the graduated licensing system. The report identifies four areas that may contribute to a successful restructuring of novice driver education as an integral part of the licensing system.

In 1999, an effort to identify a driver development program for lifetime learning was established to determine the needs of a comprehensive instructional program. A review of the current documents is being completed and an outline of the lifetime learning program was accomplished. Five specific training periods were identified for driver development to include prelicensing, graduated licensing, and continuing licensing programs. Pre-licensing includes traffic safety education in the school, home, and public information areas. This phase also includes driver education and training efforts in the public and private sectors designed to prepare a driver for licensing. Graduated licensing includes parent training and driver education and training efforts by the public and private sectors that move beyond the pre-licensing efforts. Continuing licensing includes required, personal, and specialized training imposed by the court system, business, government, and the insurance industry to qualify for continued or additional licensing requirements or discounts.

In 2005, NHTSA developed a set of guidelines for testing the effectiveness of driver education standards and curriculum. This material represents the best practices developed by an ADTSEA Curriculum Standards Committee in October, 2005. These standards will be reflected in future curriculum materials supported, sponsored and approved by this professional organization representing traffic safety instructors across North America.

The role of the driver educator is not limited to pre-licensing efforts in the public and private sector. This role will need to be expanded to provide services for lifetime learning components. ADTSEA will play a role in helping to identify the specific needs to accomplish the task of preparing a novice driver within the recommended graduated licensing guidelines.

Assumptions

- There is a need to eliminate the 30 classroom hours and six in-car hours minimum standard for driver education.
- The need for concurrent learning experiences outweighs the difficulties in scheduling for concurrent activities. A higher set of standards needs to be encouraged and developed.
- A sequence of activities needs to be created that allows an integrated approach of information delivery and acquisition to skill development which leads to effective habit formation.
- Instructor training must be designed to make use of new materials. Requirements, incentives and motivation methods must be developed to encourage teacher training.
- Driver education is the beginning effort and should encourage a need for on-going education.
- Administrative efforts would be developed to support driver education efforts. Those administrative efforts would encourage initiation, implementation and maintenance of driver education programs.
- A process needs to be developed to perform the task of developing updated materials and encourage program maintenance.
- The responsibilities of stakeholders and partners of traffic safety education would be well defined.
- Information, descriptions, analysis, and guided experiences will result in desirable performances and behaviors. That multi-segment program development will lead to better driver performance and behavior.
- The driver is to be educated prior to entering the Segment I program, during the Segment II program, and continue with periodic public information and performance enhancement.

Classroom Performances Concurrent Phase One

Goals

A novice driver is a person who is able to:

- Demonstrate a working knowledge of rules, regulations and procedures of operating an automobile;
- Use visual search skills to obtain correct information and make reduced-risk decisions for effective speed and position adjustments;
- Interact with other users within the Highway Transportation System by adjusting speed, space, and communications to avoid conflicts and reduce risk;
- Demonstrate balanced vehicle movement through steering, braking, and accelerating in a precise and timely manner throughout a variety of adverse conditions;
- Recognize vehicle technology systems and explain the benefit of braking, traction, intelligent handling and stability systems.
- Confirm the need to protect oneself and others through using active and passive vehicle occupant protection systems;
- Display knowledge of responsible actions in regard to physical and psychological conditions affecting driver performance; and
- Extend supervised practice with licensed parent or guardian to develop precision in the use of skills, processes, habits and responsibilities.

Skill evaluation for each driver should indicate progression for:

- Positioning a vehicle:

- ✓ Based on visual referencing skills, dividing attention, space management,
- **Procedures and sequencing for vehicle operational skill:**
 - ✓ Based on predrive checks, driver readiness procedures, vehicle control skills, vehicle maneuvering, vehicle position and/or speed selection, and vehicle balance.
- **Processing traffic and vehicle information into appropriate speed and position selection:**
 - ✓ Based on visual search skills, dividing attention, and space management as measured by vehicle speed, roadway position, driver commentary, and appropriate communication.
- **Precision movements for maintaining vehicle control and balance in expected and unexpected situations:**
 - ✓ Based on vehicle speed control, dividing attention, vehicle balance, collision avoidance, response to mechanical failures, and traction loss prevention, detection, and control.
- **Extend supervised practice with licensed parent or guardian:**
 - ✓ Based on delivery of parent guide and completion of Program Skills Log.

Novice Driver Preparation Segment I Classroom Standards

While participating in the state approved driver education 45 hour classroom program comprised of not less than 22 sessions of 120 minute training segments, the participating student should:

- C 1.0 become aware of program goals through a student/parent orientation.
- C 2.0 recognize and comply with the rules of the road based on state and local requirements.
- C 3.0 recognize and illustrate vehicle operating space needed for reduced-risk operation.
- C 4.0 understand and practice processes and procedures for getting ready to drive a vehicle.
- C 5.0 develop and practice a procedure for starting a vehicle.
- C 6.0 develop and practice a procedure for securing a vehicle.
- C 7.0 list and explain basic concepts related to vision control needed to operate a vehicle.
- C 8.0 list and explain basic motion control techniques needed to operate a vehicle while maintaining suspension balance.
- C 9.0 list and demonstrate the four basic techniques related to steering control needed to operate a vehicle.
- C 10.0 identify and practice use of communication techniques, courtesy and respect in regard to other roadway users.
- C 11.0 identify methods for stopping a vehicle in motion.
- C 12.0 develop vehicle reference points to know where the vehicle is positioned to the roadway.
- C 13.0 recognize, understand, determine meaning, and relate roadway conditions, signs, signals, and pavement markings to reduced-risk driving decisions.
- C 14.0 understand procedures and processes for basic vehicle maneuvering tasks as listed.
- C 15.0 discover how visual skills and mental perception lead to reduced-risk driving decisions.
- C 16.0 should select, maintain, and adjust speed to reduce risk of collision and in compliance with rules of the road.
- C 17.0 review and apply the principles of a space management system (SEE) to reduced-risk vehicle operation making appropriate communication, speed and lane position adjustments.
- C 18.0 demonstrate and practice basic maneuvers vehicle for reduced-risk operation.
- C 19.0 develop procedures and practice techniques for reduced-risk lane changes in a variety of lane change situations.
- C 20.0 develop procedures and practice techniques for reduced-risk perpendicular, angle and parallel parking.
- C 21.0 develop procedures and practice techniques for reduced-risk speed management.
- C 22.0 identify and comply with roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- C 23.0 identify and comply with space management situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- C 24.0 identify and comply with intersection entry situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- C 25.0 identify and comply with curve entry/apex/exit situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- C 26.0 identify and comply with planned passing situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- C 27.0 identify and comply with roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds above 55 m.p.h.
- C 28.0 identify and comply with space management situations on limited access roadways and roadways without limited access at speeds above 55 m.p.h.
- C 29.0 identify and comply with merging, speed control, lane selection, and exiting situations on limited access roadways at speeds above 55 m.p.h.

- C 30.0 identify and comply with gap selection, communication, speed control, and lane selection during passing situations on limited access roadways at speeds above 55 m.p.h.
- C 31.0 identify the high risk effects of alcohol and others drugs on personality and driver performance.
- C 32.0 recognize legal responsibility to not use chemicals that affect ability to use a vehicle safely and refuse riding with others that are using chemicals that can affect driver attention and performance.
- C 33.0 recognize, compensate, or enhance driver fitness to aid reduced-risk driver performance.
- C 34.0 recognize adverse weather conditions as visibility and traction problems and adjust speed to meet the ability to steer and stop the vehicle within the limits of the conditions as presented.
- C 35.0 adverse weather conditions as a visibility and traction problem and the affect on space management skills in regard to speed and position adjustments.
- C 36.0 value the use of occupant protection as a crash prevention and loss prevention tool for reduced-risk driver performance.
- C 37.0 recognize and respond to other motorized vehicles that may have different weight, speed, and visibility problems.
- C 38.0 recognize and respond to other non-motorized vehicles that may have different weight, speed, and visibility problems.
- C 39.0 recognize and respond to channelized/tracked vehicles that may have different weight, speed, and visibility problems.
- C 40.0 recognize and respond to vehicle malfunctions in a reduced-risk manner.
- C 41.0 understand and relate how the roadway system is managed by police and state agencies to help deal with emergencies and vehicle malfunctions.
- C 42.0 perform map reading and trip planning exercises that lead to an in-car activity or a future family trip
- C 43.0 recognize problems and make wise consumer choices in purchasing insurance or an automobile.
- C 44.0 understand future operator responsibilities in regard to licensing and attending to a crash scene situation.
- C 45.0 attend the student/parent debriefing.

Novice Driver Preparation Segment I In-car Standards

While participating in the state approved driver education eight hour segment I in-car training program comprised of not less than 16 sessions of 30 minute training segments, the participating student should demonstrate proficiency of the following tasks in 16 planned instructional routes.

- IC. 1.0. Preparations to Operate Vehicle.** The student recognizes the visible space around the vehicle, the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle, identifies the location of alert and warning symbol lights, understands the operation of vehicle control and safety devices, and investigates vehicle balance concepts when braking accelerating, and steering.
- IC. 2.0. Judgment of Vehicle to Roadway Position.** The student recognizes and analyzes the standard and personal vehicle guides or reference points relationship to roadway position and vehicle placement.
- IC. 3.0. Visualization of Intended Travel Path.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.
- IC. 4.0. Searching Intended Travel Path.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.
- IC. 5.0. Speed Control.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of The Selected State Vehicle Law, lane changing, turnabouts and parking.
- IC. 6.0. Lane Position Selection.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.
- IC. 7.0. Rear Zone Searching and Control.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of rules of the road, lane changing, turnabouts and parking.
- IC. 8.0. Following Time and Space.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.

- IC. 9.0. Communication and Courtesy.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.
- IC. 10.0. Using Three Steps to Problem-Solving.** The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.
- IC. 11.0. Responses to Emergency Situations.** The student appraises inclement and extreme weather conditions and formulates predictions on vehicular and driver limitations before developing and executing responses; investigates roadway and vehicle technology, including occupant protection, to develop an understanding of the related uses and crash and injury protections; demonstrates proper use of occupant protection devices; and utilizes map reading and route planning techniques to avoid adverse driving conditions.
- The student assesses vehicle operation and malfunctions to eliminate or prevent related problems by securing scheduled and unscheduled maintenance or repairs; understands vehicle braking systems and utilizes proper braking techniques in favorable and unfavorable vehicular, weather, and roadway conditions; understands vehicle performance and potential conflicts other motorized and non-motorized roadway users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately.
- IC. 12.0. Driver Assessment.** The student enrolled in a certified driver education program should be able to successfully demonstrate the key core behavioral patterns while performing the recommended procedures on a designated assessment route.

Novice Driver Preparation Segment II Classroom Standards

While participating in the state approved driver education 8 hour segment II classroom program comprised of not less than 8 sessions of 60 minute training segments, the participating student should:

- C.II. 1.0. Mental and Risk Perceptual Awareness.** The student:
- develops an understanding of the effects of negative reinforcement on driving behavior,
 - recognizes the role of driver fitness, mental preparedness, and the effects of alcohol and other drugs, and
 - develops essential knowledge and skills for reduced-risk performances in preventing and avoiding collision threats.

- C.II. 2.0. Driver Fitness Tasks.** The student recognizes the role of driver fitness, mental preparedness, and the effects of alcohol and other drugs on reduced-risk driver performances.

- C.II. 3.0. Avoiding Collision Threats.** The student develops essential knowledge and skills for reduced-risk performances in preventing and avoiding collision threats.

The student is expected to relate to effects of momentum, gravity, and inertia in personal driving situations, list and identify the purpose of modern vehicle technology for reducing the collision effects of driver error, and relate the concepts of vehicle understeer and vehicle oversteer to traction loss.

Novice Driver Preparation Segment II In-car Standards

While participating in the state approved driver education two hour segment II in-car training program comprised of not less than 4 sessions of 30 minute training segments, the participating student should demonstrate proficiency of the personal driving system and strategies in 4 planned assessment routes.

- IC.II. 1.0. Commentary Driving Assessment. The student is expected to use a driving system to search for changes to path of travel and line of sight, identify high risk situations, evaluate methods to reduce driver risk in identified situations, evaluate divided attention tasks needed, explain consequences associated driver behaviors and collision factors, and execute appropriate speed and position adjustments accompanied by appropriate communication*
- IC.II. 2.0 SEE System Training. The student is expected to use a driving system to search for changes to path of travel and line of sight, identify high risk situations, evaluate methods to reduce driver risk in identified situations, evaluate divided attention tasks needed, explain consequences associated driver behaviors and collision factors, and execute appropriate speed and position adjustments accompanied by appropriate communication .*
- IC.II. 3.0 Commentary Space Management Assessment.** The student is expected to use a driving system to identify restrictions to the path of travel, identify restrictions to the line of sight, and execute appropriate speed and position adjustments, while checking space to the rear.
- IC.II. 4.0 Advanced Collision Avoidance Actions (Off-Road Application).** The student is expected to identify steering actions used to avoid collisions and minimize impact, identify speed control techniques used to avoid collisions and minimize impact, and identify driver strategies related to using new vehicle technologies effectively. The student is expected to relate to effects of momentum, gravity, and inertia in personal driving situations, list and identify the purpose of modern vehicle technology for reducing the collision effects of driver error, and relate the concepts of vehicle understeer and vehicle oversteer to traction loss.

Essential Knowledge and Skills for Driver and Traffic Safety Education

Driver and Traffic Safety Education: Classroom Segment I

- (A) General Requirements.** Driver education is a required prerequisite to qualify for a driver permit between 14 years 6 months and before age 17 dependent on state licensing requirements.
- (B) Introduction.** State regulated driver and traffic safety education provides the foundation for students, assisted by parents/mentors, to begin the lifelong learning process of reduced risk driving practices. Students acquire essential knowledge, skills, and experiences to perform reduced risk driving in varying traffic environments. Satisfactory completion of the driver and traffic safety education course qualifies the student to continue the graduated driver licensing process.
- (C) Responsibilities.** Teachers manage student efforts to meet or exceed minimum competency standards through a classroom instruction that includes student-centered activities, modeling, knowledge assessment, skill assessment, guided observation, and parental involvement. Concurrent and integrated operation of classroom and in-car instruction is required for student knowledge and skill development.

(D) Classroom Segment I Knowledge and Skills.

Classroom Module One: Preparing To Operate a Vehicle.

The student develops an understanding of local school regulations and requirements. The student formulates knowledge of state and local rules and regulations required to satisfactorily complete the driver and traffic safety education program requirements. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle, and identifies the location of dashboard alert and warning symbol lights. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle. The student develops procedures and processes for starting and securing the vehicle. NOTE: Subsequent to successful enrollment in the local driver and traffic safety education course, the student is eligible to start the supervised instruction portion of the graduated driver licensing process.

C 1.0 Student should become aware of program goals through a student/parent orientation.

- 1.1 Conduct introductions
- 1.2 State purpose of Orientation Session
- 1.3 Explain the Driver Education Program
- 1.4 Identify the Graduated Driver Licensing (GDL) Requirements and Responsibilities
- 1.5 Complete Course Registration Forms
- 1.6 Explain Course Requirements, Policy, Rules and Documentation for successful completion
- 1.7 Identify Student Classroom Rules
- 1.8 Identify Student In-car Rules
- 1.9 Explain In-car Driving Plan and Routes
 - 1.9.1 Use of controlled substances
 - 1.9.2 Use of prescription and over the counter medicines
- 1.10 Discuss driving with temporary and permanent disabilities.
- 1.11 Explain Program, Student, Parent and Teacher Partnership and Responsibilities.
- 1.12 Explain the need for maintaining communications
- 1.13 Identify Injury Risk for Teens.
- 1.14 Introduce reduced-risk driving goals.

C 2.0 Student should recognize and comply with the rules of the road based on state and local requirements.

- 2.1. Signs, Signals, and Markings
- 2.2. Legal Stops and Restricted Speeds
- 2.3. Pedestrian Rights and Duties
- 2.4. Safety Responsibility Law
- 2.5. Speed Regulations
- 2.6. Alcohol and Other Drugs
- 2.7. Driver Handbook References

C 3.0 Student should recognize and illustrate vehicle operating space needed for reduced-risk operation.

- 3.1 Identify Visual line of sight limitations to the front of the vehicle
- 3.2 Identify Visual line of sight limitations to the rear of the vehicle
- 3.3 Identify Visual line of sight limitations to the right side of the vehicle
- 3.4 Identify Visual line of sight limitations to the left side of the vehicle
- 3.5 Identify Length and width of vehicle
- 3.6 Identify Size of vehicle tire patches
- 3.7 Adjust Rear and side view mirror settings
 - 3.7.1 Identify traditional mirror settings used for some vehicles
 - 3.7.2 Identify blindzone and glare elimination (BGE) mirror settings and use

C 4.0 Student should understand and practice processes and procedures for getting ready to drive a vehicle.

- 4.1. Understand mental and physical well-being
- 4.2. Manage emotions
- 4.3. Protect others
- 4.4. Check outside and inside the vehicle before opening vehicle door
- 4.5. Lock doors after entry
- 4.6. Make vehicle adjustments
 - 4.7.1 Head restraints
 - 4.7.2 Seat
 - 4.7.3 Rear and side view mirrors
 - 4.7.4 Safety restraints
 - 4.7.5 Steering wheel
- 4.7. Understand gauges, electronics, and accessories
 - 4.8.1. Alert and warning symbols and locations
 - 4.8.2. Vehicle control devices
 - 4.8.3. Safety, communication, comfort, and convenience devices
 - 4.8.4. Purpose and use of vehicle's owner's manual;
 - 4.8.5. Routine vehicle checks.

C 5.0 Student should develop and practice a procedure for starting a vehicle.

- 5.1. Check and ensure that the parking brake is set
- 5.2. Secure the foot brake pedal
- 5.3. Select appropriate gear for starting vehicle
- 5.4. Recognize alert lights and symbols for safety accessories
- 5.5. Operate ignition starting device
- 5.6. Select and operate appropriate vehicle accessories
- 5.7. Recognize warning lights and symbols for engine or system accessories

C 6.0 Student should develop and practice a procedure for securing a vehicle.

- 6.1. Stop the vehicle in a safe and legal position.
- 6.2. Set parking brake as required by state statute and owner's manual.
- 6.3. Shift into appropriate gear before removing foot from brake.
- 6.4. Turn off appropriate accessories prior to turning off ignition and removing key.
- 6.5. Visually check traffic flow before opening door.
- 6.6. Lock doors and/or secure available alarm system.

Classroom Module Two: Understanding Vehicle Control Needs.

The student understands the basic concepts of vision control, understands techniques for slowing and stopping, becomes familiar with basic steering techniques, and analyzes the standard and personal vehicle markers for reference points. The student develops targeting skills, understands path of travel concepts, and investigates vehicle balance concepts when braking, accelerating, and steering. The student identifies a driver control sequence of vision control, motion control, then steering control and use of courtesy and respect in regard to other roadway users.

C 7.0 Student should list and explain basic concepts related to vision control needed to operate a vehicle.

- 7.1. Identify vision and mental perception requirements
 - 7.1.1. Three basic visual fields
 - 7.1.2. Compare visual skills to mental perception
 - 7.1.3. Techniques to improve visual skills
 - 7.1.4. Techniques to improve mental perception of traffic events
 - 7.1.5. Overcoming visual deficiencies
- 7.2. Visually identify open space to enter prior to moving foot from brake to accelerator
- 7.3. Targeted line of sight
- 7.4. Target to end of the path of travel
- 7.5. Reference vehicle to path of travel
- 7.6. Maintain an open line of sight
- 7.7. Develop Searching skills based on dividing visual and mental attention between two or more tasks

C 8.0 Student should list and explain basic motion control techniques needed to operate a vehicle while maintaining suspension balance.

