2017





# Novice Teen Driver Education and Training Administrative Standards (NTDETAS) 2017 Revision



- Program Administration
- Education and Training
  - Content Standards
  - Classroom Delivery
  - Behind-the-Wheel Delivery
  - Online Delivery
- Instructor Qualifications
  - Stages for Instructor Preparation Program
  - Model Teacher Training Materials
- Coordination with Driver Licensing
- Parent/Guardian Involvement





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#### **Executive Summary**

Crashes continue to be the leading cause of death among American teens, accounting for more than one-third of all deaths of 15 to 20-year-olds. Novice teen drivers are over-represented in U.S. crash statistics since tracking began and this trend continues to this day. The impacts of these senseless tragedies on families and society are immeasurable.

Traditional driver education programs, developed in the 1930's are dated and need to be revisited. Safety experts have questioned the instructional time of 30 hours of classroom, 6 hours of behind-the-wheel and 6 hours of observation for novice teen driver education. Additionally, the content and methods of delivery for driver education have also been questioned. An effort was initiated to update and produce a new national standard for driver education.

To address the issue, this document provides a guide for all novice driver education programs in States striving to provide quality, consistent driver education.

The Novice Teen Driver Education and Training Administrative Standards (NTDETAS) were published in 2009 and revised in 2017 to incorporate classroom and behind-the-wheel delivery standards, online delivery standards, instructor training standards and instructor training resource materials, as well as a revision to the entire NTDETAS.

The revised NTDETAS provides enhanced standards within five (5) key areas:

- Section 1. Program Administration
- Section 2. Education / Training
  - a. Content Standards
  - b. Classroom Delivery Standards
  - c. Behind-the-Wheel Delivery Standards
  - d. Online Delivery Standards
- Section 3. Instructor Qualifications
  - a. Stages for Instructor Preparation Program
  - b. Model Instructor Training Materials
- Section 4. Coordination with Driver Licensing
- Section 5. Parent/Guardian Involvement

The standards also include a number of attachments, including Content Standards (Attachments A-B), Stages for an Instructor Preparation Program, Table of Contents of the Model Training Materials for the Teaching Task (Attachments C-D), Graduated Driver Licensing (GDL) System Model (Attachment E) and The National Highway Traffic Safety Administration's (NHTSA's) Highway Safety Program Guideline No. 4 – Driver Education (Attachment F).

States are encouraged to adopt and implement the standards contained in the NTDETAS to assist in their efforts to reduce teen driver crashes and fatalities.

The NTDETAS are recommended and intended to be accepted as the minimum standard for "novice driver education programs" within the United States. These are all minimum requirements that State's should strive to achieve. It is understood that not all States can implement all of the

standards at once, but that States should develop a plan to implement these standards incrementally. Each State should strive to improve their driver education program by implementing the NTDETAS standards identified in this document.

For the most current version of the NTDETAS, supporting documents, model instructor training materials for the teaching task, and additional resources visit <a href="https://www.anstse.info">www.anstse.info</a>.

#### Introduction

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 15 to 20-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.\(^1\) Novice teen drivers are over-represented in U.S. crash statistics since tracking began and this trend continues to this day. The impacts of these senseless tragedies on families and society are immeasurable.

Driver education and training provides new drivers with the information, skills and attitudes designed to produce safer drivers who are less likely to be involved in crashes. It is most often available to young people through either public secondary schools and/or commercial driving schools that are privately owned and operated. Although regulations pertaining to the delivery of driver education programs exist in most jurisdictions in the United States, the content and scope of regulations that govern the administration and delivery of these education programs may vary substantially.

Traditional driver education programs, developed in the 1930's are dated and need to be revisited. Safety experts have questioned the instructional time of 30 hours of classroom, 6 hours of behind-the-wheel and 6 hours of observation for novice teen driver education. Additionally, the content and methods of delivery for driver education have also been questioned. An effort was initiated to update and produce a new national standard.

To address the issue, this document provides a guide for all novice driver education programs in States striving to provide quality, consistent driver education.

The Novice Teen Driver Education and Training Administrative Standards (NTDETAS) 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, thus also meeting the NHTSA

<sup>&</sup>lt;sup>1</sup> 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. www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Teen%20Driver/files/BegTeenDrivers810651.pdf

Uniform Guidelines for State Highway Safety Programs Guideline No. 4 – Driver Education, Attachment F.

While noting that administering education standards and policies are a State's right, these standards were created to serve as the foundation for State policies on driver education and training with the following understandings:

- The goals of driver education and training are to provide knowledge, develop skills, and influence the attitudes and behaviors of novice drivers.
- The overall objective is to train novice drivers to perform as safe and competent drivers, thereby minimizing their risk, contributing to the reduction of crashes, fatalities, and injuries.
- Driver education and training should be an integral component of a comprehensive Graduated Driver Licensing (GDL) system.
- Driver development should be a lifelong learning process.
- Driver education and training should be a phased educational process.
- Driver education and training standards 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**

While the value of novice teen driver education and training has long been a subject of debate among researchers, educators, and others in the transportation and traffic safety community, it continues to be the primary introduction to the driving task for American teens. McKnight (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 drives 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 original Novice Teen Driver Education and Training Administrative Standards (NTDETAS).

The implementation of the resulting standards is a first step and is intended to assist driver education and training professionals in providing the framework to teach novice teen drivers the

<sup>&</sup>lt;sup>2</sup> 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: <a href="http://www.drivers.com/article/305/">http://www.drivers.com/article/305/</a>. 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.

<sup>&</sup>lt;sup>3</sup> 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.

skills and transfer the knowledge necessary to perform as safe and competent drivers, thereby contributing to the reduction of crashes, fatalities, and injuries.

The initial Working Group deliberated, considered the current evidence, and reached consensus on the NTDETAS originally published in 2009. It reflected the collective knowledge and experience of both research and practice in driver education and training at that time. The NTDEAS represented a collaborative process by public, private professional, parental, government, nonprofit, and research organizations to identify and develop standards for an ideal State driver education and training program. The revised standards continue to represent a **starting point**, and the Working Group recognized that in some standards 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.

#### History

The original standards were developed in 2009 by a Working Group consisting of representatives from the driver education professional community with assistance from the National Highway Traffic Safety Administration (NHTSA) to define the future of driver education and assist in improving the delivery of driver education programs nationally. Additionally, the Working Group sought feedback and input from the larger driver education community and conducted a conference in Phoenix, Arizona. The comments from conference attendees were considered by the Working Group and were included where appropriate.

The approach to developing these standards was as follows:

- 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 NTDETAS was the first step in developing and implementing a comprehensive national driver education program effort.

In 2010, an association of major stakeholders was created to maintain and, when necessary, upgrade the Standards and to provide oversight in implementation activities. This volunteer group of stakeholders, consisting of the:

- AAA,
- AAA Foundation for Traffic Safety (AAAFTS),
- American Association of Motor Vehicle Administrators (AAMVA),
- American Driver and Traffic Safety Education Association (ADTSEA),
- Driver Education and Training Administrators (DETA),
- Driving School Association of the Americas (DSAA),
- Governors Highway Safety Association (GHSA), and
- Transportation Research Board (TRB),

was titled the "Association of National Stakeholders in Traffic Safety Education" (ANSTSE), referred to as the "Association."

- The Association developed a maintenance system for keeping the Standards up-to-date and a Strategic Plan for implementation of the Standards in the States. Initiated in 2012, revisions were made to the original Administrative Standards to reflect changes in driver education.
- In 2012, the Association began the development of standards for the delivery of driver education and training. These delivery standards can be found in Section 2: Education and Training of this national standards document.
- In 2013, the Association, with the assistance of a contractor, Highway Safety Services, LLC (HSS) and subcontractor, the Traffic Injury Research Foundation (TIRF) began development of online delivery standards. These online delivery standards can be found in Section 2: Education and Training of this national standards document. States do not have to allow the utilization of online driver education, but if they choose to do so, these are the standards that should be followed.
- In 2013, the Association, with the assistance of an expert working group (the Teacher Training Working Group) began development of additional instructor training standards and model training materials. These instructor training standards and a description of the materials can be found in Section 3: Instructor Qualifications and Attachments C-D of this national standards document.
- In 2017, the Association finalized revisions to the original Administrative Standards into this current document, to incorporate classroom and behind-the-wheel delivery standards, online delivery standards, instructor training standards and model training materials, as well as a revision to the entire NTDETAS.

The revised NTDETAS provides standards within five (5) key areas, with the new standards incorporated:

Section 1. Program Administration

Section 2. Education / Training

a. Content Standards

b. Classroom Delivery Standards

c. Behind-the-Wheel Delivery Standards

d. Online Delivery Standards

Section 3. Instructor Qualifications

a. Stages for Instructor Preparation Program

b. Model Instructor Training Materials

Section 4. Coordination with Driver Licensing

Section 5. Parent/Guardian Involvement

The revised standards also include a number of attachments relating to Content Standards (Attachments A-B), teacher training (Attachments C-D), Graduated Driver Licensing (GDL) (Attachment E) and NHTSA's Highway Safety Program Guideline No. 4 – Driver Education (Attachment F).

Much like the initiation and evolution of best Graduated Driver Licensing (GDL) practices, these driver education and training 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.

ANSTSE meets at least once a year to review the status of the NTDETAS as established in the "Requirements for the Review and Update of the Novice Teen Driver Education and Training Administrative Standards and the Strategic Plan" document. This document outlines the requirements for regularly scheduled meetings and the process for submitting recommendations for the review and update of the NTDETAS.

## **ANSTSE Technical Assistance and NHTSA State Driver Education Assessments / Peer Reviews**

ANSTSE technical assistance is available, **at no cost to the State**, for any State wanting to adopt and implement any component of the NTDETAS. ANSTSE technical assistance may be conducted in conjunction with a NHTSA State Driver Education Assessment / Peer Review. The technical assistance can provide a preliminary analysis of the States driver education program. Then the State may utilize highway safety funds, or other funds, to conduct a NHTSA State Driver Education Assessment / Peer Review based on the recommendations in the NTDETAS. The NTDETAS are also used to assess a State's driver education program during a NHTSA State Driver Education Assessment / Peer Review.

ANSTSE technical assistance and the NHTSA State Driver Education Assessments / Peer Reviews offer States tools to use over time to review their driver education programs, note the program's strengths and accomplishments, and note where improvements can be made.

Following a NHTSA State Driver Education Assessment / Peer Review, ANSTSE can provide post analysis technical assistance to assist with implementing the recommendations given in the NHTSA State Driver Education Assessment / Peer Review. Technical assistance will be provided either offsite or onsite. For more information visit www.anstse.info.

#### What Are Standards?

In general, a "Standard" is a written definition, program description, limit or rule, approved and monitored for compliance by an authoritative agency, professional or recognized body (e.g., ANSTSE) as a minimum acceptable benchmark.

Standards are an acknowledged measure of comparison for quantitative or qualitative value and something, such as a practice or a product that is widely recognized or employed, especially because of its excellence.

Standards may be classified as (1) mandatory and enforced by law or (2) voluntary and placed in public domain to encourage their widespread use.

In essence, a standard is an agreed upon way of doing something. Standards are the distilled wisdom of individuals with expertise in their subject matter (e.g., ANSTSE Members) and who know the needs of the organizations they represent and/or evaluate.

Specific, strong, and measurable driver education standards are a tool to ensure students receive the level of information and experience necessary to properly prepare them for real world driving situations. In addition to providing that foundation, the NTDETAS allow programs greater flexibility in course development and delivery and facilitates growth and improvement in their education system.

Establishing the baseline for novice driver education and training conducted in the United States allows organizations to tailor their program to excel in producing safer novice drivers.

The NTDETAS are voluntary and consensus based standards that are available for use by any person or organization, private or government. They may become mandatory as a result of its use, reference or adoption by a regulatory authority (e.g., a State).

#### **Administrative Standards**

These Standards identify the "Who," "What," "Where" and "When" for the administration of a State's driver education program. For example: "Who" is responsible; "What" procedures to follow; "Where" to submit information/data; "When" courses may be held or "When" to submit course completion information. Administrative Standards address key requirements for the administration of driver education.

#### **Content Standards**

These Standards contain "What" content the driver education course should cover and "What" knowledge and skills development is expected. The content identifies "What" critical knowledge and skills are taught in driver education courses to improve the overall quality of instructional content which benefits the novice learning driver.

#### **Delivery Standards**

Standards for "How" driver education is delivered are also critical to the new driver's success. They establish criteria for "How" driver education is taught. Delivery standards establish the process for "How" driver education is delivered in an effort to improve the overall quality of instructional delivery methods, in turn, benefitting the novice learning driver. These standards address the delivery methods for classroom, behind-the-wheel and online instruction.

#### **Instructor Standards**

Standards for "Who" delivers driver education is critical to the driver education program and the success of the novice driver. They establish criteria for "What" the instructor candidates should be taught, the qualifications of an instructor candidate and "How" the instructor candidates should teach.

#### **How to Use This Document**

For the most current version of the NTDETAS, supporting documents, instructor training materials and additional resources visit www.anstse.info.

The NTDETAS are composed of both "Normative" or mandatory and "Informative" or optional components. To be considered in compliance with the NTDETAS, a State must meet all "Normative" components in full. Components of the Standards that are "Informative" and that support the larger overall Standard should be met, if possible, to fully improve the State's overall driver education program.

Standards that are "Normative," or mandatory utilize descriptors such as "shall," "must" or "will." These standards are in bold font in this document. To be in compliance the State must meet these Standards in full.

Standards that are "Informative" or optional utilize descriptors such as "should" or "may." These standards are in regular font in this document. They generally support an overall larger standard and assist the State in meeting the standard, and should be met if possible.

The two primary descriptors for standards in this document are:

- "shall" (the State must meet to be considered in compliance); and
- "should" (the State should strive to meet this standard or portion of a standard).

This document provides five key areas of standards:

#### 1.0 Program Administration

All entities delivering driver education 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 driver education programs. 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. This section provides standards for the administration, oversight, record keeping, program evaluation, data collection and communication of driver education.

#### 2.0 Education/Training

High quality program content is an essential element for improved driver education. However, improved content alone will not change the behaviors necessary for novice drivers. The delivery of this program must be enhanced. Increased time in classroom and behind-the-wheel instruction is the first step in providing more experience for novice drivers. The second step is to schedule the learning experiences so that driver education students have an appropriate timeframe to learn and practice the behaviors necessary for driving a motor vehicle safely. This section provides standards for the curricula, instructional time, student evaluation and delivery methods. Standards for online delivery have been developed as well, including instructional design, structural design, evaluation/testing/ assessment, technological design and capabilities, and legal requirements.

There are two attachments related to this section:

- Attachment A ADTSEA Curriculum Standards
- Attachment B DSAA Curriculum Standards

#### 3.0 Instructor Qualifications

Proper training of driver education instructors is paramount to the success of every State's driver education program. Content relating to teaching theory and how to teach driver education must be the focal point of the driver education teacher preparation program and ample time must be devoted and required for successful completion. This section outlines the minimum standards for instructor training and qualifications for the training of novice drivers, including prerequisites, course content from State approved driver education curricula, the teaching task, a student teaching practicum, exit assessments and ongoing training and recertification.

There are two attachments related to this section:

- Attachment C ANSTSE Stages for Driver Education Instructor Preparation Program,
- Attachment D ANSTSE Table of Contents of the Model Training Materials for Driver Education Instructors, which corresponds to the modules in the model training materials. (available for free download at www.anstse.info).

#### 4.0 Coordination with Driver Licensing

Novice driver education is a key element in driver licensing. Driver education and driver licensing must be coordinated within the State. Graduated Driver Licensing (GDL) has been proven to be a successful countermeasure in reducing teen driver crashes and fatalities. Driver education must be an integral component within a State's GDL Program, as identified in the National Highway Traffic Safety Administration's (NHTSA's) model for GDL. The agencies responsible for driver education and driver licensing must coordinate their efforts to have a positive impact on GDL, parent involvement and driver education. Enforcement of GDL laws must be coordinated between the driver license agency, courts and law enforcement.

GDL is a comprehensive system that is most effective when all components of GDL are incorporated. More comprehensive GDL programs have a greater safety benefit. States are encouraged to implement a comprehensive GDL program that incorporates all components as identified in NHTSA's GDL model. This section provides standards for communication between the state driver education agency and the driver license authority; the GDL system; coordination and education with courts and law enforcement; requirements for the knowledge and skills tests.

There is one attachment related to this section:

• Attachment E – NHTSA Graduated Driver Licensing System Model

#### 5.0 Parent/Guardian Involvement

Parents/guardians play a vital role that should support and enhance driver education in the novice's learning to drive experience. The parent/guardian is responsible for providing driving practice, regulating the novice's driving exposure, being prepared to play their role and assisting the novice in the learning to drive experience. Parent/guardian involvement is an integral component within the State's Graduated Driver Licensing (GDL) Program and must be coordinated between the State agencies responsible for driver education and driver licensing. This section provides standards for supervised driving practice, a parent seminar, parent progress reports and parent resources.

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The organizations involved in creating these National Standards also acknowledges the exemplary contributions of the late Mr. John Harvey and Mr. David Huff. John Harvey and David Huff embodied the collective effort of all those who have toiled to elevate the status and effectiveness of driver education.

John Harvey "Harv" 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.

David Huff, Montana's Traffic Education Director from 1998-2011, forged strong partnerships with diverse groups and worked to improve and support driver education as the foundation of a systems approach to traffic safety through collaboration, research, and developing state and national standards.

#### 1.0 Program Administration

All entities delivering driver education 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 driver education programs. 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. This section provides standards for the administration, oversight, record keeping, program evaluation, data collection and communication of driver education.

#### 1.1. Management, Leadership, and Administration

- 1.1.1 States shall have a single agency, or coordinated agencies to regulate, administer and oversee all novice driver education programs. The agency or agencies shall:
  - a) have authority and responsibility for the implementation, monitoring, evaluation, and enforcement of these and State standards;
  - b) establish and maintain an advisory board of all stakeholders to provide input to the State agency/agencies;
  - c) undertake all other administrative actions that make available quality driver education programs;
  - d) develop and execute communication strategies to inform parents and the public about driver education issues and driving laws; and
  - e) communicate to entities in a timely fashion about changes to laws, regulations, procedures and other matters relevant to driver education.
- 1.1.2 States shall have a full-time, funded State administrator for driver education. The administrator:
  - a) shall be qualified to manage and oversee all aspects of the State's functions in driver education, and be familiar with the delivery of driver education;
  - b) shall be an employee of the agency that has oversight of driver education; and
  - should meet or exceed the qualifications and training required by the State for a novice driver education instructor and/or school owner or possesses equivalent experience or qualifications.
- 1.1.3 States shall provide funding to the responsible agency/agencies for driver education.
- 1.1.4 States shall ensure all driver education providers meet applicable federal and state laws and rules.

#### 1.2 Application, Oversight and Recordkeeping

#### 1.2.1 States shall have an application and review process for providers. The process:

a) shall ensure that only driver education programs that conform to applicable state and national standards are approved;

NOTE: "programs" refers to a provider's total scope of operations, not just the curriculum used by its instructors.

b) shall ensure that driver education programs are culturally competent by reflecting multicultural education principles;

NOTE: see definitions of culturally competent and multicultural education principles in Definitions of Key Terms.

- c) shall administer applications for certification and recertification of driver education instructors, including owner/operators of public and private providers (see Section 3.0 Instructor Qualifications); and
- d) should list on the appropriate public State website all approved driver education providers.

#### 1.2.2 States shall assess and ensure provider compliance. The State shall:

- a) establish and maintain a conflict resolution system for disputes between the State agency and driver education providers;
- b) provide remediation opportunities to driver education programs when sanctions are issued;
- c) impose financial and/or administrative sanctions for non-compliance with the State requirements; and
- d) deny or revoke approval of driver education programs that do not conform to applicable state and national standards.
- 1.2.3 States shall have standardized monitoring, evaluation/auditing, and oversight procedures to ensure compliance with these and State standards. The procedures shall include at a minimum:
  - a) a process for providers to undergo review, by the regulating State authority;
  - b) the right to inspect premises and training records maintained in connection with courses conducted under the program, to interview instructors and students, to inspect vehicles and to inspect classroom and/or behind-the-wheel instruction; and
  - c) verification that all providers continue to meet State requirements.

- 1.2.4 States shall ensure driver education providers have 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.
- 1.2.5 States shall require driver education providers to maintain program and course records, as established by the State, at a minimum, consisting of:
  - instructor information;
  - insurance records;
  - an individual record for each student including the registration form, attendance, performance results;
  - and course completion certificates.
- 1.2.6 States shall require providers to follow state and/or federal legal requirements for the transmission of personal and/or confidential information electronically or in hard copy format.
- 1.2.7 States shall require that both successful and unsuccessful completion of the course and other results of learners are recorded and kept in a secure file/location as required by the state regulating authority.
- 1.2.8 States shall require providers to obtain parental/guardian authorization for minors to participate in the course, in order to verify that the learner has not secured driver education without parental consent.

#### 1.3 Program Evaluation and Data Collection

- 1.3.1 States shall require driver education providers to collect and report student identification, performance and other data to the designated State agency so that evaluations of the State's driver education program can be conducted and made available to the public.
- 1.3.2 States shall ensure that student information submitted to the agency or used by the agency remains confidential, as required by applicable state and federal regulations.
- 1.3.3 States shall develop and execute a comprehensive evaluation program to measure progress toward the established goals and objectives of the driver education program and optimize the allocation of resources.
- 1.3.4 States shall track data and utilize the data for the improvement of their driver education program.
- 1.3.5 States shall require the responsible agency for driver education to maintain data elements (e.g. driver license number) on students that can be linked to driver record data.

#### 1.4 Communication Program

- 1.4.1 States shall develop and implement communication strategies directed at supporting policy and program elements. The State Highway Safety Office, in collaboration and cooperation with driver education and training, driver licensing, and highway safety partners, should consider a statewide communications plan and campaign that:
  - Informs the public and parents/guardians about State GDL laws including, but not limited to: the role of supervised driving, underage drinking, and zero tolerance laws;
  - Identifies the at-risk target population;
  - Provides materials that are culturally competent and reflect multicultural education principles;
  - Informs the public on the role of parental monitoring/involvement; and
  - Informs the public about state guidelines and regulation of driver education.

NOTE: see definitions of culturally competent and multicultural education principles in Definitions of Key Terms.

#### 2.0 Education/Training

High-quality program content is an essential element for improved driver education. However, improved content alone will not change the behaviors necessary for novice drivers. The delivery of driver education must also be enhanced. Increased time in classroom and behind-the-wheel instruction is the first step in providing more experience for novice drivers. The second step is to schedule the learning experiences so that novice drivers have an appropriate time frame to learn and practice the behaviors necessary for driving a motor vehicle safely. This section provides standards for the curricula, instructional time, student evaluation and delivery methods. Standards for online delivery have been developed as well, including instructional design, structural design, evaluation/testing/ assessment, technological design and capabilities, and legal requirements.

There are two attachments related to this section:

- Attachment A ADTSEA Curriculum Standards
- Attachment B DSAA Curriculum Standards

#### 2.1 Driver Education Curricula

- 2.1.1 States shall have driver education that meets or exceeds current nationally recognized content standards such as those provided by ADTSEA and DSAA Attachments A and B. Each State retains authority in determining which curricula meet its state standards.
- 2.1.2 States shall require driver education providers to use formalized written curricula. The curricula shall:
  - a) include written lesson plans for classroom, behind-the-wheel, observation time, simulation and driving ranges that include goals, objectives and outcomes for learning.
  - b) use a variety of multimedia in various combinations to deliver the curriculum. These may include, but are not limited to, videos, written materials, activities, testing, animation, interactive media, and simulations.
  - c) use active learning and incorporate higher-order/critical thinking skills.
  - d) provide learners with the opportunity to reflect upon what they have learned as a means to improve retention of concepts.
  - e) be culturally competent and accommodates the multicultural educational needs of learners.

NOTE: see definitions of culturally competent and multicultural education principles in Definitions of Key Terms.

- 2.1.3 States shall require core driver instructional hours that focus on the driving task and safe driving practices sufficient to meet the criteria established by the end-of-course examination.
  - a) States shall require increased minimum instruction hours consisting of:
    - o 45 hours of classroom/theory;
    - o 10 hours of behind-the-wheel instruction; and
    - 10 hours of additional flexible, verifiable instruction, consisting of any of the following, as defined in these standards:
      - Observation
      - Behind-the-wheel
      - Range
      - Simulation
      - Classroom (face-to-face or online)
      - Computer-based independent student learning

NOTE: Flexibility in the delivery of the required instructional hours is described in Standards 2.3.5, 2.3.6 and 2.4.

NOTE: Use of substitution hours within classroom and behind-the-wheel (BTW) does not reduce the amount of instructional time required for the 10 Hours of Additional Flexible, Verifiable Instruction.

b) States shall require instructional hours to be delivered across multiple learning stages (e.g. Segment I and Segment II as defined in NHTSA's GDL Model).

NOTE: Flexibility in the delivery of the required instructional hours is described in Standards 2.3.5, 2.3.6 and 2.4.

- 2.1.4 States shall ensure that the instruction of novice drivers is completed using concurrent and integrated classroom and behind-the-wheel time where the bulk of the classroom instruction occurs close in time to the in-vehicle instruction to ensure the maximum transfer of skills. States should establish requirements for driver education which:
  - a) requires full attendance and successful completion of classroom and behind-the-wheel.
  - b) ensures classroom instruction is spread out over a period of time (distributive learning) and is not completed in fewer than 30 days.
  - c) consists of classroom instruction periods that should not exceed 120 minutes per day.
  - d) consists of behind-the-wheel instruction that:
    - o has not more than 3 students in the vehicle.
    - o ensures that each student drives no more than 90 minutes per day.
    - o is integrated with laboratory driving simulation and/or driving range instruction, if applicable.
    - o may be in addition to classroom instruction provided per day.

2.1.5 States shall require each student to receive or obtain an approved driver education textbook or educational materials of equal scope (hardcopy or electronic).

NOTE: A state driving manual or handbook is not considered a textbook nor is equal in scope and educational value, but serves as an excellent supplementary resource tool for instruction related to state licensing requirements.

- 2.1.6 States shall require successful completion of an approved end-of-course knowledge and skill assessment examination based on the stated goals and objectives to complete the driver education program.
- 2.1.7 States shall require a course provider to conduct valid post-course evaluations of driver education programs to be completed by the students and/or parent for the purpose of improving the effectiveness of the program.

NOTE: A resource for help in conducting these evaluations is the AAA Foundation for Traffic Safety "Evaluating Driver Education Programs: Comprehensive Guidelines." <sup>1</sup>

#### 2.2 Student Evaluation

- 2.2.1 States shall ensure that providers and instructors deliver timely and ongoing feedback to students on their progress made in classroom, behind-the-wheel, and any other laboratory phases including remedial instruction during the driver education course. The evaluation and assessment of each student is critical to the learner's success, assists the instructor in monitoring their progress and shall be:
  - a) consistent with the concepts, lessons, and course objectives. The methods for evaluation shall be clearly stated in the course.
  - b) conducted on an ongoing and varied basis following the teaching of major concepts and at the end of the unit or driving session.
  - c) constructive, informative, and frequently provided.
  - d) graded and tracked by the program and/or the instructor.
- 2.2.2 States shall require on-going classroom and behind-the-wheel evaluations, at a minimum, through:
  - evaluation of homework assignments,
  - worksheets,
  - reports,

verbal feedback,

- role-playing activities or demonstrations,
- or end-of-unit tests.

NOTE: Record keeping is essential to continuous progress reports.

<sup>&</sup>lt;sup>1</sup> Clinton, K., & Lonero, L. (2006, October). Evaluating Driver Education Programs: Comprehensive Guidelines Washington, DC: AAA Foundation for Traffic Safety.

#### 2.3 Delivery Methods

- 2.3.1 States shall limit the number of students per class based on state student/teacher ratios for the classroom phase of driver education.
- 2.3.2 States shall require providers to make available seating and writing space for each student.
- 2.3.3 States shall stipulate that an instructor can only teach one classroom at a time.
- 2.3.4 States shall require training vehicles for driver education behind-the-wheel and driving range instruction to meet state standards for the safety of students and instructors, that:
  - a) shall be in safe mechanical condition and equipped with:
    - dual-control brakes
    - instructor eye-check and rear-view mirrors
    - signage visible from all sides of the vehicle, to provide a means for other roadway users to understand that instruction is taking place and provides a possible warning of unexpected maneuvers by the driver; and
    - meets all Federal Motor Vehicle Safety Standards (FMVSS) applicable to the vehicles used; and in accordance with the requirements of the State.
  - b) shall not allow the driver education vehicle to be operated by a student without instructor supervision.
  - c) should be inspected at least annually by a state-approved inspection facility or qualified mechanic and meet all other state vehicle requirements.
  - d) should require all providers to keep a log on each training vehicle, covering issues such as safety and maintenance.
  - e) should require additional equipment for behind-the-wheel and driving range instruction such as:
    - Cell phone
    - First-aid/body fluid kit
    - Fire extinguisher (at least UL rated 5-B:C)
    - Safety kit
    - Reflective devices
    - Flashlight
    - Crash reporting kit
    - Brake and accelerator pedal extensions, if required
    - Appropriate seat cushion(s), if required

- 2.3.5 States shall establish, if applicable, requirements for maximum substitution hours of simulation or driving range instruction for behind-the-wheel instruction. For courses with ten (10) hours or more of behind-the-wheel instruction, no more than two (2) hours of any combination may be substituted. States shall establish requirements:
  - a) for driving simulation, if permitted, that:
    - requires an instructor be trained in the use of simulation to teach the instruction.
    - supports the classroom and behind-the-wheel content and follows an approved curriculum.
  - b) for driving ranges, if permitted that:
    - requires an instructor be trained in the use of the driving range to teach the instruction.
    - requires driving range instruction support the classroom and behind-the-wheel content and follow an approved curriculum.

NOTE: Courses with less than ten (10) hours of behind-the-wheel instruction may not substitute simulation or driving range instruction for behind-the-wheel instruction, if permitted.

NOTE: Observation time should align with behind-the-wheel instruction time if substitution of driving range and simulation is permitted.

- 2.3.6 States shall establish, if applicable, requirements for maximum substitution hours of computer-based independent student learning for classroom instruction. For courses with forty-five (45) hours or more of classroom instruction, no more than ten (10) hours may be substituted. States shall establish requirements that:
  - a) requires an instructor be trained in the proper use of driver education computerbased independent student learning systems or is assisted by a person trained in the use of computers and computer programs.
  - b) stipulates computer-based independent student learning:
    - be approved by the state, proceeds from simple to complex and supports the goals and objectives of the driver education program.
    - not be counted towards behind-the-wheel driver education.
    - be user-friendly and accessible to all students.
    - includes consequences for making incorrect skill, knowledge or attitudinal decisions or actions.
    - provides remedial practice.
  - c) ensures computer-based independent student learning is classified as classroom instruction and should not exceed the 120 minute per day maximum.

NOTE: Courses with less than forty-five (45) hours of classroom instruction may not substitute computer-based independent student learning for classroom instruction, if permitted.

NOTE: Each State shall recognize that computer-based independent student learning may only supplement the core classroom or online minimum standards, if permitted.

#### 2.4 Online Delivery Methods

2.4.1 States shall establish requirements for the instructional design of online delivery of driver education, if permitted, that establishes how to organize, standardize, communicate and examine the instructional content/curriculum. At a minimum:

NOTE: In addition to these standards, State's shall establish requirements for content standards as identified in Section 2.1.

- a) An online course syllabus is provided that clearly states the learning objectives, expectations of learners, grading policy, privacy and legal policies, and also includes contact information for the online course provider, online instructor, and technical troubleshooting.
  - Contact information includes hours of availability and expected response time.
  - Contact information for online instructors and the online instructor's hours of availability are clearly posted on the course website.
- b) Course timeline, important dates, and deadlines are clearly described in the syllabus and on the website.
- c) The syllabus and curriculum both outline any required parent participation and monitoring.
- d) For parent-taught driver education, the course curriculum has a specific component requiring regular parent participation, in addition to conducting the behind-the-wheel portion of the course.
- e) The course is organized into units and lessons, each of which follows a knowledge map and, where appropriate, builds upon previous units and/or concepts.
- f) The curriculum must be up-to-date, accurate, and meet state-specified driver education content standards as described in Section 2.1.1.
- g) The curriculum uses active learning and incorporates higher-order/critical thinking skills.
- h) The instructional design provides the learner an opportunity to reflect upon what they have learned as a means to improve retention of concepts.
- i) The curriculum is culturally competent and accommodates the multicultural educational needs of learners.
   NOTE: see definitions of culturally competent and multicultural education principles in Definitions of Key Terms.
- j) Content uses appropriate readability levels and language use for learners.
- k) All content and learning materials respect copyright laws.