- 8.1. Recognize how Speed affects vehicle direction
- 8.2. Place the vehicle into motion smoothly
 - 8.2.1. Changing vehicle load—side to side (vehicle roll)
 - 8.2.1.1. Steering movements
 - 8.2.1.2. Brake and steering combinations
 - 8.2.2. Changing vehicle load—front to rear (vehicle pitch)
 - 8.2.2.1. Releasing brake suddenly
 - 8.2.2.2. Covering accelerator downhill
 - 8.2.2.3. Light accelerator pressure
 - 8.2.2.4. Progressive accelerator pressure

- 8.2.2.5. Thrust accelerator pressure
- 8.2.2.6. Excessive acceleration affects balance
- 8.2.3. Changing vehicle load—rear to front (vehicle pitch)
 - 8.2.3.1. Releasing accelerator
 - 8.2.3.2. Covering brake uphill
 - 8.2.3.3. Controlled braking (Squeeze on)
 - 8.2.3.4. Threshold braking (Firm pressure prior to lockup)
 - 8.2.3.5. Trailing brake (Squeeze off)
 - 8.2.3.6. Excessive deceleration affects balance
- 8.2.4. Changing vehicle load—pivot around center of gravity (vehicle yaw)
 - 8.2.4.1. Sudden braking inputs create traction loss
 - 8.2.4.2. Sudden acceleration inputs create traction loss
 - 8.2.4.3. Sudden steering inputs create traction loss
- 8.3. Identify how Safety belts maintain seating position
- 8.4. Identify how the Dead pedal allows driver to feel roll, pitch, and yaw characteristics

C 9.0 Student should list and demonstrate the four basic techniques related to steering control needed to operate a vehicle.

- 9.1. Hand to hand steer (Push/Pull)
 - 9.1.1. Hand position (9-3, 8-4)
 - 9.1.2. Precision maneuvers
 - 9.1.3. Steering through curves
 - 9.1.4. Intersection turning
 - 9.1.5. Lane change
 - 9.1.6. Front traction loss control (understeer)
- 9.2. Hand over hand steer
 - 9.2.1. Hand position (9-3; 8-4)
 - 9.2.2. Left or right side of wheel used

- 9.2.3. Limited line of sight on entry causing speed under 15 mph
- 9.2.4. Tight turning efforts (alley way, parking lots, etc.)
- 9.2.5. Perpendicular and parallel parking
- 9.2.6. Rear traction loss (oversteer)
- 9.3. Limited evasive steer
 - 9.3.1. Hand position (9-3)
 - 9.3.2. Maximum steering inputs are 180 degrees
 - 9.3.2.1. Input to move front of vehicle
 - 9.3.2.2. Input to move rear of vehicle
 - 9.3.2.3. Input to center vehicle in lane
- 9.4. One-hand steering
 - 9.4.1. Hand Position (12)
 - 9.4.1.1. Backing vehicle
 - 9.4.1.2. Hand moves in direction of intended vehicle movement
 - 9.4.2. Hand Position (6)
 - 9.4.2.1. Backing vehicle
 - 9.4.2.2. Hand moves in direction of intended trailer movement
 - 9.4.3. Hand Position (9 or 3, 8 or 4)
 - 9.4.3.1. Using vehicle controls with right or left hand
 - 9.4.3.2. Using gear shifting device with right hand

C 10.0 The student should identify and practice use of communication techniques, courtesy and respect in regard to other roadway users.

- 10.1. Identify Technique
 - 10.1.1. Use of turn signal light before turning right or left
 - 10.1.2. Use of lane change device to signal moving to another lateral position
 - 10.1.3. Use of headlights on at all times to increase visibility to others
 - 10.1.4. Use of horn to make others aware of your presence

10.1.5. Tap of brake lights to warn rear traffic of a slowdown or stop in the traffic flow

10.1.6. Use of vehicle speed and position to communicate the driver's intention

10.1.7. Use of hand signals to establish eye contact with other roadway users

10.2. Identify Timing.

10.2.1. Engage signal light for a minimum of five seconds prior to moving to provide time for the communication to be sent, received and acted upon

10.2.2. Communicate early for control of a safe path of travel

10.3. Identify Commitment

10.3.1. Identify messages are acknowledged by others

C 11.0 The student should identify methods for stopping a vehicle in motion.

11.1. Search effectively ahead of the vehicle to determine braking needs

11.2. Use controlled braking efficiently with heel of foot on floorboard

11.3. Check rear zone/space prior to braking

11.4. Apply a firm squeezing braking force at the beginning of the braking process

11.5. Bring the vehicle to a smooth stop

11.6. Recognize that too much braking action affects vehicle body pitch toward the front

11.7. Ease pressure off brake during last two seconds of braking to ease pitch of vehicle

11.8. Check the rear zone/space before, during and after braking actions

11.9. Effective use of ABS braking

C 12.0 The student should develop vehicle reference points to know where the vehicle is positioned to the roadway.

12.1. Identify Right Side of Vehicle References

12.1.1. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line

12.1.2. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line

- 12.1.3. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line
- 12.2. Identify Left Side of Vehicle References
 - 12.2.1. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line
 - 12.2.2. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line
 - 12.2.3. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line
- 12.3. Identify Front of Vehicle References
 - 12.3.1. Determine when the front bumper is positioned even with the stop line or curb edge
- 12.4. Identify Rear of Vehicle References
 - 12.4.1. Determine when the rear bumper is positioned even with a line
- 12.5. Identify Front Turning Point of Vehicle
 - 12.5.1. Determine where on the road the front is positioned for turning left
 - 12.5.2. Determine where on the road the front is positioned for turning right
- 12.6. Identify Rear Turning Point of Vehicle
 - 12.6.1. Determine where on the road the rear is positioned for turning left
 - 12.6.2. Determine where on the road the rear is positioned for turning right
- 12.7. Visualization of Intended Travel Path
 - 12.7.1. Identify Target
 - 12.7.1.1. Identify an object or area that appears in the center and at the end of your intended travel path
 - 12.7.2. Identify Target Area
 - 12.7.2.1. Identify the traffic problems and elements in and near the target area
 - 12.7.2.2. Locate your target area, evaluate the Line of Sight or Path-of-Travel conditions and determine best approach speed and lane position
 - 12.7.3. Identify Targeting Path

- 12.7.3.1. Evaluate the target area, while developing an image of your targeting path
- 12.7.3.2. Identify elements that can change or modify the intended travel path
- 12.7.3.3. Determine risks associated with maintaining the intended path of travel

12.8. Rules of the Road

12.8.1. Yield right of way

12.8.2. Intersection

- 12.8.2.1. Approach
- 12.8.2.2. Stop position (when required)
 - 12.8.2.2.1. Stop Line, or if none
 - 12.8.2.2.2. Crosswalk line, or if none
 - 12.8.2.2.3. Crosswalk, or if none
 - 12.8.2.2.4. Edge of roadway or curb line
 - 12.8.2.2.5. Proceed with caution or yield to traffic flow
- 12.8.2.3. Entry without affecting traffic flow
 - 12.8.2.3.1. Estimate time needed to cross
 - 12.8.2.3.2. Estimate time needed to turn left
 - 12.8.2.3.3. Estimate time needed to turn right

Classroom Module Three: Introducing Traffic Entry Skills.

The student recognizes and responds to meaning of signs, signals, and markings. The student should understand and use procedures for processing information for intersection approach, making precision right and left turns, making lateral maneuvers on and off the roadway, and backing the vehicle. The student is introduced to a space management system (SEE) for developing critical thinking, decision-making, and problem-solving skills to operate the vehicle and performs basic maneuvers in a controlled risk environments.

C 13.0 The student should recognize, understand, determine meaning, and relate roadway conditions, signs, signals, and pavement markings to reduced-risk driving decisions.

13.1. Identify Roadway Characteristics

13.1.1. Recognize Intersection Types

- 13.1.1.1.1. Unguarded
- 13.1.1.1.2. Guarded by sign or signal
- 13.1.1.1.3. Crossroad with through road
- 13.1.1.1.4. Crossroad without through road
- 13.1.1.1.5. Highway-railroad grade crossing
- 13.1.1.1.6. T- and Y-style
- 13.1.1.1.7. Traffic circle/round-about

13.1.2. Recognize Traffic Calming Devices

13.1.3. Recognize Surface Conditions

13.1.4. Recognize Slope and Grade

13.1.5. Recognize Traction (adhesion) Potential

13.1.6. Recognize Highway Conditions

- 13.1.6.1.1.1. Roadway
- 13.1.6.1.1.2. Shoulder
- 13.1.6.1.1.3. Off-road areas

13.1.7. Recognize Lane Controls

13.2. Identify Signs and Signals

13.2.1. Recognize Meaning

- 13.2.1.1.1. Shapes
- 13.2.1.1.2. Color
- 13.2.1.1.3. Symbols
- 13.2.1.1.4. Legend/Message

13.2.2. Recognize Locations

13.2.3. Recognize Legal controls

- 13.2.3.1.1. Stop
- 13.2.3.1.2. Yield
- 13.2.3.1.3. Traffic Flow
- 13.2.3.1.4. Regulations

13.3. Identify Pavement Markings/Symbols

13.3.1. Recognize Meaning

13.3.1.1.1. Color

- 13.3.1.1.1.1. Yellow.
- 13.3.1.1.1.2. White.
- 13.3.1.1.1.3. Red.
- 13.3.1.1.1.4. Blue.
- 13.3.1.1.1.5. Black

13.3.1.1.2. Line Markings

- 13.3.1.1.2.1. Dashed
- 13.3.1.1.2.2. Solid
- 13.3.1.1.2.2. Striped
- 13.3.1.1.2.3. Curb markings

13.3.2. Recognize Location

13.3.3. Recognize Legal controls

- 13.3.3.1. Passing
- 13.3.3.2. Crosswalk
- 13.3.3.3. Lane Storage
- 13.3.3.4. Turn Position

C 14.0 The student should understand procedures and processes for basic vehicle maneuvering tasks as listed.

14.1. Identify Procedural steps

14.1.1. Evaluate Intersection Approach

- 14.1.1.1. See and respond to open/closed space/zones

- 14.1.1.2. Check and respond to rear space/zone conditions
- 14.1.1.3. Establish and maintain proper lane usage and speed control
- 14.1.1.4. Search left, front, and right spaces/zones for line of sight or path of travel changes
- 14.1.1.5. Find open spaces/zones before entering
- 14.1.1.6. Use staggered, legal, and safety stop when applicable;
- 14.1.1.7. See condition of a traffic signal;
- 14.1.1.8. Adjust speed to arrive at a green light
 - 14.1.1.8.1. See closed front space/zone
 - 14.1.1.8.2. Adjust speed to reduce closure rate and to arrive in an open space/zone
 - 14.1.1.8.3. Adjust speed to have at least one open side space/zone

- 14.1.2. Evaluate Precision Left Turns
- 14.1.3. Evaluate Precision Right Turns
- 14.1.4. Evaluate moving To/from the Curb
- 14.1.5. Evaluate Backing
 - 14.1.5.1.1. Straight
 - 14.1.5.1.2. Around corner
 - 14.1.5.1.3. Lateral lane change to the left or right
- 14.2. Identify Driver information processing
 - 14.2.1. Understand Vision and mental perception requirements
 - 14.2.2. Understand Value of directed experience/practice
- 14.3. Space management system introduction (S.E.E.)
 - 14.3.1. Understand conditions for Searching
 - 14.3.1.1. Changes to path of travel
 - 14.3.1.2. Changes to the line of sight
 - 14.3.1.3. Changes in road surface and condition

- 14.3.2. Understand situations for Evaluating
 - 14.3.2.1. Alternative paths of travel
 - 14.3.2.2. Appropriate position
 - 14.3.2.3. Appropriate speed
 - 14.3.2.4. Appropriate communication
- 14.3.3. Understand skills needed to Execute decisions
 - 14.3.3.1. Speed changes
 - 14.3.3.2. Position changes
 - 14.3.3.3. Communication needs
- 14.4. Describe Rules of Road
 - 14.4.1. Identify Yielding right of way
 - 14.4.2. Identify Signal use
 - 14.4.3. Lane position rules at intersections
 - 14.4.4. Intersection rules
 - 14.4.5. Signs, signals, and markings rules
 - 14.4.6. Backing rules

Classroom Module Four: Introducing Intersection Skills and negotiating curves and hills.

The student utilizes visual and mental processing skills for critical thinking, decision-making, and problem-solving skills in controlled risk environments. The student should understand principles for targeting, path of travel, searching, and speed control when approaching a variety of controlled and uncontrolled intersections and limited risk curves and hills.

C 15.0 The student should discover how visual skills and mental perception lead to reduced-risk driving decisions.

- 15.1. Recognize need to Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks
 - 15.1.1. Move focal vision from travel path to another location and back to travel path
 - 15.1.2. Move focal vision within ½ second time frames
 - 15.1.3. Share attention more than one time to allow brain to perceive information
- 15.2. Identify Target Area Searching
 - 15.2.1. Search to target area 15 to 20 seconds ahead, evaluate its conditions and determine entry speed and position
 - 15.2.2. Search for Line-of-Sight or Path-of-Travel changes affecting approach to target area
 - 15.2.3. Approach target area, while continually re-evaluating risks in the immediate 4-6 second travel path
 - 15.2.4. Approach the target area, search for a new target area and new travel path 15 to 20 seconds ahead
- 15.3. Know How to Judge Space in Seconds
 - 15.3.1. Visualize the space vehicle will occupy at least 15-20 seconds ahead
 - 15.3.2. Search 15-20 seconds ahead, continually evaluating the 4-6 second immediate path
 - 15.3.3. Speed and/or lane position adjustments may be required when the target area cannot be seen
- 15.4. Identify Changes to Line of Sight or Path-of-Travel
 - 15.4.1. Evaluate modification in the ability to see or maintain a travel path
 - 15.4.2. Identify When Line of Sight or Path-of-Travel change are recognized, the need to evaluate other zones/spaces for speed and lane adjustments
- 15.5. Identify Open, Closed or Changing Zones/Spaces
 - 15.5.1. Identify the intended travel path for open, closed or changing conditions
 - 15.5.2. Evaluate open, closed or changing conditions for speed and position adjustments
- 15.6. Search Intersections

- 15.6.1. Search for open zones/space to the left, front and right, when approaching an intersection including highway-rail grade crossings
- 15.6.2. Evaluate closed or changing zones/spaces and make necessary speed and/or lane position adjustments, when approaching an intersection
- 15.6.3. Search for open zones/spaces to the left, front and right, before entering an intersection
- 15.7. Search Into Curves and Over Hills
 - 15.7.1. Search the line of sight and path of travel through the curve or over the hill crest for closed or changing conditions
 - 15.7.2. Evaluate the line of sight or path of travel for appropriate speed and position adjustments, before entering a curve or a hill crest

C 16.0 The student should select, maintain, and adjust speed to reduce risk of collision and in compliance with rules of the road.

- 16.1. Select safe speed
 - 16.1.1. Determine travel speed based upon driver, vehicle, legal, roadway, and environmental limitations
 - 16.1.2. Determine speed adjustment needed for reduced risk
 - 16.3.3. Adjust speed to meet unposted residential (35) and unposted rural speed (55) limitations as based on state regulations
 - 16.1.3. Check gauges, mirrors, and evaluate line of sight or path of travel conditions
- 16.2. Recognize Changes in Line of Sight or Path of Travel
 - 16.2.1. Avoid using acceleration into a closed or changing zone/space
 - 16.2.2. Recognize a closed zone/space (such as a red light or stopped traffic), adjust speed to arrive at an open zone/space
 - 16.2.3. When ability to see a line of sight or path of travel is reduced, adjust speed to maintain or establish an open zone/space

Classroom Module Five: Space Management and Vehicle Control Skills in Moderate Risk Environments.

The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in moderate risk environments including basic vehicle control, space management, lane changing, turnabouts, and parking. Students should determine the reduced risk turn around procedure for the speed, traffic flow and restrictions to line of sight and/or path of travel.

C17.0 The student should review and apply the principles of a space management system (SEE) to reduced-risk vehicle operation making appropriate communication, speed and lane position adjustments.

- 17.1. Divide attention between path of travel and other tasks
- 17.2. Use an orderly visual search process
- 17.3. Control of space to front
- 17.4. Use rear and side view mirrors effectively
- 17.5. Maintain separation to sides and rear
- 17.6. Communicate presence/intentions
- 17.7. Manage intersections effectively
- 17.8. Practice Commentary response
 - 17.8.1. Identify Speed and position adjustment development
 - 17.8.2. Identify Reference points for maneuvers
 - 17.8.3. Identify Rear space/zone view conditions
- 17.9. Identify blind zones for different vehicles

C 18.0 The student should demonstrate and practice basic maneuvers vehicle for reduced-risk operation.

- 18.1. Identify Divided attention Tasks
- 18.2. Intersection Maneuvers
- 18.3. Identify Procedures for Backing in a Straight Line
- 18.4. Identify Procedures for Backing Around a Corner
- 18.5. Determine Turning Around Options
 - 18.5.1. Identify space management considerations
 - 18.5.1.1. Communication
 - 18.5.1.2. Procedures

- 18.5.1.3. Position to curb
- 18.5.1.4. Speed control
- 18.5.1.5. Steering control
- 18.5.1.6. Vision control
- 18.5.2. Identify when it is safer to go around the block
- 18.5.3. Identify safe behaviors for turning around in a parking lot
- 18.5.4. Identify procedures for a two-point turnaround with entry into a roadway or driveway on the left or by backing around a corner to the right
 - 18.5.4.1. Signal
 - 18.5.4.2. Forward position reference
 - 18.5.4.3. Evaluate alignment to space
 - 18.5.4.4. Back to a pivot point
 - 18.5.4.5. Steering control
 - 18.5.4.6. Target center of vehicle or space to the rear
 - 18.5.4.7. Speed control
 - 18.5.4.8. Straighten vehicle to lane position
 - 18.5.4.9. Rear limitation reference
 - 18.5.4.10. Cancel signal?
- 18.5.5. Identify procedures for an intersection U-turn
 - 18.5.5.1. Using proper forward position
 - 18.5.5.2. Using minimum space to go forward
 - 18.5.5.3. Evaluating alignment to space
 - 18.5.5.4. Backing to pivot point
 - 18.5.5.5. Turning steering wheel
 - 18.5.5.6. Visually targeting center of vehicle or space to the rear
 - 18.5.5.7. Straightening vehicle to lane position
 - 18.5.5.8. Using rear limitation reference
- 18.5.6. Identify procedures for a three-point turnabout in a low risk roadway environment

- 18.5.6.1. Using proper forward position
- 18.5.6.2. Using minimum space to go forward
- 18.5.6.3. Evaluating alignment to space
- 18.5.6.4. Back to pivot point
- 18.5.6.5. Turning steering wheel
- 18.5.6.6. Visually targeting center of vehicle or space to the rear
- 18.5.6.7. Straightening vehicle to lane position
- 18.5.6.8. Using rear limitation reference
- 18.5.7. Cul-de-sac or circular drive turnabout
- 18.6. Rules of the Road Review
 - 18.6.1. Turnabouts
 - 18.6.2. Speed
 - 18.6.3. Lane change
 - 18.6.4. Parking/leaving vehicle

C 19.0 The student should develop procedures and practice techniques for reduced-risk lane changes in a variety of lane change situations.