- 1) There is no commercial marketing or advertising within the actual course content and lessons other than the course provider's labeling/branding.
- m) A glossary of driver education and any other relevant terms is provided on the site.
- n) Resources and materials that are supplemental to the course are clearly indicated as such and are supplied through links, downloadable documents, software, an online resource center, or other means that are easily accessible to the learner.
- o) Courses are facilitated by state-approved online instructors who meet Section 3.0 of these Standards as well as the re-certification/re-approval process as outlined in Standard 3.5 of these Novice Teen Driver Education and Training Administrative Standards.
- p) Online instructors facilitate the course using one of two models.
  - Instructor-led: the online instructor leads the course through face-to-face or synchronous methods, interacts with learners regularly, actively monitors learner progress, and reviews assignments or tests as necessary.
  - Instructor-monitored/supported: an online instructor monitors the online course, monitors each learner's progress, reviews and assesses learner submissions as required, and answers questions or concerns in a reasonable and timely manner.
- q) In addition to the basic instructor training program, online instructors who facilitate and personnel who manage the online driver education system are trained in the effective use of online-based driver education learning systems and methodologies by means of state-approved training.
- 2.4.2 States shall establish requirements for the structural design of online delivery of driver education, if permitted, that describes how the course will be implemented in order to meet the learning and course requirements. At a minimum:
  - a) The online course uses a variety of multimedia in various combinations to deliver the curriculum. These may include, but are not limited to, videos, written materials, activities, testing, animation, interactive media, and simulations.
  - b) The course structure employs one of three models:
    - Hybrid/Blended: the course delivery combines online (virtual) and classroom (face-to-face) instruction and meets the relevant delivery standards for both online and classroom settings. The overall course is instructor-led.
    - Fully Online, Instructor-Led: the course is delivered online and the majority of learning is synchronous.
    - Fully Online, Instructor-Monitored/Supported: the course is delivered online and involves asynchronous or synchronous interaction.

- c) In online instructor-led synchronous courses, state standards should inform the maximum number of classes per day and learners per session enrolled in a course at any given time. If the state does not have such standards, the maximum number of classes per day should not exceed five classes per day and 30 learners per course.
- d) The structure of the course should facilitate learner-learner interaction, which allows learners to benefit from the questions and experiences of others, through either:
  - synchronous mode(s) (e.g., webcam, Skype, video conference, phone conversations); or,
  - asynchronous mode(s) (e.g., blogs, emails, forums, message boards, podcasts, etc.).
- e) The curriculum is designed to provide at least the minimum number of hours of instruction as set in Section 2.1.3 and is of sufficient rigor, depth, and breadth to meet the learning outcomes.
  - This is exclusive of supplemental material or learner time spent online (i.e., time is measured by the length of time it takes to teach an instructional component, not including extra information, or how long it takes learners to complete the component).
- f) Online instruction does not exceed time limits as set by Section 2.1.4 of the Standards. The entire online course adheres to the concept of distributive learning, and is completed according to the time requirements set in the Section 2.1.3.
- g) The online course presents information in various formats, providing supplemental material and resources, and demonstrating instructor capacity to adapt instruction to learner needs.
- h) Online providers encourage learners to begin behind-the-wheel training, according to State licensing, after beginning the online course or as soon as possible after completing the online course.
- 2.4.3 States shall establish requirements for the evaluation/testing/assessment of online delivery of driver education, if permitted, that refers to how and what type of evaluation will be carried out for learners, the course, and online instructors. At a minimum:
  - a) Evaluations and assessments of learners are consistent with the concepts, lessons, and course objectives. The methods for evaluation are clearly stated in the course.
  - b) Evaluations and assessments are conducted in a variety of formats (such as quizzes, electronically submitted assignments, questions regarding video segments, responses in blog/online discussions, random questions, or other means).

- c) The course contains a pool of quiz and test questions that are randomly selected and distributed across learners and across individual lessons, in order to prevent learners from copying and/or sharing test information.
- d) Evaluation of learners is conducted on an ongoing and varied basis.
  - May occur following the teaching of major concepts; and,
  - Shall occur at the end of each unit.
- e) Feedback on evaluations or assessments is constructive, informative, and frequently provided.
- f) Course quizzes, activities, and any other assessment techniques are graded and tracked by the program and/or the online instructor.
- g) Learners are able to see their grades as they progress through the course.
- h) Where applicable, the learner's progress and performance are communicated to parents/guardians (e.g., for minors).
- i) For the final test, the identity of each learner should be verified as required by the State.
- j) The online course provider frequently and in various ways assesses the delivery of the course and the curriculum (i.e., learners are given the opportunity to provide feedback on the course).
- 2.4.4 States shall establish requirements for the technological design and capabilities of online delivery of driver education, if permitted, that refers to minimum technological tools and/or capabilities required by online driving educators in order to be able to provide online education and requirements needed by learners to take online driver education. At a minimum:
  - a) The technological requirements such as hardware, web browser, software, internet connection speed, and other required components to take the course are clearly described on the website, prior to the opportunity to purchase the course.
  - b) The web pages and components are clearly organized. A site map, contact page, and orientation section that explain how to use the course are provided.
    - Contact information for technical support is provided and technical support hours of availability are clearly posted on the website.
  - c) The course and the website are user-friendly, easy to navigate, and accessible to learners.
  - d) Courses must require learners to complete all required elements prior to completing the course.

- e) Learner time in the course is tracked by learner activity and work successfully completed on the course and not just the amount of time the learner is "logged in." Computer system support, downloading videos, and other non-course related support shall not count toward learner time.
- f) Learners are required to use a username and password to enroll in and to access the course at all times.
- g) Learners are logged out of the course after a specified amount of inactivity established by the State or the online provider. The learner is required to login again to resume the course.
- h) The identity of each learner is verified on a random basis throughout the course to ensure the learner who is signed in is the individual completing the course (e.g., the learner is prompted with security questions upon login and at random during the course).
- i) When learners log back into the course, they are able to resume from their last verified activity.
- 2.4.5 States shall establish legal requirements for the delivery of online driver education, if permitted, to ensure that online providers protect learner privacy, verify learner participation and test taking and comply with state/federal requirements for driver education and certification. At a minimum:
  - a) The course and the online provider shall be authorized by the state-regulating authority to operate within the State and to provide online driver education instruction for the purpose of meeting state certification requirements.
    - If the State requires online providers to re-apply for approval to operate, the online provider shall meet the State requirements.
  - b) In states which regulate online driver education providers, the State authorization to operate and the agency issuing the authorization to operate are clearly communicated on the online provider website. Online providers clearly indicate on their website if they are currently approved by the state regulatory agency.
  - c) The State should list on the appropriate public State website all approved providers, as well as those online providers who previously held State approval but which are no longer approved.
  - d) The online provider's website describes how the course meets state and/or federal accessibility standards (e.g., conforms to US Sections 504 and 508 of the Rehabilitation Act in connection to information technology) to ensure equal access to all users.
    - The online provider's website provides alternative options for users with special needs to access web content.

- e) Learner information is kept confidential, protected, and securely stored in all electronic or non-electronic formats. The online provider meets all privacy and confidentiality requirements as set out by state laws, by the Family Educational Rights and Privacy Act (FERPA), and by any other federal laws.
- f) Online providers follow state and/or federal legal requirements for the transmission of personal and/or confidential information electronically or in hard copy format.
- g) The online provider's privacy policy is clearly stated on the website.
- h) Those individuals who have access to personal identification information (PII) within learner files meet state and/or federal legal requirements for working with youth (e.g. background checks or fingerprinting).
- i) Online instructors meet professional and legal requirements as set in Section 3.0 of these Novice Teen Driver Education and Training Administrative Standards and/or by the State.
- j) Identification of learners is verified by random checks and as specified by the State throughout the online course and for the final test.
- k) Successful or unsuccessful completion of the course and results of learners are recorded and kept in a secure file/location as required by the state regulating authority.
- 1) Results of performance are reported to learners immediately and, if the course is passed successfully, the certificate of completion is issued as specified by the State.
- m) Course completion certificates are issued in a secure manner to the learner and/or the appropriate state authority.
- n) All technological hardware and software meets state and/or federal requirements concerning the use of technology for professional or instructional purposes.
- o) For minors, parental/guardian authorization to participate in the course is required in order to verify that the learner has not enrolled in driver education without parental consent.

#### 3.0 Instructor Qualifications

Proper training of driver education instructors is paramount to the success of every State's driver education program. Content relating to teaching theory and how to teach driver education must be the focal point of the driver education instructor preparation program and ample time must be devoted and required for successful completion. This section outlines the minimum standards for instructor training and qualifications for the training of novice drivers, including prerequisites, course content from State approved driver education curricula, the teaching task, a student teaching practicum, exit assessments and ongoing training and recertification.

There are two attachments related to this section:

- Attachment C ANSTSE Stages for Driver Education Instructor Preparation Program,
- Attachment D ANSTSE Table of Contents of the Model Training Materials for Driver Education Instructors, which corresponds to the training modules in the model training materials (available for free download at <a href="https://www.anstse.info">www.anstse.info</a>).

# 3.1 Prerequisites 3.1.1 States shall require the following prerequisites for instructor candidates receiving training. As recognized or determined by the State, each instructor candidate shall: a) possess a valid driver's license (held for at least 5 consecutive years); b) have an acceptable driving record;

- c) pass federal and state criminal background checks;
- d) meet health or physical requirements;
- e) achieve the minimum academic education requirement (high school graduate); and
- f) meet the minimum age requirement (at least 21 years of age).
- 3.1.2 States shall require instructor candidates to pass entry-level assessments to demonstrate their knowledge, skills, and attitudes for the safe operation of a motor vehicle to gain entry into the driver education instructor preparation program. (See Attachments C through D.) Each instructor candidate must pass a basic:
  - a) driver knowledge test including state specific traffic laws; and
  - b) driving skills assessment.
- 3.1.3 States should require programs to pre-screen an individual to determine if they are an acceptable candidate to enter the instructor preparation program.

#### 3.2 Training

- 3.2.1 States shall require instructor candidates to successfully complete a course detailing classroom content, BTW lessons and State specific information from State approved driver education curricula. The instructor candidate shall demonstrate their knowledge of State approved driver education curricula by achieving/ mastering the following competencies. The instructor candidate must:
  - a. Demonstrate comprehension of the foundations of novice driver education by:
    - i. applying and/or verbalizing risk management skills to the task of driving either as a driver or passenger;
    - ii. identifying and demonstrating safe driving techniques; and
    - iii. demonstrating how to drive in a highly social, strategic, and cooperative manner (environmentally friendly).
  - b. Demonstrate knowledge of the driver education curriculum content, including:
    - i. State specific rules (i.e., GDL requirements);
    - ii. rules of the road (State's Highway Traffic/Vehicle Code);
    - iii. safe driving techniques;
    - iv. risk management/risk avoidance practices and procedures; and
    - v. decision making skills.
  - c. Recognize and explain the general nature of the foundations of novice driver education within the highway transportation system and the consequences of system failures.
  - d. Explain and apply the principles of perception to risk management when operating a motor vehicle.
  - e. Explain and apply the techniques for managing risk when operating a motor vehicle over pre-selected on and off-street activities.
  - f. Recognize and identify physical, social, and psychological influences that can affect motor vehicle operator performance.
  - g. Identify current and emerging vehicle technologies (i.e. forward collision warning, electronic stability control, warning mirrors and cameras, etc.).
  - h. Demonstrate concepts and generalizations that enable one to make objective decisions regarding the:
    - i. choice to drive unimpaired;
    - ii. use of occupant restraints and protective devices;
    - iii. benefits of effective speed management;
    - iv. strategies to drive without distraction, fatigue, drowsy driving, and road rage;
    - v. environmental factors that influence the decision-making process;
    - vi. use of visual skills to obtain appropriate information to make reduced-risk decisions in low, moderate, and high risk driving environments;
    - vii. management of time, space, and visibility when operating a motor vehicle;
    - viii. interaction with other roadway users in a positive manner;
    - ix. expectations of the motor vehicle operator from the other roadway user's point of view; and the
    - x. use of balanced vehicle movement.

- i. Identify and support additional skills practice with parents/guardians/mentors.
- j. Identify laws, rules, and regulations that govern the smooth movement of traffic.
- k. Identify and support rules and regulations governing a State's GDL program and licensing tests.
- 1. Demonstrate comprehension of administrative rules, including:
  - i. school, instructor, and student in-vehicle responsibilities;
  - ii. dual controls and restraint systems use;
  - iii. optional in-vehicle instructional equipment use;
  - iv. appropriate use of driver education textbooks;
  - v. assessment requirements;
  - vi. record keeping protocol;
  - vii. when to offer the program and minimum number of required periods;
  - viii. computer program(s) use; and
  - ix. requirements for size of classes and facilities.
- 3.2.2 States shall require instructor candidates to successfully complete a course in teaching and learning theories (e.g., *The Teaching Task*). See Attachment D for the Model Training Materials as an example of the teaching task. The instructor candidate shall demonstrate the appropriate use of the performance standards that make up the teaching and learning theories. Utilizing a course of instruction designed for teaching and learning theories (e.g., The Teaching Task) the instructor candidate should:
  - a. Describe the history of driver education.
  - b. Describe and demonstrate the fundamental concepts of learning.
  - c. Describe and demonstrate the fundamental concepts of teaching.
  - d. Demonstrate how to use lesson plans and curricula.
  - e. Demonstrate how to use effective questioning techniques.
  - f. Describe and demonstrate professional responsibilities and accountability of the driver education instructor.
  - g. Describe and abide by sexual harassment policies.
  - h. Describe the importance of liability protection.
  - i. Describe and demonstrate the process for preparing to teach.
  - j. Describe and demonstrate techniques for classroom management.
  - k. Describe and demonstrate techniques for student assessment and evaluation.
  - 1. Describe the process for coordination between classroom and behind-the-wheel instruction.
  - m. Describe how to and the need for additional training to conduct online and virtual classroom driver education.
  - n. Describe how to and the need for additional training to address special needs driver education students.

- o. Describe and demonstrate how to use lesson plans for in-vehicle instruction.
- p. Describe and demonstrate how to manage the mobile classroom.
- q. Describe and demonstrate in-vehicle teaching techniques including coaching and correction.
- r. Describe and demonstrate how to evaluate and provide feedback to the student driver and observers.
- s. Describe and demonstrate techniques for teaching:
  - i. visual systems and vision control
  - ii. hazard perception and decision making
  - iii. speed and space management
  - iv. steering control and vehicle balance
  - v. time management
  - vi. communication
  - vii. driver responsibility
- t. Describe and demonstrate how to manage and take control of the vehicle during invehicle instruction.
- u. Describe what to do in an emergency or collision.
- v. Describe the role and use of on-board technologies for in-vehicle instruction.
- w. Describe how to and the need for additional training to conduct simulation and driving range instruction.
- x. Demonstrate the skills necessary to develop partnerships and communicate with parents/mentors/guardians and state officials.
- y. Identify how to locate and describe jurisdictional laws, rules, policies and procedures related to vehicle operation and driver education.

Note: The ANSTSE Model Training Materials for the Teaching Task (see Attachment E) have been designed to assist in meeting the standards in 3.2.2.

- 3.2.3 States shall require instructor candidates to successfully deliver a series of practice teaching assignments during the instructor training course, including both classroom and BTW lessons. The instructor candidate must demonstrate:
  - a. How to utilize and adapt classroom lesson plans and deliver classroom presentations.
  - b. How to utilize and adapt lesson plans to deliver behind-the-wheel lessons, utilizing coaching techniques for in-vehicle instruction, and
    - i. demonstrate how to utilize standards of driver performance,
    - ii. demonstrate a variety of coaching techniques for in-vehicle instruction, and deliver BTW lessons.
  - c. How to influence learning and habit development.
  - d. How to assess student performance.
  - e. How to assist the learner to apply concepts from classroom and BTW instruction.

- f. Knowledge of risk management principles in all driving situations.
- g. Risk assessment procedures and provide timely intervention for in-vehicle instruction.
- h. How to conduct computer assisted, online, simulation based and range exercise instruction (if applicable)
- i. How to assess the course.
- j. How to schedule and grade.

#### 3.3 Student Teaching Practicum

3.3.1 States shall require instructor candidates to teach with an experienced mentor or complete a student teaching practicum, to deliver course content (both classroom and BTW) during a regularly scheduled driver education course to novice students while being supervised and evaluated.

#### 3.4 Exit Assessment

- 3.4.1 States shall require the driver education instructor candidate to pass exit assessments, beyond the state driver licensing test, to demonstrate their knowledge, skills and attitudes for the operation of a motor vehicle to successfully complete the driver education instructor preparation program. (See Attachment C.) They must pass an advanced exit level:
  - a. driver knowledge test;
  - b. instructor knowledge test; and
  - c. in-vehicle teaching skills assessment.

#### 3.5 Ongoing Training and Recertification

- 3.5.1 States shall require instructors to receive regular continuing education and professional development, as approved by the State.
- 3.5.2 States shall require a regular driving record review for instructors.
- 3.5.3 States shall require instructors to pass periodic federal and state criminal background checks.
- 3.5.4 States should require instructor candidates to successfully complete other pre or post courses/requirements as prescribed by the State, such as a course in first aid/CPR and automated external defibrillators (AED).

#### 4.0 Coordination with Driver Licensing

Given that novice driver education is a key element within driver licensing, driver education and driver licensing must be coordinated within the State. Further, as Graduated Driver Licensing (GDL) has been proven to be a successful countermeasure in reducing teen driver crashes and fatalities, driver education must be an integral component within a State's GDL Program, as identified in the National Highway Traffic Safety Administration's (NHTSA's) model for GDL. The agencies responsible for driver education and driver licensing must coordinate their efforts to have a positive impact on GDL, parent involvement and driver education. Enforcement of GDL laws must be coordinated between the driver license agency, courts and law enforcement.

GDL is a comprehensive system that is most effective when all components of GDL are incorporated, and more comprehensive GDL programs have a greater safety benefit. States are encouraged to implement a comprehensive GDL program that incorporates all components as identified in NHTSA's GDL model. This section provides standards for communication between the state driver education agency and the driver license authority; the GDL system; coordination and education with courts and law enforcement; requirements for the knowledge and skills tests.

There is one attachment related to this section:

• Attachment E – NHTSA Graduated Driver Licensing System Model

### **4.1** Communication Between the State Driver Education Agency/Agencies and the Driver Licensing Authority

4.1.1 States shall have a formal system for communication and collaboration between the State driver education agency/agencies and the State driver licensing authority. This system must share information between these agencies.

#### 4.2 GDL System

- 4.2.1 States shall adopt a comprehensive multi-stage Graduated Driver Licensing (GDL) system that contains the recommended GDL components and restrictions as featured in the National Highway Traffic Safety Administration (NHTSA) GDL Model. See Attachment F.
- 4.2.2 States shall have a GDL system that includes, incorporates, or integrates multi-stage driver education that meets these Novice Teen Driver Education and Training Administrative Standards.
- 4.2.3 States should not reduce the time requirements in the GDL process for successful completion of driver education. Instead, States should consider extending the GDL process for those who do not take driver education.

#### 4.3 Coordination and Education of Courts and Law Enforcement

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

- 4.3.2 States shall ensure that sanctions for noncompliance with GDL requirements by novice drivers are developed and enforced uniformly.
- 4.3.3 States should evaluate enforcement efforts to determine effectiveness.

### 4.4 Knowledge and Skills Tests

- 4.4.1 States shall ensure that State licensing knowledge and skills tests are empirically based and reflect these Novice Teen Driver Education and Training Administrative Standards.
- 4.4.2 States shall develop and implement valid and reliable driver's license knowledge and skills tests, such as the American Association of Motor Vehicle Administrators (AAMVA) Noncommercial Model Driver Testing System, which assesses the novice driver's understanding of laws and principles of driving and that assesses their ability to operate a motor vehicle.

NOTE: For more information on developing valid and reliable knowledge and skills tests, refer to AAMVA's Guidelines for Knowledge and Skills Test Development (Revised 2006).

### 5.0 Parent/Guardian Involvement

Parents/guardians play a vital role that should support and enhance driver education in the novice's learning to drive experience. The parent/guardian is responsible for providing driving practice, regulating the novice's driving exposure, being prepared to play their role and assisting the novice in the learning to drive experience. Parent/guardian involvement is an integral component within the State's Graduated Driver Licensing (GDL) Program and must be coordinated between the State agencies responsible for driver education and driver licensing. This section provides standards for supervised driving practice, a parent seminar, parent progress reports and parent resources.

### **5.1 Supervised Driving Practice**

- 5.1.1 States shall require the parent/guardian of a novice driver to follow the requirements of the GDL program, including:
  - supervising an extended learner permit period of at least six (6) months;
  - providing weekly supervised practice driving in a wide variety of increasingly challenging driving situations; and
  - conducting a minimum of fifty (50) hours of supervised practice driving.

NOTE: The minimum of 50 hours of supervised practice driving should not be reduced by a novice driver's participation in driver education programs, nor should any other activity be considered a substitute.

5.1.2 States shall require the parent of a novice driver to supervise an extended intermediate license period that temporarily restricts driving unsupervised with teen passengers, driving during nighttime hours, and other privileges/restrictions until the State's GDL requirements have been met and the parent determines the teen is ready to drive unsupervised in these high-risk conditions.

### 5.2 Parent Seminar

- 5.2.1 States shall require the parent of a teen driver to complete a parent seminar prior to or at the start of the course.
- 5.2.2 States should ensure that the parent seminar outlines the parent's responsibility and opportunities to reduce his or her teen's risk, and should include, but not be limited to:
  - a) modeling safe driving behavior;
  - b) determining the readiness of the teen to begin the learning process;
  - c) managing the novice driver's overall learning-to-drive experience;
  - d) conducting effective supervised practice driving;
  - e) determining the teen's readiness to advance to the next licensing stage and assume broader driving privileges; and

f) negotiating and adopting 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 learn and for the parent to grant progressively broader driving privileges.

NOTE: The parent seminar should focus on parent's responsibilities and opportunities related to driving, rather than on school administrative information or other social health issues.

### **5.3 Parent Progress Reports**

5.3.1 States shall require the driver education provider to ensure parents are informed about their teen's progress throughout the driver education course, and receive a post-course final assessment report that informs them of the progress and proficiency of their teen driver.

### **5.4 Parent Resources**

- **5.4.1 States shall provide parents with resources to supervise their teen's learning-to-drive experience.** The resources should include, but are not limited to:
  - a) rules, regulations and expectations of the State GDL and Driver Education requirements;
  - b) a list of state approved driver education schools;
  - c) access to a "Parent-Teen Driving Agreement"; and
  - d) access to a tool for logging the required hours of supervised practice.

### **Glossary of Definitions and Acronyms**

**Active learning** – as opposed to passive learning, learners are engaged in the materials they study through reading, writing, talking, listening, and reflecting.

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

**Asynchronous** – communication exchanges which occur in elapsed time between two or more people. Examples are email, online discussion forums, message boards, blogs, podcasts, etc.

**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 driver operates a vehicle (e.g., off-street, on-street, on-highway) and is guided by an instructor in the front passenger seat. Observation is not included in behind-the-wheel time.

**Blended course** – a course that combines two modes of instruction for classroom learning, such as online (virtual) and face-to-face.

**Blog** – As a noun, a website or a section of website used for expressing ideas and opinions of users in multiple modalities, often maintained by one leader. As a verb, maintaining or adding content to an ongoing asynchronous discussion housed at a target website.

**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 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-thewheel instruction.

Communications plan – a document that proposes how to target audiences using marketing communication channels such as advertising, public relations, experiences or direct mail for example. It is concerned with deciding who to target, when, with, what message and how.

**Computer-based independent student learning** – independent student study utilizing software which directly meets and helps achieve the goals and objectives of the driver education program.

**Concurrent** – the practice of employing behind-the-wheel, classroom, and observation teaching methods where there is no significant break of instruction between the classroom, behind-the-wheel and observation phases.

**Confidential** – spoken, written, and 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.

**Continuing education** – education provided for adults after they have left the formal education system, consisting typically of short or part-time courses. An instructional program that brings participants up-to-date in a particular area of knowledge or skills.

**Correspondence learning** – a driver education program in which the classroom/theory portion is completed by the student in the home or other setting that is not located at the place of study (i.e., school).

**Course** – the course of study, under the direct guidance of a driver education instructor that, upon successful completion, results in a student having the basic knowledge, skills and attitudes necessary to safely operate a motor vehicle within the highway transportation system.

**Course enrollment** – the number of learners formally in a course. Course enrollment data are influenced by registration periods, duration of course (semester, year-long, or flexible schedules for competency-based credits), drop/add periods and "count" dates that determine accuracy of number of learners enrolled per course, completion and/or attrition rates.

**Course registration** – the process of officially enrolling in a course; Refer to "Course enrollment."

**Culturally competent** – teaching in a cross-cultural or multicultural setting. Enable each student to relate course content to his or her cultural context.

**Curriculum** – the overall written program of instruction, including classroom, behind-the-wheel, and observation 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.

**Driver education** – to transfer knowledge, develop skills, and influence the attitudes and behaviors of the teen, so they can perform as a safe and competent driver, thereby minimizing their risk, contributing to the reduction of crashes, fatalities, and injuries.

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

**Entities** – oversight management for providers of driver education.

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

**Face-to-face** – when two or more people meet in person.

**Facilitate** – an instructor, either through instructor-led or instructor-monitored/supported courses, works with online learners to monitor progress, attendance and, at a minimum, uses asynchronous interaction (e.g., chats, blogs, emails, forums, message boards, podcasts, etc.) to provide training and assist in learner motivation.

**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.

**Higher-order/critical thinking skills** – more strategic issues such as route finding, self-assessment of driving skills, including these will improve the effectiveness of driver training.

**Hybrid course** – refer to "Blended course."

**Informative Standards** – optional components which utilize descriptors such as "should" or "may." These standards generally support an overall larger standard, and should be met if possible.

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

**Instructional hours** – means those hours students are provided the opportunity to engage in educational activity planned by and under the direction of a teacher, exclusive of breaks and time spent for meals.

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

**Instructor candidate** – the person who is receiving training through teacher training courses to become an instructor/teacher.

**Instructor-led** – instructors lead the majority of the hybrid/blended or fully online course (i.e., virtual classroom) and actively monitor, participate, and conduct face-to-face or synchronous instruction with learners.

**Instructor-monitored/supported** – instructors monitor the online course, each learner's progress, review and assess learner submissions, and instructors are available to answer questions or concerns through asynchronous or synchronous methods throughout the course.

**Integrated** – classroom, behind-the-wheel and laboratory driver education shall be scheduled to include an alternating mix of instruction throughout the duration of the driver education course.

**Intermediate license** – 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.

**Knowledge map** – a knowledge or learning map is a network of sequenced learning targets. It is a graphical representation of complex information that is designed to allow effective assimilation of the material. Learning maps typically display major concepts on a two dimensional grid, with connecting lines between related concepts that describe the nature of the relationship.

**Laboratory** – the portion of the driver education program, under the direct guidance of an instructor that enables students to learn through practice driving experiences, either real or simulated through the use of a multiple-vehicle (preferably) driving range or driving simulator system.

**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.

**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.

**Multicultural education principles** – is an educational field of study that refers to any form of education, teaching and learning that incorporates the histories, texts, values, beliefs, and perspectives of people from different cultural backgrounds and how that education, teaching and learning impact their lives to create equitable opportunities for living and working in cultural pluralist society.

**Multiple learning stages** – 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.

**Noncommercial Model Driver Testing System (NMDTS)** – developed by AAMVA and establishes uniformity between jurisdictions for the testing of noncommercial operators and provides a base of core information for driver manuals and Graduated Driver License (GDL) parent instruction guides.

**Normative Standards** – mandatory components which utilize descriptors such as "shall," "must" or "will." To be in compliance the state must meet this standard in full.

**Novice driver** – any new driver that has not yet developed and demonstrated the knowledge and skills necessary for licensure.

**Novice teen driver** – any teen who falls under the State's GDL system.

**Novice teen driver education** – 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.

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

Online content – refer to "Classroom content."

**Online course** – any course offered over the Internet.

**Online instructor** – the person who holds the appropriate instructor certification and is responsible for instruction in an online course.

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

**Range** – see driving range.

**Recertification** – to renew the certification of, especially certification given by a licensing board.

**Rehabilitation Act** – the Federal legislation that authorizes a variety of training and service discretionary grants administered by the Rehabilitation Services Administration. The Act also includes a variety of provisions focused on rights, advocacy and protections for individuals with disabilities.

**Reliable** (**Reliability**) – an index of how consistently a test measures something. For example, if a knowledge test is reliable, a person taking the test twice would be expected to get a similar score both times.

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

**Simulation** – using interactive computer programs which use basic vehicle controls and instruments and imitates real or imaginary driving scenarios. Often used to create events that would normally be impossible, difficult, or dangerous to the novice teen driver.

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

**Skype** – have a spoken conversation with (someone) over the Internet using the software application Skype, typically also viewing by webcam.

**Standard** – a written definition, program description, limit or rule, approved and monitored for compliance by an authoritative agency, professional or recognized body (ANSTSE) as a minimum acceptable benchmark. In essence, a standard is an agreed upon way of doing something. Standards are the distilled wisdom of individuals with expertise in their subject matter (ANSTSE Members) and know the needs of the organizations (US State's) they represent and/or evaluate.

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

**Student-teacher ratio** – the number of students in comparison to the number of teachers provided for each course.

**Synchronous** – refers to a setting in which the instructor and student(s) participate in the instruction at the same time.

**Teaching and learning theories** – conceptual frameworks in which knowledge is absorbed, processed, and retained during learning. Cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.

**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."

**Valid** (**Validity**) – an index of how well a test measures what it is supposed to be measuring. Thus, the validity of a driver licensing test is a measure of how well the test indicates that the applicant knows how to be a safe driver.

**Virtual** – with respect to online education, being on or simulated on a computer, electronic device or computer network; occurring or existing primarily online.

### **Acronyms**

AAA American Automobile Association

AAAFTS AAA Foundation for Traffic Safety

AAMVA American Association of Motor Vehicle Administrators

ADA Americans with Disabilities Act

ADTSEA American Driver and Traffic Safety Education Association

ANSTSE Association of National Stakeholders in Traffic Safety Education

BTW Behind-the-Wheel

CPR cardiopulmonary resuscitation

DETA Driver Education and Training Administrators

DSAA Driving School Association of the Americas

FERPA Family Educational Rights and Privacy Act

FMVSS Federal Motor Vehicle Safety Standards

GDL Graduated Driver Licensing

GHSA Governors Highway Safety Association

NHTSA National Highway Traffic Safety Administration

NMDTS Noncommercial Model Driver Testing System

NTDETAS Novice Teen Driver Education and Training Administrative Standards

OSHA Occupational Safety and Health Act

TRB Transportation Research Board

TIRF Traffic Injury Research Foundation

UL Underwriters Laboratories

### **Attachments**

This section of the document includes the following attachments:

- Attachment A ADTSEA Curriculum Standards
- Attachment B DSAA Curriculum Standards
- Attachment C Stages for Driver Education Instructor Preparation Program
- Attachment D Table of Contents of the Model Training Materials for the Teaching Task
- Attachment E NHTSA Graduated Driver Licensing System Model
- Attachment F NHTSA Uniform Guidelines for State Highway Program Highway Safety Program Guideline No. 4 Driver Education

### **Additional Resources:**

- AAA
- AAA Foundation for Traffic Safety (AAAFTS)
- American Driver and Traffic Safety Education Association (ADTSEA)
- Driving School Association of the Americas (DSAA)
- National Institute for Driver Behavior (NIDB)
- National Highway Traffic Safety Administration (NHTSA)

See the ANSTSE website for additional resources and links: www.anstse.info

# American Driver and Traffic Safety Education Association Novice Driver Education Curriculum Standards

Classroom and In-Car for Segment I and Segment II

### **Prepared by**

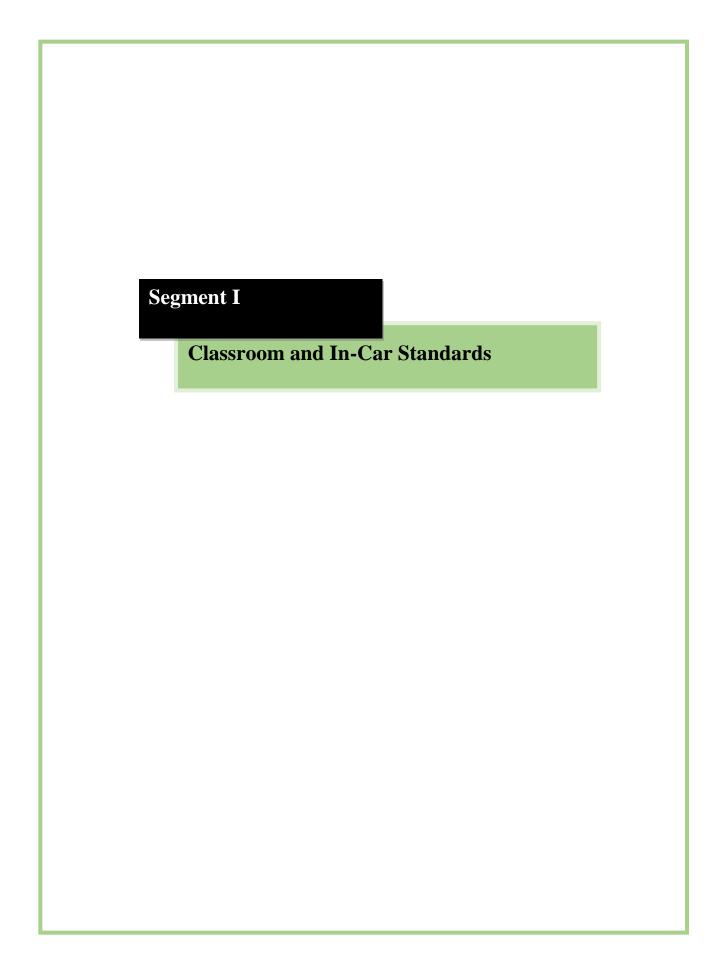
The American Driver and Traffic Safety Education Association Curriculum and Standards Committee



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### American Driver and Traffic Safety Education Association National Curriculum Standards Introduction

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(s) in the motor vehicle.