- 19.1. Identify Space management requirements
 - 19.1.1. Identify Divide attention conditions
 - 19.1.2. Identify Communication techniques
 - 19.1.3. Determine Speed and lane position adjustments
- 19.2. Identify lane change Procedures
 - 19.2.1. Evaluate space/zones and side view mirror blind zones
 - 19.2.1.1. Check side view mirror blind zone
 - 19.2.1.2. Check BGE side view mirror view
 - 19.2.2. Move to the left side of lane for left lane change
 - 19.2.3. Move to right side of lane for right lane change
 - 19.2.4. Check side view mirror blind zone
 - 19.2.4.1. Check side view mirror blind zone

- 19.2.4.2. Check BGE side view mirror view
- 19.2.5. Decide best lane position for conditions
- 19.3. Lane Position
- 19.4. Speed control
- 19.5. Steering control
- 19.6. Identify Vehicle blind zones and truck no zones

C 20.0 The student should develop procedures and practice techniques for reduced-risk perpendicular, angle and parallel parking.

- 20.1. Entry
 - 20.1.1. Space management applications
 - 20.1.2. Dividing attention between tasks
 - 20.1.3. Communication
 - 20.1.4. Procedures
 - 20.1.4.1. Positioning/Reference Points
 - 20.1.4.2. Vision control
 - 20.1.4.3. Speed control
 - 20.1.4.4. Steering control
 - 20.1.4.5. Forward
 - 20.1.4.6. Reverse
- 20.2. Exit
 - 20.2.1. Space management applications
 - 20.2.2. Communication
 - 20.2.3. Procedures
 - 20.2.3.1. Positioning/Reference Points
 - 20.2.3.2. Vision control
 - 20.2.3.3. Speed control
 - 20.2.3.4. Steering control
 - 20.2.3.5. Forward

20.2.3.6. Reverse

C 21.0 The student should develop procedures and practice techniques for reduced-risk speed management.

- 21.1. Visibility
- 21.2. Dividing Attention
- 21.3. Traffic controls
- 21.4. Road condition
- 21.5. Vehicle condition
- 21.6. Space to front/rear
- 21.7. Other roadway users
- 21.8. Vehicle dynamics
- 21.9. Speed differentials

Classroom Module Six: Developing Traffic Flow and Space Management Skills at Speeds Below 55 m.p.h.

The student will utilize space management techniques and visual skills needed for gap assessment at intersections, following or being followed by other vehicles, entering and exiting curves, traveling on multi-lane roadways, and passing or being passed on multiple lane roadways at speeds up to 55 m.p.h. The student recognizes the visible space around the vehicle, develops targeting skills, understands path of travel concepts, and investigates vehicle balance concepts when braking, accelerating, and steering. The student identifies communication techniques, use of courtesy and respect in regard to other roadway users, stopping and slowing the vehicle, and develop personal vehicle reference points.

C 22.0 The student should identify and comply with roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 22.1. Dividing attention between tasks
- 22.2. Non-motorized highway users
- 22.3. Following and being followed

- 22.4. Entering and exiting curves
- 22.5. Traffic flow to each side of vehicle
- 22.6. Multiple use and reversible lanes
- 22.7. Oncoming traffic gap selection
- 22.8. Crossing traffic gap selection
- 22.9. Multiple lane passing
- 22.10. Vehicle blind zones and truck no zones

C 23.0 The student should identify and comply with space management situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 23.1. Identify techniques to Control space around the vehicle
- 23.2. Understand the need to Divide attention between tasks
- 23.3. Identify Appropriate mirror use
- 23.4. Recognize vehicle blind zones and truck no zones
- 23.5. Maintain separation to sides and rear
- 23.6. Communicate presence/intentions
- 23.7. Describe Multiple lane use and reversible lanes
- 23.8. Describe procedures for approaching and exiting a curve
- 23.9. Perform Commentary responses
 - 23.9.1. Speed and position changes development
 - 23.9.2. Rear space/zone response development
- 23.10. Know Rules of the Road
 - 23.10.1. right of way
 - 23.10.2. Passing

C 24.0 The student should identify and comply with intersection entry situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 24.1. Space management applications
- 24.2. Dividing attention between tasks
- 24.3. Unique signs, signals, and markings

- 24.4. Communication
- 24.5. Types of intersections
- 24.6. Level of traffic flow congestion
- 24.7. Identify number of usable lanes
- 24.8. Procedures
- 24.9. Lane position
- 24.10. Speed control
- 24.11. Steering control

C 25.0 The student should identify and comply with curve entry/apex/exit situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 25.1. Space management applications
- 25.2. Dividing attention between tasks
- 25.3. Communication
- 25.4. Unique signs, signals, and markings
- 25.5. Procedures
- 25.6. Lane position
- 25.7. Speed control
- 25.8. Steering control

C 26.0 The student should identify and comply with planned passing situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 26.1. Space management
- 26.2. Communication
- 26.3. Procedures
- 26.4. Lane position
- 26.5. Speed control
- 26.6. Steering control
- 26.7. Stopping distance

- 26.8. Abort considerations
- 26.9. Passing/being passed

Module Seven: Dealing with Complex Environments at Speeds Above 55 m.p.h..

The student will utilize space management techniques and visual skills needed for gap assessment at intersections, following or being followed by other vehicles, entering and exiting curves, traveling on multi-lane roadways, and passing or being passed on multiple lane roadways at speeds above 55 m.p.h. The student recognizes the visible space around the vehicle, develops targeting skills, understands path of travel concepts, and investigates vehicle balance concepts when braking, accelerating, and steering. The student identifies communication techniques, use of courtesy and respect in regard to other drivers, stopping and slowing the vehicle, and develop the judgment of vehicle to the roadway through standard and personal vehicle references at speeds above 55 m.p.h.

C 27.0 The student should identify and comply with roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds above 55 m.p.h.

- 27.1. Non-motorized highway restrictions
- 27.2. Sharing the roadway
 - 27.2.1. With other motorized highway users
 - 27.2.2. With domestic and wildlife
 - 27.2.3. With other driver behavior
- 27.3. Divided attention tasks
- 27.4. Vehicle size and activity
- 27.5. Following and being followed
- 27.6. Approach to Curves
 - 27.6.1. See curve in target area
 - 27.6.2. Check all zones for options
 - 27.6.3. Establish effective speed control
 - 27.6.4. Left curve approach
 - 27.6.5. Right curve approach
- 27.7. Entering and exiting limited access highways
 - 27.7.1. Unique signs, signals, and markings

- 27.7.2. Communication
- 27.7.3. Types of interchanges
- 27.7.4. Level of traffic flow congestion
- 27.7.5. Identify number of usable lanes
- 27.8. Multiple use and reversible lanes
- 27.9. Traffic flow to each side of vehicle
- 27.10. Vehicle blind zones and truck no zones
- 27.11. Oncoming traffic gap selection
 - 27.11.1. Crossing traffic gap selection
 - 27.11.2. Two-lane and Multi-lane passing

C 28.0 The student should identify and comply with space management situations on limited access roadways and roadways without limited access at speeds above 55 m.p.h.

- 28.1. Control of space around vehicle
- 28.2. Dividing attention tasks
- 28.3. Appropriate mirror use
- 28.4. Vehicle blind zones and truck no zones
- 28.5. Maintain separation to sides and rear
- 28.6. Communicating presence/intentions
- 28.7. Effective management of merge/exit maneuvers
- 28.8. Commentary responses
 - 28.8.1. Speed and position adjustment assessment
 - 28.8.2. Rear space/zone observance assessment
- 28.9. Rules of the Road
 - 28.9.1. Merging rules
 - 28.9.2. Passing rules
 - 28.9.3. Use of traffic flow control devices
 - 28.9.4. Flashers
 - 28.9.5. Lights

28.9.6. Towing

C 29.0 The student should identify and comply with merging, speed control, lane selection, and exiting situations on limited access roadways at speeds above 55 m.p.h.

- 29.1. Communication
- 29.2. Space management
- 29.3. Dividing attention tasks
- 29.4. Gap selection
- 29.5. Vehicle blind zones and truck no zones
- 29.6. Closure rate
- 29.7. Speed control
 - 29.7.1. Slowest speed on entrance ramp for maximum searching time and options
 - 29.7.2. Effective speed on acceleration lane
 - 29.7.3. Getting off
 - 29.7.3.1. Plan ahead
 - 29.7.3.2. Test brakes
 - 29.7.3.3. Flat curves
- 29.8. Lane position

C 30.0 The student should identify and comply with gap selection, communication, speed control, and lane selection during passing situations on limited access roadways at speeds above 55 m.p.h.

- 30.1. Procedures
- 30.2. Limited access highway advantages/disadvantages
- 30.3. Passing on right side of vehicles
- 30.4. Space management
- 30.5. Divided attention tasks
 - 30.5.1. Identify tailgater problems for speed and lane position adjustments
 - 30.5.2. Evaluate gain versus risk prior to attempting passing maneuver
 - 30.5.3. Check all zones for line of sight and/or path of travel conditions

- 30.6. Vehicle blind zones and truck no zones
- 30.7. Communication
- 30.8. Speed control
- 30.9. Steering control
- 30.10. Stopping ability limited
- 30.11. Abort considerations
- 30.12. Being passed consideration

Classroom Module Eight: Factors Affecting Driver Performance.

The student recognizes the significant effects of alcohol and other drugs, fatigue, and emotions on the driving task. The student identifies alcohol and other drugs, distractions, anger management, fatigue, and emotions as major factors in fatal motor vehicle crashes for individuals between 15 and 24 years of age. The student recognizes alcohol use among youth can spiral into a series of problems including poor driving performance, poor academic achievement, disruption of classroom learning, family life, as well as delinquency or other problems with society and unlawful behaviors. The student recognizes fatigue as a major problem for youthful drivers due to all the school-related activities, lack of structured sleep cycles, and late night activities. The student develops a plan to deal with other drivers, errors, and anger. Anger management is a key element to preventing road rage issues recognizing that emotions and violent reactions of youth, as well as society in general, have been well documented during the past few years. The student recognizes that personal distractions, as well as, external and internal vehicle distractions can cause inattention to task and, therefore, injury and physical damage crashes.

C 31.0 The student should identify the high risk effects of alcohol and others drugs on personality and driver performance.

- 31.1. Recognizing alcohol and other drugs effect on teens
- 31.2. Teen risk factors for alcohol and other drugs use/abuse
- 31.3. Limiting risk of driving with others that are intoxicated
- 31.4. The effect of alcohol and other drugs on driver performance
- 31.5. Advertisement/ peer pressure to use alcohol and other drugs
- 31.6. Chemical use/abuse rules and regulations
 - 31.6.1. Laws concerning alcohol and other drug abuse
 - 31.6.2. Zero Tolerance rules and regulations
 - 31.6.3. Penalties associated with alcohol and other drug abuse

C 32.0 The student should recognize legal responsibility to not use chemicals that affect ability to use a vehicle safely and refuse riding with others that are using chemicals that can affect driver attention and performance.

- 32.1. "Just say no" message
- 32.2. Refusal skills
- 32.3. Peer intervention skills
- 32.4. Community resources
- 32.5. Parental support

C 33.0 The student should recognize, compensate, or enhance driver fitness to aid reduced-risk driver performance.

- 33.1. Driver Distractions
 - 33.1.1. Definitions
 - 33.1.2. Affect on new drivers
 - 33.1.3. Outside vehicle distractions
 - 33.1.3.1. Limitations to vehicle path of travel
 - 33.1.3.2. Signs, signals, and markings
 - 33.1.3.3. Other users
 - 33.1.4. Inside vehicle distractions
 - 33.1.4.1. Passengers
 - 33.1.4.2. Electronics
 - 33.1.4.3. Dashboards controls
- 33.2. Dividing attention
 - 33.2.1. Vision needs
 - 33.2.2. Mental awareness
- 33.3. Temporary impairments
 - 33.3.1.1. Fractured bones
 - 33.3.1.2. Acute illness
 - 33.3.1.3. Fatigue

- 33.4. Long term disabilities
 - 33.4.1.1. Muscle paralysis
 - 33.4.1.2. Missing limbs
 - 33.4.1.3. Chronic illness
 - 33.4.1.4. Mental disabilities
- 33.5. Fatigue and sleep deprivation
- 33.6. Driver aggression and response
- 33.7. Driver motivation

Classroom Module Nine: Dealing with Adverse Conditions.

The student appraises inclement and extreme weather conditions and formulates predictions on vehicular and driver limitations before developing and executing responses; investigates roadway and vehicle technology, including occupant protection, to develop an understanding of the related uses and crash and injury protections; demonstrates proper use of occupant protection devices; and utilizes route planning techniques to avoid adverse driving conditions.

C 34.0 The student should recognize adverse weather conditions as visibility and traction problems and adjust speed to meet the ability to steer and stop the vehicle within the limits of the conditions as presented.

- 34.1. Identify Changing weather conditions
 - 34.1.1. Understand what can go wrong
 - 34.1.2. Prevention techniques
 - 34.1.3. Problem recognition
 - 34.1.3.1. rain
 - 34.1.3.2. storms
 - 34.1.3.3. snow
 - 34.1.3.4. winds, etc.
 - 34.1.4. Vehicle control
- 34.2. Changing visibility conditions

- 34.2.1. What can go wrong
- 34.2.2. Prevention techniques
- 34.2.3. Problem recognition
 - 34.2.3.1. glare
 - 34.2.3.2. low light
 - 34.2.3.3. fog
 - 34.2.3.4. blizzard effects, etc.
- 34.2.4. Vehicle control
- 34.3. Changing traction conditions.
 - 34.3.1. What can go wrong
 - 34.3.2. Prevention techniques
 - 34.3.3. Problem recognition
 - 34.3.3.1. traction loss to front tires
 - 34.3.3.2. traction loss to rear tires, etc.
 - 34.3.4. Vehicle control
- 34.4. Traffic flow situations under limited conditions of visibility/traction.
- 34.5. Intersection management under limited conditions of visibility/traction.
 - 34.5.1. Traffic flow to each side of vehicle
 - 34.5.2. Oncoming traffic gap selection
 - 34.5.3. Crossing traffic gap selection
- 34.6. Multiple-lane choices and usage under limiting conditions
- 34.7. Responding to non-motorized highway users

C35.0 The student should recognize adverse weather conditions as a visibility and traction problem and the affect on space management skills in regard to speed and position adjustments.

- 35.1. Control of space around vehicle
- 35.2. Dividing attention tasks
- 35.3. Appropriate mirror use
- 35.4. Maintain separation to sides and rear

- 35.5. Communicating presence/intentions
- 35.6. Effective management of limited visibility/traction
- 35.7. S.E.E. Commentary assessment
- 35.8. Rules of the Road
 - 35.8.1. Maintaining visibility laws
 - 35.8.2. Occupant protection laws
 - 35.8.3. Use of electronic devices
 - 35.8.4. Flasher usage
 - 35.8.5. Headlight usage

C 36.0 The student should value the use of occupant protection as a crash prevention and loss prevention tool for reduced-risk driver performance.

- 36.1. Occupant protection knowledge
 - 36.1.1. Active restraints
 - 36.1.2. Passive restraints
 - 36.1.3. Active Passive Integration
 - 36.1.4. Frontal crash protection
 - 36.1.4.1. First generation supplemental restraints
 - 36.1.4.2. Second generation supplemental restraints
 - 36.1.4.3. Third generation supplemental restraints
 - 36.1.5. Side impact protection
 - 36.1.6. Rear impact protection
- 36.2. Occupant use and misuse
 - 36.2.1. Myths
 - 36.2.2. Lap belt adjustments
 - 36.2.3. Shoulder restraint adjustments
 - 36.2.4. Legal requirements
- 36.3. Protecting children
 - 36.3.1. Age and seat requirements

- 36.3.2. Weight and seat requirements
- 36.3.3. Proper seat placement
- 36.3.4. Legal requirements
- 36.4. Vehicle control
 - 36.4.1. Seat belt adjustments
 - 36.4.2. Airbag and steering control
 - 36.4.3. Active Passive Integration Assist
 - 36.4.4. Rear impact

Classroom Module Ten: Other Roadway Users.

The student understands vehicle performance and potential conflicts other motorized and non-motorized roadway users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately. Tractor-trailer combinations and trains are recognized as dangerous vehicles in the vehicle, truck, and train interaction at intersections and in high speed areas.

C 37.0 The student should recognize and respond to other motorized vehicles that may have different weight, speed, and visibility problems.

- 37.1. Tractor and trailer combinations
 - 37.1.1. Single trailer combinations
 - 37.1.2. Double trailer combinations
 - 37.1.3. Triple trailer combinations
 - 37.1.4. Visibility issues
 - 37.1.5. Passing issues
 - 37.1.6. Wind blast issues
 - 37.1.7. Space needs when turning
 - 37.1.8. Passenger vehicle interaction
- 37.2. Delivery vans and trucks
- 37.3. Motorcycles and mopeds
 - 37.3.1. Size and speed
 - 37.3.2. Visibility issues

- 37.3.3. Lane position issues
- 37.4. Construction vehicles
- 37.5. Farm vehicles
- 37.6. Snowmobiles and ATV units
- 37.7. Speed issues
 - 37.7.1. Different travel speeds
 - 37.7.2. Maintaining momentum on hills
 - 37.7.3. Sudden slow downs

C 38.0 The student should recognize and respond to other non-motorized vehicles that may have different weight, speed, and visibility problems.

- 38.1. Pedalcycles
- 38.2. Personalized transport
 - 38.2.1. Skates/Rollerblades
 - 38.2.2. Skateboards
 - 38.2.3. Horses
 - 38.2.4. Others
- 38.3. Horse drawn equipment
- 38.4. Pedestrians

C 39.0 The student should recognize and respond to channelized/tracked vehicles that may have different weight, speed, and visibility problems.

- 39.1. Freight trains
- 39.2. High speed passenger trains
- 39.3. Electric/cable cars
- 39.4. Trolley cars

Classroom Module Eleven: Responding to Vehicle Malfunctions and Crashes.

The student assesses vehicle operation and malfunctions to eliminate or prevent related vehicle or weather-related problems. The student understands vehicle braking and technology systems and

utilizes proper braking techniques in favorable and unfavorable vehicular, weather, and roadway conditions. The student understands vehicle performance and potential conflicts other motorized and non-motorized roadway users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately. The student recognizes responsibilities associated with crashes regardless of causal factors.

C 40.0 The student should recognize and respond to vehicle malfunctions in a reduced-risk manner.

- 40.1. Dashboard electronic malfunctions
 - 40.1.1. Alert lights and symbols
 - 40.1.2. Warning lights and symbols
- 40.2. Fuel and ignition system malfunctions
- 40.3. Lights and signal malfunctions
- 40.4. Steering and suspension malfunctions
 - 40.4.1. Off-road recovery
 - 40.4.2. Understeer/oversteer recognition and correction
 - 40.4.3. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 40.5. Tires, traction loss recognition and control
 - 40.5.1. Blowouts
 - 40.5.2. Understeer/oversteer recognition and correction
 - 40.5.3. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 40.6. Braking system malfunctions
 - 40.6.1. Antilock braking systems (ABS)
 - 40.6.2. Understeer/oversteer recognition and correction
 - 40.6.3. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 40.7. Active passive integrated approach (APAI) systems
- 40.8. Vehicle load and weight transfer
 - 40.8.1. Effect on balance
 - 40.8.2. Forces of impact
 - 40.8.3. Traction, gravity, inertia, momentum

- 40.8.4. Tire condition/air pressure
- 40.8.5. ABS (two-wheel/four-wheel)
- 40.8.1. Intelligent stability and handling systems (ISHS, ESP, ESC)

C 41.0 The student should understand and relate how the roadway system is managed by police and state agencies to help deal with emergencies and vehicle malfunctions.

- 41.1. Law enforcement agencies
 - 41.1.1. State enforcement agencies
 - 41.1.2. County enforcement agencies
 - 41.1.3. Local enforcement agencies
- 41.2. Emergency response agencies..
 - 41.2.1. Getting help
 - 41.2.2. Types of emergency response
- 41.3. Rules of Road
 - 41.3.1. Responsibilities at crash scene
 - 41.3.2. Reporting crashes
 - 41.3.3. Financial responsibility

Classroom Module Twelve: Making Informed Consumer Choices.

The student synthesizes information and applies strategies to prepare a trip plan, develop a driving route, select motor vehicles and purchase insurance, take appropriate actions at crash scene, protect the environment, and prepare for future participation in the graduated licensing system. Completing driver education is just the start of a learning process concerning traffic safety and making reduced risk driver decisions. The student will recognize that traffic safety is a part of a life-long learning process.

C 42.0 The student should perform map reading and trip planning exercises that lead to an in-car activity or a future family trip

- 42. 1. Map reading
 - 42.1.1. Paper and atlas formats
 - 42.1.2. Digital and GPS formats
 - 42.1.3. Mapquest or maps.com formats

- 42. 2. Destination Driving exercise
 - 42.2.1. Plan an in-car driving route
 - 42.2.1.1. Mark turns
 - 42.2.1.2. Controlled intersections
 - 42.2.1.3. Speed
 - 42.2.2. Planning a family trip driving route

C 43.0 The student should recognize problems and make wise consumer choices in purchasing insurance or an automobile.

- 43.1. Insurance
 - 43.1.1. Types
 - 43.1.2. Needs
 - 43.1.3. Financial responsibility
- 43.2. Purchasing vehicles
 - 43.2.1. New vehicle costs
 - 43.2.2. Used vehicle costs
 - 43.2.3. Vehicle selection
 - 43.2.3.1. Type
 - 43.2.3.2. Size
 - 43.2.3.3. Utility
 - 43.2.3.4. Safety features

C 44.0 The student should understand future operator responsibilities in regard to licensing and attending to a crash scene situation.

- 44.1. Local licensing laws
 - 44.1.1. Vehicle
 - 44.1.2. Driver
- 44.2. Crash scene
 - 44.2.1. Driver responsibilities

44.2.2. Getting help

44.3. Crash reporting

C 45.0 Student/Parent debriefing.

45.1. Review program driver skill log requirements

45.2. Evaluation of destination driving route

45.3. Review licensing requirements

45.4. Student responsibilities

45.5. Media advertising

45.6. Use of natural resources

45.7. Parent responsibilities

45.8. Making safe vehicle choices

Essential Knowledge and Skills for Driver and Traffic Safety Education

Segment One Driver and Traffic Safety Education: In-car Skills

(D) General Requirements. Driver education in-car instruction is a required prerequisite to qualify for a driver permit between 14 years 6 months and before age 17 dependent on state licensing requirements.

(E) Introduction. State regulated driver and traffic safety education provides the foundation for students, assisted by parents/mentors, to begin the lifelong learning process of reduced risk driving practices. Students acquire essential knowledge, skills, and experiences to perform reduced risk driving in varying traffic environments. Satisfactory completion of the driver and traffic safety education course qualifies the student to continue the graduated driver licensing process.

(F) Responsibilities. Teachers assist and guide students to meet or exceed minimum competency standards through in-car instruction that includes modeling, knowledge assessment, skill assessment, guided observation, and parental involvement. Concurrent and integrated operation of classroom and in-car instruction is required for student knowledge and skill development.

(G) In-car knowledge and skills.

In-car Segment One: Preparing To Operate a Vehicle.

The student develops an understanding of local school regulations and requirements. The student formulates knowledge of rules and regulations required to satisfactorily complete the driver and traffic safety education program. The student recognizes the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle, identifies the location of alert and warning symbol lights, understands the operation of vehicle control and safety devices, investigates vehicle balance concepts, and analyzes the standard vehicle reference points relationship to roadway position and vehicle placement.

IC 1.0. Preparations to Operate Vehicle. The student recognizes the visible space around the vehicle, the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle, identifies the location of alert and warning symbol lights, understands the operation of vehicle control and safety devices, and investigates vehicle balance concepts when braking accelerating, and steering.

1. 1. **Vehicle Operating Space.** The student is expected to:

- 1.1.1. recognize the visual limitation to the front of the vehicle;
- 1.1.2. recognize the visual limitation to the rear of the vehicle;
- 1.1.3. recognize the visual limitation the right side of the vehicle;
- 1.1.4. recognize the visual limitation to the left side of the vehicle;
- 1.1.5. measure the length and width of the vehicle;
- 1.1.6. draw and measure the size of the vehicle tire patches;
- 1.1.7. draw and demonstrate the limited visual view in the rear view mirror;
- 1.1.8. draw and demonstrate the traditional mirror view settings for the rear and side view mirrors; and
- 1.1.9. draw and demonstrate the blind-zone and glare elimination (BGE) settings for the rear and side view mirrors.

1. 2. **Getting Ready to Drive.** The student is expected to:

- 1.2.1. prepare physically and mentally to use vehicle;
- 1.2.2. approach the vehicle with awareness;
- 1.2.3. check outside and inside of vehicle before opening the door;
- 1.2.4. lock doors;
- 1.2.5. adjust head restraints, seat position, mirrors, safety restraints, steering wheel position;
- 1.2.6. check all occupants for safety belt use; and
- 1.2.7. be able to demonstrate effective meaning and usage of all gauges.

1. 3. **Starting the Vehicle.** The student is expected to:

- 1.3.1. place or check that parking brake in set position;
- 1.3.2. select proper gear for starting;
- 1.3.3. secure foot brake pedal;
- 1.3.4. recognize alert lights for safety accessories;
- 1.3.5. demonstrate proper use of ignition starting device;
- 1.3.6. demonstrate ability to select and use appropriate accessories;

- 1.3.7. give an example of a warning light for engine or system accessories;
 - 1.3.8. make appropriate gear selection for movement; and
 - 1.3.9. put headlights on - day and night.
1. 4. **Placing Vehicle in Motion.** The student is expected to:
- 1.4.1. visually identify open space to enter before moving foot from brake to gas;
 - 1.4.2. communicates to other users;
 - 1.4.3. places the vehicle into motion smoothly; and
 - 1.4.4. recognize that too much acceleration affects vehicle body pitch toward the rear.
1. 5. **Stopping Vehicle in Motion.** The student is expected to:
- 1.5.1. search effectively ahead of the vehicle to determine braking needs;
 - 1.5.2. use controlled braking efficiently with heel of foot on floorboard;
 - 1.5.3. check rear zone/space prior to braking;
 - 1.5.4. apply a firm squeezing braking force at the beginning of the braking process;
 - 1.5.5. bring the vehicle to a smooth stop by squeezing off brake;
 - 1.5.6. recognizes that too much braking action affects vehicle body pitch toward the front;
 - 1.5.7. ease pressure off brake during last two seconds of braking to ease pitch of vehicle;
 - 1.5.8. check the rear zone/space before, during and after braking actions; and
 - 1.5.9. demonstrate effective use of maximum ABS braking.
1. 6. **Steering.** The student is expected to:
- 1.6.1. turn head and visually target in the direction of intended path of travel prior to turning;
 - 1.6.2. use a target, sightline, transition point, and path of travel to determine steering entry and return;
 - 1.6.3. use a balanced hand position on the wheel;

- 1.6.4. recognizes that too much steering affects vehicle body roll towards the opposite side of vehicle;
- 1.6.5. use the Hand-Over-Hand or Hand-to-Hand (Turning), Hand-To-Hand (Curvatures), One Hand (Reverse), or Evasive Action (Avoidance) methods effectively; and
- 1.6.6. visually check the rear view mirror, side view mirrors and mirror blind-zone areas.

1. 7. **Securing the Vehicle.** The student is expected to:

- 1.7.1. stop the vehicle in a safe and legal position;
- 1.7.2. set the parking brake as required by state statute and owner's manual;
- 1.7.3. shift into appropriate gear before removing foot from brake;
- 1.7.4. turn off appropriate accessories prior to turning off ignition and removing key;
- 1.7.5. visually check traffic flow before opening door; and
- 1.7.6. lock doors and/or secure any alarm system.

IC 2.0. Judgment of Vehicle to Roadway Position. The student recognizes and analyzes the standard and personal vehicle guides or reference points relationship to roadway position and vehicle placement.

2. 1. **Right Side of Vehicle.** The student is expected to:

- 2.1.1. determine when the vehicle is positioned within 3-6 inches of the curb or a lane line;
- 2.1.2. determine when the vehicle is positioned within 2-3 feet of the curb or a lane line; and
- 2.1.3. determine when the vehicle is positioned within 5-8 feet of the curb or a lane line.

2. 2. **Left Side of Vehicle.** The student is expected to:

- 2.2.1. determine when the vehicle is positioned within 3-6 inches of the curb or a lane line;
- 2.2.2. determine when the vehicle is positioned within 2-3 feet of the curb or a lane line; and

- 2.2.3. determine when the vehicle is positioned within 5-8 feet of the curb or a lane line.
- 2. 3. **Front of Vehicle.** The student is expected to:
 - 2.3.1. determine when the front bumper is positioned even with the stop line or curb line.
- 2. 4. **Rear of Vehicle.** The student is expected to:
 - 2.4.1. determine when the rear bumper is positioned even with a line.
- 2. 5. **Front Turning Point of Vehicle.** The student is expected to:
 - 2.5.1. determine where on the road the front is positioned for turning left; and
 - 2.5.2. determine where on the road the front is positioned for turning right.
- 2. 6. **Rear Turning Point of Vehicle.** The student is expected to:
 - 2.6.1. determine where on the road the rear is positioned for turning left; and
 - 2.6.2. determine where on the road the rear is positioned for turning right.
- 2. 7. **Application of Principles.** The student is expected to:
 - 2.7.1. demonstrate vehicle placement within typical lane space positions; and
 - 2.7.2. demonstrate vehicle placement within lane space when backing and turning.

In-car Segment Two: Introducing Traffic Entry and Intersection Approach Skills.

The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.

IC. 3.0. Visualization of Intended Travel Path. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.

- 3. 1. **Target.** The student is expected to:
 - 3.1.1. identify an object or area that appears in the center and at the end of your intended path of travel.

3. 2. **Target Area.** The student is expected to:
 - 3.2.1. identify the traffic problems and elements in and near the target area; and
 - 3.2.2. locate your target area, evaluate the line of sight or path-of-travel conditions and determine best approach speed and lane position.
3. 3. **Targeting Path.** The student is expected to:
 - 3.3.1. evaluate the target area, while developing an image of your targeting path;
 - 3.3.2. identify elements that can change or modify the intended travel path; and
 - 3.3.3. determine risks associated with maintaining the intended path of travel.

IC. 4.0. Searching Intended Travel Path. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.

4. 1. **Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks.** The student is expected to:
 - 4.1.1. move focal vision from travel path to another location and back to travel path;
 - 4.1.2. move focal vision within ½ second time frames; and
 - 4.1.3. share attention more than one time to allow brain to perceive information.
4. 2. **Target Area to Searching Areas.** The student is expected to:
 - 4.2.1. search to the target area 15 to 20 seconds ahead to evaluate its conditions and determine entry speed and position.
 - 4.2.2. search for Line of Sight or Path-of-Travel changes that can or will affect the approach to the target area.
 - 4.2.3. approaching the target area, continually re-evaluate risks in immediate 4-6 second travel path.
 - 4.2.4. as you approach the target area, search for your new target area and new travel path that is 15 to 20 seconds ahead.
4. 3. **Know How to Judge Space in Seconds.** The student is expected to:
 - 4.3.1. visualize the space your vehicle will occupy at least 15-20 seconds ahead;
 - 4.3.2. search 15-20 seconds ahead, continually evaluating the 4-6 second immediate path; and

- 4.3.3. speed and/or lane position adjustments may be required when the search areas cannot be maintained.
- 4. 4. **Detect Changes to Line of Sight or Path-of-Travel.** The student is expected to:
 - 4.4.1. evaluate modification in the ability to see or maintain a travel path; and
 - 4.4.2. recognize a Line of Sight or Path-of-Travel change, then evaluate other zones/spaces for speed and lane adjustments.
- 4. 5. **Identify Open, Closed or Changing Zones/Spaces.** The student is expected to:
 - 4.5.1. identify the intended travel path for open, closed or changing conditions; and
 - 4.5.2. evaluate open, closed or changing conditions for speed and position adjustments.
- 4. 6. **Searching Intersections.** The student is expected to:
 - 4.6.1. search for open zones/space to the left, front and right, when approaching an intersection;
 - 4.6.2. evaluate closed or changing zones/spaces and make necessary speed and/or lane position adjustments, when approaching an intersection; and
 - 4.6.3. search for open zones/spaces to the left, front and right, before entering an intersection.
- 4. 7. **Searching Into Curves and Over Hills.** The student is expected to:
 - 4.7.1. search the line of sight and path of travel through the curve or over the hill crest for the possible closed or changing status of your path of travel, when the target area is a curve or a hill crest; and
 - 4.7.2. evaluate the LOS-POT for appropriate speed and position adjustments, before entering a curve or a hill crest.

In-car Segment Three: Developing Visual and Mental Perception for Vehicle Control Tasks.

The student utilizes critical thinking, divided attention, decision-making, and problem-solving skills to operate the vehicle and perform precision maneuvers in controlled risk, limited risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of rules of the road, lane changing, turnabouts and parking.

IC. 5.0. Speed Control. The student utilizes critical thinking, divided attention, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, limited risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of rules of the road, lane changing, turnabouts and parking.

5. 1. Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks. The student is expected to:

- 5.1.1. move focal vision from travel path to another location and back to travel path;
- 5.1.2. move focal vision within ½ second time frames; and
- 5.1.3. share attention more than one time to allow brain to perceive information.

5. 2. Selection For Ongoing Conditions. The student is expected to:

- 5.2.1. travel speed should be based upon driver, vehicle, legal, roadway, and environmental limitations; and
- 5.2.2. constant adjustments to speed are based on driver processing information, based on limitations.

5. 3. After Seeing Changes in Line of Sight or Path of Travel. The student is expected to:

- 5.3.1. avoid using acceleration into a closed or changing zone/space;
- 5.3.2. recognizing a closed zone/space (a red light or stopped traffic), adjust speed to arrive as the zone/space opens; and
- 5.3.3. when your ability to see a line of sight or path of travel is reduced, adjust speed to maintain or establish an open zone/space.

5. 4. After Seeing a Speed Limit Sign. The student is expected to:

- 5.4.1. recognize it as a cue to check vehicle gauges, mirrors, and evaluate line of sight or path of travel conditions; and
- 5.4.2. adjust speed to meet driver, vehicle, legal, roadway, and environmental limitations.

IC. 6.0. Lane Position Selection. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control,

space management, selected sections of the rules of the road, lane changing, turnabouts and parking.

6. 1. **Lane Position.** The student is expected to:
 - 6.1.1. select the appropriate lane for space management, legal requirements, and destination.
6. 2. **Lane position usage while driving straight ahead.** The student is expected to:
 - 6.2.1. select a lane position to give best separation from closed or changing zones/space; and
 - 6.2.2. demonstrate ability to place vehicle in appropriate lane position.
6. 3. **Lane position usage while parking.** The student is expected to:
 - 6.3.1. select a lane position to give best separation from closed or changing zones/space; and
 - 6.3.2. demonstrate ability to place vehicle in appropriate lane position.
6. 4. **Lane position usage while turning around.** The student is expected to:
 - 6.4.1. select a lane position to give best separation from closed or changing zones/space; and
 - 6.4.2. demonstrate ability to place vehicle in appropriate lane position.
6. 5. **Lane position usage while approaching curves and hill crests.** The student is expected to:
 - 6.5.1. establish the appropriate lane position on approach;
 - 6.5.2. establish the appropriate lane position on apex; and
 - 6.5.3. establish the appropriate lane position on exiting.
6. 6. **Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks.** The student is expected to:
 - 6.6.1. move focal vision from travel path to another location and back to travel path;
 - 6.6.2. move focal vision within ½ second time frames; and
 - 6.6.3. share attention more than one time to allow brain to perceive information.

IC. 7.0. Rear Zone Searching and Control. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of rules of the road, lane changing, turnabouts and parking.

7.1. Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks. The student is expected to:

- 7.1.1. move focal vision from travel path to another location and back to travel path;
- 7.1.2. move focal vision within ½ second time frames; and
- 7.1.3. share attention more than one time to allow brain to perceive information.

7.2. Inside Rearview Mirror Usage. The student is expected to:

- 7.2.1. search to the rear after seeing a change to your line of sight or path of travel;
- 7.2.2. search to the rear before and after making a turn or a stop;
- 7.2.3. search to the rear before and after making speed adjustment; and
- 7.2.4. search to the rear before and after making lane position adjustment.

7.3. Outside Side View Mirrors and Mirror Blind Zone Checks. The student is expected to:

- 7.3.1. check the side view mirror before adjusting a lane position in that direction;
- 7.3.2. visually check mirror blind zone after side view mirror use (traditional setting), before moving the steering wheel; and
- 7.3.3. check the side view mirror (BGE) before adjusting a lane position in that direction.

7.4. Evaluate Condition to the Rear. The student is expected to:

- 7.4.1. determine if the rear zone/space is an open, closed, or changing condition; and
- 7.4.2. when a tailgater is closing or changing the rear zone/space, determine the appropriate speed or lane adjustment needed.

IC. 8.0. Following Time and Space. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in

controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.

8. 1. Closure Rate on Approach. The student is expected to:

8.1.1. approach the vehicle in front gradually, avoiding a fast closure rate.

8. 2. Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks. The student is expected to:

8.2.1. move focal vision from travel path to another location and back to travel path;

8.2.2. move focal vision within ½ second time frames; and

8.2.3. share attention more than one time to allow brain to perceive information.

8. 3. Moving at Same Speed - Maintaining Four Second Interval. The student is expected to:

8.3.1. when following another vehicle, work to maintain four seconds of time and space; and

8.3.2. adjust speed or lane position if four seconds of time is difficult to maintain.

8. 4. When Stopping Behind Vehicles. The student is expected to:

8.4.1. when stopped behind a vehicle, be able to see the rear tires touching the pavement ahead to keep a minimum of fifteen feet of space; and

8.4.2. when stopped behind a vehicle without visibility to the rear, be able to see the driver in the side view mirror.

8. 5. Delay Start Before Moving. The student is expected to:

8.5.1. after the vehicle in front begins to move, delay your movement for two seconds to open the front zone/space.

IC. 9.0. Communication and Courtesy. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.

9. 1. **Technique.** The student is expected to:

- 9.1.1. use turn signal light on before turning right or left;
 - 9.1.2. use lane change signal rather than turn signal appropriate for moving to another lateral position;
 - 9.1.3. use headlights on at all times to increase visibility;
 - 9.1.4. use horn to make others aware of your presence;
 - 9.1.5. tap brake lights to warn rear traffic of a slowdown or stop in the traffic flow;
 - 9.1.6. use vehicle speed and position could communicate the driver's intention; and
 - 9.1.7. use hand signals should be used to establish eye contact with other roadway users.
9. 2. **Timing.** The student is expected to:
- 9.2.1. put signal light on at least five seconds prior to moving since communication requires time to be sent, received and acted upon; and
 - 9.2.2. communicate early so that your safe path of travel can best be controlled.
9. 3. **Commitment.** The student is expected to:
- 9.3.1. make sure your messages are acknowledged by others.

IC. 10.0. Using Three Steps to Problem-Solving. The student utilizes critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk, low risk, moderate risk, and complex risk environments including basic vehicle control, space management, selected sections of the rules of the road, lane changing, turnabouts and parking.

10. 1. **Search for a change to your line-of-sight and/or to your path-of-travel.** The student is expected to:
- 10.1.1. look for what may no longer make your intended path-of-travel available or safe.
10. 2. **Evaluate your other zones/spaces for risk.** The student is expected to:
- 10.2.1. look for related information;
 - 10.2.2. look for alternate path of travel; and

10.2.3. get all information before acting.