In 1993, the National Highway Traffic Safety Administration (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 was completed and an outline of the lifetime learning program was accomplished. Three specific training periods were identified for driver development to include pre-licensing, 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 2009, the Novice Teen Driver Education and Training Administrative Standards (NTDETAS) were developed by representatives from the driver education professional community with assistance from NHTSA to define the future of driver education and assist in improving the delivery of driver education programs nationally.

In 2017, the NTDETAS were revised to include delivery standards for classroom, behind-the-wheel and online as well as teacher training standards and materials. The American Driver and Traffic Safety Education Association (ADTSEA) curriculum standards are referenced in the Administrative Standards as Attachment A. This 2017 revision includes additional standards for current and emerging vehicle technology.

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 continue to play a role in identifying the specific needs to accomplish the task of preparing a novice driver. The ADTSEA Standards and Curriculum Committee will review the curriculum standards on a yearly basis. ADTSEA will continue to review and update the standards through web meetings, as new vehicle safety technology becomes available in the future.

### **Classroom Performances**

### 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 managed-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 automated vehicle safety technology systems and explain the benefits of vehicle warning and assistance 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 will indicate progression for:

- Positioning a vehicle:
  - ✓ Based on visual referencing skills, dividing attention, space management,
- Procedures and sequencing for vehicle operational skill:
  - ✓ Based on pre-drive 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.

### **Overview of Classroom Standards for Novice Driver Education**

The student will participate in the state approved driver education 45-hour classroom program comprised of not less than 22.5 sessions of 120-minute training segments.

### C 1.0 Classroom Standard One: Preparing to Operate a Vehicle.

The student will:

- 1.1 become aware of program goals through a student/parent orientation.
- 1.2 recognize and comply with the rules of the road based on state and local requirements.
- 1.3 recognize and illustrate vehicle operating space needed for managed-risk operation.
- 1.4 understand and practice processes and procedures for preparing to drive a vehicle. This includes being aware of and knowing how to utilize current vehicle technology.
- 1.5 recognize the value of occupant protection as a crash prevention and loss prevention tool for managed-risk driver performance.
- 1.6 identify and practice a procedure for starting a vehicle.
- 1.7 identify and practice a procedure for securing a vehicle.
- 1.8 attend the student/parent debriefing at the conclusion of the course and complete the requirements of GDL.

### C 2.0 Classroom Standard Two: Understanding Vehicle Controls.

The student will:

- 2.1 explain and apply basic concepts related to vision control needed to operate a vehicle.
- 2.2 explain and apply basic motion control techniques needed to operate a vehicle while maintaining suspension balance.
- 2.3 explain and apply the four basic techniques related to steering control needed to operate a vehicle.
- 2.4 identify and practice use of communication techniques, courtesy and respect in regard to other roadway users.
- 2.5 identify and practice methods for stopping a vehicle.
- 2.6 identify and develop vehicle reference points to know where the vehicle is positioned to the roadway.

### C 3.0 Classroom Standard Three: Introducing Traffic Entry Skills.

The student will:

- 3.1. recognize, understand, determine meaning, and relate roadway conditions, signs, signals, and
  - pavement markings to managed-risk driving decisions.
- 3.2. understand procedures and processes for basic vehicle maneuvering tasks as listed.

# C 4.0 Classroom Standard Four: Introducing Intersection Skills and Negotiating Curves and Hills.

The student will:

- 4.1. discover how visual skills and mental perception lead to managed-risk driving decisions.
- 4.2. in compliance with rules of the road, select, maintain, and adjust speed to reduce risk of collision .

# C 5.0 Classroom Standard Five: Space Management and Vehicle Control Skills in Moderate Risk Environments.

The student will:

- 5.1. review and apply the principles of a space management system (i.e. SEE) to managedrisk vehicle operation making appropriate communication, speed and lane position adjustments.
- 5.2. demonstrate and practice basic vehicle maneuvers for managed-risk operation and identify and respond to divided attention tasks.

- 5.3. identify procedures and practice techniques for managed-risk lane changes in a variety of lane change situations.
- 5.4. identify procedures and practice techniques for managed-risk perpendicular, angle and parallel parking.
- 5.5. identify procedures and practice techniques for reduced-risk speed management.

# C 6.0 Classroom Standard Six: Developing Traffic Flow and Space Management Skills at Speeds Below 55 m.p.h.

The student will recognize and respond to:

- 6.1. roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.2. space management situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.3. intersection entry situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.4. curve entry/apex/exit situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.5. planned passing situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

# C 7.0 Classroom Standard Seven: Developing Traffic Flow and Space Management Skills at Maximum Highway Speeds

The student will recognize and respond to:

- 7.1. roadway and traffic flow situations on limited access roadways and roadways without limited access at maximum highway speeds.
- 7.2. space management situations on limited access roadways and roadways without limited access at maximum highway speeds.
- 7.3. merging, speed control, lane selection, and exiting situations on limited access roadways at maximum highway speeds.
- 7.4. gap selection, communication, speed control, and lane selection during passing situations on limited access roadways at maximum highway speeds.

### C 8.0 Classroom Standard Eight: Factors Affecting Driver Performance.

The student will:

- 8.1. identify the high-risk effects of alcohol and others drugs, including prescription drugs on personality and driver performance.
- 8.2. recognize legal responsibility to not use alcohol and other drugs that affect ability to operate a vehicle safely and develop strategies for alternative means of safe transportation.
- 8.3. understand the need for driver fitness to aid managed-risk driver performance and recognize that external and internal vehicle distractions, fatigue, and aggression may result in injury and physical damage crashes.
- 8.4. understand the impact of temporary impairments and long-term disabilities and the strategies to compensate and enhance for managed-risk driver performance.
- 8.5. identify risk factors affecting other driver's performance and describe low risk responses.

### C 9.0 Classroom Standard Nine: Managing Adverse Conditions.

The student will:

- 9.1. recognize how adverse weather conditions can impact or affect visibility and traction and respond by adjusting speed to meet the ability to steer and stop the vehicle within the limits of the conditions as presented.
- 9.2. recognize how adverse weather conditions creates visibility and traction problems and the affect on space management skills in regard to speed and position adjustments.

9.3. recognize how night driving creates a visibility problem and how this affects space management in regard to speed and position adjustments.

### C 10.0 Classroom Standard Ten: Other Roadway Users.

The student will:

- 10.1. recognize the characteristics and limitations of other motorized vehicles that may have different weight, speed, and visibility problems and respond with appropriate space management principles.
- 10.2. recognize the characteristics and limitations of non-motorized vehicles and pedestrians that may have different speed and visibility problems and respond with appropriate space management principles.
- 10.3. recognize the characteristics and limitations of tracked vehicles (trains and trolleys) that may have different weight, speed, and visibility problems and respond with appropriate space management principles.

# C 11.0 Classroom Standard Eleven: Responding to Emergencies, Vehicle Malfunctions and Crashes and Understanding Vehicle Technology.

The student will:

- 11.1. recognize and respond to vehicle malfunctions in a managed-risk manner, understand vehicle braking and technology systems and utilize proper braking techniques.
- 11.2. recognize and understand the operation of current and emerging vehicle technologies and address new automated vehicle safety technologies as they become available in the future.
- 11.3. understand and relate how the roadway system is managed by police and state agencies to help deal with emergencies and vehicle malfunctions.
- 11.4. recognize the responsibilities for attending to a crash scene situation.

### C 12.0 Classroom Standard Twelve: Making Informed Consumer Choices.

The student will:

- 12.1. perform map reading and trip planning exercises using current and emerging technology that lead to an in-car family trip activity.
- 12.2. recognize problems and make wise consumer choices in purchasing insurance or an automobile.
- 12.3. understand future operator responsibilities in regard to licensing.
- 12.4. understand operator responsibilities in regard to traffic stops.
- 12.5. understand techniques for safely towing a boat or trailer or driving a special vehicle.
- 12.6. understand the impact vehicles have on the environment and strategies to reduce the carbon footprint.

### Overview of In-car Standards for Novice Driver Education

While participating in the state approved driver education 10 hour in-car training program and 12 hours observation comprised of not less than 20 sessions of 30 minute training segments, the participating student will demonstrate proficiency of the following tasks in 20 planned instructional routes.

### IC 1.0. In-car Standard One: Preparing to Operate a Vehicle.

1.1 Preparations to Operate Vehicle. The student will recognize the visible space around the vehicle, the necessity of making routine vehicle checks and adjustments prior to and after entering the vehicle, identify the location of alert and warning symbol lights, understand the operation of vehicle control and safety devices, and investigate vehicle balance concepts when braking, accelerating, and steering.

- **1.2 Judgment of Vehicle to Roadway Position.** The student will recognize and analyze the standard and personal vehicle guides or reference points relationship to roadway position and vehicle placement.
- IC 2.0. In-car Standard Two: Introducing Traffic Entry and Intersection Approach Skills. The student will utilize critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments. Topics include:
  - 2.1. Visualization of Intended Travel Path
  - 2.2 Searching Intended Travel Path

# IC. 3.0. In-car Standard Three: Developing Visual and Mental Perception for Vehicle Control Tasks.

The student will utilize 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, and apply the state vehicle law and rules of the road. Topics include:

- 3.1 Speed Control
- 3.2 Lane Position Selection
- 3.3 Rear Zone Searching and Control
- 3.4 Following Time and Space
- 3.5 Communication and Courtesy
- 3.6 Using Three Steps to Problem-Solving (i.e. SEE)
- 3.7 Use a Practice Commentary

### IC. 4.0. In-car Standard Four: Responding to Emergency Situations.

- **4.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks.** The student will utilize critical thinking, decision-making, and problem-solving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.
- **4.2 Identify, Assess and Respond to Vehicle Emergencies.** The student will describe appropriate ways to prevent having a vehicle emergency and identify, assess and respond to vehicle emergencies, including engine failure, brake failure and tire pressure failure.
- **4.3 Identify, Assess and Respond to Environmental Conditions.** The student will describe appropriate ways to prevent having an environmental emergency and identify, assess and respond to environmental conditions, including traction loss, vehicle tires dropping off the pavement, line of sight loss situations and loss of path travel situations.

### IC. 5.0. In-car Standard Five: Assessment of Driver Performance.

- **5.1. Driver Assessment.** The student enrolled in a certified driver education program will be able to successfully demonstrate the key core behavioral patterns while performing the recommended procedures on a designated assessment route.
- **5.2. Assessment of Automated Vehicle Safety Technology.** The student enrolled in a certified driver education program will be able to properly use and understand available automated vehicle safety technology.

### Relationship between Classroom and In-Car Standards

The following table describes how the classroom standards correlate with the in-car standards.

Classroom Standard	In-Car Standard
C 1.0 Classroom Standard One: Preparing To Operate a Vehicle C 2.0 Classroom Standard Two: Understanding Vehicle Controls	IC. 1.0. In-car Standard One: Preparing to Operate a Vehicle 1.1 Preparations to Operate Vehicle 1.2 Judgment of Vehicle to Roadway Position
C 3.0 Classroom Standard Three: Introducing Traffic Entry Skills C 4.0 Classroom Standard Four: Introducing Intersection Skills and Negotiating Curves and Hills C 5.0 Classroom Standard Five: Space Management and Vehicle Control Skills in	IC. 2.0 In-car Standard Two: Introducing Traffic Entry and Intersection Approach Skills 2.1. Visualization of Intended Travel Path 2.2 Searching Intended Travel Path  IC. 3.0. In-car Standard Three: Developing Visual and Mental Perception for Vehicle Control Tasks
Moderate Risk Environments C 6.0 Classroom Standard Six: Developing Traffic Flow and Space Management Skills at Speeds Below 55 m.p.h. C 7.0 Classroom Standard Seven: Developing Traffic Flow and Space Management Skills at Maximum Highway Speeds C 10.0 Classroom Standard Ten: Other Roadway Users	<ul> <li>3.1 Speed Control</li> <li>3.2 Lane Position Selection</li> <li>3.3 Rear Zone Searching and Control</li> <li>3.4 Communication and Courtesy</li> <li>3.5 Using Three Steps to Problem-Solving (i.e. SEE)</li> </ul>
C 9.0 Classroom Standard Nine: Managing Adverse Conditions C 11.0 Classroom Standard Eleven: Responding to Emergencies, Vehicle Malfunctions and Crashes and Understanding Vehicle Technology	<ul> <li>IC. 4.0. In-car Standard Four: Responding to Emergency Situations</li> <li>4.1 Divide Focal and Mental Attention Between</li> <li>4.2 Identify, Assess and Respond to Vehicle Emergencies</li> <li>4.3 Identify, Assess and Respond to Environmental Conditions</li> </ul>

### **Essential Knowledge and Skills for Driver and Traffic Safety Education**

### **Driver and Traffic Safety Education: Classroom**

- (A) General Requirements. Driver education is generally a required prerequisite to qualify for a driver permit between 14 years 6 months and before age 18 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 managed risk driving practices. Students acquire essential knowledge, skills, and experiences to perform managed 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 Knowledge and Skills Standards.

### C 1.0 Classroom Standard One: Preparing To Operate a Vehicle

### The student will:

- 1.1 become aware of program goals through a student/parent orientation.
- 1.2 recognize and comply with the rules of the road based on state and local requirements.
- 1.3 recognize and illustrate vehicle operating space needed for managed-risk operation.
- 1.4 understand and practice processes and procedures for preparing to drive a vehicle. This includes being aware of and knowing how to utilize current vehicle technology.
- 1.5 recognize the value of occupant protection as a crash prevention and loss prevention tool for managed-risk driver performance
- 1.6 identify and practice a procedure for starting a vehicle.
- 1.7 identify and practice a procedure for securing a vehicle.
- 1.8 attend the student/parent debriefing at the conclusion of the course and complete the requirements of GDL.

This standard relates to Standard IC 1.0.

The following details explain the content standards listed above.

### C 1.1 Student will become aware of program goals through a student/parent orientation.

- 1.1.1 Make introductions with instructor
- 1.1.2 Understand purpose of orientation session
- 1.1.3 Understand how the driver education program will be conducted
- 1.1.4 Identify the Graduated Driver Licensing (GDL) requirements and responsibilities
- 1.1.5 Complete course registration forms
- 1.1.6 Understand course requirements, policy, rules and documentation for successful completion
- 1.1.7 Identify student classroom rules
- 1.1.8 Identify student in-car rules
- 1.1.9 Identify in-car driving plan and routes

- 1.1.10 Understand driving with temporary impairment and permanent disabilities.
  - a. Use of controlled substances (illegal and legal drugs that are controlled by the government and are more likely to be abused by individuals)
  - b. Use of prescription and over the counter medicines
- 1.1.11 Identify program, student, parent and teacher partnership and responsibilities.
- 1.1.12 Identify the need for maintaining communications
- 1.1.13 Identify injury risk for teens.
- 1.1.14 Identify managed-risk driving goals.

# C 1.2 Student will recognize and comply with the rules of the road based on state and local requirements.

- 1.2.1 Signs, signals, and markings
- 1.2.2 Legal stops and restricted speeds
- 1.2.3 Pedestrian and bicyclists rights and duties
- 1.2.4 Safety responsibility law
- 1.2.5 Speed regulations
- 1.2.6 Alcohol, other drugs and prescription drugs
- 1.2.7 Driver handbook references

# C 1.3 Student will recognize and illustrate vehicle operating space needed for managed-risk operation.

- 1.3.1 Identify visual limitations to the front, rear and sides of the vehicle
- 1.3.2 Identify the length and width of the vehicle's blind zone
- 1.3.3 Identify size of vehicle tire patches
- 1.3.4 Adjust rear and side view mirror settings
  - a. Identify traditional mirror settings used for some vehicles
  - b. Identify blind zones and the use of enhanced mirror settings

# C 1.4 Student will understand and practice processes and procedures for preparing to drive a vehicle by being aware of and utilizing new vehicle technology.

- 1.4.1 Understand mental and physical well-being
- 1.4.2 Manage emotions
- 1.4.3 Protect others by using provided safety equipment
- 1.4.4 Check outside and inside the vehicle before opening vehicle door
- 1.4.5 Lock doors after entry
- 1.4.6 Make vehicle adjustments
  - a. Head restraints
  - b. Seat
  - c. Rear and side view mirrors
  - d. Safety restraints
  - e. Steering wheel
  - f. Pedals
- 1.4.7 Understand gauges, electronics, and accessories
- 1.4.8 Alert and warning symbols and locations
- 1.4.9 Vehicle control devices
- 1.4.10 Safety, communication, comfort, and convenience devices
- 1.4.11 Purpose and use of vehicle's owner's manual
- 1.4.12 Routine vehicle checks

### 1.4.13 Tire safety

- a. Tire pressure
- b. Tread depth
- c. Tire wear and damage

# C 1.5 Student will recognize the value of occupant protection as a crash prevention and loss prevention tool for managed-risk driver performance.

- 1.5.1 Occupant protection knowledge
  - a. Active restraints
  - b. Passive restraints
  - c. Active passive integration
  - d. Frontal crash protection
  - e. Side impact protection
  - f. Rear impact protection

### 1.5.2 Occupant use and misuse

- a. Myths
- b. Lap belt adjustments
- c. Shoulder restraint adjustments
- d. Legal requirements

### 1.5.3 Protecting children

- a. Age and seat requirements
- b. Weight and seat requirements
- c. Proper seat placement
- d. Legal requirements

### 1.5.4 Vehicle control

- a. Seat belt adjustments
- b. Airbag and steering control
- c. Active passive integration assist (APIA)
- d. Front impact
- e. Side impact
- f. Rear impact

### C 1.6 Student will identify and practice the procedures for starting a vehicle.

- 1.6.1 Check and ensure that the parking brake is set
- 1.6.2 Depress the foot brake pedal
- 1.6.3 Select appropriate gear for starting vehicle
- 1.6.4 Recognize alert lights and symbols for safety accessories
- 1.6.5 Operate ignition starting device
- 1.6.6 Select and operate appropriate vehicle accessories
- 1.6.7 Recognize warning lights and symbols for engine or system accessories

### C 1.7 Student will identify and practice a procedure for securing a vehicle.

- 1.7.1 Stop the vehicle in a safe and legal location and keep right foot on the brake.
- 1.7.2 Set 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 vehicle.
- 1.7.5 Visually check traffic flow before opening door.
- 1.7.6 Lock doors and/or secure available alarm system.

# C 1.8 Student will attend the student/parent debriefing at the conclusion of the course and complete the requirements of the GDL.

- 1.8.1 Review program driver skill log requirements
- 1.8.3 Evaluation of destination driving route
- 1.8.4 Review licensing requirements
- 1.8.4 Student responsibilities
- 1.8.5 Media advertising
- 1.8.6 Use of natural resources
- 1.8.7 Parent responsibilities
- 1.8.8 Making safe vehicle choices

### C 2.0 Classroom Standard Two: Understanding Vehicle Controls

The student will:

- 2.1 explain and apply basic concepts related to vision control needed to operate a vehicle.
- 2.2 explain and apply basic motion control techniques needed to operate a vehicle while maintaining suspension balance.
- 2.3 explain and apply the four basic techniques related to steering control needed to operate a vehicle.
- 2.4 identify and practice use of communication techniques, courtesy and respect in regard to other roadway users.
- 2.5 identify and practice methods for stopping a vehicle.
- 2.6 identify and develop vehicle reference points to know where the vehicle is positioned to the roadway.

This standard relates to Standard IC 1.0.

The following details explain the content standards listed above.

# C 2.1 Student will explain and apply basic concepts related to vision control needed to operate a vehicle.

- 2.1.1 Identify vision and mental perception requirements:
  - a. Three basic visual fields (central, fringe or focal, peripheral) and how they are used in the driving task
  - b. Compare visual skills to mental perception
  - c. Techniques to improve visual skills
  - d. Techniques to improve mental perception of traffic events
  - e. Overcoming visual deficiencies
- 2.1.2 Visually identify open space prior to moving foot from brake to accelerator
- 2.1.3 Targeted line of sight
- 2.1.4 Target to end of the path of travel
- 2.1.5 Reference vehicle to path of travel
- 2.1.6 Maintain an open line of sight 20-30 seconds ahead
- 2.1.7 Develop searching skills based on dividing visual and mental attention between two or more tasks

# C 2.2 Student will explain and apply basic motion control techniques needed to operate a vehicle while maintaining suspension balance.

- 2.2.1 Recognize how speed affects vehicle direction
- 2.2.2 Place the vehicle into motion smoothly
  - a. Changing vehicle load—side to side (vehicle roll)
    - i. Steering movements
    - ii. Brake and steering combinations
  - b. Changing vehicle load—front to rear (vehicle pitch)
    - i. Releasing brake suddenly
    - ii. Covering accelerator downhill
    - iii. Light accelerator pressure
    - iv. Progressive accelerator pressure
    - v. Thrust accelerator pressure

- vi. Excessive acceleration affects balance
- c. Changing vehicle load—rear to front (vehicle pitch)
  - i. Releasing accelerator
  - ii. Covering brake uphill
  - iii. Controlled braking (Squeeze on)
  - iv. Threshold braking (Firm pressure prior to lockup)
  - v. Trailing brake (Squeeze off)
  - vi. Excessive deceleration affects balance
- d. Changing vehicle load—pivot around center of gravity (vehicle yaw)
  - i. Sudden braking inputs create traction loss
  - ii. Sudden acceleration inputs create traction loss
  - iii. Sudden steering inputs create traction loss
- 2.2.3 Identify how safety belts maintain seating position and keep the driver in-contact with the steering wheel
- 2.2.4 Identify how the dead pedal allows driver to feel roll, pitch, and yaw characteristics

# C 2.3 Student will explain and apply the four basic techniques related to steering control needed to operate a vehicle.

- 2.3.1 Hand-to-hand steer (Push/Pull)
  - a. Hand position (9-3, 8-4)
  - b. Precision maneuvers
  - c. Steering through curves
  - d. Intersection turning
  - e. Lane change
  - f. Front traction loss control (understeer)
- 2.3.2 Hand-over-hand steer
  - a. Hand position (9-3, 8-4)
  - b. Left or right side of wheel used
  - c. Limited line of sight on entry causing speed under 15 mph
  - d. Tight turning efforts (alley way, parking lots, etc.)
  - e. Perpendicular and parallel parking
  - f. Rear traction loss (oversteer)
- 2.3.3 Limited evasive steer
  - a. Hand position (9-3)
  - b. Maximum steering inputs are 180 degrees
    - i. Input to move front of vehicle
    - ii. Input to move rear of vehicle
    - iii. Input to center vehicle in lane
- 2.3.4 One-hand steering
  - a. Hand Position (12)
    - i. Backing vehicle
    - ii. Hand moves in direction of intended vehicle movement
  - b. Hand Position (6)
  - i. Backing vehicle
  - ii. Hand moves in direction of intended trailer movement
  - c. Hand Position (9 or 3, 8 or 4)
    - i. Using vehicle controls with right or left hand
    - ii. Using gear shifting device with right hand

# C 2.4 Student will identify and practice use of communication techniques, courtesy and respect in regard to other roadway users.

- 2.4.1 Identify Technique
  - a. Use of turn signal before turning right or left
  - b. Use of turn signal or lane change device to move to another lateral position
  - c. Use of headlights on at all times to increase visibility to others
  - d. Use of horn to make others aware of your presence
  - e. Tap of brake lights to warn rear traffic of a slowdown or stop in the traffic flow

f.Use of vehicle speed and position to communicate the driver's upcoming action

### 2.4.2 Identify Timing

- a. Engage turn signal for a minimum of five seconds prior to moving to provide time for the communication to be sent, received and acted upon
- b. Communicate early for control of a safe path of travel
- 2.4.3 Identify Upcoming Action
  - a. Identify that messages are acknowledged by others

### C 2.5 Student will identify and practice methods for stopping a vehicle.

- 2.5.1 Search effectively ahead of the vehicle to determine braking needs
- 2.5.2 Check rear zone/space prior to braking
- 2.5.3 Use controlled braking efficiently with heel of foot on floorboard
- 2.5.4 Apply a firm squeezing braking force at the beginning of the braking process
- 2.5.5 Bring the vehicle to a smooth stop
- 2.5.6 Recognize that too much braking action affects vehicle body pitch toward the front
- 2.5.7 Ease pressure off brake during last two seconds of braking to ease pitch of vehicle
- 2.5.8 Check the rear zone/space before, during and after braking actions
- 2.5.9 Effective use of ABS braking

# C 2.6 Student will identify and develop vehicle reference points to know where the vehicle is positioned to the roadway.

- 2.6.1 Identify Right Side Vehicle References
  - a. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line
  - b. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line
  - c. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line
- 2.6.2 Identify Left Side Vehicle References
  - a. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line
  - b. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line
  - c. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line
- 2.6.3 Identify Front Vehicle References
  - a. Determine when the front bumper is positioned even with the stop line or curb edge

- 2.6.4 Identify Rear Vehicle References
  - a. Determine when the rear bumper is positioned even with a line
- 2.6.5 Identify Front Turning Point of Vehicle
  - a. Determine where on the road the front is positioned for turning left
  - b. Determine where on the road the front is positioned for turning right
- 2.6.6 Identify Rear Turning Point of Vehicle
  - a. Determine where on the road the rear is positioned for backing left
  - b. Determine where on the road the rear is positioned for backing right
- 2.6.7 Visualization of Intended Travel Path
  - a. Identify Target
    - Identify a stationary object or area that appears in the center and at the end of your intended travel path
  - b. Identify Target Area
    - i. Identify the traffic problems and elements in and near the target area
    - ii. Locate your target area, evaluate the line of sight or path of travel conditions and determine best approach speed and lane position
  - c. Identify Targeting Path
    - i. Evaluate the target area, while developing an image of your targeting path
    - ii. Identify elements that can change or modify the intended travel path
    - iii. Determine risks associated with maintaining the intended path of travel
- 2.6.8 Rules of the Road
  - a. Yield right of way
  - b. Intersection
    - i. Approach
    - ii. Stop position (when required)
      - Stop Line, or if none
      - Crosswalk line, or if none
      - Sidewalk or implied crosswalk, or if none
      - Edge of roadway or curb line
      - Proceed with caution or yield to traffic flow

### C 3.0 Classroom Standard Three: Introducing Traffic Entry Skills

The student will:

- 3.1. recognize, understand, determine meaning, and relate roadway conditions, signs, signals, and
  - pavement markings to managed-risk driving decisions.
- 3.2. understand procedures and processes for basic vehicle maneuvering tasks as listed.

This standard relates to Standard IC 2.0.

The following details explain the content standards listed above.

- C 3.1 Student will recognize, understand, determine meaning, and relate roadway conditions, signs, signals, and pavement markings to managed-risk driving decisions. (For a complete listing of all signs, signals, pavement markings refer to your state's motor vehicle code.)
  - 3.1.1 Identify roadway characteristics
    - a. Recognize intersection types
      - i. Uncontrolled
      - ii. Controlled by sign or signal
      - iii. Crossroad with through road
      - iv. Crossroad without through road
      - v. Highway-rail grade crossing
      - vi. T- and Y-style
      - vii. Traffic circle/round-about
    - b. Recognize traffic calming devices
    - c. Recognize surface conditions
    - d. Recognize slope and grade
    - e. Recognize traction (adhesion/grip) potential
    - f. Recognize highway conditions
      - i. Roadway
      - ii. Shoulder
      - iii. Off-road areas
    - g. Recognize lane controls
  - 3.1.2 Identify signs and signals
    - a. Recognize Meaning
    - i. Shapes
      - ii. Color
      - iii. Symbols
      - iv. Legend/message
    - b. Recognize locations
    - c. Recognize legal controls
      - i. Stop
      - ii. Yield
      - iii. Traffic Flow
      - iv. Regulations
  - 3.1.3 Identify pavement markings/symbols
    - a. Recognize meaning
      - i. Color
        - Yellow

- White
- Red
- Blue
- Green (bike lane)
- ii. Line Markings
  - Dashed (puppy lines and elephant lines)
  - Solid
  - Striped
  - Curb markings
- 3.1.4 Recognize location
  - a. Recognize legal controls
    - i. Passing
    - ii. Crosswalk
    - iii. Lane storage
    - iv. Turn position

# C 3.2 Student will understand procedures and processes for basic vehicle maneuvering tasks as listed.

- 3.2.1 Identify and apply procedural steps
  - a. Intersection approach
    - i. See and respond to open/closed space/zones
    - ii. Check and respond to rear space/zone conditions
    - iii. Establish and maintain proper lane usage and speed control
    - iv. Search left, front, and right spaces/zones for line of sight or path of travel changes
    - v. Find open spaces/zones before entering
    - vi. Use staggered, legal, and safety stop when applicable
    - vii. See condition of a traffic signal
    - viii. Adjust speed to arrive at a green light
      - See closed front space/zone
      - Adjust speed to reduce closure rate and to arrive in an open space/zone
      - Adjust speed to have at least one open side space/zone
  - b. Precision left turns
  - c. Precision right turns
  - d. Moving to/from the curb
  - e. Backing
  - i. Straight
  - ii. Around corner
  - iii. Lateral lane change to the left or right
- 3.2.2 Identify and apply driver information processing
  - a. Understand vision and mental perception requirements
  - b. Estimate time needed to cross, turn left or turn right
  - c. Understand value of directed experience/practice
- 3.2.3 Introduction of the space management system (i.e. SEE)
  - a. Understand conditions for searching
    - i. Changes to path of travel
    - ii. Changes to the line of sight
    - iii. Changes in road surface and condition

- b. Understand situations for evaluating
  - i. Alternative paths of travel
  - ii. Appropriate position
  - iii. Appropriate speed
  - iv. Appropriate communication
- c. Understand skills needed to execute decisions
  - i. Speed changes
  - ii. Position changes
  - iii. Communication needs
- 3.2.4 Describe rules of the road
  - a. Identify yielding right of way
  - b. Identify signal use
  - c. Lane position rules at intersections
  - d. Intersection rules
  - e. Signs, signals, and markings rules
  - f. Backing rules

# C 4.0 Classroom Standard Four: Introducing Intersection Skills and Negotiating Curves and Hills

The student will:

- 4.1. discover how visual skills and mental perception lead to managed-risk driving decisions.
- 4.2. in compliance with rules of the road, select, maintain, and adjust speed to reduce risk of collision.

This standard relates to Standard IC 2.0.

The following details explain the content standards listed above.

# C 4.1 Student will discover how visual skills and mental perception lead to managed-risk driving decisions.

- 4.1.1 Recognize need to divide focal vision and mental attention between intended target, travel path and other tasks
  - a. Move focal vision from target area to another location and back to target area
  - b. Move focal vision within ½ second time frames
  - c. Use active searching to allow brain to perceive information
- 4.1.2 Identify target area searching
  - a. Search to target area, evaluate the conditions and determine entry speed and position
  - b. Search for line of sight or path of travel changes affecting approach to target area
  - c. Approach target area, while continually re-evaluating risks in the immediate 4-8 second travel path
  - d. Approach the target area, search for a new target area and new travel path
- 4.1.3 Know how to judge space in seconds
  - a. Search 20-30 seconds ahead to identify potential problems
  - b. Visualize the space the vehicle will occupy at least 12-15 seconds ahead
  - c. Search 8-12 seconds ahead to identify an alternate path of travel
  - d. Continually evaluate the 4-8 second immediate path
  - e. Speed and/or lane position adjustments may be required when the target area cannot be seen
- 4.1.4 Identify changes to line of sight or path of travel
  - a. Evaluate modification in the ability to see or maintain a travel path
  - b. Identify when line of sight or path of travel change are recognized, the need to evaluate other zones/spaces for speed and lane adjustments
- 4.1.5 Identify open, closed or changing zones/spaces
  - a. Identify the intended travel path for open, closed or changing conditions
  - b. Evaluate open, closed or changing conditions for speed and position adjustments
- 4.1.6 Search intersections
  - a. Search for open zones/space to the left, front and right, when approaching an intersection including highway-rail grade crossings
  - b. Evaluate closed or changing zones/spaces and make necessary speed and/or lane position adjustments, when approaching an intersection

- c. Search for open zones/spaces to the left, front and right, before entering an intersection
- 4.1.7 Search into curves and over hills
  - a. Search the line of sight and path of travel through the curve or over the hill crest for closed or changing conditions
  - b. Evaluate the line of sight or path of travel for appropriate speed and position adjustments, before entering a curve or a hill crest

# C 4.2 Student will in compliance with rules of the road, select, maintain, and adjust speed to reduce risk of collision.

- 4.2.1 Select safe speed
  - a. Determine travel speed based upon driver, vehicle, legal, roadway, and environmental limitations
  - b. Determine speed adjustment needed for managed risk
  - c. Since states have set different speed limits for residential, rural, urban, and interstate roads, it is important to adjust your speed to posted speed limits, the type of roadway, and roadway conditions.
  - d. Check gauges, mirrors, and evaluate line of sight or path of travel conditions
- 4.2.2 Recognize changes in line of sight or path of travel
  - a. Avoid using acceleration into a closed or changing zone/space
  - b. Recognize a closed zone/space (such as a red light or stopped traffic), adjust speed to arrive at an open zone/space
  - c. When ability to see a line of sight or path of travel is reduced, adjust speed to maintain or establish an open zone/space

# C 5.0 Classroom Standard Five: Space Management and Vehicle Control Skills in Moderate Risk Environments

The student will:

- 5.1. review and apply the principles of a space management system (i.e. SEE) to managed-risk vehicle operation making appropriate communication, speed and lane position adjustments.
- 5.2. demonstrate and practice basic vehicle maneuvers for managed-risk operation and identify and respond to divided attention tasks.
- 5.3. identify procedures and practice techniques for managed-risk lane changes in a variety of lane change situations.
- 5.4. identify procedures and practice techniques for managed-risk perpendicular, angle and parallel parking.
- 5.5. identify procedures and practice techniques for reduced-risk speed management.

This standard relates to Standard IC 3.0.

The following details explain the content standards listed above.

# C 5.1 Student will review and apply the principles of a space management system (i.e. SEE) to managed-risk vehicle operation making appropriate communication, speed and lane position adjustments.

- 5.1.1 Divide attention between path of travel and other tasks
- 5.1.2 Use an orderly visual search process
- 5.1.3 Control of space to front
- 5.1.4 Use rear and side view mirrors effectively
- 5.1.5 Maintain separation to sides and rear
- 5.1.6 Communicate presence/intentions
- 5.1.7 Manage intersections effectively
- 5.1.8 Practice commentary response
  - a. Identify speed and position adjustment development
  - b. Identify reference points for maneuvers
  - c. Identify rear space/zone view conditions
- 5.1.9 Identify blind zones for different vehicles

# C 5.2 Student will demonstrate and practice basic vehicle maneuvers for managed-risk operation.

- 5.2.1 Identify divided attention tasks
- 5.2.2 Identify intersection maneuvers
- 5.2.3 Identify procedures for backing in a straight line
- 5.2.4 Identify procedures for backing around a corner
- 5.2.5 Determine lowest risk turn around options
  - a. Identify space management considerations
    - i. Communication
    - ii. Procedures
    - iii. Position to curb
    - iv. Speed control
    - v. Steering control
    - vi. Vision control

- b. Identify when it is safer to go around the block
- c. Identify safe behaviors for turning around in a parking lot
- d. Identify procedures for a turnabout with entry into a roadway, alley or driveway on the left or by backing around a corner to the right
- e. Identify procedures for a U-turn
- f. Identify procedures for a three-point (on-street) turnabout in a low risk roadway environment
- g. Identify procedures for turning around in a cul-de-sac, round-about or circular drive turnabout

### C 5.3 Student will identify procedures and practice techniques for managed-risk lane changes in a variety of lane change situations.

- 5.3.1 Identify space management requirements
  - a. Determine the need for a lane change
  - b. Identify divided attention conditions
  - c. Identify communication techniques
  - d. Determine speed and lane position adjustments
- 5.3.2 Identify procedures and practice lane change techniques
  - a. Evaluate space/zones and side view mirror blind zones
  - b. Move to the left side of lane for left lane change
  - c. Move to right side of lane for right lane change
  - d. Signal
  - e. Check blind zones
  - f. Decide best lane position for conditions
- 5.3.3 Lane Position
- 5.3.4 Speed control
- 5.3.5 Steering control
- 5.3.6 Identify vehicle blind zones and truck no zones

## C 5.4 Student will identify procedures and practice techniques for managed-risk perpendicular, angle and parallel parking.

- 5.4.1 Entering a parking space
  - a. Space management applications
  - b. Dividing attention between tasks
  - c. Communication
  - d. Identify procedures and practice parking techniques
    - i. Positioning/reference points
    - ii. Vision control
    - iii. Speed control
    - iv. Steering control
    - v. Forward
    - vi. Reverse
- 5.4.2 Exiting a parking space
  - a. Space management applications
  - b. Dividing attention between tasks
  - c. Communication
  - d. Identify procedures and practice parking techniques
    - i. Positioning/Reference Points
    - ii. Vision control

- iii. Speed control
- iv. Steering control
- v. Forward
- vi. Reverse

## C 5.5 Student will identify procedures and practice techniques for reduced-risk speed management.

- 5.5.1 Visibility
- 5.5.2 Dividing attention
- 5.5.3 Traffic controls
- 5.5.4 Driver condition
- 5.5.5 Road condition
- 5.5.6 Vehicle condition
- 5.5.7 Space to front/rear
- 5.5.8 Other roadway users
- 5.5.9 Traffic flow
- 5.5.10 Vehicle dynamics
- 5.5.11 Speed differentials

## C 6.0 Classroom Standard Six: Developing Traffic Flow and Space Management Skills at Speeds Below 55 m.p.h.

The student will recognize and respond to:

- 6.1. roadway and traffic flow situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.2. space management situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.3. intersection entry situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.4. curve entry/apex/exit situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.
- 6.5. planned passing situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

This standard relates to Standard IC 3.0.

The following details explain the content standards listed above.

## C 6.1 Student will 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.

- 6.1.1 Dividing attention between tasks
- 6.1.2 Sharing the roadway with motorized and non-motorized users
- 6.1.3 Following and being followed
- 6.1.4 Entering and exiting curves
- 6.1.5 Traffic flow to each side of vehicle
- 6.1.6 Multiple use and reversible lanes
- 6.1.7 Oncoming traffic gap selection
- 6.1.8 Crossing traffic gap selection
- 6.1.9 Multiple lane passing
- 6.1.10 Vehicle blind zones and truck no zones

## C 6.2 Student will identify and comply with space management situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 6.2.1 Identify techniques to control space around the vehicle
- 6.2.2 Understand the need to divide attention between tasks
- 6.2.3 Identify appropriate mirror use
- 6.2.4 Recognize vehicle blind zones and truck no zones
- 6.2.5 Maintain separation to sides and rear
- 6.2.6 Communicate presence/intentions
- 6.2.7 Describe multiple lane use and reversible lanes
- 6.2.8 Describe procedures for approaching and exiting a curve
- 6.2.9 Perform commentary responses
  - a. Speed and position changes development
  - b. Rear space/zone response development

## C 6.3 Student will identify and comply with intersection entry situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 6.3.1 Space management applications
- 6.3.2 Dividing attention between tasks
- 6.3.3 Unique signs, signals, and markings
- 6.3.4 Communication
- 6.3.5 Types of intersections
- 6.3.6 Level of traffic flow congestion
- 6.3.7 Estimate time needed to cross, turn right or turn left
- 6.3.8 Identify number of usable lanes
- 6.3.9 Procedures
- 6.3.10 Lane position
- 6.3.11 Speed control
- 6.3.12 Steering control

## C 6.4 Student will 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.

- 6.4.1 Space management applications
- 6.4.2 Dividing attention between tasks
- 6.4.3 Communication
- 6.4.4 Unique signs, signals, and markings
- 6.4.5 Procedures
- 6.4.6 Lane position
- 6.4.7 Speed control
- 6.4.8 Steering control

## C 6.5 Student will identify and comply with planned passing situations on limited access roadways and roadways without limited access at speeds up to 55 m.p.h.

- 6.5.1 Space management applications
- 6.5.2 Dividing attention between tasks
- 6.5.3 Communication
- 6.5.4 Procedures
- 6.5.5 Lane position
- 6.5.6 Speed control
- 6.5.7 Steering control
- 6.5.8 Stopping distance
- 6.5.9 Abort considerations
- 6.5.10 Passing/being passed

## C 7.0 Classroom Standard Seven: Dealing with Complex Environments at Maximum Highway Speeds

The student will recognize and respond to:

- 7.1. roadway and traffic flow situations on limited access roadways and roadways without limited access at maximum highway speeds.
- 7.2. space management situations on limited access roadways and roadways without limited access at maximum highway speeds.
- 7.3. merging, speed control, lane selection, and exiting situations on limited access roadways at maximum highway speeds.
- 7.4. gap selection, communication, speed control, and lane selection during passing situations on limited access roadways at maximum highway speeds.

This standard relates to Standard IC 3.0.

*The following details explain the content standards listed above.* 

## C 7.1 Student will identify and comply with roadway and traffic flow situations on limited access roadways and roadways without limited access at maximum highway speeds.

- 7.1.1 Non-motorized highway restrictions
- 7.1.2 Sharing the roadway with motorized and non-motorized users
- 7.1.3 Divided attention tasks
- 7.1.4 Vehicle size and movement
- 7.1.5 Following and being followed
- 7.1.6 Approach to curves
  - a. See curve in target area
  - b. Check all zones for options
  - c. Establish effective speed control
  - d. Left curve approach
  - e. Right curve approach
- 7.1.7 Entering and exiting limited access highways
  - a. Unique signs, signals, and markings
  - b. Communication
  - c. Types of interchanges
  - d. Level of traffic flow congestion
  - e. Identify number of usable lanes
- 7.1.8 Multiple use and reversible lanes
- 7.1.9 Traffic flow to each side of vehicle
- 7.1.10 Vehicle blind zones and truck no zones
- 7.1.11 Oncoming traffic gap selection
  - a. Crossing traffic gap selection
  - b. Two-lane and multi-lane passing

### C 7.2 Student will identify and comply with space management situations on limited access roadways and roadways without limited access at maximum highway speeds.

- 7.2.1 Control of space around vehicle
- 7.2.2 Dividing attention tasks
- 7.2.3 Appropriate mirror use
- 7.2.4 Vehicle blind zones and truck no zones
- 7.2.5 Maintain separation to sides and rear
- 7.2.6 Communicating presence/intentions

- 7.2.7 Effective management of merge/exit maneuvers
- 7.2.8 Commentary responses
  - a. Speed and position adjustment assessment
  - b. Rear space/zone observance assessment
- 7.2.9 Rules of the Road
  - a. Merging rules
  - b. Passing rules
  - c. Use of traffic flow control devices
  - d. Flashers
  - e. Vehicle lights
  - f. Towing
  - g. Emergency vehicles, including move-over laws

### C 7.3 Student will identify and comply with merging, speed control, lane selection, and exiting situations on limited access roadways at maximum highway speeds.

- 7.3.1 Communication
- 7.3.2 Space management
- 7.3.3 Dividing attention tasks
- 7.3.4 Gap selection
- 7.3.5 Vehicle blind zones and truck no zones
- 7.3.6 Closure of space
- 7.3.7 Speed control
  - a. Managing speed on entrance ramp for maximum searching time and options
  - b. Effective speed on acceleration lane
  - c. Exiting
    - i. Plan ahead
    - ii. Test brakes
    - iii. Flat curves
- 7.3.8 Lane selection and position

## C 7.4 Student will identify and comply with gap selection, communication, speed control, and lane selection during passing situations on limited access roadways at maximum highway speeds.

- 7.4.1 Procedures
- 7.4.2 Limited access highway advantages/disadvantages
- 7.4.3 Passing/overtaking on right side of vehicles
- 7.4.4 Space management
- 7.4.5 Divided attention tasks
  - a. Identify tailgater problems for speed and lane position adjustments
  - b. Evaluate gain versus risk prior to attempting passing maneuver
  - c. Check all zones for line of sight and/or path of travel conditions
- 7.4.6 Vehicle blind zones and truck no zones
- 7.4.7 Communication
- 7.4.8 Speed control
- 7.4.9 Steering control
- 7.4.10 Stopping ability limited
- 7.4.11 Abort considerations
- 7.4.12 Passing/being passed considerations

#### C 8.0 Classroom Standard Eight: Factors Affecting Driver Performance

The student will:

- 8.1. identify the high-risk effects of alcohol and others drugs, including prescription drugs on personality and driver performance.
- 8.2. recognize legal responsibility to not use alcohol and other drugs that affect the ability to operate a vehicle safely and develop strategies for alternative means of safe transportation.
- 8.3. understand the need for driver fitness to aid managed-risk driver performance and recognize that external and internal vehicle distractions, fatigue, and aggression that can cause inattention to task and may result in injury and physical damage crashes.
- 8.4. understand the impact of temporary impairments and long-term disabilities and the strategies to compensate and enhance for managed-risk driver performance.
- 8.5. identify risk factors affecting other driver's performance and describe low risk responses.

The following details explain the content standards listed above.

## C 8.1 Student will identify the high-risk effects of alcohol and others drugs, including prescription drugs on personality and driver performance.

- 8.1.1 Recognizing alcohol and other drugs, including prescription drugs effect on teens
- 8.1.2 Teen risk factors for alcohol and other drugs, including prescription drug use/abuse
- 8.1.3 Limiting risk of driving/riding with others that are intoxicated
- 8.1.4 The effect of alcohol and other drugs, including prescription drugs on driver performance
- 8.1.5 Advertisement/peer pressure to use alcohol and other drugs
- 8.1.6 Alcohol and other drug use/abuse rules and regulations
  - a. Laws concerning alcohol and other drug abuse
  - b. Zero tolerance rules and regulations
  - c. Penalties associated with alcohol and other drug abuse

## C 8.2 Student will recognize legal responsibility to not use alcohol and other drugs that affect the ability to operate a vehicle safely and develop strategies for alternative means of safe transportation.

- 8.2.1 Refusal skills
- 8.2.2 Peer intervention skills
- 8.2.3 Community resources/health agencies
- 8.2.4 Parental support

## C 8.3 Student will understand the need for driver fitness to aid managed-risk driver performance and recognize that external and internal vehicle distractions, fatigue and aggression may result in injury and physical damage crashes.

- 8.3.1 Driver distractions
  - a. Definitions/types
    - i. Physical
    - ii. Mental
    - iii.Visual
    - iv. Auditory
  - b. Effect on new drivers
  - c. Outside vehicle distractions

- d. Inside vehicle distractions, including vehicle technology
- 8.3.2 Dividing attention
  - a. Vision needs
  - b. Mental awareness
- 8.3.4 Fatigue and sleep disorders
- 8.3.5 Driver aggression and response
- 8.3.6 Driver motivation
- C 8.4 Student will understand the impact of temporary impairments and long-term disabilities and the strategies to compensate and enhance for managed-risk driver performance.
  - 8.4.1 Temporary impairments (i.e. sprains, fractured bones, acute illness, etc.)
  - 8.4.2 Long term disabilities (i.e. paralysis, missing limbs, chronic illness, mental disabilities, etc.)
- C 8.5 Student will identify risk factors affecting other driver's performance and describe low risk responses.
  - 8.5.1 Identify risk factors
  - 8.5.2 Low risk responses

#### C 9.0 Classroom Standard Nine: Managing Adverse Conditions

The student will:

- 9.1. recognize how adverse weather conditions can impact or affect visibility and traction problems and respond by adjusting speed to meet the ability to steer and stop the vehicle within the limits of the conditions as presented.
- 9.2. recognize how adverse weather conditions creates visibility and traction problems and the affect on space management skills in regard to speed and position adjustments.
- 9.3 recognize how night driving creates a visibility problem and how this affects space management in regard to speed and position adjustments.

This standard relates to Standard IC 4.0.

The following details explain the content standards listed above.

## C 9.1 Student will recognize how adverse weather conditions can impact or affect visibility and traction problems and respond by adjusting speed to meet the driver's ability to steer and stop the vehicle within the limits of the conditions as presented.

- 9.1.1 Identify changing weather conditions
  - a. Understand what can go wrong
  - b. Prevention techniques
  - c. Types of adverse conditions
  - d. Vehicle control
- 9.1.2 Changing visibility conditions
  - a. What can go wrong
  - b. Prevention techniques
  - c. Types of adverse conditions
  - d. Vehicle control
- 9.1.3 Changing traction conditions.
  - a. What can go wrong
  - b. Prevention techniques
  - c. Understeer
  - d. Oversteer
  - e. Vehicle control
- 9.1.4 Traffic flow situations under limited conditions of visibility/traction.
- 9.1.5 Intersection management under limited conditions of visibility/traction.
  - a. Traffic flow to each side of vehicle
  - b. Oncoming traffic gap selection
  - c. Crossing traffic gap selection
- 9.1.6 Multiple-lane choices and usage under limiting conditions
- 9.1.7 Responding to non-motorized highway users

## C 9.2 Student will recognize how adverse weather conditions creates visibility and traction problems and the affect on space management skills in regard to speed and position adjustments.

- 9.2.1 Control of space around vehicle
- 9.2.2 Dividing attention tasks
- 9.2.3 Appropriate mirror use
- 9.2.4 Maintain separation to sides and rear

- 9.2.5 Communicating presence/intentions
- 9.2.6 Effective management of limited visibility/traction
- 9.2.7 SEE commentary assessment
- 9.2.8 Rules of the Road
  - a. Maintaining visibility laws
  - b. Occupant protection laws
  - c. Use of electronic devices
  - d. Emergency flasher usage
  - e. Headlight usage
- C 9.3 Student will recognize how night driving creates a visibility problem and how this affects space management in regard to speed and position adjustments.
  - 9.3.1 Understand what can go wrong
  - 9.3.2 Prevention techniques
  - 9.3.3. Vehicle control

#### C 10.0 Classroom Standard Ten: Other Roadway Users

#### The student will:

- 10.1. recognize the characteristics and limitations of and respond to other motorized vehicles that may have different weight, speed, and visibility problems and respond with appropriate space management principles.
- 10.2. recognize the characteristics and limitations of non-motorized vehicles and pedestrians that may have different speed and visibility problems and respond with appropriate space management principles.
- 10.3. recognize the characteristics and limitations of tracked vehicles (trains and trolleys) that may have different weight, speed, and visibility problems and respond with appropriate space management principles.

This standard relates to Standard IC 3.0.

The following details explain the content standards listed above.

## C 10.1 Student will recognize the characteristics and limitations of other motorized vehicles that may have different weight, speed, and visibility problems and respond with appropriate space management principles.

- 10.1.1 Heavy commercial vehicles
  - a. Straight commercial vehicles
  - b. Single trailer combinations
  - c. Double trailer combinations
  - d. Triple trailer combinations
  - e. Visibility issues
  - f. Passing issues
  - g. Wind blast issues
  - h. Space needs when turning
  - i. Passenger vehicle interaction
  - j. Hazardous materials vehicle interaction
- 10.1.2 Commercial and non-commercial passenger vehicles
  - a. School bus
  - b. Multi-purpose activity bus
  - c. Transit bus
  - d. Motorcoach
  - e. Shuttle bus
- 10.1.3 Vehicle and trailer combination
  - a. Passing issues
  - b. Wind blast issues
  - c. Space needs when turning
  - d. Visibility issues
- 10.1.4 Delivery vans and trucks
- 10.1.5 Motorcycles and mopeds
  - a. Size and speed
  - b. Visibility issues
  - c. Lane position issues
- 10.1.6 Construction vehicles and work zones
- 10.1.7 Emergency vehicles
- 10.1.8 Farm vehicles

- 10.1.9 Funeral processions
- 10.1.10 Snowmobiles and ATV units
- 10.1.11 Speed issues
  - a. Different travel speeds
  - b. Maintaining momentum on hills
  - c. Acceleration/deceleration
- C 10.2 Student will recognize the characteristics and limitations of non-motorized vehicles and pedestrians that may have different speed, and visibility problems and respond with appropriate space management principles.
  - 10.2.1 Pedal cycles and bicycles
  - 10.2.2 Personalized transport
    - a. Skates/rollerblades
    - b. Skateboards
    - c. Horses
    - d. Others
  - 10.2.3 Horse drawn equipment
  - 10.2.4 Pedestrians
- C 10.3 Student will recognize the characteristics and limitations of tracked vehicles (trains and trolleys) that may have different weight, speed, and visibility problems and respond with appropriate space management principles.
  - 10.3.1 Freight trains
  - 10.3.2 High speed passenger trains
  - 10.3.3 Electric/cable cars
  - 10.3.4 Trolley cars

## C 11.0 Classroom Standard Eleven: Responding to Emergencies, Vehicle Malfunctions and Crashes and Understanding Vehicle Technology

The student will:

- 11.1. recognize and respond to vehicle malfunctions in a managed-risk manner, understand vehicle braking and technology systems and utilize proper braking techniques.
- 11.2. recognize and understand the operation of current and emerging vehicle technologies and address new automated vehicle safety technologies as they become available in the future.
- 11.3. understand and relate how the roadway system is managed by police and state agencies to assist with emergencies, crashes and vehicle malfunctions.
- 11.4. recognize the responsibilities for attending to a crash scene situation.

This standard relates to Standard IC 4.0.

The following details explain the content standards listed above.

## C 11.1 Student will recognize and respond to vehicle malfunctions in a managed-risk manner, understand vehicle braking and technology systems and utilize proper braking techniques.

- 11.1.1 Dashboard electronic malfunctions
  - a. Alert lights and symbols
  - b. Warning lights and symbols
- 11.1.2 Engine, fuel, and ignition system malfunctions
- 11.1.3 Lights and signal malfunctions
- 11.1.4 Steering and suspension malfunctions
  - a. Power steering
  - b. Off-road recovery
  - c. Understeer/oversteer recognition and correction
  - d. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 11.1.5 Tires, traction loss recognition and control
  - a. Blowouts
  - b. Understeer/oversteer recognition and correction
  - c. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 11.1.6 Braking system malfunctions
  - a. Antilock braking systems (ABS)
  - b. Understeer/oversteer recognition and correction
  - c. Intelligent stability and handling systems (ISHS, ESP, ESC)
- 11.1.7 Active passive integrated approach (APIA) systems
- 11.1.8 Vehicle load and weight transfer
  - a. Effect on balance
  - b. Forces of impact
  - c. Traction, gravity, inertia, momentum
  - d. Tire condition/air pressure
  - e. ABS (two-wheel/four-wheel)
- 11.1.9 Intelligent stability and handling systems (ISHS, ESP, ESC)

- C 11.2 Student will recognize and understand the operation of current and emerging vehicle warning, assistance and convenience system technologies and address new automated vehicle safety technologies as they become available in the future.
  - 11.2.1 Identify and understand the operation and purpose of ongoing vehicle technologies, such as:
    - a. All-wheel drive
    - b. Antilock brakes (ABS)
    - c. Electronic stability control (ESC)
    - d. Traction control
  - 11.2.2 Identify and understand the operation and purpose of vehicle warning system technologies, such as:
    - a. Back-up cameras
    - b. Back-up warning
    - c. Bicycle detection
    - d. Blind spot monitor
    - e. Curve speed warning
    - f. Drowsiness alert
    - g. Forward collision warning
    - h. High speed alert
    - i. Lane departure warning
    - j. Obstacle detection
    - k. Parking sensors
    - 1. Pedestrian detection
    - m. Rear cross traffic alert
    - n. Side view camera
    - o. Temperature warning
    - p. Tire pressure monitoring system
  - 11.2.3 Identify and understand the operation and purpose of vehicle assistance system technologies, such as:
    - a. Active and passive safety systems (active head restraints, advanced airbags and safety belt pretensions)
    - b. Adaptive cruise control
    - c. Adaptive headlights
    - d. Automated emergency braking systems / brake assist
    - e. Automated reverse braking
    - f. Electronic blind spot assistance
    - g. Hill descent assist
    - h. Hill start assist
    - i. Lane keeping assist
    - j. Left turn crash avoidance
    - k. Parking assist / automated parallel parking
    - 1. Self-dimming headlights
    - m. Telematics (connected services)
    - n. Traffic jam and queuing assist
    - o. Vehicle to infrastructure communication
    - p. Vehicle to vehicle communication

- 11.2.4 Identify and understand the operation and purpose of vehicle convenience system technologies, such as:
  - a. Active window/windshield display
  - b. Biometric car access
  - c. Hands-free vehicle door open
  - d. Keyless entry/start
  - e. Navigation systems and alerts
  - f. Remote vehicle shutdown/start
  - g. Self-parking vehicles
  - h. Three-dimensional gestures
  - i. Voice recognition
- C 11.3 Student will understand and relate how the roadway system is managed by police and state agencies to help assist with emergencies, crashes and vehicle malfunctions.
  - 11.3.1 Law enforcement agencies
    - a. State enforcement agencies
    - b. County enforcement agencies
    - c. Local enforcement agencies
  - 11.3.2 Emergency response agencies
    - a. Getting help
    - b. Types of emergency response
  - 11.3.3 Rules of Road
    - a. Financial responsibility
    - b. Move over law
  - 11.4 Student will recognize the responsibilities for attending to a crash scene situation.
    - 11.4.1 Responsibilities at a crash scene
    - 11.4.2 Getting help
    - 11.4.3 Reporting crashes

#### C 12.0 Classroom Standard Twelve: Making Informed Consumer Choices

The student will:

- 12.1. perform map reading and trip planning exercises using current and emerging technology that lead to an in-car family trip activity.
- 12.2. make wise consumer choices in purchasing insurance or an automobile.
- 12.3. understand future operator responsibilities in regard to licensing.
- 12.4. understand operator responsibilities in regard to traffic stops.
- 12.5. understand techniques for safely towing a boat or trailer or driving a special vehicle.
- 12.6. understand the impact vehicles have on the environment and strategies to reduce the carbon footprint.

The following details explain the content standards listed above.

## C 12.1 Student will perform map reading and trip planning exercises using current and emerging technology that lead to an in-car family trip activity.

- 12.1.1 Map reading
  - a. Paper and atlas formats
  - b. Digital and GPS formats
  - c. Online map formats
- 12.1.2 Destination driving exercise
  - a. Plan an in-car family trip driving route

### C 12.2 Student will recognize problems and make wise consumer choices in purchasing insurance or an automobile.

- 12.2.1 Insurance
  - a. Types
  - b. Needs
  - c. Safety and financial responsibility (see state law)
- 12.2.2 Purchasing vehicles
  - a. New vehicle costs
  - b. Used vehicle costs
  - c. Vehicle selection

#### C 12.3 Student will understand future operator responsibilities in regard to licensing.

- 12.3.1 Licensing/registration laws
  - a. Driver
  - b. Vehicle

#### C 12.4 Student will understand operator responsibilities in regard to traffic stops.

12.4.1 Identify responsibilities and behavior of the driver.

## C 12.5 Student will understand techniques for safely towing a boat or trailer or driving a special vehicle.

- 12.5.1 Towing a boat or trailer and driving special vehicles
  - a. Skills required for safely towing a boat or trailer
  - b. Techniques required to back a trailer successfully
  - c. Basic equipment needed
  - d. Connecting a trailer to a vehicle
  - e. Loading a trailer

## C 12.6 Student will understand the impact vehicles have on the environment and strategies to reduce the carbon footprint.

- 12.6.1 Fuel-efficient vehicles
- 12.6.2 Fuel-saving driving habits
  - a. Keep track of your gas mileage
  - b. Control your speed
  - c. Warm the engine
  - d. Lighten the load
  - e. Reduce idling
  - f. Reduce drag
- 12.6.3 Alternative fuels
- 12.6.4 Recycling
  - a. Motor oil
  - b. Used cars and parts

#### **Essential Knowledge and Skills for Driver and Traffic Safety Education**

#### **Driver and Traffic Safety Education: In-car Skills**

- **(E) General Requirements.** Driver education in-car instruction is generally a required prerequisite to qualify for a driver permit between 14 years 6 months and before age 18 dependent on state licensing requirements.
- (F) Introduction. State regulated driver and traffic safety education provides the foundation for students, assisted by parents/mentors, to begin the lifelong learning process of managed risk driving practices. Students acquire essential knowledge, skills, and experiences to perform managed 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.
- (G) 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.
- (H) In-car knowledge and skills standards.

#### IC 1.0 In-car Standard One: Preparing to Operate a Vehicle

- **1.1 Preparations to Operate Vehicle.** The student will recognize 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 is aware of vehicle balance concepts when braking, accelerating, and steering.
- **1.2 Judgment of Vehicle to Roadway Position.** The student will recognize and analyze the standard and personal vehicle guides or reference points relationship to roadway position and vehicle placement.

This standard relates to Standard C 1.0 and C 2.0. The following details explain the content standards listed above.

**IC 1.1 Preparations to Operate Vehicle.** The student will recognize 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 is aware of vehicle balance concepts when braking, accelerating, and steering.

#### **1.1.1 Vehicle Operating Space**. The student will:

- a. Identify the visual limitation to the front of the vehicle;
- b. Identify the visual limitation to the rear of the vehicle;
- c. Identify the visual limitation to the right side of the vehicle;
- d. Identify the visual limitation to the left side of the vehicle;
- e. Measure the length and width of the vehicle;
- f. Draw and measure the size of the vehicle tire patches;

- g. Demonstrate the limited visual view in the rear-view mirror;
- h. Demonstrate the traditional mirror view settings for the rear and side view mirrors; and
- i. Demonstrate and apply the enhanced mirror settings for the rear and side view mirrors.

#### **1.1.2 Getting Ready to Drive.** The student will:

- a. Prepare physically and mentally to use vehicle;
- b. Approach the vehicle with awareness;
- c. Check outside and inside of vehicle before opening the door;
- d. Lock doors:
- e. Adjust head restraints, seat position, mirrors, safety restraints, steering wheel position;
- f. Check all occupants for safety belt use; and
- g. Be able to demonstrate effective meaning and usage of all gauges.

#### **1.1.3 Starting the Vehicle.** The student will:

- a. Place or check that parking brake is in set position, as required by state statute and owner's manual;
- b. Select proper gear for starting;
- c. Secure foot brake pedal;
- d. Recognize alert lights for safety accessories;
- e. Demonstrate proper use of ignition starting device;
- f. Demonstrate ability to select and use appropriate accessories;
- g. Give an example of a warning light for engine or system accessories;
- h. Make appropriate gear selection for movement; and
- i. Put headlights on day and night.

#### **1.1.4 Placing Vehicle in Motion.** The student will:

- a. Visually identify open space to enter before moving foot from brake to accelerator:
- b. Communicate to other users;
- c. Place the vehicle into motion smoothly; and
- d. Recognize that too much acceleration affects vehicle body pitch toward the rear.

#### **1.1.5 Stopping Vehicle in Motion.** The student will:

- a. Search effectively ahead of the vehicle to determine braking needs;
- b. Use controlled braking efficiently with heel of foot on floorboard;
- c. Check rear zone/space prior to braking;
- d. Apply a firm squeezing braking force at the beginning of the braking process;
- e. Bring the vehicle to a smooth stop by squeezing off brake;
- f. Recognize that too much braking action affects vehicle body pitch toward the front:
- g. Ease pressure off brake during last two seconds of braking to ease pitch of vehicle;
- h. Check the rear zone/space before, during and after braking actions; and
- i. Demonstrate effective use of maximum ABS braking.

#### **1.1.6 Steering.** The student will:

- a. Turn head and visually target in the direction of intended path of travel prior to turning;
- b. Use a target, sightline and path of travel to determine steering entry and return;
- c. Use a balanced hand position on the wheel (9-3 or 8-4);
- d. Recognize that too much speed and steering affects vehicle body roll toward the opposite side of vehicle;
- e. Use the hand-over-hand or hand-to-hand (turning), hand-to-hand (curvatures), one hand (reverse), or evasive action (avoidance) methods effectively; and
- f. Visually check the rear-view mirror, side view mirrors and mirror blind-zone areas.

#### **1.1.7 Securing the Vehicle.** The student will:

- a. Stop the vehicle in a safe and legal position;
- b. Set the parking brake as required by state statute and owner's manual;
- c. Shift into appropriate gear before removing foot from brake;
- d. Turn off appropriate accessories prior to turning off the vehicle;
- e. Visually check traffic flow before opening door; and
- f. Lock doors and/or secure any alarm system.

**IC 1.2. 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.

#### **1.2.1 Right Side of Vehicle.** The student will:

- a. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line:
- b. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line; and
- c. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line.

#### **1.2.2 Left Side of Vehicle.** The student will:

- a. Determine when the vehicle is positioned within 3-6 inches of the curb or a lane line;
- b. Determine when the vehicle is positioned within 2-3 feet of the curb or a lane line; and
- c. Determine when the vehicle is positioned within 5-8 feet of the curb or a lane line

#### **1.2.3 Front of Vehicle.** The student will:

a. Determine when the front bumper is positioned even with the stop line or curb line.

#### **1.2.4** Rear of Vehicle. The student will:

a. Determine when the rear bumper is positioned even with a line.

#### **1.2.5 Front Turning Point of Vehicle.** The student will:

- a. Determine where on the road the front is positioned for turning left; and
- b. Determine where on the road the front is positioned for turning right.

#### **1.2.6 Rear Turning Point of Vehicle.** The student will:

- a. Determine where on the road the rear is positioned for backing left; and
- b. Determine where on the road the rear is positioned for backing right.

#### **1.2.7 Application of Principles.** The student will:

- a. Demonstrate vehicle placement within typical lane positions; and
- b. Demonstrate vehicle placement within the lane when backing and turning.

#### IC 2.0 In-car Standard Two: Introducing Traffic Entry and Intersection Approach Skills

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

#### 2.1 Visualization of Intended Travel Path

#### 2.2. Searching Intended Travel Path

This standard relates to Standard C 3.0 and C 4.0. The following details explain the content standards listed above.

**IC. 2.1. 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.

#### **2.1.1** Target. The student will:

a. Identify a stationary object or area that appears in the center and at the end of your intended path of travel.

#### **2.1.2** Target Area. The student will:

- a. Locate the target area and evaluate the line of sight or path of travel conditions
- b. Identify the traffic problems and elements in and near the target area; and determine best approach speed and lane position.

#### **2.1.3** Targeting Path. The student will:

- a. Evaluate the target area, while developing an image of the intended targeting path;
- b. Identify elements that can change or modify the intended travel path; and
- c. Determine risks associated with maintaining the intended path of travel.

## **IC. 2.2 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.

## **2.2.1** Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow the brain to perceive information.

#### **2.2.2 Target Area to Searching Areas.** The student will:

- a. Search to the target area to evaluate its conditions and determine entry speed and position
- b. Search for line of sight or path of travel changes affecting the approach to the target area
- c. Approach the target area, while continually re-evaluating risks in the immediate 4-8 second travel path
- d. As you approach the target area, search for your new target area and new travel path

#### **2.2.3** Know How to Judge Space in Seconds. The student will:

- a. Search 20-30 seconds ahead to identify potential problems;
- b. Visualize the space the vehicle will occupy at least 12-15 seconds ahead;
- c. Search 8-12 seconds ahead to identify an alternate path of travel;
- d. Continually evaluate the 4-8 second immediate path; and
- e. Make speed and/or lane position adjustments when the search areas cannot be maintained

#### **2.2.4 Detect Changes to Line of Sight or Path of Travel.** The student will:

- a. Evaluate modification in the ability to see or maintain a travel path; and
- b. Recognize a line of sight or path of travel change, then evaluate other zones/spaces for speed and lane adjustments

#### **2.2.5 Identify Open, Closed or Changing Zones/Spaces.** The student will:

- a. Identify the intended travel path for open, closed or changing conditions; and
- b. Evaluate open, closed or changing conditions for speed and position adjustments.