10. 3. **Execute an Adjustment.** The student is expected to:

10.3.1. get the best

10.3.1.1. speed control;

10.3.1.2. lane position; and

10.3.1.3. communication for the conditions.

10. 4. **Use a Practice Commentary.** The student is expected to:

10.4.1. develop the procedures to a process and into habit;

10.4.2. start with an appropriate speed and lane position for limitations and conditions;

10.4.3. look for line of sight or path of travel zone/space changes;

10.4.4. explain and demonstrate the three steps to control the zone/space change;

10.4.5. develop the process for 10-15 minutes at a time as a rear seat occupant/observer; and

10.4.6. repeat the process for 3-5 minutes at a time as a driver.

In-car Segment Four: Factors Affecting Driver Performance.

The student recognizes the significant effects of alcohol and other drugs, fatigue, and emotions on the driving task. The student identifies alcohol, fatigue, and emotions as major factors in fatal motor vehicle crashes for individuals between 15 and 24 years of age. The student recognizes alcohol use among youth can spiral into a series of problems including poor driving performance and unlawful behaviors. The student recognizes fatigue as a major problem for youthful drivers due to all the school-related activities, lack of structured sleep cycles, and late night activities. The student develops a plan to deal with other drivers, errors, and anger. Anger management is a key element to preventing road rage issues recognizing that emotions and violent reactions of youth, as well as society in general, have been well documented during the past few years.

The student appraises inclement and extreme weather conditions and formulates predictions on vehicular and driver limitations before developing and executing responses; investigates roadway and vehicle technology, including occupant protection, to develop an understanding of the related uses and crash and injury protections; demonstrates proper use of occupant protection devices; and utilizes map reading and route planning techniques to avoid adverse driving conditions. The student assesses vehicle operation and malfunctions to eliminate or prevent related problems by securing scheduled and unscheduled maintenance or repairs; understands vehicle braking systems and utilizes proper braking techniques in favorable and unfavorable vehicular, weather, and roadway conditions; understands vehicle performance and potential conflicts other motorized and non-motorized roadway

users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately.

IC. 11.0. Responses to Emergency Situations. The student appraises inclement and extreme weather conditions and formulates predictions on vehicular and driver limitations before developing and executing responses; investigates roadway and vehicle technology, including occupant protection, to develop an understanding of the related uses and crash and injury protections; demonstrates proper use of occupant protection devices; and utilizes map reading and route planning techniques to avoid adverse driving conditions. The student assesses vehicle operation and malfunctions to eliminate or prevent related problems by securing scheduled and unscheduled maintenance or repairs; understands vehicle braking systems and utilizes proper braking techniques in favorable and unfavorable vehicular, weather, and roadway conditions; understands vehicle performance and potential conflicts other motorized and non-motorized roadway users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately.

11. 1. Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks. The student is expected to:

- 11.1.1. move focal vision from travel path to another location and back to travel path;
- 11.1.2. move focal vision within ½ second time frames; and
- 11.1.3. share attention more than one time to allow brain to perceive information.

11. 2. Identify and Respond to Vehicle Failures. The student is expected to:

- 11.2.1. demonstrate ability to recognize engine failure and respond with appropriate actions;
- 11.2.2. demonstrate ability to recognize brake failure and respond with appropriate actions; and
- 11.2.3. demonstrate ability to recognize tire pressure failure and respond with appropriate actions.

11. 3. Identify and Respond to Environmental Conditions. The student is expected to:

- 11.3.1. demonstrate ability to recognize traction loss and respond with appropriate actions;
- 11.3.2. demonstrate ability to recognize when tires drop off pavement and respond with appropriate actions;
- 11.3.3. demonstrate ability to recognize sudden POT restrictions and respond with appropriate actions; and

- 11.3.4. demonstrate ability to recognize sudden LOS restrictions and respond with appropriate actions.

In-car Segment Five: Assessment of Driver Performance.

The student is assessed based on vehicle operation, understands vehicle braking systems and utilizes proper braking techniques in favorable and unfavorable vehicular, weather, and roadway conditions; understands vehicle performance and potential conflicts other motorized and non-motorized roadway users present and applies critical-thinking, decision-making, and problem-solving skills to respond appropriately.

IC. 12.0. The student enrolled in a certified driver education program should be able to successfully demonstrate the key core behavioral patterns while performing the following procedures.

12. 1. Divide Focal and Mental Attention Between Intended Travel Path and Other Tasks. The student is expected to:

- 12.1.1. move focal vision from travel path to another location and back to travel path;
- 12.1.2. move focal vision within ½ second time frames; and
- 12.1.3. share attention more than one time to allow brain to perceive information.

12. 2. Precision Turns. The student is expected to:

- 12.2.1. demonstrate and explain a proper side position;
- 12.2.2. demonstrate and explain the forward position;
- 12.2.3. search intersections left, front, and right to ascertain open zones/spaces; and
- 12.2.4. look into the turn before turning the steering wheel.

12. 3. Approach to Intersections. The student is expected to:

- 12.3.1. see and respond to open/closed zones;
- 12.3.2. check and respond to rear zone conditions;
- 12.3.3. establish and maintain proper lane usage and speed control;
- 12.3.4. search left, front, and right zones for LOS-POT changes, get open zones before entering; and
- 12.3.5. demonstrate and use staggered, legal, and safety stop when applicable.

12. 4. Timing Arrival for Open Zone. The student is expected to:

- 12.4.1. see condition of traffic light; adjust speed to arrive at a green light;
 - 12.4.2. see closed front zone; adjust speed to reduce closure rate and to arrive in an open zone; and
 - 12.4.3. adjust speed to have at least one open side zone.
12. 5. **Precision Lane Change.** The student is expected to:
- 12.5.1. evaluate zones and mirror blind spots;
 - 12.5.2. move to LP2 (Lane Position 2, the left side of lane) for left lane change;
 - 12.5.3. move to LP3 (right side of lane) for right lane change;
 - 12.5.4. make final mirror blind spot check;
 - 12.5.5. enter new lane in LP2 or LP3; and
 - 12.5.6. decide on best lane position for conditions
12. 6. **Approach to Curves.** The student is expected to:
- 12.6.1. see curve in target area;
 - 12.6.2. check all zones for options;
 - 12.6.3. establish effective speed control;
 - 12.6.4. left curve approach LP3 if right zone is open, apex LP1, exit LP1; and
 - 12.6.5. right curve approach LP2 if left zone is open, apex LP3, exit LP1.
12. 7. **Passing/Being Passed.** The student is expected to:
- 12.7.1. identify tailgater problems for speed and lane position adjustments;
 - 12.7.2. evaluate gain versus risk prior to attempting passing maneuver;
 - 12.7.3. check all zones for LOS-POT conditions; and
 - 12.7.4. control speed and lane position.
12. 8. **Getting On/Off Highways.** The student is expected to:
- 12.8.1. slowest speed on entrance ramp for maximum searching time and options;
 - 12.8.2. evaluate gap to enter;
 - 12.8.3. effective speed on acceleration lane; and
 - 12.8.4. getting off: plan ahead, test brakes.
12. 9. **Backing Techniques.** The student is expected to:

- 12.9.1. effective searching prior to and while backing;
- 12.9.2. effective use of brake for speed control; and
- 12.9.3. effective steering technique.

12. 10. **Parking Techniques.** The student is expected to:

- 12.10.1. establish side position;
- 12.10.2. demonstrate proper forward position;
- 12.10.3. use minimum space to go forward;
- 12.10.4. evaluate alignment to space;
- 12.10.5. back to pivot point, turn wheel;
- 12.10.6. visually target center of vehicle or space to the rear; and
- 12.10.7. straighten tires, demonstrate rear limitation reference.

12. 11. **Turnaround Techniques.** The student is expected to:

- 12.11.1. establish side position;
- 12.11.2. demonstrate proper forward position;
- 12.11.3. use minimum space to go forward;
- 12.11.4. evaluate alignment to space;
- 12.11.5. back to pivot point, turn wheel;
- 12.11.6. visually target center of vehicle or space to the rear; and
- 12.11.7. straighten tires, demonstrate rear limitation reference.

12. 12. **Responding to Emergency Situations.** The student is expected to:

- 12.12.1. use vision control, motion control, and steering control sequences;
- 12.12.2. recognize and respond to adverse conditions that change vehicle traction;
- 12.12.3. recognize front wheel traction loss;
- 12.12.4. recognize rear wheel traction loss;
- 12.12.5. demonstrate appropriate controlled brake, trail brake, threshold brake, and antilock brake use; and
- 12.12.6. recognize and respond to vehicle mechanical failures.

Environment Risk Relationships

Risk Level	Instructor	Speed	External Distractions	Traffic Volume	Roadway Limitations
Controlled	Assumes 100% of space management responsibilities	Less than 30 mph	External distractions controlled by instructor	Little to minimal cross traffic volume	Single lane residential or suburban style marked and unmarked with controlled and uncontrolled intersections
Low	Assumes 90% of space management responsibilities	Less than 45 mph	External distractions are minimal	Minimal to low cross traffic and opposing traffic	Multi-lane, one and two way flow, traffic signals simple curve and hill approaches
Moderate	Assumes 50% of space management responsibilities	Less than 55 mph	External distractions are evident and consistent to front and rear	High volume opposing traffic with low volume of cross or entry traffic, urban areas	Limited access, multi-lane, rural curves and hill approaches, moderate controlled urban one and two way streets Light weather and visibility conditions.
Complex	Assumes 25% of space management responsibilities. Assesses student space management	Varying speeds up to speed limits	External distractions are numerous and inconsistent to front and rear	High volume opposing, cross , entry and exit flows. Mix of drivers using variance of speed and lane position adjustments	Limited access, multi-lane, rural curves and hill approaches, moderate controlled urban one and two way streets. Varying road surfaces, visibility, and weather conditions

Essential Knowledge and Skills for Driver and Traffic Safety Education

Driver and Traffic Safety Education: Classroom Segment II

(H) General Requirements. This course is a required prerequisite to obtain a Selected State Driver License at ages between 16 years and before age 18.

(I) Introduction. Selected state driver and traffic safety education provides the foundation for students, assisted by parents/mentors, to continue the lifelong learning process of reduced risk driving practices, keeping mentally and physically fit, while acquiring essential knowledge, skills, and experiences to understand and perform reduced risk driving in varying traffic environments..

(J) Responsibilities. Teachers help students meet or exceed minimum competency standards through a combination of classroom and in-car instruction that includes modeling, knowledge assessment, skill assessment, guided observation, and support continued parental involvement.

Classroom Segment II knowledge and skills.

Classroom Module One: Mental and Perceptual Awareness. The student develops an understanding of the effects of negative reinforcement on driving behavior. The student recognizes the role of driver fitness, mental preparedness, and the effects of alcohol and other drugs. The student develops essential knowledge and skills for reduced-risk performances in preventing and avoiding collision threats. NOTE: Subsequent to successful enrollment in the local driver and traffic safety education course, the student is eligible to start the unrestricted licensing portion of the graduated driver licensing process.

C.II. 1.0. Mental and Perceptual Awareness

1.1 Dealing with Negative Reinforcement: The student is expected to:

- ✓ identify the effects of media on driver risk-taking.
- ✓ relate how peers have affected their driver performance.
- ✓ identify other driver behaviors that reinforce poor driving performances.

1.2 *Developing Risk Awareness : The student is expected to:*

- ✓ identify high risk situations.
- ✓ identify methods to reduce driver risk in identified situations.
- ✓ identify consequences associated driver behaviors and collision factors.

1.3 Making Effective Decisions: The student is expected to:

- ✓ identify driver errors contributing to collisions.
- ✓ identify consequences associated high-risk driver behavior and vehicle operation.
- ✓ identify driver actions to reduce severity of or avoid a collision.

1.4 Using a Space Management System: The student is expected to:

- ✓ identify three steps of the space management system employed.
- ✓ relate how searching skills are developed for reduced-risk performance.
- ✓ relate how evaluation skills are developed for reduced-risk performance.
- ✓ explain how to execute speed and position adjustments with effective communication.
- ✓ develop a plan to work with No-zone concepts.

Module Two: Driver Fitness Tasks.

The student recognizes the role of driver fitness, mental preparedness, and the effects of alcohol and other drugs on reduced-risk driver performances .

C.II. 2.0. Driver Fitness Tasks

2.1 Fatigue Factors: The student is expected to:

- ✓ identify factors that may lead to driver fatigue.
- ✓ relate fatigue to risk awareness and effective decision-making.
- ✓ relate fatigue to other driver physical limitations.

2.2 Role of Emotions: The student is expected to:

- ✓ identify emotions which may affect driving performance
- ✓ relate emotional factors to driving performance
- ✓ recognize how emotions may play a role in driver attention to task.

- 2.3 Distracted Driving
- ✓ identify driver distractions as a vision and mental problem
 - ✓ identify driver distractions as a vision and mental problem
 - ✓ identify factors in the vehicle that can cause distractions
 - ✓ identify factors outside the vehicle that can cause distractions
 - ✓ identify personal factors that can cause distractions
 - ✓ deal with distractions by;
 - . Move focal vision from travel path to another location and back to travel path.
 - . Move focal vision within ½ second time frames.
 - . Share attention more than one time to allow brain to perceive information.
- 2.4 Aggressive Driving Factors: The student is expected to:
- ✓ identify factors that may lead to road rage.
 - ✓ relate emotions to other driver emotional limitations.
 - ✓ relate emotions to risk awareness and effective decision-making.
- 2.5 Substance Abuse Factors: The student is expected to:
- ✓ recognize the impact of zero tolerance laws.
 - ✓ relate youthful alcohol collision risk involvement to adult alcohol collision risk involvement.
 - ✓ identify the impact of blood alcohol concentrations (BAC) of less than .08% to .10% on driver risk awareness and decision-making.
 - ✓ relate the psychological effects of alcohol on driving task.
 - ✓ relate the physiological effects of alcohol on the driving task.
 - ✓ develop a plan to avoid alcohol and other drug related driving

Module Three: Avoiding Collision Threats.

The student develops essential knowledge and skills for reduced-risk performances in preventing and avoiding collision threats.

C.II. 3.0 Avoiding Collision Threats

- 3.1 Driver Actions: The student is expected to:
- ✓ identify space management practices which may reduce risk and allow time for decision-making.
 - ✓ identify steering actions used to avoid collisions and minimize impact.
 - ✓ identify speed control techniques used to avoid collisions and minimize impact.
 - ✓ identify driver strategies related to using new vehicle technologies effectively.

- 3.2 Knowing the Vehicle : The student is expected to:
- ✓ relate vehicle limitations associated with different vehicle types.
 - ✓ relate how tire pressures and traction affect vehicle control.
 - ✓ relate how a vehicle is designed to fit the style of use.
 - ✓ relate how crash test results can influence purchase and driver performances.
- 3.3 Vehicle Actions : The student is expected to:
- ✓ relate to effects of momentum , gravity, and inertia in personal driving situations.
 - ✓ list and identify the purpose of new vehicle technology for reducing the collision effects of driver error.
 - ✓ relate the concepts of vehicle understeer and vehicle oversteer to traction loss.
- 3.4 Environmental Factors: The student is expected to:
- ✓ identify weather related conditions which lead to a need for greater risk awareness and better decision-making.
 - ✓ identify distracting situations which lead to a need for greater risk awareness and better decision-making.

Essential Knowledge and Skills for Driver and Traffic Safety Education

Driver and Traffic Safety Education: In-car Segment II

(K) General Requirements. This course is a required prerequisite to obtain a Selected State Driver License at ages between 16 years and before age 18.

(L) Introduction. Selected state driver and traffic safety education provides the foundation for students, assisted by parents/mentors, to continue the lifelong learning process of reduced risk driving practices, keeping mentally and physically fit. while acquiring essential knowledge, skills, and experiences to understand and perform reduced risk driving in varying traffic environments..

(M) Responsibilities. Teachers help students meet or exceed minimum competency standards through a combination of classroom and in-car instruction that includes modeling, knowledge assessment, skill assessment, guided observation, and support continued parental involvement.

(N) Segment II In-car knowledge and skills.

Segment II In-car training.

The student develops an understanding of the effects of negative reinforcement on driving behavior. The student recognizes the role of driver fitness, mental preparedness, and the effects of alcohol and other drugs. The student develops essential knowledge and skills for reduced-risk performances in preventing and avoiding collision threats. NOTE: Subsequent to successful enrollment in the local driver and traffic safety education course, the student is eligible to start the unrestricted licensing portion of the graduated driver licensing process.

IC.II 1.0 Commentary Driving Assessment. The student is expected to:

- ✓ search for changes to path of travel and line of sight
- ✓ identify high risk situations
- ✓ evaluate methods to reduce driver risk in identified situations.
- ✓ Evaluate divided attention tasks needed.
- ✓ explain consequences associated driver behaviors and collision factors
- ✓ execute appropriate speed and position adjustments accompanied by appropriate communication

IC.II 2.0 SEE System Training. The student is expected to:

- ✓ search for changes to path of travel and line of sight
- ✓ identify high risk situations
- ✓ evaluate methods to reduce driver risk in identified situations.
- ✓ evaluate divided attention tasks needed.
- ✓ explain consequences associated driver behaviors and collision factors
- ✓ execute appropriate speed and position adjustments accompanied by appropriate communication .

IC.II 3.0 Commentary Space Management Assessment. The student is expected to:

- ✓ identify restrictions to the path of travel.
- ✓ identify restrictions to the line of sight.
- ✓ execute appropriate speed and position adjustments, while checking space to the rear.

IC.II. 4.0 Advanced Collision Avoidance Actions (Off-Road Application).

4.1. Driver Actions. The student is expected to:

- ✓ identify steering actions used to avoid collisions and minimize impact.
- ✓ identify speed control techniques used to avoid collisions and minimize impact.
- ✓ identify driver strategies related to using new vehicle technologies effectively.

4.2. Vehicle Actions. The student is expected to:

- ✓ relate to effects of momentum , gravity, and inertia in personal driving situations.
- ✓ list and identify the purpose of new vehicle technology for reducing the collision effects of driver error.
- ✓ relate the concepts of vehicle understeer and vehicle oversteer to traction loss.

Scope and Sequence of Activities:

Time frames	Segment I Classroom	Virtual Interactive Simulation	Segment I In-car	Segment II Classroom	Segment II In-car
Time Period One	C. 1.0				
	C. 2.0				

	C. 3.0				
	C. 4.0				
	C. 5.0				
Period Two	C. 6.0				
	C. 7.0	VIS. 1.0			
	C. 8.0		IC. 1.0		
	C. 9.0	VIS. 2.0			
	C. 10.0		IC. 2.0		
Period Three	C. 11.0	VIS. 3.0			
	C. 12.0		IC. 2.0		
	C. 13.0	VIS. 4.0			
	C. 14.0		IC. 3.0		
	C. 15.0	VIS. 5.0			
Period Four	C. 16.0		IC. 4.0		
	C. 17.0	VIS. 6.0			
	C. 18.0		IC. 5.0		
	C. 19.0	VIS. 7.0			
	C. 20.0		IC. 6.0		
Period Five	C. 21.0	VIS. 8.0			
	C. 22.0		IC. 7.0		
	C. 23.0	VIS. 9.0			
	C. 24.0		IC. 8.0		
	C. 25.0	VIS. 10.0			
Period Six	C. 26.0		IC. 9.0		
	C. 27.0				
	C. 28.0		IC. 7.0		
	C. 29.0				

	C. 30.0		IC. 8.0		
Period Seven	C. 31.0				
	C. 32.0		IC. 9.0		
	C. 33.0				
	C. 34.0		IC. 10.0		
	C. 35.0				
Period Eight	C. 36.0		IC. 10.0		
	C. 37.0				
	C. 38.0		IC. 11.0		
	C. 39.0				
	C. 40.0		IC. 12.0		
Period Nine	C. 41.0				
	C. 42.0		makeup		
	C. 43.0				
	C. 44.0		makeup		
	C. 45.0				
Time Period for State Licensing with Parent Practice and Novice Driver Experience					
Seg. II Period One		VIS. 11.0		C. II. 1.0	
				C. II. 1.0	IC. II. 1.0
		VIS. 12.0		C. II. 1.0	
				C. II. 2.0	IC. II. 2.0
		VIS. 13.0		C. II. 2.0	
Seg. II Period Two				C. II. 2.0	IC. II. 3.0
		VIS. 14.0		C. II. 3.0	
				C. II. 3.0	IC. II. 4.0

					IC. II. 4.0

Attachment F

**Driving School Association of the Americas’
Beginner Driver Education and Training**

Curriculum Content Standards



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Preface

All across the United States you will find people learning to drive. Professional instruction to the beginning driver plays an important and valuable role in our society and we all benefit when drivers begin their driving careers with as much information and background as possible.