#### **2.2.6 Searching Intersections.** The student will:

- a. Search for open zones/space to the left, front and right, when approaching an intersection (every intersection is a zone change);
- b. Evaluate closed or changing zones/spaces and make necessary speed and/or lane position adjustments, when approaching an intersection; and
- c. Search for open zones/spaces to the left, front and right, before entering an intersection.

#### **2.2.7 Searching Into Curves and Over Hill Crest**. The student will:

- a. Search the line of sight and path of travel through the curve or over the hill crest for possible closed or changing status of your path of travel, when the target area is a curve or a hill crest; and
- b. Evaluate the line of sight, path of travel for appropriate speed and position adjustments, before entering a curve or a hill crest.

## IC 3.0 In-car Standard Three: Developing Visual and Mental Perception for Vehicle Control Tasks

The student will utilize 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, and apply the state vehicle law and rules of the road. Topics include:

- 3.1 Speed Control
- 3.2 Lane Position Selection
- 3.3 Rear Zone Searching and Control
- 3.4 Following Time and Space
- 3.5 Communication and Courtesy
- 3.6 Using Three Steps to Problem-Solving (i.e. SEE)
- 3.7 Use a Practice Commentary

This standard relates to Standard C 5.0, C 6.0, C 7.0 and C 10.0. The following details explain the content standards listed above.

#### IC. 3.1 Speed Control.

### 3.1.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames;
- c. Use active searching to allow brain to perceive information.

#### **3.1.2 Selection for Ongoing Conditions.** The student will:

- a. Select travel speeds based upon driver, vehicle, legal, roadway, and environmental limitations;
- b. Make speed adjustments based on driver processing information, and limitations.

#### **3.1.3** After Seeing Changes in Line of Sight or Path of Travel. The student will:

- a. Recognize a closed zone/space (a red light or stopped traffic), adjust speed to arrive as the zone/space opens;
- b. Avoid using acceleration into a closed or changing zone/space;
- c. Adjust speed to maintain or establish an open zone/space when your ability to see a line of sight or path of travel is reduced.

#### **3.1.4** After Seeing a Speed Limit Sign. The student will:

- a. Check speedometer, mirrors, and evaluate line of sight or path of travel conditions; and
- b. Adjust speed to meet driver, vehicle, legal, roadway, and environmental limitations.

#### **3.1.5 Speed Control While Approaching Curves and Hills.** The student will:

- a. Establish appropriate speed on approach;
- b. Establish appropriate speed on apex; and
- c. Establish appropriate speed on exit.

#### IC. 3.2 Lane Position Selection.

### 3.2.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to the target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow brain to perceive information.

#### **3.2.2 Lane Position.** The student will:

a. Select the appropriate lane for space management, legal requirements, and destination.

#### **3.2.2 Lane position usage while driving straight ahead.** The student will:

- a. Select a lane position to give best separation from closed or changing zones/space; and
- b. Demonstrate ability to place vehicle in appropriate lane position.

#### **3.2.3** Lane position usage while parking. The student will:

- a. Select a lane position to give best separation from closed or changing zones/space; and
- b. Demonstrate ability to place vehicle in appropriate lane position.

#### **3.2.4** Lane position usage while turning around. The student will:

- a. Select a lane position to give best separation from closed or changing zones/space; and
- b. Demonstrate ability to place vehicle in appropriate lane position.

#### 3.2.5 Lane position usage while approaching curves and hill crests. The student will:

- a. Establish the appropriate lane position on approach;
- b. Establish the appropriate lane position in apex of a curve; and
- c. Establish the appropriate lane position on exiting.

#### IC. 3.3 Rear Zone Searching and Control.

### 3.3.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow brain to perceive information.

#### **3.3.2 Inside Rearview Mirror Usage**. The student will:

- a. Search to the rear after seeing a change to your line of sight or path of travel;
- b. Search to the rear before and after making a turn or a stop;
- c. Search to the rear before and after making speed adjustment; and
- d. Search to the rear before and after making lane position adjustment.

#### 3.3.3 Outside Side View Mirrors and Mirror Blind Zone Checks. The student will:

- a. Check the side view mirror before adjusting a lane position in that direction;
- b. Visually check mirror blind zone after side view mirror use (traditional setting), before moving the steering wheel; and
- c. Check the side view mirror before adjusting a lane position in that direction.

#### **3.3.4** Evaluate Condition to the Rear. The student will:

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

#### IC. 3.4 Following Time and Space.

## 3.4.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow brain to perceive information.

#### **3.4.2** Closure Rate on Approach. The student will:

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

#### **3.4.3 Moving at Same Speed - Maintaining Four Second Interval.** The student will:

- a. Work to maintain four seconds of time and space when following another vehicle.
- b. Adjust speed or lane position if four seconds of time is difficult to maintain.

#### **3.4.4 When Stopping Behind Vehicles.** The student will:

- a. When stopped behind a vehicle, be able to see the rear tires touching the pavement ahead
- b. When stopped behind a vehicle without visibility to the rear, be able to see the driver ahead in their side view mirror (no-zone).

#### **3.4.5 Delay Start Before Moving.** The student will:

a. Delay forward movement for two seconds to open the front zone/space after the vehicle in front begins to move.

#### IC. 3.5 Communication and Courtesy.

#### **3.5.1 Technique.** The student will:

- a. Use turn signal before turning right or left;
- b. Use lane change device rather than turn signal appropriate for moving to another lateral position;
- c. Use headlights on at all times to increase visibility;
- d. Use horn to make others aware of your presence;
- e. Tap brake lights to warn rear traffic of a slowdown or stop in the traffic flow; and
- f. Use vehicle speed and position could communicate the driver's intention.

#### **3.5.2 Timing**. The student will:

- a. Put turn signal on at least five seconds prior to moving since communication requires time to be sent, received and acted upon (see state law)
- b. Communicate early so that your safe path of travel can best be controlled.

#### **3.5.3** Commitment. The student will:

a. Make sure messages are acknowledged by others.

#### IC. 3.6 Using Three Steps to Problem-Solving (i.e. SEE).

### **3.6.1** Search for a change to your line of sight and/or to your path of travel. The student will:

a. Search for restrictions to your intended path of travel

#### **3.6.2 Evaluate your other zones/spaces for risk**. The student will:

- a. Search related zones;
- b. Look for alternate path of travel; and
- c. Evaluate all information before executing.

#### **3.6.3 Execute an Adjustment**. The student will:

- a. Select and apply the best
  - i. Speed control;
  - ii. Lane position; and
  - iii. Communication for the conditions.

#### **IC. 3.7** Use a Practice Commentary. The student will:

- a. State the zone condition, look for line of sight or path of travel zone/space changes;
- b. State the actions you will take in terms of speed, lane position and communication;
- c. Develop the process for brief periods of time as a rear seat occupant/observer; and
- d. Repeat the process for brief periods of time for the driver.

#### IC 4.0 In-car Standard Four: Responding to Emergency Situations

- **4.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks.** The student will utilize critical thinking, decision-making, and problemsolving skills to operate the vehicle and perform basic maneuvers in controlled risk environments.
- **4.2 Identify, Assess and Respond to Vehicle Emergencies.** The student will describe appropriate ways to prevent having a vehicle emergency and identify, assess and respond to vehicle emergencies, including engine failure, brake failure and tire pressure failure.
- **4.3 Identify, Assess and Respond to Environmental Conditions.** The student will describe appropriate ways to prevent having an environmental emergency and identify, assess and respond to environmental conditions, including traction loss, vehicle tires dropping off the pavement, line of sight loss situations and loss of path travel situations.

This standard relates to Standard C 9.0 and C 11.0.

The following details explain the content standards listed above.

# **IC. 4.1 Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks.** 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 will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow brain to perceive information.

#### **IC. 4.2 Identify and respond to vehicles emergencies.** The student will:

- a. Describe appropriate ways to prevent having a vehicle emergency.
- b. Identify, assess, and respond to engine failure.
- c. Identify, assess, and respond to brake failure.
- d. Identify, assess, and respond to tire failure.

#### IC. 4.3 Identify and respond to environmental conditions. The student will:

- a. Describe appropriate ways to prevent having an environmental emergency.
- b. Identify, assess, and respond to traction loss.
- c. Identify, assess, and respond to vehicle tires dropping off the pavement.
- d. Identify, assess, and respond to line of sight loss situations.
- e. Identify, assess, and respond to loss of path of travel situations.

#### IC 5.0 In-car Standard Five: Assessment of Driver Performance

- **5.1. Driver Assessment.** The student enrolled in a certified driver education program will be able to successfully demonstrate the key core behavioral patterns while performing the recommended procedures on a designated assessment route.
- **5.2. Assessment of Automated Vehicle Safety Technology.** The student enrolled in a certified driver education program will be able to properly use and understand available automated vehicle safety technology.

This standard relates to Standard C 1.0 - C 7.0 and C 9.0 - C 11.0. The following details explain the content standards listed above.

**IC. 5.1** The student enrolled in a certified driver education program will be able to successfully demonstrate the key core behavioral patterns while performing the following procedures.

## **5.1.1** Divide Focal and Mental Attention Between Intended Target, Travel Path and Other Tasks. The student will:

- a. Move focal vision from target area to another location and back to target area;
- b. Move focal vision within ½ second time frames; and
- c. Use active searching to allow brain to perceive information.
- **5.1.2 Precision Turns**. The student will:
  - a. Demonstrate and explain a proper side position;
  - b. Demonstrate and explain the forward position;
  - c. Search intersections left, front, and right to ascertain open zones/spaces; and
  - d. Look into the turn before turning the steering wheel.

#### **5.1.3** Approach to Intersections. The student will:

- a. See and respond to open/closed zones;
- b. Check and respond to rear zone conditions;
- c. Establish and maintain proper lane usage and speed control;
- d. Search left, front, and right zones for changes, get open zones before entering; and
- e. Demonstrate and use staggered, legal, and safety stop when applicable.

#### **5.1.4** Timing Arrival for Open Zone. The student will:

- a. See condition of traffic light; adjust speed to arrive at a green light;
- b. See closed front zone; adjust speed to reduce closure rate and to arrive in an open zone; and
- c. Adjust speed to have at least one open side zone.

#### **5.1.5 Precision Lane Change**. The student will:

- a. Evaluate zones and mirror blind spots;
- b. Move to lane position 2, the left side of lane for left lane change;
- c. Move to lane position 3, the right side of lane for right lane change;
- d. Make final mirror blind spot check;
- e. Enter new lane in lane position 2 or lane position 3; and
- f. Decide on best lane position for conditions.

#### **5.1.6** Approach to Hill Crest and Curves. The student will:

- a. See hill or curve in target area;
- b. Check all zones for options;

- c. Establish effective speed control;
- d. Best lane position for approaching the hill crest
- e. Select best lane position for left curve approach, lane position 3 if right zone is open, apex lane position 1, exit lane position 1; and
- f. Select best lane position for right curve approach, lane position 2 if left zone is open, apex lane position 3, exit lane position 1.

#### **5.1.7 Passing/Being Passed**. The student will:

- a. Identify tailgater problems for speed and lane position adjustments;
- b. Evaluate gain versus risk prior to attempting passing maneuver;
- c. Check all zones for conditions; and
- d. Control speed and lane position.

#### **5.1.8 Getting On/Off Limited Access Highways.** The student will:

- a. Adjusting speed on entrance ramp for maximum searching time and options;
- b. Evaluate gap to enter;
- c. Effective speed on acceleration lane; and
- d. Getting off: plan ahead, test brakes.

#### **5.1.9 Backing Techniques.** The student will:

- a. Effective searching prior to and while backing;
- b. Effective use of brake for speed control; and
- c. Effective steering technique.

#### **5.1.10 Parking Techniques.** The student will:

- a. Establish side position;
- b. Demonstrate proper forward position;
- c. Use minimum space to go forward;
- d. Evaluate alignment to space;
- e. Back to pivot point, turn wheel;
- f. Visually target center of vehicle or space to the rear; and
- g. Straighten tires, demonstrate rear limitation reference.

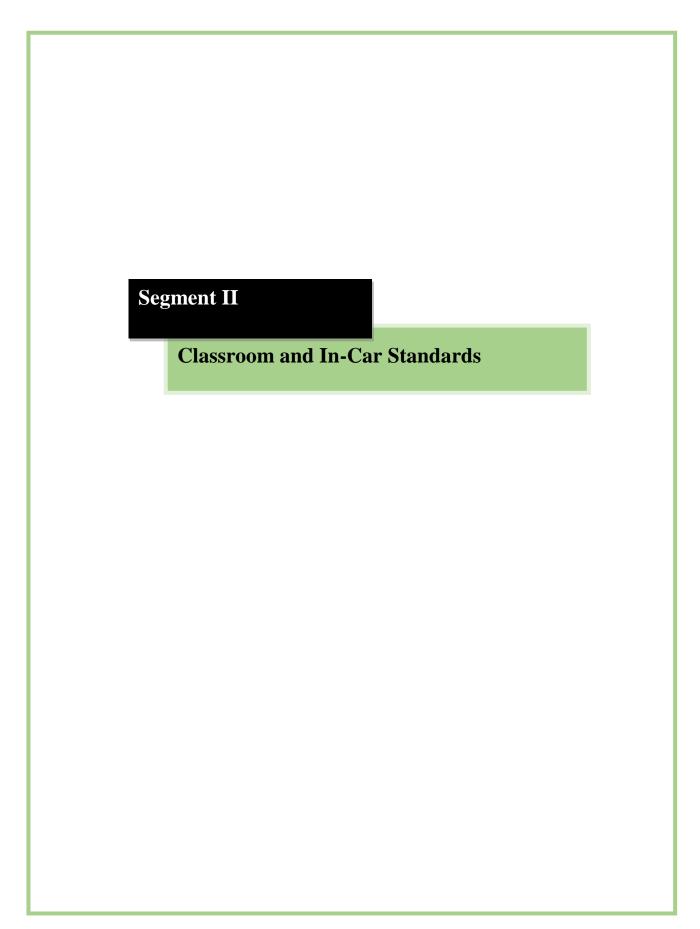
#### **5.1.11 Turnabout Techniques**. The student will:

- a. Establish side position;
- b. Demonstrate proper forward position;
- c. Use minimum space to go forward;
- d. Evaluate alignment to space;
- e. Back to pivot point, turn wheel;
- f. Visually target center of vehicle or space to the rear; and
- g. Straighten tires, demonstrate rear limitation reference.

#### **5.1.12 Responding to Emergency Situations**. The student will:

- a. Use vision control, motion control, and steering control sequences;
- b. Recognize and respond to adverse conditions that change vehicle traction;
- c. Recognize front wheel traction loss;
- d. Recognize rear wheel traction loss;
- e. Demonstrate appropriate controlled brake, trail brake, threshold brake, and antilock brake use; and
- f. Recognize and respond to vehicle mechanical failures.

## **IC. 5.2** The student enrolled in a certified driver education program will be able to properly use and understand available automated vehicle safety technology.



This material represents the best practices developed by the ADTSEA Curriculum Standards Committee. 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.

#### **Classroom Performances Concurrent with Segment I**

#### 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 benefits of vehicle warning and assistance 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 pre-drive 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.

#### Overview of 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 automated vehicle safety technology for reducing the collision effects of driver error, and relate the concepts of vehicle understeer and vehicle oversteer to traction loss.

#### **Overview of 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 automated vehicle safety 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 automated vehicle safety 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 and In-Car Segment II

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

**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.

**Responsibilities.** Teachers will 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 standards.

#### Segment II - C 1.0 Classroom Standard One: Mental and Perceptual Awareness

The student understands 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.

#### Segment II - C 2.0 Classroom Standard 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 preventing/deterring the driver's attention from the task.

#### 2.3 Distracted Driving

- ✓ identify driver distractions as a vision and mental problem
- ✓ identify factors inside 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

# Segment II - C 3.0 Classroom Standard 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 automated vehicle safety 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.
  - ✓ relate
- 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 automated vehicle safety 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.

# 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.

# Segment II - IC 1.0 In-Car Standard One: Commentary Driving Assessment

# **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

# Segment II - IC 2.0 In-Car Standard Two: SEE System Training

# **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

# **Segment II - IC 3.0 In-Car Standard Three: Commentary Space Management Assessment**

# **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

# Segment II - IC 4.0 In-Car Standard Four: Advanced Collision Avoidance Actions (Off-Road Application)

# 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 automated vehicle safety 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 automated vehicle safety 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 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 B – DSAA Curriculum Standards

# **Driving School Association of the Americas**

# **Beginner Driver Education and Training**

Curriculum Content Standards



www.dsaa.org

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#### **PREFACE**

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

The original version of these standards was developed in collaboration with Sue McNeill of the Road Safety Educators' Association (RSEA), Ontario, Canada. In December 2008, Sue lost her courageous battle with cancer but left her legacy as an expert in road safety. The Driving School Association of the Americas is proud of its collaboration with Sue McNeill and RSEA that has resulted in these curriculum content standards which have proven extremely useful 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 bring 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 they will pose the least risk possible to themselves and others and to help them remain crash- and violation-free in their driving careers.

The Driving School Association of the Americas has also adopted a process for curriculum review and approval to assist schools in measuring their curriculum against the DSAA Curriculum Content Standards. Visit the DSAA website for more information www.thedsaa.org.

#### CURRICULUM CONTENT STANDARDS REVISION

The revision of the DSAA Curriculum Content Standards was an activity in the DSAA FY 2016 Technical Assistance Project with the Association of National Stakeholders for Traffic Safety Education (ANSTSE), Highway Safety Services (HSS) and supported by the National Highway Traffic Safety Administration (NHTSA). The Foundation for Safe Driving was sub-contracted to complete the revision of the DSAA Curriculum Content Standards. The DSAA's Education Committee, Board of Directors, and Communication Office reviewed and supplied feedback to the DRAFT version of the revision. The Foundation for Safe Driving used the feedback to continue the revision of the Curriculum Content Standards and to finalize the 2016 revision. A Phase 2 Driver Education Program was also added to the standards as well as a glossary of terms. The terms defined in the glossary are *italicized* in the document. The 2017 revision of the DSAA Curriculum Content Standards included the addition of Vehicle Technology Systems and Automated Vehicle Systems. This is the current version of the standards and if anyone needs an updated copy, please contact the DSAA Communication Office.

#### INTRODUCTION

Driving is a complex and demanding skill. Every driver needs to be aware of all the elements that form the foundation to becoming a safe and responsible driver such as: 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.

Death from a motor vehicle crash is the number one "disease" for young people in the United States. And fatalities are not the only problem; injury crashes are epidemic as well. There are many professional curriculums for driver education and training programs to consider. It is our hope that DSAA's curriculum content standards will help identify curriculum elements that target 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 new driver as their driving career begins.

#### CURRICULUM CONTENT STANDARDS OVERVIEW

- **1.0 Rules of the Road.** To develop knowledge, appreciation, and skills related to the jurisdictional rules of the road and how they set a foundation for safe, responsible, and incident-free driving.
- **2.0 Vehicle Components.** To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safely features and how they contribute to safe, responsible and incident-free driving.
- **3.0 Vehicle Handling.** To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe, responsible and incident-free driving.
- **4.0 Driver Behavior.** To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving.
- **5.0 Sharing the Road.** To develop knowledge, appreciation, and skills related to effectively interacting with other road-users and how it contributes to safe, responsible, and incident-free driving.
- **Attention and Perception.** To develop knowledge, appreciation, and skills related to attention and how it contributes to safe, responsible, and incident-free driving.
- **7.0 Perception and Risk Management.** To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe, and responsible driving, and incident-free driving.
- **8.0 Vehicle Maintenance/Malfunctions and Technology.** To develop knowledge, appreciation, and skills related to vehicle maintenance, vehicle malfunctions, and vehicle technology and how they contribute to safe, responsible, and incident-free driving.
- **9.0 Managing Emergences and Adverse Conditions.** To develop knowledge, appreciation, and skills related to managing emergences and adverse conditions and how they contribute to safe, responsible, and incident-free driving.
- **10.0 Respect and Responsibility.** To develop knowledge, appreciation, and skills related to respectful and responsible driving attitudes and how they contribute to safe, responsible, and incident-free driving.
- **11.0 Vehicle Technology Systems.** To develop knowledge, appreciation, and skills related to vehicle technology systems contributing to safe, responsible, and incident-free driving.
- **12.0 Automated Vehicle Systems.** To develop knowledge, appreciation, and skills related to automated vehicle Systems as to contributing to safe, responsible, and incident-free driving.

# 1.0 RULES OF THE ROAD

**1.0 Rules of the Road.** To develop knowledge, appreciation, and skills related to the jurisdictional rules of the road and how they set a foundation for safe, responsible, and incident-free driving.

#### 1. Classroom Instruction.

- **1.1.1** To know the jurisdictional specific process for obtaining the *privilege to drive*, the student must be able to:
  - A. Identify the process for obtaining and maintaining a Driver's License;
  - B. Recognize and implement the process for the graduated drivers licensing system;
  - C. Explain the process for *license suspension and revocation*;
  - D. Identify the process for *vehicle registration*;
  - E. Understand the process for obtaining vehicle insurance; and
  - F. Recognize the process for parental involvement in driver education.
- **1.1.2** To safely and responsibly comply with traffic laws and regulations to drive safely in the *Highway Transportation System (HTS)*, the student should be able to:
  - A. Explain the road safety rationale for traffic laws and regulations to safely control traffic flow;
  - B. Explain current road safety issues and how traffic laws and regulations address these issues;
  - C. Explain the jurisdictional specific laws concerning speed selection, speed limits, appropriate communication, passing and being passed, moving forward, turning, stopping, parking, leaving a parking space, proper following distance, backing, coasting, and distracted driving;
  - D. Know the jurisdictional specific laws and penalties concerning intoxication including those applicable to adults, over legal driving age, improper use of a driver's license, Driving Under the Influence, Public Intoxication, Driving While Intoxicated, Intoxication Assault, and Intoxication Manslaughter violations, applicable to minors and adults and under legal drinking age, for improper use of a driver's license, Driving Under the Influence by a Minor, Public Intoxication, Minor in Possession, Driving While Intoxicated, Intoxication Assault, and Intoxication Manslaughter violations; Open Container Law, Open Container Enhancement Law, applicable to minors and adults for Administrative License Revocation and Implied Consent violations;
  - E. Explain the jurisdictional-specific laws concerning blind spot driving, the ability to stop a vehicle on a roadway various conditions, use of vehicle lights, and entering, traveling on, and exiting a freeway;
  - F. Understand the jurisdictional-specific recommendations for altering speed, route planning, and choosing not to drive for the duration of poor driving conditions including heavy traffic, bad weather, low visibility, poor roadway, malfunctioning vehicle, and impaired or fatigued driver;

- G. Describe the jurisdictional-specific procedures for handling a common driving challenges such as vehicle breakdown, a vehicle in a skid, brake failure, running off pavement, blowout, driving down a steep hill and winter driving;
- H. Explain how to demonstrate proper and safe responses to the rules of the road;
- I. Understand drivers obligations and accountability to drive safely and responsibly;
- J. Recognize the consequences of disobeying traffic laws and regulations; and
- K. Identify that driver education provides the basis of knowledge and skills for a lifelong process of safely and responsibly complying with traffic laws and regulations.
- **1.1.3** To safely and responsibly comply with *yielding protocol* and with who should be given the *right of way*, the student should be able to:
  - A. Explain the purpose and principles for *yielding protocol* and *right of way* laws;
  - B. Explain the jurisdictional specific *yielding protocol* and *right of way* laws;
  - C. Explain the *right of way* laws as they relate to *school buses*;
  - D. Understand the *yielding protocol* right of way laws as they relate to *emergency vehicles* and the Move Over Law in their jurisdiction;
  - E. Explain the right of way laws as they relate to pedestrians; and
  - F. Explain the *right of way* laws as they relate to interacting other motor vehicles and road users.
- **1.1.4** To safely and responsibly comply with traffic control devices, the student should be able to:
  - A. Identify traffic control devices including signs, signals, and markings;
  - B. Explain the rationale for traffic control devices and how they contribute to road safety:
  - C. Identify the prominent characteristics of common traffic control devices to explain the specific meaning and purpose for each; and
  - D. Explain how to demonstrate proper and safe response to all traffic control devices; and
  - E. Recognize how the basic understanding of traffic control devices allows a driver to make educated and legal decisions on how to drive safely and responsibly.
- **1.1.5** To safely and responsibly understand the hierarchy of the *Highway Transportation System (HTS)*, the student should be able to:
  - A. Describe the *Highway Transportation System*;
  - B. Identify the types of vehicles that use the *Highway Transportation System*;
  - C. Explain the differences between the different driving environments in the HTS that includes suburban, urban, and rural environments;
  - D. Explain the differences between the different driving environments in the HTS that includes *controlled*, *low*, *moderate*, *and complex risk environments*; and
  - E. Compare the hierarchy and characteristics of parking areas, city streets, country roads, provincial highways, federal highways, freeways and expressways.

- **1.1.6** To safely and responsibly cooperate with other road users and law enforcement in the *Highway Transportation System (HTS)*, the student should be able to:
  - A. List the different road users in the HTS including vulnerable road users;
  - B. Explain the jurisdictional laws and responsibilities of sharing the road with other road users such as bicyclists, trucks, motorcyclists, slow-moving vehicles, work zone/construction workers, and pedestrians (including a runner, physically disabled person, child skater, highway construction and maintenance worker, utility worker, and stranded motorist);
  - C. Know the jurisdictional laws concerning responsibilities at the scene of a traffic crash including aiding the injured;
  - D. List the jurisdictional laws for pedestrians, bicycles, motorcycles, trucks, light rail, neighborhood electronic vehicles, person on horseback, horse-driven conveyance, farm equipment and motor assisted scooters;
  - E. Know the jurisdictional laws regarding *active and passive occupant restraints* and open truck beds;
  - F. Describe the responsibilities if stopped by law enforcement;
  - G. Identify define aggressive driving traits;
  - H. Understand how *speed* reduces your *field of vision including central vision, focus vision, and peripheral vision*;
  - I. Explain how to safely and responsibly transport cargo, using safety chains, and towing a vehicle; and
  - J. Identify how avoid being poisoned by carbon monoxide.

(No In-Vehicle Instruction until proper jurisdictional license is obtained.)

**1.3 In-Vehicle Observation.** (No In-Vehicle Observation until proper jurisdictional license is obtained.)

# 2.0 VEHICLE COMPONENTS

**2.0 Vehicle Components.** To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safely features and how they contribute to safe, responsible and incident-free driving.

#### 2.1. Classroom Instruction.

- **2.1.1** To safely and properly use basic vehicle components, the student should be able to:
  - A. Identify and explain the functions of the basic vehicle components, including control devices, instruments, warning or alert indicators, visibility devices including contemporary sideview mirror setting and traditional sideview mirror setting, safety devices, comfort devices, anti-theft devices, communication devices, and traction control devices:
  - B. Identify and explain the functions of the vehicle *control devices* including steering wheel, *accelerator pedal*, *brake pedal*, *clutch pedal*, gear selector, and parking brake;
  - C. Explain the difference between automatic and manual transmissions;
  - D. Identify the gear shift lever for an automatic and manual transmission;
  - E. Identify the pedal operations for an automatic and manual transmissions;
  - F. Understand the *vehicle starting tasks*;
  - G. Demonstrate proper use and importance of the each vehicle component; and
  - H. Explain the importance of vehicle control and its effect on safe driving.
- **2.1.2** To consistently and properly use safety restraint systems, the student should be able to:
  - A. Know the jurisdictional-specific safety belt laws;
  - B. Explain the laws of physics and how they affect the outcomes of a crash, including momentum, inertia, kinetic energy, gravity, friction, and force of impact;
  - C. Identify active and passive occupant protection;
  - D. Explain proper positioning for use of the safety restraint systems;
  - E. Identify child safety restraints; and
  - F. Understand that the driver is ultimately responsible for the safety of all passengers through the use of any and all appropriate safety restraint systems as required.
- **2.1.3** To safely and responsibly perform external and internal pre-trip checks, the student should be able to:
  - A. Explain the *external pre-trip check*;
  - B. Explain the internal pre-trip check; and
  - C. Recognize the *blind areas* around a vehicle.
- **2.1.4** To safely and responsibly perform vehicle *post-drive checks*, the student should be able to:
  - A. Explain the *post-drive check*;
  - B. Describe the procedures for ensuring children, adults and animals properly exit the vehicle; and
  - C. Explain how to secure the vehicle.

- **2.2.1** To safely and properly use basic vehicle components, the student should be able to:
  - A. Identify and demonstrate the proper use of basic vehicle components, including control devices instruments and warning indicators, visibility devices, safety devices, comfort devices, anti-theft devices, communication devices, and traction control devices;
  - B. Perform vehicle starting tasks;
  - C. Identify the gear shift lever for an automatic or manual transmission; and
  - D. Identify the pedal operations for an automatic or manual transmission.
- **2.2.2** To consistently and properly use safety restraint systems, the student should be able to:
  - A. Use safety belts properly; and
  - B. Ensure that all passengers properly use safety belts.
- **2.2.3** To safely and responsibly perform external and internal pre-trip checks, the student should be able to:
  - A. Perform an external *pre-trip check*;
  - B. Perform an internal pre-trip check; and
  - C. Identify the *blind areas* around a vehicle.
- **2.2.4** To safely and responsibly perform vehicle shut down procedures, the student should be able to:
  - A. Shut down the vehicle properly;
  - B. Ensure all passengers safely exit the vehicle including children, adults and animals; and
  - C. Secure the vehicle.
- **2.3 In-Vehicle Observation** (If required in your jurisdiction).
- **2.3.1.** To observe the use of basic vehicle components, the student should be able to:
  - A. Observe the driver identifying and demonstrating proper use of basic vehicle components, including control devices instruments and warning indicators, visibility devices, safety devices, comfort devices, *anti-theft devices*, communication devices, and traction control devices;
  - B. Observe vehicle *starting tasks*;
  - C. Observe the driver identifying the gear shift lever for an automatic or manual transmission; and
  - D. Observe the driver identifying the pedal operations for an automatic or manual transmission.
- **2.3.2** To consistently and properly use safety restraint systems as a passenger, the student should be able to:
  - A. Use safety belts properly; and
  - B. Ensure that all passengers properly use safety belts.

- **2.3.3** To safely and responsibly observe external and internal pre-trip checks, the student should be able to:
  - A. Observe the driver perform an external pre-trip check;
  - B. Observe the driver perform an internal pre-trip check; and
  - C. Identity the *blind areas* around a vehicle.
- **2.3.4** To safely and responsibly observe vehicle shut down procedures, the student should be able to:
  - A. Observe the driver shut down the vehicle properly;
  - B. Safely exit the vehicle after the vehicle is shut down properly; and
  - C. Observe the driver secure the vehicle.

# 3.0 VEHICLE HANDLING

**3.0 Vehicle Handling.** To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe, responsible and incident-free driving.

#### 3.1 Classroom Instruction.

- **3.1.1** To safely and responsibly control the vehicle to drive safely, the student should be able to:
  - A. Explain the importance of vehicle control in vehicle handling and its effect on safe driving;
  - B. Demonstrate how to control the vehicle properly by using the *proper hand position* on the steering wheel, visual tracking procedures, *steering control*, seating position, starting and stopping procedures, acceleration, speed control, deceleration and braking, and parking brake procedures;
  - C. Explain the use of the *vehicle controls* to perform *vehicle movements* including moving forward, parking, changing directions, turning, backing, entering the highway or freeway, and yielding the right-of-way in urban and rural driving environments;
  - D. Identify how to manage complex intersections; and
  - E. Explain reasons a driver would use or avoid using certain driving techniques.
- **3.1.2** To safely and responsibly use vehicle *reference points*, the student should be able to:
  - A. Identify vehicle reference points;
  - B. Explain how vehicle *reference points* are used to position the front, sides, corners, and rear of the vehicle; and
  - C. Describe how vehicle *reference points* are used to perform *vehicle maneuvers* and manage *vehicle space*.
- **3.1.3** To safely and responsibly maintain the vehicle's *balanced weight*, the student should be able to:
  - A. Explain the role of *balanced weight* in vehicle handling;
  - B. Explain the effect of the following on the vehicle's *balanced weight*, steering inputs, acceleration/deceleration, braking/slowing weight management, time management, *space management*, stopping distances, braking distances, *following too closely* (*tailgating*), adjusting speed for conditions effect of road surfaces on stopping, seasonal changes and road surfaces, and tire types and conditions;
  - C. Explain the benefits of proper tire inflation;
  - D. Explain appropriate point of brake application under various conditions and situation;
  - E. Explain the role of friction under various conditions;
  - F. Understand how a *vehicle's roll, pitch and yaw* effect a vehicle's balanced weight; and
  - G. Explain how to demonstrate caution in maintaining the *vehicle's balanced weight* in compensating for different driving conditions.