These standards were developed in collaboration with Sue McNeill of Road Safety Educators' Association (RSEA), Ontario, Canada. In December 2008, Sue lost a courageous battle with cancer leaving a legacy as an expert in road safety. The Driving School Association of the Americas is proud of the collaboration with Sue McNeill and RSEA that has resulted in this useful tool for curriculum planning and development.

Sue was acknowledged by academics and practitioners alike as a person who advocated for high standards in driver education and training. She had the unique ability to keep a common sense approach in establishing curriculum content standards, methods of training, and instructor competency guidelines.

The Driving School Association of the Americas' *Curriculum Content Standards* are intended to provide guidance towards the highest level of instruction that can be attained so that as people learn to drive in the United States they will pose the least risk possible to themselves and others and to help them remain crash- and violation-free in their driving careers.

Introduction

Driving is a complex and demanding skill. Every driver needs to be aware that knowledge of risk prevention and avoidance, understanding the vehicle, vehicle handling, perception and risk management, the highway transportation system (HTS) rules of road, interacting with other drivers, driver behavior, attention, and personal responsibility are an important foundation to becoming a safe driver.

Death from a motor vehicle crash is the number one “disease” for young people in the United States. Fatalities are not the only problem; injury crashes are epidemic as well.

In the United States, there are many professional curriculums for driver education and training programs to consider. DSAA’s curriculum content standards will help identify a curriculum that targets the reasons for crashes.

These standards provide teaching objectives, topics, and knowledge outcomes and abilities, as well as examples of required topics and will help to prepare the beginning driver, parents and mentors, and all those who will support and interact with the driver as a driving career begins.

Standard 1 – Understanding and Managing Risk

1. Understanding and Managing Risk		
Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
1A ✓ Jurisdictional-specific process for obtaining the privilege to drive	– Jurisdictional-specific process for obtaining the privilege to drive	– Explain jurisdictional licensing processes and the risk of entering the driving population
1B ✓ Accurate risk-perception	– Accurate risk-perception a) quick and effective reaction time b) proactive versus reactive driving action c) expectations of other road-users d) consequences of not doing what other road-users expect e) Safe time margins – Factors that affect driver risk perception	– Describe the most common crash situations
1C ✓ Understand the hierarchy of the Highway Transportation System	– Highway Transportation System a) Interstate b) United State highway c) State highway	– List and explain the hierarchy of U.S. roads and their various configurations

1. Understanding and Managing Risk		
Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul style="list-style-type: none"> d) County road e) City street f) Alley 	
<p>1D</p> <p>✓ Accurate perception of personal limits, abilities, and risk tolerance</p>	<ul style="list-style-type: none"> – Different types of drivers – Dangerous driving <ul style="list-style-type: none"> a) aggressive driving b) street racing c) personal and social consequences d) legal and economic consequences – Personal risk-tolerance <ul style="list-style-type: none"> a) caution versus risk b) proactive versus reactive driving action c) role of overconfidence and under-confidence in inaccurate risk-perception d) risk-aversion in personal value system e) develop rational personal risk preferences 	<ul style="list-style-type: none"> – Explain how perception of your driving ability can influence crash involvement – Identify and explain personal limits and abilities – Explain perceived level of risk for various situations – Consistently demonstrated appropriate risk-management strategies, habits, and attitudes
1E	<ul style="list-style-type: none"> – Common crash factors for 	<ul style="list-style-type: none"> – Consistently demonstrate good decision-making and driving skills to

1. Understanding and Managing Risk

Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>✓ Recognition and avoidance of crash situations</p>	<p>beginning drivers</p> <ul style="list-style-type: none"> a) inappropriate speed b) risk tolerance c) risk perception d) inappropriate risk-taking e) driver skill f) driver experience g) peer pressure h) overconfidence i) hazardous driving conditions j) poor attention management k) not looking for hazards l) inability to recognize hazards m) distracted driving o) impaired driving <p>– Common reasons for crash</p>	<p>reduce the risk.</p> <ul style="list-style-type: none"> – List the common reasons for crashes among various driving demographics
<p>1F</p> <p>✓ Identification of potential hazards and effective response to hazards</p>	<p>– Potential hazards of driving and effective responses</p> <ul style="list-style-type: none"> a) vehicle malfunctions b) weather/environment conditions c) road conditions 	<ul style="list-style-type: none"> – List possible hazards of driving – Describe effective responses to potential hazards of driving

1. Understanding and Managing Risk

Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul style="list-style-type: none"> d) vehicle conditions e) distractions inside the vehicle f) distractions outside the vehicle g) other road-users h) unpredictable driving behavior i) driving error resulting in danger to self and to other road users 	
<p>1G</p> <p>✓ Effective decision-making to ensure safe driving</p>	<ul style="list-style-type: none"> – Hazard perception, decision-making, and judgment – Effects of impairment of decision – making skills – Role of personal motives on decision-making skills – Post-incident decision-making to ensure personal safety 	<ul style="list-style-type: none"> – Describe different decision-making skills and models – Consistently demonstrate appropriate decision-making to ensure safe driving habits
<p>1H</p> <p>✓ Recognition and avoidance of crash situations</p>	<ul style="list-style-type: none"> – Common crash factors for beginner drivers <ul style="list-style-type: none"> a) inappropriate speed b) risk tolerance c) risk perception d) inappropriate risk-taking e) driver skill f) driver experience 	<ul style="list-style-type: none"> – List common crash factors for beginner drivers – Describe the most common crash situations – Consistently demonstrate good decision-making and driving skills to reduce the risk

1. Understanding and Managing Risk

Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	g) peer pressure h) overconfidence i) hazardous driving conditions j) poor attention management k) not looking for hazards l) inability to recognize hazards m) distracted driving n) dangerous driving o) impaired driving – Common crash situations	

Standard 2 – The Vehicle Components

2. The Vehicle Components		
Purpose: To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safety features and how they contribute to safe, responsible, and incident-free driving.		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>2A</p> <p>✓ Consistent and proper use of safety restraint systems</p>	<p>– Law of physics</p> <p style="padding-left: 20px;">a) momentum</p> <p style="padding-left: 20px;">b) inertia</p> <p style="padding-left: 20px;">c) kinetic energy</p> <p style="padding-left: 20px;">d) gravity</p> <p style="padding-left: 20px;">e) friction</p> <p style="padding-left: 20px;">f) force of impact</p> <p>Proper safety belt position</p> <p>Jurisdictional laws</p>	<p>– Explain the basic laws of physics and how they affect the outcome of a crash</p> <p>– Explain the proper position and of safety restraint systems</p> <p>– Explain the jurisdictional-specific safety belt laws</p>
<p>2B</p> <p>✓ Safe and proper use of basic vehicle components</p>	<p>– Basic vehicle components</p> <p style="padding-left: 20px;">a) control devices</p> <p style="padding-left: 20px;">b) instruments and warning indicators</p> <p style="padding-left: 20px;">c) devices that aid visibility</p> <p style="padding-left: 20px;">d) safety devices</p> <p style="padding-left: 20px;">e) comfort devices</p> <p style="padding-left: 20px;">f) anti-theft devices</p> <p style="padding-left: 20px;">g) communication devices</p> <p style="padding-left: 20px;">h) traction control devices</p>	<p>– Locate and identify basic vehicle components</p> <p>– Explain and its effect on safe driving</p> <p>– Consistently demonstrate proper and safe use of all the importance of each basic vehicle component basic vehicle components</p>
<p>2C</p> <p>✓ Safe and proper pre-</p>	<p>– Pre-trip checks</p> <p style="padding-left: 20px;">a) external checks</p>	<p>– Conduct pre-trip checks properly and safely</p>

2. The Vehicle Components

Purpose: To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safety features and how they contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>trip checks</p> <ul style="list-style-type: none"> ✓ Safe and responsible vehicle control ✓ Safe and responsible use of traction and other driver inputs ✓ Safe and responsible driving to avoid crashes 	<p>b) internal checks</p> <ul style="list-style-type: none"> – Controlling the vehicle safely and responsibly a) visual tracking b) steering control c) seating position d) starting and accelerating e) speed control f) deceleration and braking g) parking brake h) parking i) changing direction j) right-of-way maneuvers k) turns l) highway and freeway driving m) urban and rural driving – Traction <ul style="list-style-type: none"> a) time management b) space management c) stopping distances d) braking distances e) following too closely – Friction 	<ul style="list-style-type: none"> – Explain the importance of vehicle control and its effect on safe driving – Consistently demonstrate safe, responsible, and proper driving techniques and vehicle control in a variety of situations that require different applications of skills – Explain reasons for using/avoiding specific driving techniques – Explain the role of traction in vehicle handling – Consistently locate appropriate point of brake application under various conditions and situations – Explain the role of friction under various conditions – Consistently demonstrate caution in driving behavior to compensate for different conditions. – Describe appropriate and avoid crashes evasive maneuvers inappropriate situations for applying evasive maneuvers – List basic evasive maneuvers and describe how to apply them in order to avoid crashes

2. The Vehicle Components

Purpose: To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safety features and how they contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul style="list-style-type: none">a) speed for conditionsb) affect of road surfaces on stoppingc) seasonal changes and road surfacesd) tire types and conditions<ul style="list-style-type: none">– Benefits of proper tire inflation– Common reasons for crashes– Crash avoidance and basic evasive maneuvers	

Standard 3 – Vehicle Handling

3. Vehicle Handling

Purpose: To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>3A</p> <p>✓ Safe and responsible vehicle control</p>	<p>– Controlling the vehicle safely and responsibly</p> <p>a) hand position</p> <p>b) visual tracking</p> <p>c) steering control</p> <p>d) seating position</p> <p>e) starting and accelerating</p> <p>f) speed control</p> <p>g) deceleration and braking</p> <p>h) parking brake</p> <p>i) parking</p> <p>j) changing direction</p> <p>k) turns</p> <p>l) following distance</p>	<p>– Explain the importance of vehicle control and its effect on safe driving</p> <p>– Consistently demonstrate safe, responsible, and proper driving techniques and vehicle control in a variety of situations that require different applications of skills</p> <p>– Explain reasons for using/avoiding specific driving techniques</p>

3. Vehicle Handling

Purpose: To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>3B</p> <p>✓ Safe and responsible handling of the vehicle under various conditions</p>	<p>– Traction</p> <ul style="list-style-type: none"> a) weight management b) time management c) space management d) stopping distances e) braking distances f) following too closely g) speed for conditions h) affect of road surfaces on stopping i) seasonal changes and road surfaces j) tire types and conditions <p>– Benefits of proper tire inflation</p>	<ul style="list-style-type: none"> – Explain the role of balanced weight in vehicle handling – Explain the role of traction in vehicle handling – Consistently locate appropriate point of brake application under various conditions and situations – Explain the role of friction under various conditions – Consistently demonstrate caution in driving behavior to compensate for different conditions
<p>3C</p> <p>✓ Safe and responsible driving to avoid crashes</p>	<p>– Crash avoidance habits and basic evasive maneuvers</p>	<ul style="list-style-type: none"> – Describe appropriate and inappropriate situations for applying evasive maneuvers – List basic evasive maneuvers and describe how to apply them in order to avoid crashes

3. Vehicle Handling		
Purpose: To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe and responsible driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
3D ✓ Detection and recovery from skidding and sliding	– Principles of skid control and slide control	<ul style="list-style-type: none"> – Explain the principles of skid control and slide control – Describe situations under which brake lock-up might occur and how to recover from skidding and sliding – Describe the likely emotions of losing control beyond the point of no return

Standard 4 – Perception and Risk Management

Standard 4 – Perception and Risk Management		
Purpose: To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe and responsible driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>4A</p> <p>✓ Safe and proper observation skills</p>	<ul style="list-style-type: none"> – What and where to observe and when <ul style="list-style-type: none"> a) 360 degree vision b) distance scanning and judgment c) peripheral vision d) blind spots e) visual obstructions f) limits of observation – How to observe <ul style="list-style-type: none"> a) active attention b) shoulder checks c) peripheral vision d) mirrors – Visual search and scanning to detect potential hazards <ul style="list-style-type: none"> a) distinguish hazards from typical occurrences b) scanning patterns under all conditions c) detecting potential path deviations 	<ul style="list-style-type: none"> – Consistently demonstrate safe, responsible, and proper observation skills – Consistently focus on appropriate visual targets while scanning the environment – Consistently demonstrate potential hazard detection by means of visual scanning – Explain the parts of vision and their specific uses

Standard 4 – Perception and Risk Management

Purpose: To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>4B</p> <p>✓ Identification of potential hazards and effective response to hazards</p>	<p>– Potential hazards of driving and effective responses</p> <ul style="list-style-type: none"> a) vehicle malfunctions b) weather/environmental conditions c) road conditions d) vehicle conditions e) distractions inside the vehicle f) distractions outside the vehicle g) other road-users h) unpredictable driving behavior i) driving error resulting in danger to self and to other road-users 	<ul style="list-style-type: none"> – List possible hazards of driving – Describe effective responses to potential hazards of driving
<p>4C</p> <p>✓ Effective decision-making to ensure safe driving</p>	<ul style="list-style-type: none"> – Hazard perception, decision-making, and judgment – Using decision-making skills to drive safely <ul style="list-style-type: none"> a) evaluate whether or not to drive b) anticipate what might happen c) predict possible solutions 	<ul style="list-style-type: none"> – Describe different decision-making skills – Consistently demonstrate appropriate decision-making to ensure safe driving – Describe the affects of driver-impairment on decision-making

Standard 4 – Perception and Risk Management		
Purpose: To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe and responsible driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul style="list-style-type: none"> d) prioritize situations and solutions e) make appropriate choices under pressure f) identify consequences g) make multiple decisions quickly h) develop a hierarchy of responses to various situations and alternative responses <p>– Effects of impairment on decision-making skills</p>	

Standard 5 – Rules of the Road

5.Rules of the Road		
Purpose: To develop knowledge, appreciation, and skills related to the rules of the road how they contribute to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
5A ✓ Compliance and cooperation with right of way laws	<ul style="list-style-type: none"> – Purpose of right of way laws and principles <ul style="list-style-type: none"> a) <i>school buses</i> b) <i>emergency vehicles</i> c) <i>other motor vehicles</i> d) <i>pedestrians</i> 	<ul style="list-style-type: none"> – Explain the rationale for right of way laws and principles – Explain the jurisdictional specific right of way laws and principles – Explain the importance of cooperation with school buses and emergency vehicles
5B ✓ Compliance with traffic laws and regulations as a foundation for safe and responsible driving	<ul style="list-style-type: none"> – Traffic laws and regulations reasons for traffic laws and regulations <ul style="list-style-type: none"> a) current road safety issues b) speed c) impaired driving d) distracted driving e) emergency vehicles f) licensing requirements g) vehicle insurance 	<ul style="list-style-type: none"> – Explain the rationale for traffic laws and regulations and how they contribute to road safety – Describe a current road safety issue and how traffic laws and regulations address the issue – Consistently demonstrate proper and safe response to all rules of the road
5C ✓ Compliance with traffic control devices as a foundation for safe and responsible driving	<ul style="list-style-type: none"> – Traffic control devices <ul style="list-style-type: none"> a) signs b) signals c) markings 	<ul style="list-style-type: none"> – Explain the rationale for traffic control devices in general and how they contribute to road safety – Recognize and describe the prominent characteristics of common traffic control devices and explain the specific meaning and purpose for each – Consistently demonstrate proper and

5.Rules of the Road		
Purpose: To develop knowledge, appreciation, and skills related to the rules of the road how they contribute to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
		safe response to all traffic control devices

Standard 6 – Driver Behavior

6. Driver Behavior		
Purpose: To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
6A ✓ Accurate assessment of driving environments and road conditions and appropriate adjustment of driving behavior	– Adjusting driving behavior for different driving conditions.	– Consistently and appropriately adjust driving behavior based on driving environment and road conditions.
6B ✓ Controlled emotional reactions related to driving	– Control over emotions a) potential effects on driver decision-making b) recognizing internal cues and control responses	– List types and sources of emotion – Explain how emotions relate to driver decision-making. – Describe driving strategies for dealing with emotion and relate preferred strategies and styles to personal values. – Consistently demonstrate appropriate control over emotion.
6C ✓ Positive driving attitudes and behavior.	– Personal factors and influence a) personal driving values and beliefs b) motives that influence driving c) how motives change under different circumstances d) how values, beliefs, and motives influence attitudes toward driving. – Social Factors and influence	– Explain how positive and negative personal factors influence driving attitudes and behavior. – List personal motivators and describe how each could positively and/or negatively influence personal driving attitudes and behavior. – Explain how positive and negative social factors influence driving attitudes and behavior. – Describe effective strategies for resisting negative pressures.