- **3.1.4** To safely and responsibly maintain traction and properly use other driver inputs, the student should be able to:
  - A. Explain the role of *traction* in vehicle handling;
  - B. Explain *traction* as it relates to time management, space management, and changing speed and/or position such as moving off, cornering, changing lanes, stopping distances, backing, and following;
  - C. Explain *friction* as it relates to speed maneuvers, road surfaces and stopping, seasonal changes and road surfaces, and tire types and conditions;
  - D. Explain the benefits of proper tire inflation as it relates to friction and traction;
  - E. Understand the appropriate point of brake application under various conditions and situations as it relates to traction; and
  - F. Explain the role of *friction* under various conditions as it relates to traction;
- **3.1.5** To safely and responsibly detect and recover from skidding and sliding, the student should be able to:
  - A. Identify the driving situations under which skidding or sliding might occur;
  - B. Identify driving situations under which brake lock-up might occur;
  - C. Explain the principles of skid control and slide control;
  - D. Identify how to recover from skidding and sliding; and
  - E. Explain the emotions and how to compensate for these emotions that a driver may experience when vehicle control is lost beyond the point of no return.

- **3.2.1** To safely and responsibly control the vehicle and to drive safely, the student should be able to:
  - A. Use the *vehicle controls*;
  - B. Control the vehicle properly by using the *proper hand position* on the steering wheel, *visual tracking procedures*, steering control, *seating position*, *starting and stopping procedures*, *acceleration*, *speed control*, *deceleration and braking*, and *parking brake procedures*;
  - C. Use the vehicle controls to perform *vehicle movements* including moving forward, parking, changing directions, turning, backing, entering the highway or freeway, yielding the *right-of-way* in urban and rural driving environments; and
  - D. Use or avoid using certain driving techniques in the proper situations.
- **3.2.2** To safely and responsibly use vehicle *reference points*, the student should be able to:
  - A. Identify reference points;
  - B. Use vehicle reference points to position the front, sides, corners, and rear of the vehicle; and
  - C. Use vehicle reference points to perform vehicle maneuvers and manage vehicle space.
- **3.2.3** To safely and responsibly maintain the vehicle's *balanced weight*, the student should be able to:
  - A. Maintain the vehicle's *balanced weight* while steering inputs, acceleration, deceleration, braking/slowing, weight management, time management, *space management*, stopping distances, braking distances, following distances, adjusting

- speed for conditions, effect of road surfaces on stopping, seasonal changes and road surfaces, and tire types and condition;
- B. effect of road surfaces on stopping; seasonal changes and road surfaces, and tire types and conditions;
- C. Use the appropriate brake, macerator, and steering applications; and
- D. Maintain the vehicle's balanced weight in compensating for different driving conditions.
- **3.2.4** To safely and responsibly maintain traction and using other driver inputs, the student should be able to:
  - A. Maintain traction as it relates to time management, space management and changing speed and/or position such as; moving off, cornering, changing lanes, stopping, backing, and following; and
  - B. Manage friction as it relates to speed, maneuvers, road surfaces and stopping, seasonal changes and road surfaces, and tire types and conditions.
- **3.3 In-Vehicle Observation** (If required in your jurisdiction).
- **3.3.1** To safely and responsibly observe controlling the vehicle to drive safely, the student should be able to:
  - A. Observe the use of the vehicle controls;
  - B. Observe controlling the vehicle properly by using the proper hand position on the steering wheel, visual tracking procedures, steering control, seating position, starting and stopping procedures, acceleration, speed control, deceleration and braking, and parking brake procedures;
  - C. Observe the use the *vehicle controls* to *move forward, park, change directions, turn, back, enter the highway or freeway, yield* the *right-of-way* in urban and rural driving environments; and
  - D. Observe the avoidance of using certain driving techniques in the proper situations.
- **3.3.2** To safely and responsibly use vehicle *reference points*, the student should be able to:
  - A. Observe the use of reference points;
  - B. Observe the positioning of the front, sides, corners, and rear of the vehicle; and
  - C. Observe the use of vehicle reference points to perform vehicle maneuvers and manage vehicle space.
- **3.3.3** To safely and responsibly maintain the vehicle's balanced weight, the student should be able to:
  - A. Observe maintaining the vehicle's *balanced weight* while managing; steering inputs, acceleration/deceleration, braking/slowing, weight management, time management, *space management*, stopping distances, braking distances, following distances, adjusting speed for conditions, effect of road surfaces on stopping, seasonal changes and road surfaces, and tire types and conditions;
  - B. Observe the use of proper brake, accelerator, and steering applications;

- C. Observe the maintaining the vehicle's balanced weight in compensating for different driving conditions.
- **3.3.4** To safely and responsibly maintain traction and use other driver inputs, the student should be able to:
  - A. Observe the maintaining of traction as it relates to time management, space management and changing speed and/or position such as; moving off, cornering, changing lanes, stopping, backing, and following; and
  - B. Observe maintaining friction as it relates to speed, maneuvers, road surfaces and stopping, seasonal changes and road surfaces, and tire types and condition.

#### 4.0 DRIVER BEHAVIOR

**4.0 Driver Behavior.** To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving.

#### 4.1 Classroom Instruction.

- **4.1.1** To safely and responsibly make *informed decision-making*, the student should be able to:
  - A. Explain the impact of decision-making on driving;
  - B. Explain how the rules of the road and common *safe driving practices* contribute to *informed decision-making*;
  - C. Explain how informed decision-making contributes to safe and responsible driving;
  - D. Explain the importance of good decision-making;
  - E. Explain the consequences of poor decision-making;
  - F. Understand the decision point for all safe and responsible driving decisions; and
  - G. Explain how to demonstrate proper decision-making.
- **4.1.2** To safely and responsibly maintain a *positive driving attitudes and behaviors*, the student should be able to:
  - A. Explain why driving is a privilege and not a right;
  - B. Explain how positive and negative personal factors influence *driving attitudes and behaviors*:
  - C. List personal driving values, beliefs and motives;
  - D. Explain how values, beliefs, and motives influence driving attitudes and behaviors;
  - E. Explain how *motives* influence driving;
  - F. Explain how *motive* may change under different circumstances;
  - G. Identify personal motivators and describe how each could positively and/or negatively influence personal driving attitudes and behaviors;
  - H. Identify how positive and negative social factors influence *driving attitudes and behaviors* including advertising, societal attitudes towards cars and driving, influence of other people's driving habits, and *peer pressure*;
  - I. Explain effective strategies for resisting negative pressures while driving including personal value of resisting negative pressure, resist negative informal pressure, resist negative media and commercial messages, and resist entertainment's media use of driving imagery;
  - J. Explain how positive driving attitudes and behaviors can overcoming negative motives and result in safe and responsible driving behaviors such as driving courteously and cooperatively; and
  - K. Identify how one's own driver behavior can impact other drivers.

- **4.1.3** To safely and responsibly control emotional reactions to driving, the student should be able to:
  - A. List different *emotions*;
  - B. Explain the potential effects that *emotions* may have on driving;
  - C. Explain how emotions effect a driver's decision-making abilities;
  - D. Identify internal cues to *emotions*;
  - E. List personal control responses to *emotions*;
  - F. Describe driving strategies for avoiding the need for an emotional response; and
  - G. Explain strategies for managing and demonstrating control over *emotions*.
- **4.1.4** To safely and responsibly manage driver alertness and avoid *impaired driving*, the student should be able to:
  - A. Define *impaired driving*;
  - B. List various types of impairments including distractions, drugs, alcohol, fatigue, drowsy driving, illness, medication, and mental stress;
  - C. Recognize that a combination of impairments may occur;
  - D. Explain the myths and facts related to impairments;
  - E. Identify the personal and social consequences of *impaired driving*;
  - F. Identify the legal and economic consequences of *impaired driving*;
  - G. Explain the effects of impairment on driving; and
  - H. Explain appropriate strategies for addressing the effects of driving impairments on attention.
- **4.1.5** To safely and responsibly avoid driving *fatigued*, the student should be able to:
  - A. List and explain the possible causes and symptoms of fatigue;
  - B. Explain the causes of *highway hypnosis*;
  - C. Understand the dangers of fatigue in relation to driving risk; and
  - D. Develop appropriate strategies to avoid driving while fatigued.
- **4.1.6** To safely and responsibly avoid *aggressive driving* and aggressive drivers, the student should be able to:
  - A. Describe the characteristics of aggressive driving;
  - B. Describe the dangers of aggressive driving;
  - C. Recognize the aggressive driver characteristics;
  - D. Explain common errors made by aggressive drivers; and
  - E. Develop appropriate strategies to avoid becoming and responding to an aggressive drivers.
- **4.1.7** To safely and responsibly avoid road rage, the student should be able to:
  - A. Describe the possible causes of road rage on the roadway;
  - B. Describe the dangers of road rage;
  - C. Describe common actions of drivers exhibiting signs of road rage; and
  - D. Explain appropriate strategies to avoid becoming a victim of road rage.

- **4.1.8** To safely and responsibly avoid distracted driving and distracted drivers, the student should be able to:
  - A. List the possible causes of distracted driving on the roadway;
  - B. Describe the dangers of distracted driving;
  - C. Describe common errors made by distracted drivers; and
  - D. List appropriate strategies to avoid becoming and responding to a distracted driver.

- **4.2.1** To safely and responsibly make informed decisions, the student should be able to:
  - A. Perform good decision-making skills while driving; and
  - B. Use common, safe driving practices to make informed driving decisions.
- **4.2.2** To safely and responsibly maintain positive driving attitudes and behaviors, the student should be able to:
  - A. Use positive personal factors while driving;
  - B. Use personal motivators that positively influence personal driving attitudes and behaviors; and
  - C. Avoid negative social factors that can adversely influence driving attitudes and behaviors including advertising, societal attitudes towards cars and driving, influence of other people's driving habits, and peer pressure.
- **4.2.3** To safely and responsibly control emotional reactions to driving, the student should be able to:
  - A. Use personal control responses to manage emotions;
  - B. Use Perform driving strategies that minimize the need for an emotional response; and
  - C. Use the strategies for managing and demonstrating control over emotions.
- **4.2.4** To safely and responsibly manage driver alertness and avoid *impaired driving*, the student should be able to:
  - A. Avoid *impaired driving*;
  - B. Recognize that a combination of impairments may occur;
  - C. Use appropriate strategies to address the effect of driving impairments on attention.
- **4.2.5** To safely and responsibly avoid driving fatigued, the student should be able to:
  - A. Avoid driving fatigued;
  - B. Use appropriate strategies to avoid driving fatigue; and
- **4.2.6** To safely and responsibly avoid *aggressive driving* and aggressive drivers, the student should be able to:
  - A. Recognize aggressive driver on the roadway;
  - B. Identify common errors made by aggressive drivers; and
  - C. Use appropriate strategies to avoid becoming and responding to aggressive drivers.

- **4.2.7** To safely and responsibly avoid distracted driving and distracted drivers, the student should be able to:
  - A. Recognize distracted drivers on the roadway;
  - B. Identify common errors made by distracted drivers; and
  - C. Use appropriate strategies to avoid becoming and responding to a distracted driver.
- **4.3 In-Vehicle Observation** (If required in your jurisdiction).
- **4.3.1** To safely and responsibly make informed decisions, the student should be able to:
  - A. Observe the performance of good decision-making skills while driving; and
  - B. Observe the use of common safe driving practices to make informed driving decisions.
- **4.3.2** To safely and responsibly maintain a positive driving attitudes and behaviors, the student should be able to:
  - A. Observe the use of positive personal factors while driving;
  - B. Observe the use of personal motivators that positively influence personal driving attitudes and behaviors; and
  - C. Avoid negative social factors that can adversely influence driving attitudes and behaviors including advertising, societal attitudes towards cars and driving, influence of other people's driving habits, and peer pressure.
- **4.3.3** To safely and responsibly control emotional reactions to driving, the student should be able to:
  - A. Use personal control responses to manage emotions;
  - B. Observe the use of driving strategies for avoiding the need for an emotional response; and
  - C. Observe the use of strategies for managing and demonstrating control over emotions.
- **4.3.4** To safely and responsibly manage driver alertness and avoid *impaired driving*, the student should be able to:
  - A. Avoid *impaired driving*;
  - B. Recognize that a combination of impairments may occur; and
  - C. Observe the use of appropriate strategies to address the effect of driving impairments on attention.
- **4.3.5** To safely and responsibly avoid driving fatigued, the student should be able to:
  - A. Avoid driving fatigued; and
  - B. Observe the use of appropriate strategies to avoid driving fatigue; and
- **4.3.6** To safely and responsibly avoid *aggressive driving* and aggressive drivers, the student should be able to:
  - A. Recognize aggressive drivers on the roadway;
  - B. Identify common errors made by aggressive drivers; and
  - C. Observe the use of appropriate strategies to avoid becoming and responding to aggressive drivers.

- **4.3.7** To safely and responsibly avoid distracted driving and distracted drivers, the student should be able to:
  - A. Recognize distracted drivers on the roadway;
  - B. Identify common errors made by distracted drivers; and
  - C. Observe the proper use of appropriate strategies to avoid becoming and responding to a distracted driver.

# 5.0 SHARING THE ROAD

**5.0 Sharing the Road.** To develop knowledge, appreciation, and skills to related to effectively interacting with other road-users and how this contributes to safe, responsible, and incident-free driving.

#### 5.1 Classroom Instruction.

- **5.1.1** To safely and responsibly cooperate with other road-users, the student should be able to:
  - A. Explain the difference between cooperative driving and defensive driving;
  - B. List various types of cooperative driving including sharing the road in a safe and considerate manner, respecting other road-users, understanding other road-users' needs, passing safely, space management. sharing the road with school buses, sharing the road with commercial vehicles, and cooperative freeway driving
  - C. Explain the benefits of cooperative and courteous driving;
  - D. Explain how to demonstrate the ability to predict and anticipate the behaviors of other road-users.
- **5.1.2** To safely and responsibly use appropriate *communication* with other road-users, the student should be able to:
  - A. Explain why appropriate communication is essential for an orderly and safe road system;
  - B. List ways to effectively communicate and communicate driving intentions to *other road-users*;
  - C. Explain how habits and attitudes relate to effective communication;
  - D. Explain how to adjust communication based on observation of the driving environment and actions of other road-users;
  - E. Explain how to demonstrate appropriate communication with other road-users in a variety of driving situations including *eye contact*, directional signals, headlights, brake lights, and vehicle placement; and
  - F. Explain why appropriate communication is essential for an orderly and safe roadway system.

- **5.2.1** To safely and responsibly cooperate with other road-users, the student should be able to:
  - A. Perform cooperative driving and defensive driving;
  - B. Use cooperative driving including sharing the road, in a safe and considerate manner, respecting other road-users, understanding other road users' needs, passing safely, practicing effective space management. sharing the road with school buses, sharing the road with commercial vehicles, and cooperative freeway driving
  - C. Demonstrate the ability to predict and anticipate the behaviors of other road users.

- **5.2.2** To safely and responsibly use *appropriate communication* with other road-users, the student should be able to:
  - A. Use appropriate communication essential for an orderly and safe road system;
  - B. Appropriately communicate driving intentions to other road-users;
  - C. Adjust communication based on observation of the driving environment and actions of other road-users; and
  - D. Demonstrate *appropriate communication* with other road-users in a variety of driving situations.
- **5.3 In-Vehicle Observation** (If required in your jurisdiction).
- **5.3.1** To safely and responsibly cooperate with other road-users, the student should be able to:
  - A. Observe cooperative driving and defensive driving;
  - B. Observe cooperative driving including sharing the road, in a safe and considerate manner, respecting other road-users, understanding other road users' needs, passing safely, practicing effective space management. sharing the road with school buses, sharing the road with commercial vehicles, and cooperative interstate driving
  - C. Observe the ability to predict and anticipate the behaviors of other road-users.
- **5.3.2** To safely and responsibly use appropriate communication with other road-users, the student should be able to:
  - A. Observe appropriate communication essential for an orderly and safe road system;
  - B. Observe communicating driving intentions to other road-users;
  - C. Observe adjusting communication based on observation of the driving environment and actions of other road-users; and
  - D. Observe the demonstration of appropriate communication with other road-users in a variety of driving situations.

# 6.0 DRIVER ATTENTION

**6.0 Driver Attention.** To develop knowledge, appreciation, and skills related to attention and how it contributes to safe, responsible, and incident-free driving

#### 6.1 Classroom Instruction.

- **6.1.1** To safely and responsibly manage driver attention, the student should be able to:
  - A. Define driver attention;
  - B. Identify strategies for managing driver attention including switching *attention*, *divided attention*, focused attention, sustained attention to effectively maintain attention to driving;
  - C. List communication techniques used by other road users to obtain a driver's attention; and
  - D. Explain how to demonstrate effective management of driver attention.
- **6.1.2** To safely and responsibly perform visual tracking as it relates to vehicle control, the student should be able to:
  - A. Describe visual tracking
  - B. Explain how to use *visual glance behavior* to gather information in the driving environment including scanning the forward field, using the mirrors, and turning the head.
  - C. Explain how to use visual tracking to sustain visual attention and mental attention;
  - D. Understand how each field of vision supports visual tracking;
  - E. Identify how increasing visual memory supports the ability to drive safely;
  - F. Understand how *saccadic eye movement* effects the ability to drive safely;
  - G. Understand how *visual clutter/noise* effects the ability to drive safely;
  - H. Describe how vehicle speed impacts driver attention and visual tracking; and
  - I. Relate how driver attention and visual tracking are used to manage vehicle operating space, right-of-way, following distance, vehicle speed, communication, and compensating for limitations.
- **6.1.3** To safely and responsibly assess driving environments accurately and road conditions to make appropriate driving adjustment, the student should be able to:
  - A. List different driving environments;
  - B. List different driving conditions and characteristic including speed limits, and right of way situations inherent to each driving environment and *complex intersections*;
  - C. Explain how to properly adjust driver attention for the different driving environments, *complex intersections*, and road conditions; and
  - D. Describe the *traffic flow and traffic volume*, and various types of motorized and non-motorized road-users in each driving environment.

- **6.2.1** To safely and responsibly manage driver attention, the student should be able to:
  - A. Use strategies for managing driver attention including switching attention, divided attention, focused attention, sustained attention to effectively maintain attention to driving;
  - B. Identify communication techniques used by other road users to obtain a driver's attention; and
  - C. Perform effective management of driver attention.
- **6.2.2** To safely and responsibly perform visual tracking as it relates to vehicle control, the student should be able to:
  - A. Perform visual tracking;
  - B. Use visual tracking to sustain visual attention and mental attention;
  - C. Use visual glance behavior to gather information in the driving environment including scanning the forward field, using the mirrors, and turning the head.
  - D. Use visual memory to drive safely;
  - E. Use each field of vision to support visual tracking;
  - F. Manage how vehicle speed impacts driver attention and visual tracking; and
  - G. Use driver attention and visual tracking to manage vehicle operating space, right-ofway, following distance, vehicle speed, communication, and compensating for limitations.
- **6.2.3** To safely and responsibly assess driving environments accurately and road conditions to make appropriate driving adjustments, the student should be able to:
  - E. Recognize different driving environments;
  - F. Identify the different driving conditions and characteristics including speed limits, and right of way situations inherent to each driving environment;
  - G. Adjust driver attention for the different driving environments and road conditions; and
  - H. Recognize traffic flow and traffic volume and various types of motorized and non-motorized road users in each driving environment.
- **6.3 In-Vehicle Observation** (If required in your jurisdiction).
- **6.3.1** To safely and responsibly manage driver attention, the student should be able to:
  - A. Observe the use of strategies for managing driver attention including switching attention, divided attention, focused attention, sustained attention to effectively maintain attention to driving;
  - B. Identify communication techniques used by other road users to obtain a driver's attention; and
  - C. Observe the performance of effective management of driver attention.
- **6.3.2** To safely and responsibly perform visual tracking as it relates to vehicle control, the student should be able to:
  - A. Observe the performance of visual tracking;
  - B. Observe the use of visual tracking to sustain visual attention and mental attention;

- C. Observe the use of visual glance behavior to gather information in the driving environment including scanning the forward field, using the mirrors, and turning the head.
- D. Observe the use of visual memory to drive safely;
- E. Observe the use of each field of vision to support visual tracking;
- F. Observe how vehicle speed impacts driver attention and visual tracking; and
- G. Observe the use of driver attention and visual tracking to manage vehicle operating space, right-of-way, following distance, vehicle speed, communication, and compensating for limitations.
- **6.3.3** To safely and responsibly assess driving environments accurately and road conditions to make appropriate driving adjustments, the student should be able to:
  - A. Recognize different driving environments;
  - B. Identify the different driving conditions and characteristic including speed limits, and right of way situations inherent to each driving environment; and
  - C. Observe the adjustment of driver attention for the different driving environments and road conditions; and
  - D. Observe the recognition of *traffic flow and traffic volume* and various types of motorized and non-motorized road users in each driving environment.

#### 7.0 PERCEPTION AND RISK MANAGEMENT

**7.0 Perception and Risk Management.** To develop knowledge, appreciation, and skills related to perception and risk management and how these skills and abilities contribute to safe, responsible, and incident-free driving.

#### 7.1 Classroom Instruction.

- **7.1.1** To safely and responsibly use visual observation skills, the student should be able to:
  - A. Explain the parts of vision and their specific uses to driving safely;
  - B. Explain proper observation skills;
  - C. Explain what, where, when to observe including 360 degree vision, distance scanning and judgment, peripheral vision, blind spots, visual obstructions, and limits of observation;
  - D. Explain how to observe including active attention, *eye-lead time*, shoulder checks, peripheral vision, and using the inside and outside mirrors;
  - E. Explain a visual search and scanning to detect potential hazards including distinguishing hazards from typical occurrences, scanning patterns under all conditions, and detecting potential path deviations;
  - F. Explain how to focus on appropriate visual targets while scanning the environment; and
  - G. Explain how to demonstrate potential hazard detection by means of visual scanning.
- **7.1.2** To safely and responsibly identify potential hazards and effective response to hazards, the student should be able to:
  - A. Explain potential driving hazards including vehicle malfunctions, weather/environmental conditions, road conditions, vehicle conditions, distractions inside the vehicle, distractions outside the vehicle, other road-users, unpredictable driving behaviors, and driving error resulting in danger to self and to other road-users; and
  - B. Explain the effective responses to these potential hazards of driving.
- **7.1.3** To safely and responsibly use effective decision-making skills to ensure safe driving, the student should be able to:
  - A. Describe hazard perception, decision-making, and judgement;
  - B. List a hierarchy of appropriate responses to various traffic situations;
  - C. Understand how to *prioritize information* to choose the appropriate responses to various traffic situations;
  - D. Use decision-making skills to make the correct driving movement at the *decision* point to drive safely;
  - E. Recognize what factors affect decision-making skills;
  - F. Evaluate traffic situations to *anticipate* what may happen;
  - G. Identify how visual search patterns help a driver gather information in the driving environment;

- H. Recognize how to select the appropriate gap between two approaching vehicles which will afford a driver enough time to move into or through another lane of travel without interfering with other road users;
- I. Predict possible solutions to traffic situations;
- J. Prioritize appropriate decisions to traffic situations;
- K. Make appropriate decisions to traffic situations while under pressure and quickly; and
- L. Describe the effects of driver impairment on decision-making.
- **7.1.4** To safely and responsibly understand the risk of entering the driving population, the student should be able to:
  - A. Define risk as it related to driving;
  - B. Identify how to judge risk accurately and objectively;
  - C. Explain the factors that affect a driver's risk perception;
  - D. Identify how to anticipate the actions of other road-users;
  - E. Illustrate how to react timely and effectively in risk situations;
  - F. Perform proactive versus reactive driving actions
  - G. Analyze the consequences of performing properly or improperly driving maneuvers that are expected by other road-users;
  - H. Summarize how to use safe time and space margins; and
  - I. Describe the most common causes of crashes
- **7.1.5** To safely and responsible describe accurate risk situations, the student should be able to:
  - A. Identify factors that affect a driver risk perception;
  - B. Identify the expected actions and actual actions of other road-users;
  - C. Explain quick and effective reaction time;
  - D. Differentiate between proactive and reactive driver's action;
  - E. Understand the consequences of not doing what other road-users except;
  - F. Describe safe time margins; and
  - G. Describe the most common crash situations
- **7.1.6** To safely and responsible plan trips/routes, the student should be able to:
  - A. Recognize the purpose for trip/route planning; and
  - B. List the procedures for trip/route planning including recognition of work zone and construction areas.

- **7.2.1** To safely and responsibly use visual observation skills, the student should be able to:
  - A. Use proper observation skills;
  - B. Use active attention, shoulder checks, peripheral vision, and using the inside and outside mirrors;
  - C. Use a visual search and scanning to detect potential hazards including distinguishing hazards from typical occurrences, scanning patterns under all conditions, and detecting potential path deviations;
  - D. Focus on appropriate visual targets while scanning the environment; and
  - E. Demonstrate potential hazard detection by means of visual scanning

- **7.2.2** To safely and responsibly identify potential hazards and effective response to hazards, the student should be able to:
  - A. Recognize potential driving hazards including vehicle malfunctions, weather/environmental conditions, road conditions, vehicle conditions, distractions inside the vehicle, distractions outside the vehicle, other road-users, unpredictable driving behaviors, and driving error resulting in danger to self and to other road-users; and
  - B. Perform effective responses to these potential hazards of driving.
- **7.2.3** To safely and responsibly use effective *decision-making skills* to ensure safe driving, the student should be able to:
  - A. Use *hazard perception*, *decision-making*, and judgement;
  - B. Use the appropriate responses to various traffic situations;
  - C. Use decision-making skills to drive safely;
  - D. Use visual search patterns help a driver gather information in the driving environment:
  - E. Evaluate traffic situations to anticipate what may happen;
  - F. Predict and implement possible solutions to traffic situations;
  - G. Prioritize appropriate decisions to traffic situations; and
  - H. Perform appropriate decisions to traffic situations while under pressure and quickly
- **7.2.4** To safely and responsibly understand the risk of entering the driving population, the student should be able to:
  - A. Recognize risk accurately;
  - B. Anticipate the actions of other road-users; and
  - C. React timely and effectively in risk situations.
- **7.2.5** To safely and responsible describe accurate risk situations, the student should be able to:
  - A. Recognize the expected actions and actual actions of other road-users;
  - B. Perform quick and effective reaction time;
  - C. Use proactive driver's action; and
  - D. Use safe time and margins.
- 7.3 **In-Vehicle Observation** (If required in your jurisdiction).
- **7.3.1** To safely and responsibly use visual observation skills, the student should be able to:
  - A. Observe the use of proper observation skills;
  - B. Observe the use of active attention, shoulder checks, peripheral vision, and using the inside and outside mirrors:
  - C. Observe the use of a visual search and scanning to detect potential hazards including distinguishing hazards from typical occurrences, scanning patterns under all conditions, and detecting potential path deviations;
  - D. Observe the appropriate visual targets while scanning the environment; and
  - E. Observe the Demonstration of potential hazard detection by means of visual scanning

- **7.3.2** To safely and responsibly identify potential hazards and effective response to hazards, the student should be able to:
  - A. Observe potential driving hazards including vehicle malfunctions, weather/environmental conditions, road conditions, vehicle conditions, distractions inside the vehicle, distractions outside the vehicle, other road-users, unpredictable driving behaviors, and driving error resulting in danger to self and to other road-users; and
  - B. Observe the performance of effective responses to these potential hazards of driving.
- **7.3.3** To safely and responsibly use effective decision-making skills to ensure safe driving, the student should be able to:
  - A. Observe hazard perception, decision-making, and judgement;
  - B. Observe the use of the appropriate responses to various traffic situations;
  - C. Observe decision-making skills to drive safely;
  - D. Observe the use of visual search patterns help a driver gather information in the driving environment;
  - E. Observe the evaluation of traffic situations to anticipate what may happen;
  - F. Observe the prediction and implementation of possible solutions to traffic situations; and
  - G. Observe the performance of the *appropriate decisions* to traffic situations while under pressure and quickly
- **7.3.4** To safely and responsibly understand the risk of entering the driving population, the student should be able to:
  - A. Recognize risk accurately;
  - B. Anticipate the actions of other road-users; and
  - C. Observe the timely and effectively reaction to risk situations.
- **7.3.5** To safely and responsible describe *accurate risk* situations, the student should be able to:
  - A. Recognize the expected actions and actual actions of other road-users;
  - B. Observe the performance of quick and effective reaction time;
  - C. Observe proactive driver's action; and
  - D. Observe the use of safe time and margins.

# 8.0 VEHICLE MAINTENACE/MALFUNCTIONS AND TECHNOLOGY

**8.0 Vehicle Maintenance and Technology.** To develop knowledge, appreciation, and skills related to vehicle maintenance, vehicle malfunctions, and technology contributing to safe, responsible, and incident-free driving.

#### 8.1 Classroom Instruction.

- **8.1.1** To safely and responsibly maintain the vehicle in good working order, complete vehicle maintenance, the student should be able to:
  - A. Recognize and identify the purpose for *vehicle's mechanical maintenance* and *tire service* requirements utilizing the *vehicle owner's manual as a resource*;
  - B. Identify a tire wear bar; and
  - C. Identify scheduled and unscheduled vehicle maintenance.
- **8.1.2** To safely and responsibly manage *vehicle malfunctions*, the student should be able to:
  - A. Identify vehicle malfunctions such as tire blowout, power steering failure, engine failure, accelerator failure, tire failure, traction loss, car catches on fire, power brake failure, brake failure, total steering failure, etc.;
  - B. Explain the appropriate strategies to compensate for *vehicle malfunctions*; and
  - C. Explain the procedural steps to safely move a disabled vehicle off the roadway.

- **8.2.1** To safely and responsibly drive in different driving environments, the student should be able to:
  - A. Perform driving maneuvers in urban, suburban, and rural driving environments;
  - B. Perform driving maneuvers in residential areas;
  - C. Perform driving maneuvers on city streets;
  - D. Perform driving maneuvers on freeway and expressways; and
  - E. Perform driving maneuvers on rural roadways.
- **8.3 In-Vehicle Observation** (If required in your jurisdiction).
- **8.3.1** To safely and responsibly drive in different driving environments, the student should be able to:
  - A. Observe the performance of driving maneuvers in urban, suburban, and rural driving environments;
  - B. Observe the performance of driving maneuvers in residential areas;
  - C. Observe the performance of driving maneuvers on city streets;
  - D. Observe the performance of driving maneuvers on freeway and expressways; and
  - E. Observe the performance of driving maneuvers on rural roadways.

# 9.0 MANAGING EMERGENCIES AND ADVERSE CONDIDITONS

**9.0** Managing Emergencies and Adverse Conditions. To develop knowledge, appreciation, and skills related to managing emergencies and adverse conditions and contributing to safe, responsible, and incident-free driving.

#### 9.1 Classroom Instruction

- **9.1.1** To safely and responsibly drive to avoid crashing, the student should be able to:
  - A. Demonstrate consistently caution in driving behavior to compensate for different conditions;
  - B. Explain evasive maneuvers and how to apply then to avoid crashing;
  - C. Describe appropriate situations to apply evasive maneuvers to avoid crashing; and
  - D. Describe inappropriate situations for applying evasive maneuvers;
- **9.1.2** To safely and responsibly respond to vehicle crashes and emergency situations, the student should be able to:
  - A. Identify minor or major motor vehicle crashes;
  - B. Identify potential and immediate emergency situations;
  - C. Explain how to respond to vehicle crash;
  - D. Explain what to do when arriving at the scene of a crash;
  - E. Explain what to do when stopped by a police officer; and
  - F. Explain how to yield to an emergency vehicle;
- **9.1.3** To safely and responsibly manage *adverse weather* and *reduced visibility conditions*, the student should be able to:
  - A. Recognize the distractions associated with adverse weather and reduced visibility conditions:
  - B. Recognize the characteristics of *adverse conditions* that may involve the roadway, vehicle, traffic, and driver:
  - C. Recognize the characteristics of *reduced visibility conditions*;
  - D. Understand the importance of seeing and being seen in *adverse conditions* and *reduced visibility conditions* including *headlight usage*; and
  - E. Describe and demonstrate the driving practices necessary to compensate for *adverse* weather and reduced visibility conditions.

- **9.2.1** To safely and responsibly drive to avoid crashing, the student should be able to:
  - A. Demonstrate consistently caution in driving behavior to compensate for different conditions; and
  - B. Perform evasive maneuvers to avoid crashing.

- **9.2.2** To safely and responsibly perform parking maneuvers, the student should be able to:
  - A. Perform pulling to and from the curb or line;
  - B. Perform angle parking maneuvers;
  - C. Perform perpendicular parking maneuvers; and
  - D. Perform parallel parking maneuvers.
- **9.2.3** To safely and responsibly manage adverse weather and reduced visibility conditions, the student should be able to:
  - A. Recognize the characteristics and distractions associated with adverse weather and *reduced visibility* conditions; and
  - B. Demonstrate the driving practices necessary to compensate for adverse weather and *reduced visibility* conditions.
- **9.3 In-Vehicle Observation** (If required in your jurisdiction).
- **9.3.1** To safely and responsibly drive to avoid crashing, the student should be able to:
  - A. Observe the demonstration of consistently caution in driving behavior to compensate for different conditions; and
  - B. Observe the performance of evasive maneuvers to avoid crashing.
- **9.3.2** To safely and responsibly perform parking maneuvers, the student should be able to:
  - A. Observe the performance of pulling to and from the curb;
  - B. Observe the performance angle parking maneuvers;
  - C. Observe the performance of perpendicular parking maneuvers; and
  - D. Observe the performance of parallel parking maneuvers.
- **9.3.3** To safely and responsibly manage adverse weather and reduced visibility conditions, the student should be able to:
  - A. Recognize the characteristics and distractions associated with adverse weather and reduced visibility conditions; and
  - B. Observe the demonstration of the driving practices necessary to compensate for adverse weather and reduced visibility conditions.

# 10.0 RESPECT AND RESPONSIBILITY

**10.0 Respect and Responsibility.** 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.

#### 10.1 Classroom Instruction

- **10.1.1** To safely and responsibly show leadership in promoting safe driving, the student should be able to:
  - A. Identify safe, respectful, and responsible driver behavior;
  - B. Explain how leadership, safe driving behaviors, and respect for other road-users contribute to safe and responsible driving;
  - C. Describe how using and having others use safety restraints displays a responsible driver behavior;
  - D. Describe how always being fit to drive and promoting others to be fit to drive displays responsible driver behavior;
  - E. Describe how caring and being empathic towards other road users displays responsible driver behavior;
  - F. Describe how avoiding conflict regardless of fault displays responsible driver behavior;
  - G. Describe how respecting other road users safety margins displays responsible driver behavior; and
  - H. Describe how avoiding road rage contributes to being a responsible driver;
- **10.1.2** To safely and responsibly respect the environment as it relates to operating a vehicle, the student should be able to:
  - A. Identify environmentally conscious behavior including mandatory emissions testing, proper disposal of vehicles, fluids, tires, and not littering;
  - B. List efficient driving behaviors including fuel efficiency, planning safer and more efficient routes, group driving activities, and the economic benefits of efficient driving; and
  - C. Explain how being environmentally conscious contributes to driving safety.
- **10.1.3** To safely and responsibly take the lifelong learning approach to driving, the student should be able to:
  - A. Explain how different factor contribute to changes in driver skills;
  - B. Explain why how driving is a lifelong learning process;
  - C. Identify opportunities for lifelong learning related driving;
  - D. Identify factors that contribute to changes in driving skills including changes in driving practices, traffic laws, and age of the driving population.

#### 10.2 In-Vehicle Behind the Wheel Instruction.

- **10.2.1** To safely and responsibly perform driving maneuvers, the student should be able to:
  - A. Successfully complete a Driver Competency Assessment (DCA) or alternative assessment; and
  - B. Use the analysis of the DCA or alternative assessment to become a safer and responsible driver.
- **10.3 In-Vehicle Observation** (If required in your jurisdiction).
- **10.3.1** To safely and responsibly perform driving maneuvers, the student should be able to:
  - A. Observe completion a Driver Competency Assessment (DCA) or alternative assessment; and
  - B. Use the analysis of the DCA or alternative assessment to become a safer and responsible driver.

#### 11.0 VEHICLE TECHNOLOGY SYSTEMS

**11.0 Vehicle Technology Systems.** To develop knowledge, appreciation, and skills related to vehicle technology systems contributing to safe, responsible, and incident-free driving.

#### 11.1 Classroom Instruction

- **11.1.1** To safely and responsibly manage *warning*, *mitigating*, *convenience* and *support* vehicle technology systems whether factory installed, retro-fitted, or portable (list in Appendix A), the student should be able to:
  - A. Identify different types vehicle technology systems;
  - B. Understand the purpose, benefits and limitations of *warning*, *mitigating*, *convenience* and *support* vehicle technology systems;
  - C. Know the use of the vehicle technology systems in accordance with the manufactures instructions;
  - D. Minimize the distractibility of the vehicle technology systems; and
  - E. Identify intelligent traffic systems and how it interact with vehicles.
- **11.1.2** To safely and responsibly acknowledge emerging vehicle technology systems, the student should be able to:
  - A. Recognize the potential purpose of the emerging vehicle technology systems whether factory installed, retro-fitted, or portable
  - B. Understand the purpose, benefits, and limitations of emerging vehicle technology systems; and
  - C. Know how the manufacturer integrates the emerging vehicle technology systems into the vehicle.

#### 11.2 In-Vehicle Behind the Wheel Instruction.

- **11.2.1** To safely and responsibly manage *warning*, *mitigating*, *convenience* and *support* vehicle technology systems whether factory installed, retro-fitted, or portable (list in Appendix A), the student should be able to recognize and properly use warning and mitigating vehicle technology systems in the vehicle.
- **11.2.2** To safely and responsibly acknowledge emerging vehicle technology systems, the student should be able to recognize and properly use emerging vehicle technology systems in the vehicle.

### 11.3 In-Vehicle Observation (If required in your jurisdiction).

- **11.3.1** To safely and responsibly manage *warning*, *mitigating*, *convenience* and *support* vehicle technology systems whether factory installed, retro-fitted, or portable (list in Appendix A), the student should be able to recognize and observe the use of warning and mitigating vehicle technology systems in the vehicle.
- **11.3.2** To safely and responsibly acknowledge emerging vehicle technology systems, the student should be able to recognize and observe the use of emerging vehicle technology systems in the vehicle.

#### 12.0 AUTOMATED VEHICLE SYSTEMS

**12.0 Automated Vehicle Systems.** To develop knowledge, appreciation, and skills related to automated vehicle systems, contributing to safe, responsible, and incident-free driving.

#### **12.1 Classroom Instruction**

- **12.1.1** To safely and responsibly operate automated vehicles, the student should be able to:
  - A. Understand the purpose, benefits and limitations of how automated vehicle systems operate in accordance with the manufactures instructions;
  - B. Understand the various levels of vehicle automation according to the Society of Automotive Engineers (SAE) international definitions for automation;
  - C. Acknowledge and understand the importance of vehicle cybersecurity; and
  - D. Explain countermeasures for automated vehicle systems malfunctions in accordance to the manufactures instructions.
- **12.1.2** To safely and responsibly interact with automated vehicles, the student should be able to:
  - A. Recognize how to share the road and interact with automated vehicles; and
  - B. Recognize how automated vehicles share the road with non-automated vehicles.

#### 12.2 In-Vehicle Behind the Wheel Instruction.

- **12.2.1** To safely and responsibly operate automated vehicles, the student should be able to perform the skills necessary to safety operate an automated vehicle.
- **12.2.2** To safely and responsibly interact with automated vehicles, the student should be able to share the road and interact with automated vehicle whether in an automated vehicle or non-automated vehicle.

### 12.3 In-Vehicle Observation (If required in your jurisdiction).

- **12.3.1** To safely and responsibly operate automated vehicles, the student should observe the operation of an automated vehicle.
- **12.3.2** To safely and responsibly interact with automated vehicles, the student should observe sharing the road and interacting with automated vehicle whether in an automated vehicle or non-automated vehicle.

# Phase 2

#### PHASE 2

**1.0 Risk Management.** To safely and responsibly *reduce driving risk* and how it contributes to safe, responsible, and incident-free driving.

#### 1. Classroom.

- **1.1.1** To safely and responsibly to identify and manage traffic risk, the student should be able to:
  - A. Know the jurisdictions traffic laws;
  - B. Understand yielding protocols;
  - C. Complete and use a self-reported assessment of driving skills to indicate driving behavior as a young driver;
  - D. Recognize that participation in the HTS involves constant risk that must be identified and managed;
  - E. Explain how to identify and manage potential and immediate risk by categorizing risk factors into controlled, low, moderate, and complex risk;
  - F. Understand how risk is processed differently by novice and experienced driver;
  - G. Describe how risk-taking diminishes the ability to manage risk;
  - H. Give examples of how managing risk allows the driver to respond to potential and immediate risk in controlled, low, moderate, and complex risk environments;
  - I. Explain the consequences when the driver's *perceived risk* is different from *objective risk* and formulate plans to accurately recognize risk;
  - J. Recognize how distractions complicate identifying and managing risk factors;
  - K. List the top five contributing factors to crashes and fatalities in the jurisdiction by examining the motor vehicle crash and fatality statistics as reported by the appropriate state agency;
  - L. Compare the traffic crash and fatality rates of drivers in various age groups to the rates of novice drivers ages 15 17;
  - M. Recognize the decision making skills and defensive driving skills necessary to be a safe and responsible driver; and
  - N. Understand and list appropriate strategies for the novice drivers' over-representation in crashes, injuries, and fatalities including those involving speed, alcohol and other drugs, single vehicles, and off-road control loss crashes.
- **1.1.2** To safely and responsibly employ a *space management system*, the student should be able to:
  - A. Define a space management process;
  - B. Explain how to identify and manage risk factors by utilizing a space management system;
  - C. Describe how to employ a *space management system* while establishing vehicle operating space, *right-of-way*, *following distance*, vehicle speed, and communication;
  - D. Explain how to employ a space management system to understand and manage risk; and
  - E. Understand how to employ a *space management system* to safely interact with other road users including vulnerable road users including pedestrians including a runner,

physically disabled person, child skater, highway construction and maintenance worker, utility worker, or other worker with legitimate business in or near the roadway or right of way, or stranded motorist or passenger, person on horseback, person operating equipment other than a motor vehicle including, bicycle, motorcycle, horse-drawn vehicle, farm equipment, slow moving vehicles, etc.

#### 2.0 In-Vehicle Behind the Wheel Instruction.

- **1.2.1** To safely and responsibly perform appropriate driving maneuvers and movements, the student should be able to:
  - A. Use defensive driving skills; and
  - B. Use decisions making skills.
- **1.2.2** To safely and responsibly perform driving maneuvers, the student should be able to:
  - A. Successfully complete a Driver Competency Assessment (DCA) or alternative assessment; and
  - B. Use the analysis of the DCA or alternative assessment to become a safer and responsible driver.
- **3.0 In-Vehicle Observation** (If required in your jurisdiction).
- **1.3.1** To safely and responsibly observe appropriate driving maneuvers and movements, the student should be able to:
  - A. Observe defensive driving skills; and
  - B. Observe decisions making skills.
- **1.3.2** To safely and responsibly observe driving maneuvers, the student should be able to:
  - A. Observe completion a Driver Competency Assessment (DCA) or alternative assessment; and
  - B. Use the analysis of the DCA or alternative assessment to become a safer and responsible driver.

#### **GLOSSARY**

#### - A -

**Accelerator Failure** – Failure could be caused by either a broken spring or the pedal getting stuck in the down position.

**Accelerator Pedal** – Usually a foot-operated pedal is suspended from the firewall on the right side of the driver's position. Speed is controlled by adjusting pressure on the pedal. The driver regulates speed by how much pressure is applied to the accelerator pedal.

**Active Occupant Restraint** – Occupant restraint devices that the driver actively has to engage to make it effective.

**Adverse Conditions** – Conditions that present a negative effect on the driving task. When making the decision whether to drive or the appropriate speed that is safe/reasonable, the driver must take in consideration the condition of the weather, visibility, traffic, roadway, vehicle and driver.

**Aggressive Driving** – Driving behavior exhibited in driving in a combative, forceful, or competitive manner usually caused by frustration with other drivers.

**Angle Parking** – Process of using reference points to position a vehicle diagonally to the curb with the bumper 3-6 inches from the curb (parking the vehicle diagonally to the curb).

**Animal-Drawn Vehicle** – A person riding an animal on a roadway or operating a vehicle drawn by an animal on a roadway has the rights and duties applicable to the operator of a vehicle.

**Anticipate** - To think and plan ahead, to see a situation developing early enough to alter one's strategies.

**Anti-Theft Devices** - Devices used to deter the theft of a vehicle including door locks, vehicle alarms, etc.

**Appropriate Decisions** – Choosing and implementing the proper safety measure to respond safely and responsibly to a traffic situation or an adverse condition.

**Appropriate Communication** – Informing other drivers of your intentions prior to turning, slowing, stopping, changing lane position, etc. using a mechanical or hand/arm signals, headlights, horn, lane position, etc.

**Appropriate Practice** – Practice that enhances experiences and creates acceptable habits and judgments.

Attention – Person's ability to concentrate on several sources of incoming information more than to concentrate on just one source of information. Since the driving task requires attention to a large number of items, this is an important concept. The act or state of attending especially through applying the mind to an object of sense or thought and a condition of readiness for such attention involving especially a selective narrowing or focusing of consciousness and receptivity. Automated Vehicle - An automated vehicle includes a vehicle that is equipped with one or more collision avoidance systems (i.e., electronic blind spot assistance, automated emergency braking systems) or other similar systems that enhance safety or provide driver assistance, but are not capable, collectively or singularly, of driving the vehicle without the active control or monitoring of a human operator.

**Autonomous Vehicle Technology** - Technology that has the capability to drive a vehicle without the active physical control or monitoring by a human operator. Vehicles which are capable of driving themselves. Technology installed on a motor vehicle that has the capability to drive WITHOUT active control or monitoring by a human operator.

- B -

**Backing** – Vehicle movement moving the vehicle to the rear.

**Balance Weight** – Vehicle suspension configurations that control the size of the tire patches as they contact the roadway for ideal vehicle traction and control. Changes to the suspension configuration (and therefore the tire patches affecting traction) are initiated by driver actions of steering, braking, and/or accelerating the vehicle. The vehicle suspension is in the ideal state of balance and tire traction when it is parked on a level surface.

**Being Passed** – Being overtaken and proceeded by another vehicle moving in the same direction or the attempt of the maneuver.

**Bicycle** – A device that a person may ride and that is propelled by human power and as two tandem wheels at least one of which is more than 14 inches in diameter.

**Blind Area** – The area around the vehicle that the driver cannot see from the driver's seat. **Blindspot (Blindzone)** – Areas to the sides and rear of the vehicle that rearview mirrors cannot show.

Blindzone Glare Elimination (BGE) Mirror Setting – This mirror setting the inside rear view mirror becomes the primary mirror, and the left and right side view mirrors become directed to side view use only. The driver can move the head toward the window to get a right and left side view when pulling from the curb. The mirror setting that reduces the mirror blind-zone and eliminates night glare from a following vehicle to the left or right. Mirrors are set 15 degrees to the outside for viewing side positions rather than rear corner of vehicle. Mirror setting does not completely eliminate making a visual check to the left or right when searching for open zones or space.

**Blowout** – Sudden loss of tire air pressure while driving.

**Brake Failure** – Failure of the vehicle's brakes to stop the vehicle properly.

**Brake Pedal** – Pedal that enables the driver to slow or stop a vehicle (regulates speed). Braking Distance – Distance your vehicle travels from the time you apply the brake until your vehicle stops.

- C -

Car Catches on Fire – Failure where the vehicle is on fire.

**Center of Gravity** – The point at which the entire weight of a body is considered concentrated so that, if supported at this point, the body would remain in equilibrium in any position. A point around which the vehicle's weight is evenly distributed.

**Central Vision** – The field of vision around your focal vision in which you can see clearly while looking straight ahead that aids in determining vehicle position to the roadway.

**Child Safety Seat/Child Restraint** – A crash tested device that is specially designed to provide infant/child crash protection. A general term for all sorts of devices including those that are infant/child vests or infant car beds restrained with a motor vehicle safety belt rather than seats.

Clutch Pedal – Pedal in a manual transmission vehicle that enables a driver to shift gears.

**Collision/Crash** – Contact between two or more objects, as when two vehicles collide into each other. Collision Insurance – Pays cost of fixing or replacing owner's vehicle after a crash—regardless of who was driving or who was to blame.

**Commentary Driving** – System of thinking aloud as you practice the searching process. The driver verbalizes the reasons for speed and roadway position adjustments.

**Communication Devices** – Devices that the driver uses to communicate with other road users such as mechanical or hand/arm signals, headlights, horn, lane position, etc.

**Complex Intersections** - Intersections that are oddly configured, have unusual signage, or a high number and/or a high number and/or a variety of users.

Complex Risk Environment – A complex risk environment is limited to speeds under 70 mph, having controlled or limited access interchanges or intersections in urban, suburban, and rural settings. Traffic flow is heavy and many times unpredictable, which does not allow excessive time for the novice driver to identify risks through changes to line of sight or path of travel. Two-way, one-way, access lanes, and multi-lane roadways are recommended for use in complex risk environments.

**Contemporary Sideview Mirror Setting (Blindzone/Glare Setting)** – In this mirror setting the inside rear view mirror becomes the primary mirror. The left and right side view mirrors become directed to side view use only.

**Control Devices** – Devices that the driver uses to control the vehicle, such as the steering wheel, accelerator, brake, clutch, gear selector, parking brake, etc.

**Controlled Environment** – A controlled risk environment reduces the incidence or severity of harmful incidents. The traffic speed and traffic flow volume in controlled risk environments should be at a minimal allowing time for novice driver to identify risks through changes to line of sight or path of travel.

**Controlling Consequences** – Lessening the results of an impending crash.

**Convenience and Comfort System Devices** – Devices that offer the driver convenience and comfort, such as radio; heating, ventilation, and air conditioning; seat adjustment; etc.

**Crash Involvement** – Association with a conflict or collision with an object/other road user. **Cruise/Speed Control** – Device that lets you maintain your speed without keeping your foot on the accelerator.

- D -

**Danger to Self or Others** – May cause harm to himself or someone else.

**Decision Making Skills** – A person's ability to judge right from wrong, good from bad or the ability to reason effectively. Making the correct driving decision to drive safely and responsibly. **Decision Point** – (a) A point on the roadway at which the driver must decide to slow down, speed up and/or move laterally or (b) after stopping at the legal stop position, a drier moves forward to a position where he/she can access all the information needed to make a decision on whether or not it is safe to go.

**Denial of Driver's License** – The withholding of a driver's license or driving privilege because the person is ineligible for a license. A driver's license may be issued when eligibility requirements are met.

**Distracted Driver** – When a driver is delayed in the recognition of information needed to accomplish the driving task safely because some event, activity, object, or person within or outside the vehicle compelled or tended to induce the driver's shifting attention away from the driving task. The act of distracting or the state of being distracted, especially: mental confusion, to draw or direct one's attention to a different object or in different directions at the same time

**Divided Attention** – Changing attention from the path of travel to traffic, roadway, weather, vehicle, passengers, gauges, etc. Failure to complete multi-task performances correctly to compensate for divided attention produces unsafe driving.

**Driver Education** – to transfer knowledge, develop skills, and enhance the disposition of the novice so they, so can perform as a safely and responsibly as a driver, thereby contributing to the reduction of crashes, fatalities, and injuries.

**Driver Inattention** – The driver is distracted, asleep or fatigued, or otherwise "lost in thought". **Driver Responsibility** – A driver's moral, legal, and mental accountability to the driving task. **Driver/Vehicle Control Sequence** – Vision control (visual targeting), motion control (accelerator or brake), then steering control (steering wheel).

**Driving as a Privilege** – An opportunity granted to a person to drive within the HTS.

**Driving Conditions** – When making the decision whether to drive or the appropriate speed that is safe/reasonable, the driver must take in consideration the condition of the weather, visibility, traffic, roadway, vehicle and driver.

**Driving Environments** – Controlled, low, moderate, complex risk driving environments.

**Driving Task** – All social, physical, legal, and mental skills required to drive.

**Driving Under the Influence (DUI)** – An offense for which a driver can be charged even if blood alcohol level is below 0.08%. Driving Under the Influence can include driving while under the influence of an alcoholic beverage, drug, medication, etc.

**Driving Under the Influence of Alcohol by a Minor** – It is illegal for a minor (those under 21 years of age) while having above the jurisdictional level of alcohol in the minor's system to operating a motor vehicle in a public place.

**Driving While Intoxicated (DWI)** – A person commits an offense for which a driver can be charged in all states if the person is intoxicated while driving or operating a motor vehicle in a public place.

- E -

**Engine Failure** – Vehicle failure that occurs when the engine quits running completely because the engine becomes flooded, overheats, etc.

**Emergency** – An unforeseen combination of circumstances or the resulting state that calls for immediate action.

**Emergency Vehicle** – A fire department, police vehicle, a public or private ambulance.

**Emotions** – Includes affections, feelings, motives, needs, and everything that pertains to the goal-directedness of people's actions. Feelings that Include anger, anxiety, joy, happiness, fear, hate, grief, care, and/or love.

Engine Starting Procedures – Check parking brake; foot on brake; key in ignition; gear in "Park or Neutral"; check for fuel injection or automatic choke; turn key to "on" position; check alert lights and gauges; turn key to start engine; adjust Heating, Ventilation, and Air Conditioning (HVAC); set accessories (headlights or daylight running lights are recommended); check warning lights and gauges.

**Establish Vehicle Speed** – Obeying the speed limit or the flow of traffic, whichever is slower. **Evasive Steering** – Emergency steering technique used to steer quickly around an object in your path. Without removing hands from the steering wheel, turn the wheel so that the forearms touch each other, then turn the wheel in the opposite direction until the forearms touch again. Return the wheel to center position. This is the maximum steer input for lane change and activated ABS. Less input may be used to perform maneuvers for emergency lane adjustment to the left or right.

**Experienced Driver** – Practical knowledge, skill, and practice derived from direct observation of or participation in driving. A driver with more than five years' experience in operating the motor vehicle.

**External Pre-Trip Checks** – Pre-Trip checks that include the approach to the vehicle checking for vehicle damage, fluid leaks, tire condition, children or animals around the vehicle, unwanted persons around the vehicle, and objects in the way of vehicle movement.

**Eye Contact** - A form of non-verbal communication which involves meeting the eyes of another user.

**Eye-Lead Time** - The distance (measured in seconds) ahead of your vehicle which is recommended to allow a driver to scan the driving environment, pick up all needed information, and have time to process and react to it: in general 15 seconds in city traffic and 20 seconds in a rural environment.

- F -

Fatigue – Physical or mental weariness resulting from exertion or other effect.

**Financial Responsibility** - The ability to respond in damages for liability for an accident that occurs after the effective date of the document evidencing the establishment of the financial responsibility and arises out of the ownership, maintenance, or use of a motor vehicle.

**Focus Vision (Fovial)** – That part of the vision field that allows the driver to read signs and make distinctions between vehicles and objects often measured as visual acuity.

Following Distance – The amount of time/space recommended between vehicles when following another vehicle in the intended path of travel to avoid conflict. To set a following interval a driver must select an object near the road surface. When the vehicle ahead passes that object, the driver should start counting "one thousand-one", "one thousand-two," etc., until the front of his/her vehicle reaches that object. For speeds above 30 mph, maintain 4 seconds (more for adverse conditions) of following time. Developing a 4-second following interval is the best practice for a novice driver.

- 1/2 Second The maximum amount time a driver has to divide attention from the path of travel that should reduce risk of missing critical information needed to change speed or position.
- 2-Second Following Distance Designed for use if there is an alternate path to steer the vehicle into on the roadway. Stopping in this time frame is usually not possible unless the driver is searching well ahead for clues. Therefore, a 3-4 second following distance is required.
- 3-Second Following Distance Permits a driver time to steer out of problem areas at all listed speeds on dry surface and braking out of problems at speeds to 45 mph.
- 4-Second Following Distance Permits a driver to steer out of problems at all listed speeds on dry surface and braking out of problems at speeds to legal limit of 65 mph.

**Friction** – Force that creates heat and helps each tire to maintain traction on the road, unless too much heat is generated which may cause traction loss due to melting of tire rubber on the roadway.

- G -

**Gap** - the open space between two approaching vehicles which will afford a driver enough time to move into or through another lane of travel without interfering with other road users.

**Gear Selector** – Device in vehicles used to select gears. In an automatic transmissions the gears usually are "P" – park, "R" – reverse, "N" – neutral, "D" – drive, "2" and "1" – lower drive gears. In a manual transmission the gears are usually "1st" – low drive gear, "2nd", 3rd", 4th, "R" – reverse.

**Good Driving** – Loosely defined term that many drivers assume includes themselves when each reaches the point of skilled vehicle operation.

Good Samaritan Law – Liability for emergency care: a person in good faith administers emergency care, including using an automated defibrillator, at the scene of an emergency (not in a hospital or other health care facility or means of medical transport) is not liable in civil damages for an act performed during the emergency unless the act is willful or wantonly negligent.

**Graduated Driver Licensing System** – A system that requires young drivers to progress through a series of licensing stages with various restrictions as to accompany drivers, times permitted to drive, allowable passengers, and the use of electronic communications devices.

#### - H -

**Hand-over-Hand Steering** – Pulling the steering wheel down with one hand while the other hand crosses over to pull the wheel farther down. Used for quick turns at speeds below air bag deployment speed.

**Hand Position** – Placement of the hands at 9 and 3 or 8 and 4 o'clock for best balance based on the vehicle steering wheel and input.

**Hand-to-Hand Steering** – Pushing with one hand on the side of the wheel while pulling with the other hand on the opposite side of the wheel using positions at 10 to 7 on left side and 2 to 5 o'clock on the right side of steering wheel. Used to maintain stability in cornering and avoid poor hand and arm position with impending air bag deployment. Most commonly used international steering technique on rack and pinion steering mechanism vehicles.

**Hazard** - Risk or danger found in the driving environment.

**Hazard Perception** – The ability to detect and recognize dangerous situations developing on the road.

**Headlight Usage** – Use of the vehicle headlights to see and be seen including in adverse conditions and limited visibility situations.

**High Risk Drivers** – A driver proven to be a financial risk for an insurance company due to negative motor vehicle report or owning a vehicle built for speed. Usually, a driver rated as "high risk" will pay a higher premium for insurance.

**Highway** - The width between the boundary lines of a publicly maintained way any part of which is open to the public for vehicular travel. The entire width between property lines of a road, street, or way in this state that is not privately owned or controlled and some part of which is open to the public for vehicular traffic and over which the state has legislative jurisdiction under its police power.

**Highway Hypnosis** – Drowsy or trancelike condition caused by concentration on the roadway ahead and monotony of driving.

**Highway Transportation System** – The highway transportation system (HTS) is a complex system including a consortium of federal, state, local, and individual systems functioning together to provide a reduced-risk and lawful driving Highway Transportation System environment made up of people, vehicles, and roadways.

**Hydroplaning** – Traction loss on water. Occurs when a tire patch loses roadway contact by rising up on top of water.

- I -

**Illegal Use of License** – False name to get a license; possess more than one license; use a canceled or revoked license; use another person's license; lend your license to someone else; or display or possess a false license.

**Immediate Risk** – High priority possibility of having a conflict that results in a crash or collision needing a driver's visual attention.

**Impaired Driving** - Driving while fatigued, under the influence of alcohol or other drugs, or distracted.

**Implied Consent Law** – This law relates to license suspension for refusing to take a legally requested breath or blood test. It is a civil action apart from a DWI criminal case.

**Information Devices** – Devices that provide information about the vehicle to the driver.

**Information Processing** – The brain's ability to interpret information provided by the human senses and to employ critical—thinking, decision-making, and problem-solving skills in performing legal and responsible reduced-risk driving practices in the Highway Transportation System (HTS). **Inherent Risk** – Risk that is built in or normal to a situation.

**Intelligent Traffic Systems** - are advanced applications which, without embodying intelligence as such, aim to provide innovative services relating to different modes of transport and traffic management and enable various users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks.

**Internal Pre-Trip Checks** – Pre-trip checks involve\all the procedures necessary to place the vehicle in motion in the HTS including procedures used to safely enter, inside checks, start engine, and move the vehicle. Procedures for checking and preparing the inside of the vehicle and driver prior to operating in vehicle.

**Insurance** – Pays other people's expenses for accidents caused by drivers covered under owner's policy.

**Intoxication** – (a) Not having the normal use of mental or physical faculties by reason of the introduction of alcohol, a controlled substance, a drug, a dangerous drug, or a combination of two or more of those substances or any other substance into the body; or... (b) Having an alcohol concentration of .08 or more.

**In-Vehicle Behind-the-Wheel Instruction** - That portion of the driver education laboratory instruction where the novice driver is actually seated behind the wheel of a vehicle or simulated vehicle, operating it either in real or simulated traffic situations, through the direct guidance of a driver education teacher.

**In-Vehicle Observation** – Refers to that time during which a student is riding in the back seat of a dual-controlled training vehicle observing and listening to instructions of the driver instructor related to procedures and techniques of the student driver who is behind the wheel. It involves observations of the actions and behavior of the student driver and other road users. 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.

. J .

**Jack** – Hand-operated device used to lift and hold one corner or side of the vehicle. **Joining Traffic** – Turning right or left into lanes of other vehicles.

- L -

**Lane Change** – Lateral movement of the vehicle from one lane to another using proper space management procedures.

**Large Trucks** – A motor vehicle designed, used, or maintained primarily to transport property. **Lateral Maneuver** – Vehicle movements to the side (swerve, pulling to and from the curb, lane change, merging, exiting).

**License** – An authorization to operate a motor vehicle that is issued under or granted by the laws of this state. The term includes: (A) a driver's license; (B) the privilege of a person to operate a motor vehicle regardless of whether the person hold a driver's license; and (C) a nonresident's operating privilege.

**Lifelong Learning** – the ongoing formal and informal acquisition of knowledge or skills to continue safely and responsibly driving practices for a lifetime.

**Light Truck** – A truck, including a pickup truck, panel delivery truck, or carryall truck, that has a manufacturer's rated carrying capacity of 2,000 pounds or less.

**Limit/Manage Distractions** – A driver maintains attention to the driving task and utilizing risk reduction techniques.

Low Risk Environment – A low risk environment is usually limited to speeds under 40 mph, having uncontrolled and controlled intersections in urban, suburban, and rural settings. Traffic flow volume in low risk environments should be at a minimal allowing time for novice driver to identify risks through changes to line of sight or path of travel.

**Low Water Crossing** – Roadways that may have been covered with water or even washed away during flooding, creating unsafe driving condition. Drivers who repeatedly drive through flooded low-water crossings often do not recognize the dangers of a small increase in the water level.

#### - M -

**Maintenance Checks** – Checks and routine maintenance performed to ensure that a vehicle operates properly.

**Mechanical Service** – Safeguarding the vehicle's motorized parts by servicing and performing necessary repairs utilizing the vehicle's owner's manual as a resource.

**Mental Behaviors** – Includes cognitions, thoughts, reasoning, and everything that pertains to the decision-making and evaluating characteristic of people's actions.

**Mirrors** – Detection devices and should be checked prior to and after any speed or position change.

Moderate Risk Environment – A moderate risk environment is usually limited to speeds under 40 mph, having uncontrolled and controlled intersections in urban, suburban, and rural settings. Traffic flow volume in moderate risk environments should be at a minimal allowing time for novice driver to identify risks through changes to line of sight or path of travel. Two-way, one way, and multi-lane roadways are recommended for use in moderate risk environments depending on the traffic conditions.

**Motorcycle** – A motor vehicle, other than a tractor that is equipped with a rider's saddle, and designed to have when propelled not more than three wheels on the ground.

**Motor Vehicle** – A vehicle that is self-propelled.

**Moving Forward** – Vehicle movement moving the vehicle to the front.

**Multicultural Education Principles** – is an educational field of study that refers to any form of education, teaching and learning that incorporates the histories, texts, values, beliefs, and perspectives of people from different cultural backgrounds and how that education, teaching and learning impact their lives to create equitable opportunities for living and working in cultural pluralist society.

**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.

#### - N -

**Night Driving** – Operating a vehicle during the hours of darkness.

**Night Time** – The period beginning one-half hour after sunset and ending one-half hour before sunrise.

**Novice Driver** – Satisfies one or more of the following criteria: (1) a person with limited or no exposure to operating the motor vehicle; (2) a person with vehicle operating experience, but limited

experience with the motor vehicle; (3) a driver with less than one year experience in operating the motor vehicle.

**No-Zones** – Large mirror blind-zones where truck drivers cannot see other vehicles to the front, side, or rear where truck drivers cannot see other vehicles and where most collisions occur. These no zones are in front beside the truck, to the sides of the truck, and to the rear of every large truck.

- 0 -

**Obligations of a Driver** – If a driver encounters conflict with other road users or the roadway and consequences occur, the driver has the obligation of driving to accept the consequences and be morally and financially responsible.

**Objective Risk** – The accurate or objective perception of the risk.

Occupant Protection Systems – Protection incorporating technological advances in vehicle integrity in the event of a crash and response capability, such as safety belts, airbags, padded dash, padded sun visors, crunch zones, etc. For most persons the term "occupant protection" refers to safety belts, child restraints, driver, and passenger side air bags. In the context of this lesson, the term "occupant protection" is much more inclusive, incorporating technological advances in vehicle integrity in the event of a crash and response capability. Advances in roadway and off road design and re-engineering of crash barriers to meet changes in motor vehicle weight and size have added substantially to crash survival.

**One-Hand Steering** – Movement of the steering wheel with one hand is recommended only for backing maneuvers which do not require full left or right turns or when operating information, safety, or comfort devices.

Other Drugs – Legal and illegal drugs other than alcohol.

**Other Road Users** – People who use the HTS by walking, driving, or riding (including other cars, vans, pick-up trucks, motorcycles, commercial vehicles, semi-trucks, pedestrians, animals, etc.).

**Outside Checks** – Procedures for checking for problems that might impede the vehicles movement.

**Oversteer** – When the rear tire patches lose varying degrees of traction and the front tire patches have more traction causing a spinning effect (yaw) around the vehicle's center of gravity. The vehicle has a tendency to spin to the left or right even though the driver is not turning the steering wheel.

Overtake – Pass the vehicle ahead.

**Owner** – The person who holds legal title to a motor vehicle; the purchaser or lessee of a motor vehicle subject to an agreement for the conditional sale or lease of the vehicle.

- P -

**Parallel Parking** – Parking where the vehicle lines up parallel or going the same direction as the curb. When parallel parking, the vehicle must be at least six (6) inches but not more than 18 inches from the curb.

**Park or Parking** – To stand an occupied or unoccupied vehicle, other than temporarily while loading or unloading merchandise or passengers. Examples of parking are angle, perpendicular, curb, and parallel parking.

**Parking Brake** – Mechanical brake that holds a vehicle in place when it is parked and to protect the transaxle, constant velocity joints, or transmission.

**Pass or Passing** – Overtake and proceed passed another vehicle moving in the same direction as the passing vehicle or to attempt the maneuver.

Passenger Vehicle - A passenger car, light truck, sport utility vehicle, truck, or truck tractor.