6. Driver Behavior

Purpose: To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul style="list-style-type: none"> a) influence of advertising b) societal attitudes towards cars and driving c) influence of other people's driving habits d) peer pressure an driving - Resisting negative pressures <ul style="list-style-type: none"> a) personal value of resisting negative pressures b) resist negative informal pressures c) resist negative media and commercial messages d) entertainment media use of driving imagery - Positive driving attitudes <ul style="list-style-type: none"> a) driving is a privilege not a right b) overcoming negative motives c) driving courteously d) cooperative driving - Impact of driver behavior on other road users. 	<ul style="list-style-type: none"> - Explain how positive driving attitudes result in safe and responsible driving behavior
<p>6D</p> <p>✓ Responsible and informed decision-</p>	<ul style="list-style-type: none"> - Decision-making <ul style="list-style-type: none"> a) how formal rules of the road, common safe practices of road-users, and informed 	<ul style="list-style-type: none"> - Explain the impact of decision-making on driving - Consistently demonstrate appropriate

6. Driver Behavior

Purpose: To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
making	decision-making contribute to safe and responsible driving b) approaches to decision-making c) importance of good decision-making d) consequences of poor decision-making	decision-making
6E ✓ Respect for the environment as it relates to operating a vehicle	– Environmentally conscious and efficient driving behavior a) fuel efficiency b) mandatory emissions testing c) proper disposal of cars, fluids, batteries, and tires d) littering e) planning safer and more efficient activities and routes f) economic benefits of driving efficiently	– Explain how environmentally conscious driving contributes to safety and economic benefits
6F ✓ Lifelong learning approach to driving	– The driver as a lifelong learner – Factors that contribute to changes in driving skill a) changing motor vehicle technology b) changing driving practices and laws c) the aging driving population	– Explain how different factors contribute to changes in driver skill and why driving is a lifelong learning process – Identify opportunities for lifelong learning related to driving

Standard 7 – Sharing the Road

7. Sharing the Road		
Purpose: To develop knowledge, appreciation, and skills to related to effectively interacting with other road-users and how it contributes to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>7A</p> <p>✓ Cooperative driving</p>	<ul style="list-style-type: none"> – Cooperative driving <ul style="list-style-type: none"> a) sharing the road in a safe and considerate manner b) respecting other road-users c) understanding other road-users needs d) passing safely e) space management f) benefits of cooperative and courteous driving g) sharing the road with school buses h) sharing the road with commercial vehicles i) cooperative interstate driving 	<ul style="list-style-type: none"> – Explain the difference between cooperative driving and defensive driving. – Explain the benefits of cooperative driving – Consistently demonstrate ability to predict and anticipate the behaviors of other road-users
<p>7B</p> <p>✓ Appropriate communication with other road-users</p>	<ul style="list-style-type: none"> – Communicating effectively with other road-users – Habits and attitudes related to effective communication <ul style="list-style-type: none"> a) consistently communicate driving intentions b) adjusting communication based on observation of the driving environment and other road-users 	<ul style="list-style-type: none"> – Explain why appropriate communication is essential for an orderly and safe road system – Consistently demonstrate appropriate communication with other road-users in a variety of driving situations

Standard 8 – Attention

8. Attention		
Purpose: To develop knowledge, appreciation, and skills to related to attention and how it contributes to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
<p>8A</p> <p>✓ Safe and responsible actions related to impaired driving</p>	<ul style="list-style-type: none"> – Types of impairment <ul style="list-style-type: none"> a) drug b) alcohol c) fatigue d) drowsy driving e) illness f) medication g) mental stress h) combination of multiple impairments – Effects of impairment <ul style="list-style-type: none"> a) impaired judgment b) lack of attention/alertness – Myths and facts related to impairment – Consequences of impaired driving <ul style="list-style-type: none"> a) personal and social consequences b) legal and economic consequences 	<ul style="list-style-type: none"> – Describe symptoms and effects of impairment, mythical remedies for driver alertness, consequences of impaired driving, and appropriate strategies for addressing impairment
<p>8B</p> <p>✓ Managed driver distraction</p>	<ul style="list-style-type: none"> – Distracted driving <ul style="list-style-type: none"> a) distraction inside the vehicle b) distractions outside the 	<ul style="list-style-type: none"> – List potential distractions inside and outside the vehicle – Explain how distractions affect driving

8. Attention		
Purpose: To develop knowledge, appreciation, and skills to related to attention and how it contributes to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
	vehicle	– Consistently demonstrate effective management of driver distractions
8C ✓ Managed division of attention	– Managing attention a) switching attention b) divided attention c) focused attention d) sustained attention	– Describe strategies for managing attention – Consistently demonstrate effective management of attention

Standard 9– Respect and Responsibility

9. Respect and responsibility		
Purpose: To develop knowledge, appreciation, and skills to related to respectful and responsible driving attitudes and how they contribute to safe, responsible, and incident-free driving		
Teaching Objective	Topics	Knowledge Outcomes and Abilities
9A ✓ Safe and responsible response to emergency situations	<ul style="list-style-type: none"> – Responding to emergency situations <ul style="list-style-type: none"> a) minor or major motor vehicle crashes b) arriving at the scene of a crash c) being stopped by a law enforcement officer d) yielding to an emergency vehicle e) vehicle malfunctions 	<ul style="list-style-type: none"> – Describe how to safely and responsibly handle a motor vehicle crash and emergency situations.
9B ✓ Leadership in promoting safe driving	<ul style="list-style-type: none"> – Being a safe, respectful, and responsible driver <ul style="list-style-type: none"> a) being a leader in safety restraint use and promote it in others b) being fit to drive and promote it in others c) being caring and empathetic towards other road-users – Conflict avoidance regardless of fault <ul style="list-style-type: none"> a) respecting other road-users' safety margins b) avoiding road rage in 	<ul style="list-style-type: none"> – Explain how leadership, safe behaviors, and respect for other road-users contribute to safe and responsible driving. – Consistently demonstrate leadership, safe behaviors and respect for other road-users.

9. Respect and responsibility

Purpose: To develop knowledge, appreciation, and skills to related to respectful and responsible driving attitudes and how they contribute to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	yourself and others	
9C ✓ Respect for the environment as it relates to operating a vehicle	<ul style="list-style-type: none"> – Environmentally conscious and efficient driving behavior <ul style="list-style-type: none"> a) fuel efficiency b) mandatory emissions testing c) proper disposal of cars, fluids, batteries, and tires d) littering e) planning safer and more efficient activities and routes f) economic benefits of driving efficiently 	<ul style="list-style-type: none"> – Explain how environmentally conscious driving contributes to safety and economic benefits
9D ✓ Lifelong learning approach to driving	<ul style="list-style-type: none"> – The driver as a lifelong learner – Factors that contribute to changes in driving skill <ul style="list-style-type: none"> a) changing motor vehicle technology b) changing driving practices and laws c) the aging driving population 	<ul style="list-style-type: none"> – Explain how different factors contribute to changes in driver skill and why driving is a lifelong learning process – opportunities for lifelong learning related to driving

Appendix A – Required Topics: Examples

It is expected that curriculum developers (or implementers of professional curricula) will expand on the required topic headings appropriately when developing the curriculum. The table below includes examples of how the required topics could be expanded. These examples are for illustrative purposes only and are not intended to be exhaustive. Also, specific jurisdictional topics will need to be included.

Standard 1 Understanding and Managing Risk

- Jurisdictional-specific license qualifications
- Graduated drivers licensing systems
- License suspension and revocation
- Registered owners' responsibilities
- Safety restraint use
- Insurance
- Impaired driving
- Graduated drivers license
- Parental involvement
- Hierarchy of roads in highway transportation system
- Safety features of roadways
- Safety features of vehicles

Standard 2 The Vehicle and its Components

- Laws of physics
- Pedal operation
- Ignition switch
- Manual vs. automatic transmission
- Gearshift for automatic transmission
- Gearshift for manual transmission

- Clutch pedal for manual transmission
- Steering wheel
- Accelerator (gas pedal)
- Various cruise control devices
- Avoiding the use of cruise control devices on wet, slippery road surfaces, in the early stages of driving, and in urban traffic
- Brake pedal
- Types of brakes
- Antilock braking systems
- Parking brake
- Electronic stability control systems
- New technologies
- Speedometer and odometer
- Fuel gauge
- Alternator gauge or warning light
- Temperature gauge or warning light
- Oil-pressure gauge or warning light
- Brake warning light (ABS)
- Check engine light
- Other dashboard lights
- Lights (day and night)
- Windshield wipers and washer fluid
- Sun visor
- Defroster/Defogger
- Rear-view and side-view mirrors
- Air bags and restrictions
- Seat belts
- Head restraints

- Infant/child restraint systems
- Door locks
- Structural features
- Seat-position controls
- Steering wheel
- Air conditioner and heater air vents
- Ignition buzzer
- Locks
- Alarms and other anti-theft devices
- Taillights
- Directional (turn) signals
- Emergency flashers (hazard lights)
- Parking lights
- Horn
- Pressure
- Wear pattern
- Tread depth
- Vehicle body
- Exterior lights
- Lights
- Exhaust system
- Fluid levels
- Under the hood
- Dash board
- Fluid level alerts
- Fuel level
- Brakes
- Seat belts

- Spare tire and tire changing equipment
- How to change a tire
- First aid kit
- Emergency kit

Standard 3 Vehicle Handling

- Smooth steering control
- Proper hand positioning
- Display steady lane tracking
- Maintaining optimal lane position
- Proper foot position
- Holding steady pressure at moderate levels
- Variation in cruise speed
- Benefits of steady speed control (e.g., fuel efficiency)
- Early deceleration
- Benefits/hazards
- Smooth deceleration
- Correct braking techniques
- Smooth time-limited braking
- Steady light braking and holding stop on different grades
- Moderate impact braking
- Emergency braking control
- Relationship between proper seating position and braking
- Driving characteristics of conventional and anti-lock brake systems
- Stall parking (forward and reverse)
- Hill parking (up and down)
- Angle parking
- Parallel parking
- Shoulder parking

- Yielding
- Crossing intersections
- Merging
- Changing lanes and passing
- Maintaining correct lane tracking
- Backing-up
- Yielding
- Crossing intersections
- Merging
- Changing lanes and passing
- Maintaining correct lane tracking
- Backing-up
- Stop signs
- Two- and four-way stops
- Traffic circles
- Yield signs
- Controlled and uncontrolled intersections
- T-intersections
- Malfunctioning traffic control devices
- Emergency vehicles
- Left and right turns
- Three-point turns
- Maintaining correct lane tracking
- Entering and exiting
- Curves
- Shoulders
- Camber and grade of road
- Passing

- Changing lanes
- Speed and its relationship to time and stopping distances
- Space management (front, rear, side)
- Dry
- Oily
- Damp or wet
- Icy or snowy
- Recognize critical situations requiring emergency evasion maneuvers
- Wheels-off-road recovery
- Head-on collision avoidance
- Rear-end collision avoidance
- Optimal emergency braking control
- Proper seating position
- Threshold braking modulation
- Maximum braking
- Detection and recovery
- Selecting the correct control actions in terms of both braking and steering
- Steering response
- Steering follows eyes, rapid and smooth release of wheels
- Alternate steering wheel hand positions
- Brake release and shift to neutral
- Controlling skids/slides with
 - Front wheel drive/conventional power brakes
 - Rear wheel drive/conventional power brakes
 - Front wheel drive/ABS
 - Rear wheel drive/ABS
- Four-wheel drive vehicles vs. two-wheel drive vehicles

Standard 4 Perception and Risk Management

- Parts of vision
- Use of parts of vision
- Safe margins (front, rear, side)
- Safe driving speeds
- Braking and stopping safely
- Emergency braking control
- Accelerating safely
- Using the brake and horn
- Yielding if uncertain
- Point of no return
- Impaired driving

Standard 5 Rules of the road

- The Highway Transportation System
- Principles of right of way
- Uniquely shaped signs
- Interpretation of signs
- Stop sign
- Yield sign
- Speed limit sign
- School zone sign
- Construction zone sign
- Railway crossing sign
- High Occupancy Vehicle (HOV) sign
- Temporary condition sign (i.e., weather, construction)
- Regulatory sign
- Warning sign
- Information and direction sign

- Children with special needs sign
- Children playing sign
- Emergency response sign
- Bilingual sign
- Animal warning sign
- Community safety signs
- Pedestrian signals
- Motor vehicle signals
- Accessibility features
- Traffic officer directions
- Lane-use lights
- Chevrons
- Arrows
- Bicycle
- Crosswalks
- Stop lines
- Railroad crossing
- Accessibility
- Traffic light configurations
- Drinking and driving penalties
- Passing on the right

Standard 6 Driver Behavior

- Steering control
- Speed control
- Speed versus stopping distances
- Risk perception versus accurate knowledge of vehicle performance
- Road surface conditions
- Driving as thrill-seeking

Standard 7 Sharing the Road

- Commercial vehicles
- School buses
- Cyclists and pedestrians
- Traffic control persons
- Large vehicles
- Slow-moving vehicles
- Motorcycles
- Animals
- Public transit vehicles
- Emergency vehicles
- Carpooling
- Vehicle signals
- Hand signals
- Horn
- Hazard lights
- Eye-to-eye contact
- Non-verbal communication
- Headlights
- Vehicle position

Standard 8 Attention

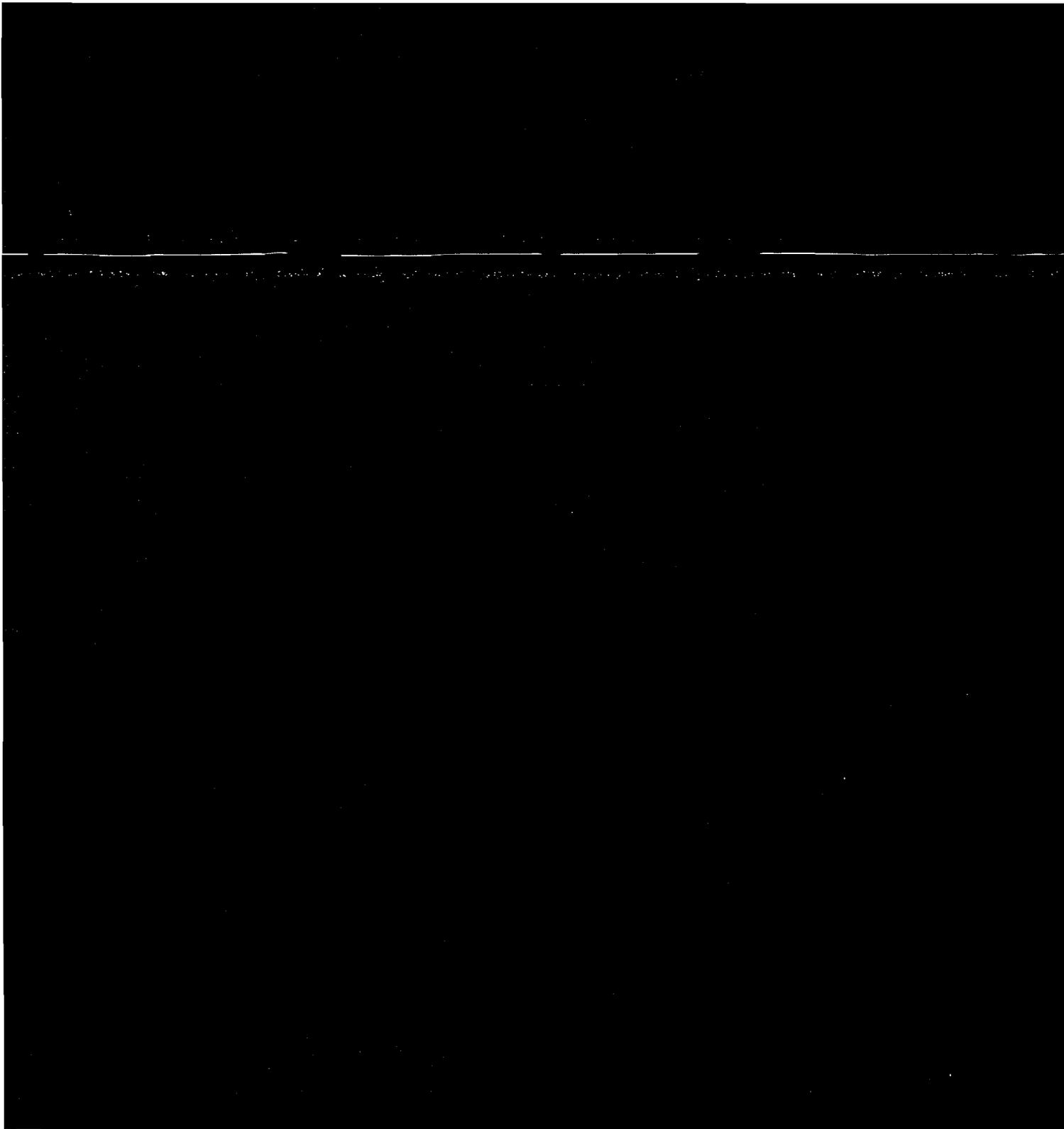
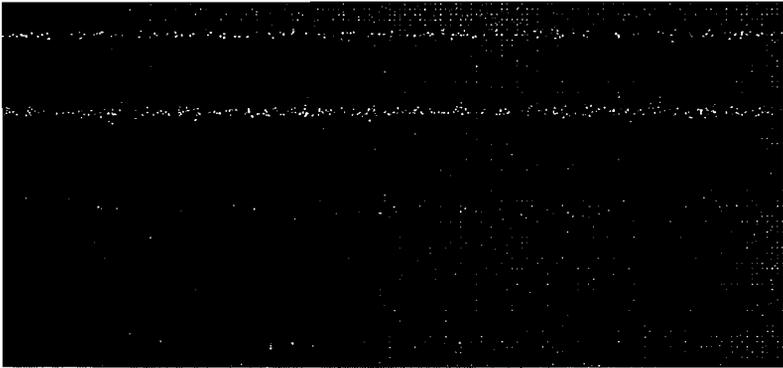
- Drinking and driving
- Eating and drinking
- Applying make-up
- Other passengers
- Pets

- Children
- Insects
- Loud noises
- Mobile communication devices (e.g., phone calls, text messaging)
- Advertising
- Animals
- Collisions
- Construction sites
- People
- Ability to choose to process relevant information while simultaneously tuning out irrelevant information
- Vigilance, concentration
- Ability to persist or maintain a consistent response set over time involves two aspects of performance: length of time or duration of performance and the consistency of performance during the time period
- Shifting attention, mental flexibility
- Ability to easily shift one's focus from one activity or stimuli to another
- Mental tracking
- Ability to internally hold onto several pieces of information at once

Standard 9 Respect and Responsibility

- Insurance and financial risk
- Ensure personal safety first
- Pull to the side of the road (if possible)
- Stop immediately
- Warn others if possible
- Call for medical help if necessary
- Call the police
- Exchange information
- Get names and addresses of witnesses

- Stay at the scene
- Make accident reports (if required)
- Go to collision reporting centre (where available)
- See a doctor (if you have been injured)
- Pull safely to the side of the road
- Have license and registration available
- How to purchase a fuel efficient vehicle
- Following manufacturer's recommended maintenance schedule
- Poorly maintained vehicles can consume more fuel
- Keeping tires inflated at the manufacturer's recommended pressure
- How and when to measure tire pressure
- Under-inflated tires can increase fuel consumption
- Avoiding unnecessary idling
- Effects of speed on fuel consumption
- Alternative fuels and technologies
- Skills will deteriorate unless effort is made to keep them sharp
- Monitor changes in personal driving skills and adapt driving behavior to compensate for changes in skills
- How feedback can help drivers improve their skills

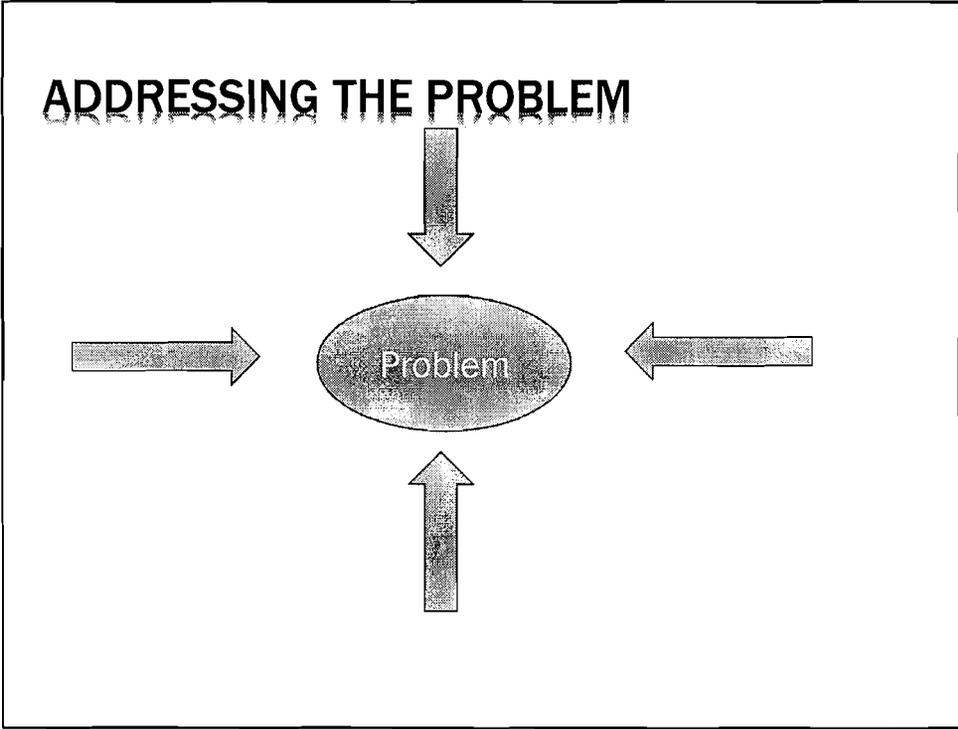


PUBLIC HEALTH MODEL OF TRAFFIC SAFETY EDUCATION

Presenter – William A. Warner, M.A. Ed

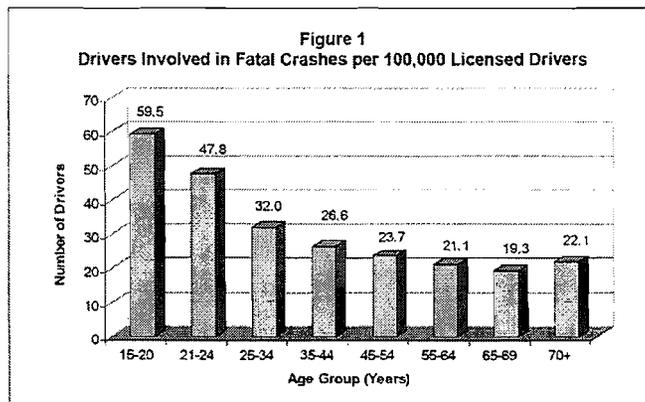
- ✘ Manager, Oregon Department of Transportation – Transportation Safety Division, Driver Education Program
- ✘ National Consultant, Speaker and Subject Expert for Traffic Safety Education
- ✘ Executive Board Member, Driver Education and Training Administrators (DETA)
- ✘ American Driver and Traffic Safety Education Association (ADTSEA) and National Institute for Driver Behavior (NIDB) Certified Trainer of Trainers
- ✘ Member, NHTSA Technical Assistance Teams for State Assessments

*Interim Study Committee
on Driver Education
August 14, 2013
Exhibit D*



PREMISE

- × Teen crashes are the number one killer of our teens 15-19; therefore it is a health crisis



PREMISE

- × Coming at it from the traditional model doesn't work. . .

Anne McCartt, senior vice president for research at the Insurance Institute for Highway Safety, says driver's ed is "not effective in reducing crashes. It's a lot to expect that a relatively limited amount of time with a teen could have a big effect on their risk-taking behavior."

HYPOTHESIS

- × Health issue
- × Traditional treatment doesn't work
- × Need different model for dealing with the crisis

Definition of Insanity: Doing the same thing but expecting different results

ISSUES WITH THE TRADITIONAL MODEL

- × Depending on Which Agency has Oversight:
 - + Seen as an elective
 - + Traditionally not evaluated by outside standards except the drive test for licensure.
 - + Strapped by Budgeting constraints
 - + Follows the ways of other subjects seen as “non-essentials”
 - × Auto Tech, Wood Shop, Home Econ, Metal Shop, Art, Music

ISSUES WITH THE TRADITIONAL MODEL

Traditional Driver Education

- **Basic model of 30 hours of classroom instruction and 6 hours of driving instruction has not changed since 1949**
- **Objectives**
 - teach young people the rules of the road and basic skills to control the car
 - Help students to pass road test
 - Ensure skills, knowledge, and attitudes that contribute to safe driving

PUBLIC HEALTH MODEL FOR DRIVER ED

PUBLIC HEALTH MODEL FOR DRIVER ED

× Assumptions of Health Model

+ Two implementation modalities

× Prevention

× Treatment

+ The more prevention practiced the less need for treatment

× (Traditional DE tends to lean toward treatment than prevention)

DRIVER ED PUBLIC HEALTH MODEL

Treatment (Skills)

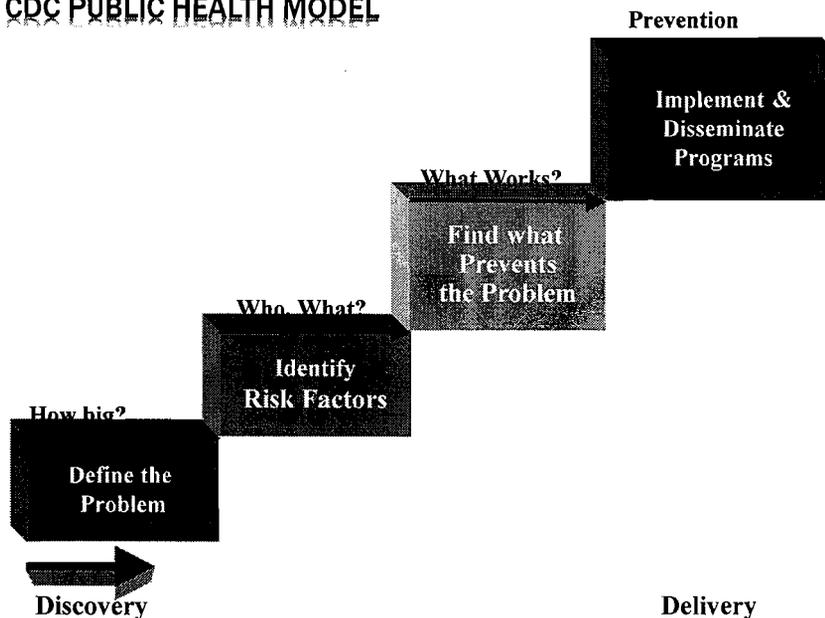
- × Searching
- × Steering
- × Braking
- × Tracking
- × Sign Recognition
- × Drug and Alcohol
- × Health Terrorism

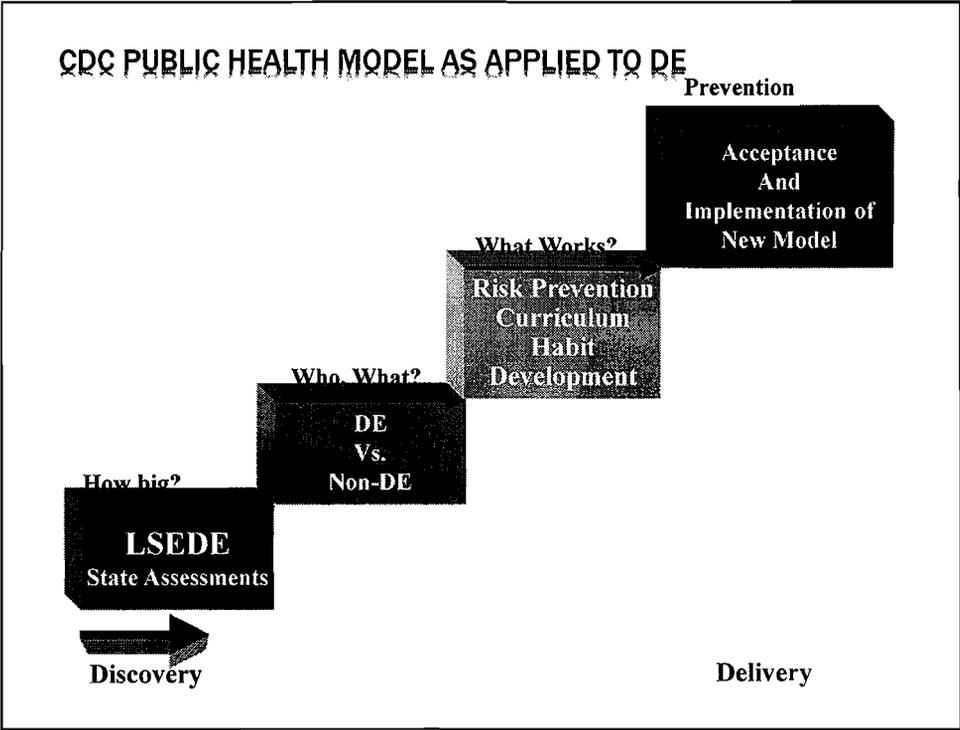
Prevention (Behaviors and Habits)

- × Risk Identification (perception training)
- × Vehicle Balance
- × Space Management
- × Precision Vehicle Placement
- × LOS POT Blockage Recognition
- × Decision Making Filters
- × "Most of Us" peer empowerment

Risk Management

CDC PUBLIC HEALTH MODEL





Changing students depends to a large extent on changing teachers and parents.

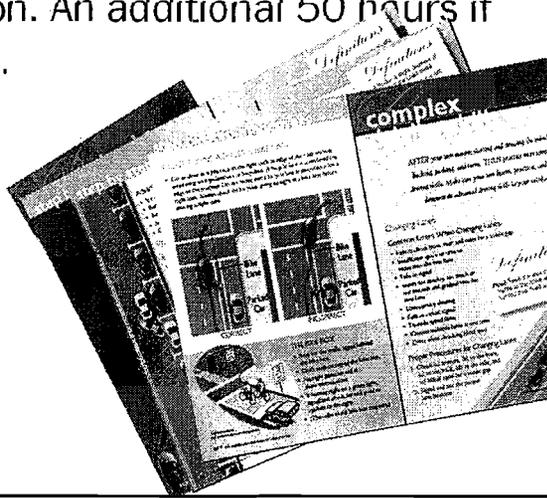
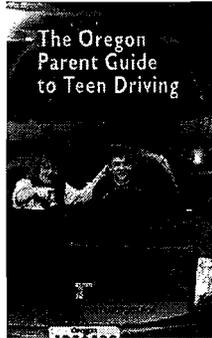
If teachers and parents continue to do the same old things, it is unlikely that student performance will improve.

The diagram features a large, shaded oval containing two paragraphs of text. Below the text, on the left, is a small illustration of a teacher standing at a chalkboard with a pointer. On the right is a large, dark illustration of an apple.

WHAT ABOUT THE PARENTS?

- ✘ GDL requires 50 hours of supervised driving with driver education. An additional 50 hours if no driver education.

DMV
Parent
Guide



WHAT ABOUT THE PARENTS?

- ✘ OAR for 5 hours of guided practice with parent while in driver education 737.015.0030(5)(G)(d)

- ✘ OAR for Mandatory Parent Meeting 737.015.0030(5)(G)(d)

- ✘ BTW Partnership Book for Expert Driving

+ Published by National Institute
Driver Behavior



for

USA TODAY ■ Home ■ News ■ Travel ■ Money ■ Sports ■ Life ■ Tech ■ W

News » Nation ■ Troops at Risk ■ Lotteries

Driver's ed set for revival in public schools

Updated 9:29:2009 9:47 AM | Comments 127 | Recommend 22 | E-mail | Save | Print | Reprints & Permissions | **RSS**

By Larry Copeland, USA TODAY



Driver's education in public schools is virtually disappearing, and that's a bad thing, says Anne McCart, senior vice president for research at the Insurance Institute for Highway Safety. She says driver's ed is "not effective in reducing crashes. It's a lot to expect that a relatively limited amount of time with a teen could have a big effect on their risk-taking behavior."

...ward curriculum. ...ngible students take high ...or driver's ed compared with 95% in the 1970s, says Allen Robinson, CEO of the American Driver and Traffic Safety Education Assn. ...presents about 50,000 public and private driver's ed teachers.

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HIGH-TECH: Driver's ed gets 21st-century update

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MOTORING

The Mixed Bag of Driver Education



DEADLY A vigil was held in this month for two teenagers killed when a train hit their car in MISSOURI.
By TANYA KATZ-ROTH
Published June 23, 2012

THERE is no debate about this fact: The first year that American teenagers have their driver's licenses will be among the most dangerous of their lives. Nothing kills more of them than car crashes.

There is a debate over this carnage,

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1. THOMAS L. FREDMAN

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The New York Times **Automobiles**

One exception is Oregon, where state officials say that the driver education program has helped reduce teenage accidents and fatalities. Many safety experts say it is among the best programs in the country.

The Oregon curriculum includes classroom training, substantial supervised driving instruction and parental involvement. It focuses on risk assessment to help young drivers anticipate problems. The state also trains and certifies instructors, an area that has received little oversight.

Troy E. Costales, an executive manager for the Oregon Transportation Department, said: "We are seeing a reduction in citations. We're seeing a reduction in crashes. And we are seeing a reduction in suspensions."

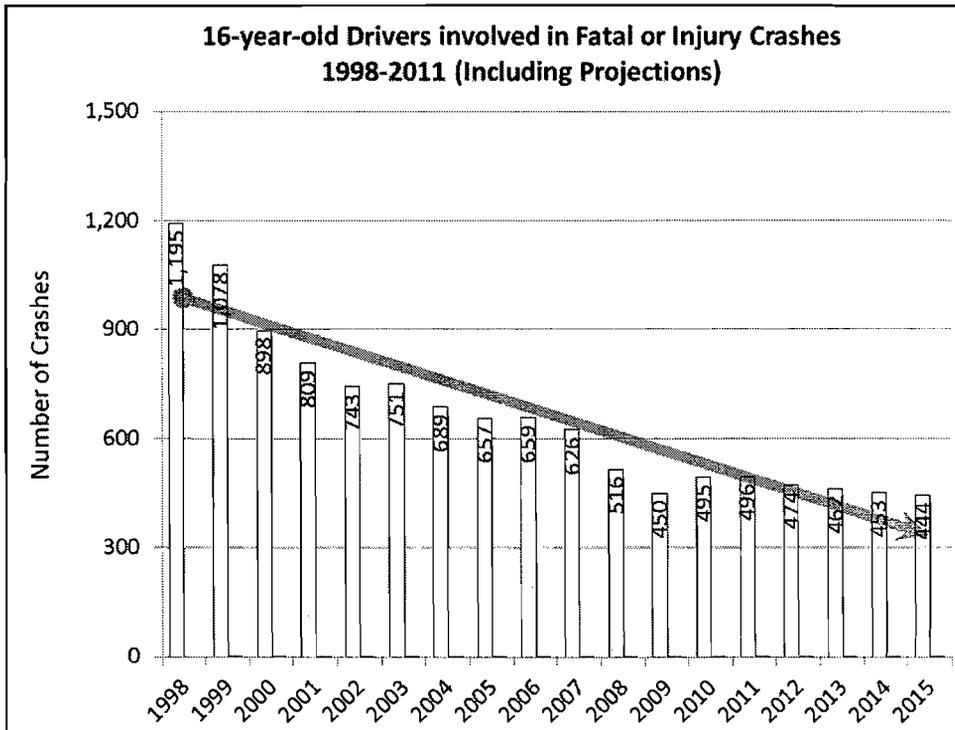
The New York Times **Automobiles**

Since it overhauled driver training about a decade ago, Oregon has had a reduction of more than 55 percent in the number of 16-year-olds behind the wheel when someone is killed or injured in a crash and a drop of almost 40 percent for 17-year-olds, said Mr. Costales, who is also chairman of the Governors Highway Safety Association, which represents state highway safety offices.

Some of the state's success comes from its graduated licensing law, "but the kids who take driver education are outperforming kids who didn't take it," Mr. Costales said, with about 12 percent fewer crashes, 20 percent fewer convictions for driving offenses and about 50 percent fewer suspended licenses. Teenagers who take the state-approved course must spend 50 hours behind the wheel, versus 100 for students who don't take the course, but other licensing restrictions are not reduced for graduates.

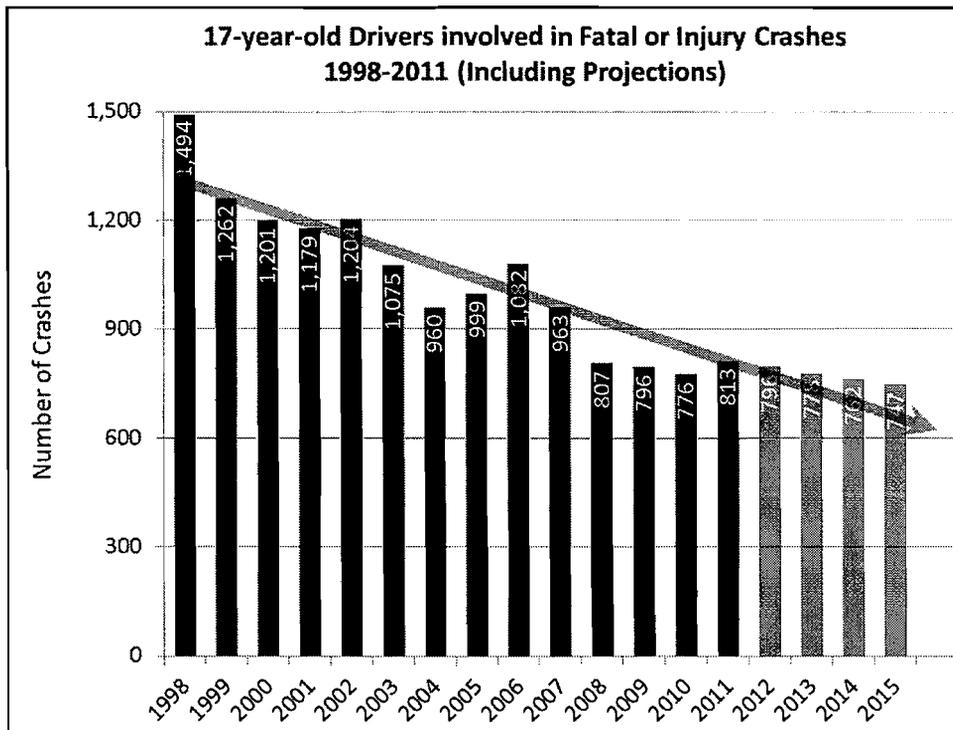
Teenage Drivers - 16

- In 1998, 1,195 16 year old drivers were involved in a fatal or injury crash.
- In 1999, the second upgrade of the Graduated Driver License in Oregon was placed into law, including an incentive for formal Driver Education.
- In 2000, only 898 16 year old drivers were involved in a fatal or injury crash.
- In 2001 the reductions continued. Only 809 16 year old drivers were involved in a fatal or injury crash.
- In 2003, the reductions continued. Only 751 16 year old drivers were involved in a fatal or injury crash.
- In 2005, the reductions continued. Only 657 16 year old drivers were involved in a fatal or injury crash.
- In 2007, the reductions were maintained. Only 626 16 year old drivers were involved in a fatal or injury crash.
- In 2008, the reductions were maintained. Only 516 16 year old drivers were involved in a fatal or injury crash (a 56.8% reduction since 1998).
- In 2009, the reductions continued. Only 450 16 year old drivers were involved in a fatal or injury crash (an 62.3% reduction since 1998)
- In 2011, the reductions decreased. 496 16 year old drivers were involved in a fatal or injury crash (an 58.5% reduction since 1998)



Teenage Drivers - 17

- In 1998, 1,494 17 year old drivers were involved in a fatal or injury crash.
- In 1999, the second upgrade of the Graduated Driver License in Oregon was placed into law, including an incentive for formal Driver Education.
- In 2000, only 1,201 17 year old drivers were involved in a fatal or injury crash.
- In 2001 the reductions continued. Only 1,179 17 year old drivers were involved in a fatal or injury crash.
- In 2003, the reductions continued. Only 1,075 17 year old drivers were involved in a fatal or injury crash.
- In 2005, the reductions continued. Only 999 17 year old drivers were involved in a fatal or injury crash.
- In 2007, the reductions were maintained. Only 960 17 year old drivers were involved in a fatal or injury crash.
- In 2008, the reductions were maintained. Only 807 17 year old drivers were involved in a fatal or injury crash (a 46% reduction since 1998).
- In 2009, the reductions continued. Only 795 17 year old drivers were involved in a fatal or injury crash (a 46.8% reduction since 1998).
- In 2011, the reductions decreased. 813 17 year old drivers were involved in a fatal or injury crash (a 45.6% reduction since 1998)



OREGON - NHTSA Study

- The crash rate for the teens taking formal DE was 11-21% lower than those following the 100 hour parent program
- The traffic conviction rate for teens taking formal DE was 39-57% lower than those following the 100 hour parent program.
- The driver license suspension rate for teens taking DE was 51-53% lower than those following the 100 hour parent program.

Thank You

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Driver Education and Training Administrators
(DETA) www.detaonline.org

National Driver Education Standards
<http://anstse.info/>