Passive Occupant Restraint\_— Occupant restraint, such as an air bag or an automatic seat belt, that works without the passenger or driver initiating the device. Systems designed to protect the occupants of a vehicle without any further actions on the occupant's part. Passive restraint systems, energy-absorbing crumple zones, energy-absorbing steering columns, driver and passenger airbags, side airbags, padded dash panel, padded sun visor, safety glass, padded head restraints are all examples of passive safety features.

**Pavement Marking** – A marking on the pavement to warn or direct drivers and to regulate traffic. **Pedestrian** – Highway user on foot.

**Peer Pressure** – Mental and social influence of others of a similar age on decision-making skills. **Perceived Risk** – What a person "thinks" is the risk. It is usually different from what is the objective risk. We want the perceived risk to become similar to the objective risk.

**Perception Distance** – Distance your vehicle travels during perception time. Perception Time – Length of time it takes the driver to make a risk-reduction decision.

**Peripheral Vision** – Area a person can see that is around the central field of vision. It is conical in shape around the other vision fields. It functions to notice changes in color and object movement.

**Perpendicular Parking** – Parking the vehicle at a right angle to a curb or parking stripe using visual reference points for entering and leaving.

**Personal Needs Self-Assessment** – Appraisal of an individuals necessary requirements and wishes in a vehicle.

**Personal Reference Point** – Adapting the standard reference point to the vehicle used by the driver

**Personal Preparation** – Preparing self for the trip including route planning, number of hours to be driven in a day, getting sleep, having money to cover expenses, letting someone know your route, being prepared to pay a repair cost if vehicle breaks down, etc.

**Physical Behavior** – Includes all actions of a driver. For example, signaling before changing lanes is in the mental, emotional, and physical behavior.

**Physiological Effects** – Deal with movement and coordination of the body (i.e., legs, arms, hands, feet, balance, etc.).

**Pitch of Vehicle** – A vehicle suspension change to the front or rear that affects the size of the tire patches' contact with the roadway surface, initiated by driver actions of braking or accelerating the vehicle. An abrupt or sudden brake or acceleration may cause a traction loss due to the vehicle's inability to balance the traction quickly enough to maintain the tire patch and therefore traction.

**Platooning** - Platoon joining, leaving, etc. Platoon-wide situational awareness through fusion of vehicle-level sensors. Lead vehicle driven by a trained professional driver following vehicles have automated driving. **Point of Decision** – Driver of the passing vehicle has entered the passing lane and is in the left rear zone of the vehicle being passed. At this point, the driver of the passing vehicle has better visibility and has time to reevaluate and make a decision whether to complete the pass or abort it.

**Point-of-No Return** – Point beyond which a driver can no longer stop safely without entering the intersection.

**Post-Trip Checks** – Procedures used to safely shut down, exit, and secure the vehicle: stop within a legal, secure parking space; set parking brake; place shift selector in (P)ark; turn off any accessories used; turn ignition switch to "off"; "lock" ignition and remove key; remove occupant restraints; check traffic prior to exiting vehicle; secure doors and windows.

**Potential Emergency Situations** – Probable situations that may present a conflict that could result in a crash or collision.

**Power Brake Failure** – Failure is usually the loss of power that helps you brake. Braking power stops if the engine stops.

**Power Steering Failure** – Failure of the power steering to help the driver steer. With difficulty, a driver can still steer the vehicle.

**Preparing the Vehicle** – Checking and, if necessary, servicing the vehicle's mechanical and tire functions.

**Prioritize Information** - The ability to identify what hazard, conflict or information needs attending to.

**Privilege to Drive** - the ability to obtain a driver's license to drive on our nations roadways that comes with responsibilities to others on the roadway, obligations to obey traffic laws, and consequences for improper driving actions.

**Psychological Effects** – Deals with the mental aspects of driving such as judgment, reason, inhibitions, mood, etc.

**Public Intoxication** – A person commits an offense if the person appears in a public place while intoxicated to the degree that the person may be a danger to the person or others.

**Public Place** – Any place to which the public or a substantial group of the public has access and includes, but is not limited to, streets, highways, and common areas of schools, hospitals, apartment houses, office buildings, transport facilities, and shops.

**Push-Pull Steering** – Using the hand-to-hand steering technique (see hand-to-hand).

#### - R -

**Race** – The use of one or more vehicles in an attempt to: out gain or outdistance another vehicle or prevent another vehicle from passing; arrive at a given destination ahead of another vehicle or vehicles; or test the physical stamina or endurance of an operator over a long-distance route.

**Railroad** – A carrier that operates cars, other than streetcars, on stationary rails to transport persons or property.

**Railroad Grade Crossing** – An intersection of a through street and a railroad crossing. **Reaction Distance** – Distance the vehicle travels from the point where the driver perceives the need to act and the point where the driver takes that action through braking, steering, or acceleration to change speed or position.

**Reaction Time** – The time the vehicle travels from the point where the driver perceives the need to act and the point where the driver takes the action through braking, steering, or acceleration to change speed or position.

**Reckless Driving** – A person commits an offense if the person drives a vehicle in willful or wanton disregard for the safety of persons or property.

**Reduced Risk Driving** – Applying knowledge, understanding, and skills including traffic laws including yielding protocol, right-of-way laws and occupant restraints, driver preparation, vehicle movements, driver readiness, risk reduction, environmental factors, distractions, impaired driving, adverse conditions, vehicle requirements, consumer responsibilities, and personal responsibilities.

**Reduced Visibility** – A driver Inability to see clearly. Limitations on gathering and processing information due to reduced illumination. Sight limitations may be due to weather, light, roadway, vehicle, traffic, or driver conditions.

**Reference Point** – Part of the outside or inside of the vehicle, as viewed from the driver's seat, which relates to some part of the roadway, which allows the driver to estimate position on the roadway. The roadway positions (points of reference) of the vehicle assist the driver in determining when to start turning, vehicle limitations, or where the vehicle is actually located.

**Responsibility of a Driver** – A driver's moral, legal, and mental accountability to driving practices that utilize the knowledge, understanding, skills, and experiences. A driver has the responsibility of driving a vehicle in the HTS without conflict with other road users or the roadway.

**Restraint Device** – Any part of a vehicle that holds an occupant in the seat during a collision.

**Restriction** – For good cause, the department may impose a limitation or endorsement suitable to the driver's license holder's driving ability.

**Revocation** – The termination of a driver's license or driving privilege for an indefinite period of time. May be restored when all the requirements for the revocation have been satisfied.

**Right of Way** – The privilege of having immediate use of a certain part of a roadway. The right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian that is approaching from a direction, at a speed, and within a proximity that could cause a collision unless one grants precedence to the other.

**Risk** – Chance of injury, damage, or loss. In driving, risk (potential or immediate) is the possibility of having a conflict that results in a crash or collision.

**Risk Management** – Reducing or managing the possibility of having a conflict (potential or immediate) that results in a non-incident, crash, or collision.

**Risk-Taking** – Taking a chance of injury, damage, or loss. In driving, risk-taking (potential or immediate) is chancing the possibility of having a conflict that results in a crash or collision.

**Road Handling Characteristics** – How a vehicle maneuvers on the roadway. Vehicles handle differently based on weight, center of gravity, load, wheelbase, engine size, tire size, etc. Road **Rage** – Popular term for aggressive driving.

**Road Users** – People who use the HTS by walking, driving, or riding (including automobiles, vans, pick-up trucks, motorcycles, commercial vehicles, semi-trucks, pedestrians, animals, horse-drawn vehicles, bicycles, etc.).

**Roadway** – The portion of a highway, other than the berm or shoulder that is improved, designed, or ordinarily used for vehicular travel. If a highway includes at least two separate roadways, the term applies to each roadway separately.

Roll of Vehicle – Vehicle suspension changes to the left or right side that affect the size of the tire patches' contact with the roadway that are initiated by the driver action of steering the vehicle. Abrupt steering efforts (hand-over-hand) at higher speeds can cause traction loss due to the suspension's inability to keep the tire patches or traction in optimum traction positions.

**Route Planning** – Preparation for travel to familiar or unfamiliar areas. Knowing where you are going and planning, in advance, which roadways to take.

- S -

**Saccadic Eye Movement** - Irregular, uneven movement of the eye as it scans a scene. This is normal eye movement.

**Safe and Reasonable Speed** – An operator may not drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard for actual and potential hazards then existing shall control the speed of the vehicle as necessary to avoid colliding with another person or vehicle that is on or entering the highway in compliance with law and the duty of each person to use due care.

**Safely and Responsibly** – A driver's legal, moral, dutiful, and mental accountability to driving practices that utilize the knowledge, understanding, skills, and experiences. A driver has the duty of driving a vehicle in the Highway Transportation System within the law and without conflict with other road users or the roadway.

**Safety Belts** – Restraining belts to protect the driver and passengers.

**Safety Zone** – The area in a roadway officially designated for exclusive pedestrian use and that is protected or so marked or indicated by adequate signs as to be plainly visible at all times while so designated.

**Scheduled Maintenance** – Vehicle service that is planned utilizing the vehicle's owner's manual as a resource.

**School Bus** – A motor vehicle that was manufactured in compliance with the federal motor vehicle safety standards for school busses in effect on the date of manufacture and that is used to transport pre-primary, primary, or secondary students on the route to or from school or on a school-related activity trip other than on routes to and from school.

**Searching** – Keep the eyes moving searching the path of travel, side to side, for line of sight restrictions, the rearview and sideview mirrors, vehicle reference to lane position, and the instrument panel, toward the target area.

- 4 8 Seconds Ahead (Searching) Stopping zone and following interval
- 8 12 Seconds Ahead (Searching) Identify alternate paths of travel and stopping zone
- 12 15 Seconds Ahead (Searching) Identify objects that require a change in speed or direction
- 20 30 Seconds Ahead (Searching) Identify potential problems awareness

**Selective Seeing** – Searching only those clues and events that restrict your line of sight or can change your intended path of travel.

**Shoulder** – Means the portion of a highway that is: adjacent to the roadway, designed or ordinarily used for parking, distinguished from the roadway by different design, construction, or marking, and not intended for normal vehicular travel.

**Shoulder Belt** – Restraining belt to protect the driver and passengers that fastens across the shoulder and chest.

**Shut-Down Procedures** – Properly shutting down the engine, exiting the vehicle including a visual check to ensure that all passengers especially children and animals are out of the vehicle, and securing the vehicle.

**Signaling** – Letting others know when you are going to stop or turn. Give signal by either signal lights or hand/arm extended out of car window.

**Single-Vehicle Crash** – A collision with only one vehicle involved.

**Skid** – A skid occurs when the tire patches lose part or all of their traction on the roadway surface due to abrupt suspension balance changes or roadway surface conditions.

**Slow Moving Vehicle** – Vehicle unable to travel at highway speed.

**Space Management Process** – Critical-thinking, decision-making, and problem-solving in the Highway Transportation System (identifying, predicting, deciding, and executing).

**Space Management System** – System the driver uses to perform the space management process.

**Speed** – The act or state of moving.

**Speed Limits** – The safe and reasonable speed declared by the state for that part of the highway system.

**Standard Sign Colors** – Red, stop or prohibition; Green, indicated movements permitted, direction, or guidance; Blue, motorist services; Yellow, general warning; Black, regulation; White, regulation; Orange, construction or maintenance warning; and Brown, public recreation and scenic guidance

**Steering Wheel** – Wheel that allows the driver to direct the vehicle. The wheel is always turned in the direction the driver wants the vehicle to move, whether moving forward or in reverse. **Stopping a Vehicle** – Ceasing movement of a vehicle or momentarily halting a vehicle, occupied or unoccupied.

**Stopping Distance** – Distance your vehicle travels while you make a stop.

**Stop Sign** – Stop before entering the crosswalk or intersection. Stop means bring the vehicle to a complete stop.

**Stopping Position** – Stopping behind a vehicle in a position that allows the driver enough space to steer around the vehicle to avoid a stalled, turning, or backing vehicle. Allows space to the front, which will avoid carjacking problems in heavy volume of traffic.

**Street** – The width between the boundary lines of a publicly maintained way any part of which is open to the public for vehicular travel.

**Survival Features** – The features incorporated into highway design to enhance occupant safety. A vehicle or roadway feature that allow you to continue to function.

**Suspension** – The temporary withdrawal of a driver's license or driving privilege for a definite period of time.

- T -

**Tailgate** – To follow another vehicle too closely.

**Tire Blowout** – Rapid deflation of air from the tire.

**Tire Failure** – Wearing out of the tires.

**Tire Service** – Safeguarding the vehicle's tires by servicing and performing necessary repairs utilizing the vehicle's owner's manual as a resource.

**Tolerance** – Tolerance is defined as the need to consume more of a drug to reach a given effect or the body's ability to eliminate the drug faster.

**Total Steering Failure** – Failure where the driver has loss the ability to steer the vehicle. This is a serious emergency.

**Tracking** – Following the roadway to maintain proper lane position.

**Traction** – Friction or gripping power between the tire patches and the roadway surface. The grip between the tires and the road surface that allows a vehicle to start, stop, and/or change direction.

**Traction Control System** – Helps maintain control by preventing any of the wheels from spinning while applying a hard acceleration. The accelerator pedal may be pushed, but the vehicle does maintain steering control with rolling traction.

**Traction Loss** – Loss of the adhesion between the tires and the road surface.

**Traditional Intersection** – A place where two or more road users meet and cross at a point.

**Traditional Sideview Mirror Setting** – Side view mirror adjusted to view sides rather than rear view. This setting must be used if rear view mirror is blocked. Left side mirror setting: while seated in the driving position, adjust left side mirror to see behind the vehicle to the left, level to the road surface, and where you see a small portion of your vehicle. Right side mirror setting: while seated in the driving position, adjust right side mirror to see behind the vehicle and to the right, level to the road surface, and where you see a small portion of your vehicle. Mirror setting does not eliminate making a visual check to the left or right.

**Traffic** – Means pedestrians, ridden or herded animals, and conveyances, including vehicles and streetcars, singly or together while using the highway for purposes of travel.

**Traffic Control Devices** – Devices used to control the movement of traffic, such as, traffic signals, signs, and roadway markings.

**Traffic Flow** – Number and types of vehicles that occupy a roadway (may differ during times of day or with other conditions).

**Traffic Laws** – A traffic rule of conduct or action prescribed or formally recognized as binding or enforced by a controlling authority.

**Traffic Signal** – Any signal used to control the movement of traffic.

**Traffic Sign Shapes** – Octagon, exclusively for Stop Signs; Horizontal rectangle, generally for guide signs; Equilateral triangle, exclusively for Yield signs; Pennant, advanced warning of No Passing Zones; Diamond, exclusively to warn existing or possible hazards on roadways or adjacent

areas; Vertical rectangle, generally for regulatory signs; Pentagon, school advance and school crossing signs; and Round, railroad advance warning signs.

**Traffic Volume** – The quantity and type of motorized and non-motorized road users.

**Trip/Route Planning** – Planning an extended trip of several days, some of which will likely be over high-speed highways that requires extra preparation or short routes around a city.

**Truck** – A motor vehicle designed, used, or maintained primarily to transport property including light trucks, semi-trailers, truck tractor, large trucks, etc.

**Turn** – Vehicle movement to change direction or lane position.

**Turnabout** – Turning in which the driver utilizes a series of maneuvers to reverse the vehicles direction. Vehicle maneuver for turning into or out of an alley or driveway using reference points for best positioning.

**Types of Driver's Licenses** – Instruction permit, Provisional License, Classified Driver's License (Class A, Class B, Class C), Class M License, Classifications, Hardship License, and Essential Need.

- U -

**Urban District** – The territory adjacent to and including a highway, if the territory: is not in a municipality; and is improved with structures that are used for business, industry, or dwelling houses and located at intervals of less than 100 feet for a distance of at least one-quarter mile on either side of the highway.

**Uncontrolled Intersection** – Intersection that has no signs or signals to regulate traffic including railroad crossings that do not have flashing red lights or crossing gates.

**Understeer** – When the front tire patches lose varying degrees of traction and the rear tire patches have more traction causing a pushing effect on the vehicle due to momentum and inertia forces. The vehicle has a tendency to go straight even if the steering wheel is turned more dramatically. **Unscheduled Maintenance** – Vehicle service that is unplanned utilizing the vehicle's owner's manual as a resource.

**Useful Field of View** – The vision that a driver uses to see the traffic environment. The useful field of view includes the central vision and fovial vision fields.

- V -

**Vehicle** – Every device, in, upon, or by which any person or property is or may be transported or drawn upon a highway, excepting devices used exclusively upon stationary rails or tracks.

**Vehicle Balance** – Vehicle suspension configurations that control the size of the tire patches as they contact the roadway for ideal vehicle traction and control. Changes to the suspension configuration (and therefore the tire patches affecting traction) are initiated by driver actions of steering, braking, and/or accelerating the vehicle. The vehicle suspension is in the ideal state of balance and tire traction when it is parked on a level surface.

**Vehicle Components** - control devices instruments and warning indicators, visibility devices, safety devices, comfort devices, anti-theft devices, communication devices, and traction control devices, etc.

**Vehicle Control Devices** – Devices that allow a driver to have power over a vehicle, such as gear selector, accelerator pedals, brake pedal, dead pedal, steering wheel, etc.

**Vehicle Control Techniques** – Techniques use to manage the vehicle control devices, such as hand to hand steering, hand over hand steering, one hand steering, etc.

Vehicle Cybersecurity - Focuses on layered solutions to ensure vehicle systems are designed to take appropriate and safe actions, even when an attack is successful.

**Vehicle Imbalance** – Loss of vehicle balance that causes traction loss.

**Vehicle Inspection** – Inspection of a vehicle at state inspection station or by an inspector to ensure the vehicle does not need adjustment, correction, or repair.

**Vehicle Insurance** - A policy to cover the costs connected with a motor vehicle crash. Individuals pay premiums to an insurance company and the insurance company then covers the costs connected with a crash or other damage.

**Vehicle Malfunctions** (**Breakdown**) – When the vehicle fails to operate normally, such as brake failure, steering failure, accelerator failure, etc.

**Vehicle Maintenance** – Safeguarding the vehicle by servicing and performing necessary repairs on a vehicle utilizing the vehicle's owner's manual as a resource. Vehicle upkeep (scheduled or unscheduled). Use the vehicles owner's manual to locate schedule maintenance plan.

**Vehicle Maneuvers** - Moving forward, turning, backing, lateral maneuvers, merging, turnabouts, etc.

**Vehicle Movements** – A procedure or method of moving the vehicle including moving forward, stopping, lateral maneuver, turning and backing. Changing a vehicles direction or lane position.

**Vehicle Operation Devices** – Devices that perform the practical work of a vehicle, such as power train, suspension system, engine, transmission, steering, etc.

**Vehicle Owner's Manual** – Manual, supplied by manufacture that explains all aspects of the vehicle.

**Vehicle Performance** – How a vehicle functions on the roadway. Vehicles perform differently based on \weight, center of gravity, load, wheelbase, engine size, tire size, etc.

**Vehicle Registration** – A resident must register with the county tax-assessor every vehicle that that is owned.

**Vehicle Space -** The space a vehicle occupies on or off the roadway in the Highway Transportation System.

**Vehicle Technology Systems** - List included in Appendix A.

**Venerable Road Users** – Persons that are at greater risk than vehicle occupants which include pedestrians including a runner, physically disabled person, child skater, highway construction and maintenance worker, utility worker, or other worker with legitimate business in or near the roadway or right of way, or stranded motorist or passenger, person on horseback, person operating equipment other than a motor vehicle including, bicycle, motorcycle, horse-driven conveyance, farm equipment, slow moving vehicles, etc.

**Visibility** – Capable of seeing and being seen.

**Vision** – he special sense by which the qualities of an object (as color, luminosity, shape and size) constituting its appearance are perceived and which is mediated by the eye.

**Visual Acuity** – Ability to see things clearly both near and far away.

**Visual Attention** – Directed attention, maintaining an open line of sight, searching skills, and targeting a line to maintain a safe path of travel.

**Visual Clutter/Noise** - An influx of a large amount of irrelevant visual information which may be distracting or confusing.

**Visual Glance Behavior** - The way drivers use their eyes to get information in the driving environment. It may be through scanning the forward field, using the mirrors, or turning the head. **Visual Functions** – Focus vision, central vision, and peripheral vision.

**Visual Memory** - The ability to retain visual information in memory while searching other areas of the environment to build up an overview of where traffic is for example, remembering if vehicles are approaching from the right as you check to the left before making your decision to move into a gap.

**Visual Search** – Process can be described as an organized pattern of focused eye movements scanning the path of travel.

**Visual Search Patterns** - The systematic way in which drivers use their eyes to get information in the driving environment.

**Visual Tracking** - (a) The act of eyes following a moving object or (b) looking toward an intended path of travel: the eyes 'run ahead' of the vehicle, making a track to follow.

#### - W -

**Warning or Alert Indicators** – An instrument panel lighted symbol that warns of a system malfunction and usually stays on while the system is malfunctioning.

Wear Bar – Bar across the tread of a tire. When the wear bar appears across the tires, it is a sign that the tire needs replacing.

**Weather Conditions** – The state of the atmosphere with respect to heat or cold, wetness or dryness, calm or storm, clearness or cloudiness. Atmospheric conditions including that fog, heavy rain, snow, wind, etc.

#### - Y -

**Yaw** – The spinning effect of a vehicle around its center of gravity. When a vehicle loses traction to the rear, the vehicle tends to move to the left or right around its center of gravity.

**Yield** – To allow another vehicle or roadway user rite of passage to proceed first.

**Yielding Protocol** – The procedures governing the decisions of who should be given the right of way to proceed first based on jurisdictional laws and sharing the road safely with other road users.

#### - Z -

**Zero-Tolerance Law** – Law stating it is illegal for persons under the age of 21 to drive with jurisdictional set amount of alcohol in the blood.

# Appendix A

# **Vehicle Technology Systems**

Warning
Mitigating
Convenience and Support

#### VEHICLE TECHNOLOGY SYSTEMS

#### Warning Vehicle Technology System

- Backup Sensors/Warning Systems
- Bicycle Detection
- Blind Spot Monitoring
- "Child/Pet Still Aboard" Warning Systems (To Prevent Heat-Related Deaths)
- Curve Speed Warning
- Driver Alertness/Fatigue Prevention
- Driver Function/Health Monitoring Systems
- Driver Impairment Prevention Systems
- EMS Proximity Notification
- Forward Collision Notification
- Lane Blockage Detection
- Lane Deviation Warning
- Left Turn Risk Warning
- Pedestrian Detection
- Rear Cross-Traffic Warning
- Tire Pressure Monitoring
- Traffic Sign Recognition
- Vehicle Status/Condition/Maintenance Monitoring Systems

#### **Mitigating Vehicle Technology Systems**

- Airbags
- Anti-Lock Braking Systems (ABS)
- Automatic Emergency Braking Both Forward & Backing
- Automatic Evasive Steering
- Crash Preparation Systems (Brake Pre-Charge, Seats, Windows, Etc.)
- Electronic Stability Control
- Inflatable Safety Belts
- Lane Position Maintenance
- Left Turn Crash Prevention
- Pedestrian Collision Mitigation
- Road-Sensing Adjustable Suspension
- Traction Control

### **Convenience and Support Vehicle Technology Systems**

- Adaptive Headlights
- Adaptive Cruise Control
- Advanced/Variable Headlight Projection Systems
- Augmented Reality Driver Information Systems
- Automatic Parking Parallel
- Automatic Parking Perpendicular
- Braking Assist
- Backup Cameras
- Camera-Based Mirrors
- Driver Seating Position Memory Systems (Seat, Steering Wheel, Mirrors, Etc.)
- Facial Recognition/Voice Commands
- Gesture-Controlled Functions
- Hill Descent Assist
- Hill Start Assist
- Holographic-Image Support Functions
- Keyless Ignition Systems
- On-Board Navigation Systems
- Partially-Automated Driving Systems
- Rear-Wheel Steering
- "See-Through" Body Panels
- Self-Repairing Paint
- Traffic Jam Assist
- Traffic Light Management/Countdown
- Variable Function Performance Systems (e.g. Limited Top Speed, Reduced Audio Volume, Etc.)
- Voice-Activated/Controlled Functions
- Vehicle-To-Infrastructure Communication (V2I)
- Vehicle-To-Vehicle Communication (V2V)

## Attachment C – Stages for Driver Education Instructor Preparation Program

(for all phases of instructor training)

#### Introduction

This document, which was developed by the Association of National Stakeholders in Traffic Safety Education (ANSTSE) – Teacher Training Working Group (TTWG) outlines the stages essential for States and/or programs to successfully train driver education instructors to deliver all segments of the driver education program that meet the Novice Teen Driver Education and Training Administrative Standards (NTDETAS). Each Stage is a critical component within the "System." Altering or omitting a Stage within the "System" will drastically affect the quality of driver education instructors trained. Many of the Stages require course development by the State or program. ANSTSE has developed training resources to assist in conducting Stage III: The Teaching Task (see Attachment D). See NTDETAS Section 3 Instructor Qualifications for specific Instructor Qualification Standards.

#### **Required Stages for Qualifications**

Classroom Only Instructors		BTW Only Instructors		
i.	Stage I	i.	Stage I	
ii.	Stage II	ii.	Stage II	
iii.	Stage III Parts I and II	iii.	Stage III Parts I and III	
iv.	Stage IV (optional but	iv.	Stage IV (optional but	
	recommended)		recommended)	
v.	Stage V	v.	Stage V	
Both Classroom and BTW Instructor				
All Stages are required except for Stage IV which is optional but recommended.				

The Five-Stages for training driver education instructors are:

#### I. Pre-Screening and Entry Assessments

Purpose: Conducted to determine if the instructor candidate has a minimum level of knowledge and skills to enter the Instructor Preparation Program. The Entry Assessments are a prerequisite to Stage II: Foundations of Novice Driver Education (The Driving Task) (the entry assessments may be conducted following Stage II).

- a. Conduct pre-screening of the instructor candidate to determine if they are a good candidate for entering the instructor preparation program.
- b. Entry-driving assessment of the instructor candidate
  - i. Pre-screening tool
  - ii. Debriefing
- c. Entry-knowledge assessment of the instructor candidate
  - i. Pre-screening tool
  - ii. Debriefing

Estimated Time: 1 hour to administer the knowledge assessment to all instructor candidates and up to 1 hour per candidate to administer the driving assessment.

# II. Foundations of Novice Driver Education (The Driving Task – formalized foundations class)

Purpose: Provided the instructor candidate has passed the Entry Assessments in Stage I, the State or program shall deliver the state approved driver education curricula in a formalized foundation class, established by the State or program, covering the entire driver education program classroom and BTW course content with instructor candidates. The State or program should utilize the standards established in the NTDETAS Section 3 Instructor Oualifications.

- a. The state's driver education program [approved driver education curricula]
  - i. Covers A-Z of the driving task [approved driver education curricula]
  - ii. All phases of instruction (e.g., classroom and BTW)
  - iii. Meets ADTSEA and/or DSAA Content Standards identified in the NTDETAS.
- b. Formal course of instruction
  - i. classroom
  - ii. BTW
  - iii. online
  - iv. hybrid
- c. Delivery Method meets Section 3 Instructor Qualifications and use an approved driver education curriculum.
  - i. Additional requirements set by the state agency.
- d. Critical Content of the Curriculum Each candidate should practice the critical content/skills during on-street activities.

Estimated Time: Determined by the length of the driver education curriculum for both classroom and BTW.

#### III. The Teaching Task / Teaching and Learning Theories (formalized foundations class)

Purpose: Provided the instructor candidate has successfully completed Stage II: Foundations for Novice Driver Education (required) the State or program shall deliver the course content for The Teaching Task / Teaching and Learning Theories utilizing the standards established in the NTDETAS Section 3 Instructor Qualifications.

This stage is designed to provide the necessary knowledge and skills for delivering classroom and behind-the-wheel instruction. Instructor candidates must be able to effectively deliver the course content covered in Stage II: Foundations of Novice Driver Education (The Driving Task) [approved driver education curricula].

The State or program is encouraged to utilize the Teaching Task / Teaching and Learning Theories training materials developed by ANSTSE as identified in the NTDETAS (see Attachment D – ANSTSE Table of Contents of the Model Training Materials for the Teaching Task).

- a. The ANSTSE NTDETAS Driver Education Teaching Task Model Training Materials includes the following components:
  - i. Part I Fundamental Concepts of Teaching and Learning

- ii. Part II Teaching and Learning Theories for Classroom
- iii. Part III Teaching and Learning Theories for BTW
- b. Formal course of instruction covering Instructional Theories (classroom and BTW)
  - iv. classroom
  - v. online
  - vi. hybrid
- c. Delivery Method –Section 3 Instructor Qualifications and ANSTSE developed Model Curriculum.
  - vii. Times within the model lesson plans are suggested minimums.
  - viii. Additional requirements set by the state agency / approved provider.
- d. Practice Teaching Instructor candidates must successfully delivery a series of driver education classroom and BTW peer teaching assignments, from the State approved curricula.
  - i. Classroom peer teaching
  - ii. BTW peer teaching
  - iii. Classroom teen teaching (optional but highly recommended)
  - iv. BTW teen teaching (optional but highly recommended)
- e. Comprehensive knowledge test(s) for successful completion of the teaching and learning theories course of instruction.

Estimated Time for Stage III:

Part I - 14 hours instruction time

Part II – 21 hours instruction time

Part III – 35 hours instruction time

# IV. Student Teaching Practicum or teaching with an experienced mentor (optional but highly recommended)

Purpose: This stage involves student teaching or teaching with an experienced mentor; and an evaluation of the instructor candidate in real-world classroom and BTW instruction.

- a. All phases of instruction
- b. Additional requirements set by the state agency / approved provider.

Estimated Time: Determined by the student teaching program.

#### V. Exit Assessments for successful completion of the instructor preparation program

Purpose: The Exit Assessments are conducted upon successful completion of Stages I-IV to determine if the instructor candidate has the required level of knowledge and skills to teach the state approved driver education curricula. The Exit Assessments are required to determine if the instructor candidate has met the requirements for instructor qualification.

- a. Exit in-vehicle teaching skills assessment of the instructor candidate
  - i. Debriefing
- b. Exit advanced knowledge assessment of the instructor candidate
  - i. Debriefing

Estimated Time: 1 hour to administer the knowledge assessment to all instructor candidates and up to 1 hour per candidate to administer the driving assessment.

### **Summary of Estimated Instructional Time**

Stage	<b>Estimated Instructional Time (hours)</b>	
Stage I – Entry Assessments	Assessment time determined by the State/Program and	
	number of instructor candidates	
Stage II – Foundations of Novice		
Driver Education (The Driving	35 (inclusive of 6 hours of BTW)	
Task/Formalized Foundations		
Class)		
Stage III – The Teaching Task		
Part I – Fundamental Concepts	14	
Part II – Classroom	21	
Part III – BTW	35	
Stage IV – Student Practicum	Student Teaching Practicum time determined by the	
	State/Program	
Stage V – Exit Assessments	Assessment time determined by the State/Program and	
	number of instructor candidates	
<b>Qualification Level</b>	<b>Estimated Instructional Time (hours)</b>	
Full Qualification – Both	105	
Classroom and BTW Instructor	103	
BTW Instructor Only	84	
Classroom Instructor Only	70	

Notes: 1. Total suggested instruction times are minimums.

- 2. Instruction time does not include time to conduct entry and exit assessments and student teaching practicum.
- 3. Instruction time is based on a 3:1 student trainer ratio for Parts II and III.
- 4. States and programs are encouraged to require all three parts of the teaching task.

# Attachment D – Table of Contents of the Model Training Materials for the Teaching Task

Developed by the TTWG. These materials are available for free download at <a href="https://www.anstse.info">www.anstse.info</a>.

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#### **Supplementary Information**

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#### Attachment E – NHTSA Graduated Driver Licensing System Model

# **Traffic Safety Facts**

#### Laws

**DOT HS 810 888W** 

January 2008

# **Graduated Driver Licensing System**

#### **Background**

The National Highway Traffic Safety Administration encourages States to implement a graduated driver licensing (GDL) system. Easing young drivers onto the roadways by controlling their exposure to progressively more difficult driving experiences can reduce the incidence of traffic crashes involving young drivers.

A significant percentage of young drivers are involved in traffic crashes, and they are twice as likely as adult drivers to be in a fatal crash. Sixteen-year old drivers have crash rates that are about three times greater than 17-year-old drivers, five times greater than 18vear-old drivers, and approximately twice the rate of 85-year-old drivers. The factors contributing to these higher crash rates include lack of driving experience and inadequate driving skills: excessive driving during nighttime, higher risk hours; risk taking behavior; poor driving judgment and decision making; drinking and driving; and distractions from teenage passengers.

To address these problems, traffic safety researchers developed a licensing system that would

prolong the learning process for young novice drivers. Based on this system, NHTSA and the American Association of Motor Vehicle Administrators developed an entry level driver licensing program to give young drivers more time to learn the complex skills required to operate a vehicle. The program consists of three stages, identified at each stage by the type of license: learner's permit, intermediate (provisional) license, and full licensure. Young drivers are required to demonstrate responsible driving behavior at each stage of licensing before advancing to the next level.

#### **Key Facts**

- In 2006, 3,490 drivers 15 to 20 years old were killed and an additional 272,000 were injured in motor vehicle crashes.
- Motor vehicle crashes are the leading cause of death for people age 15 to 20.
- In 2006, 7,463 drivers 15 to 20 years old were involved in fatal crashes—an 8-percent decrease from 8,074 involved in 1996. Driver

- fatalities for this age group increased by 3 percent between 1996 and 2006. For young males, driver fatalities rose by 5 percent, compared with a 3-percent decrease for young females.
- In 2006, 12.9 percent (7,463) of all drivers involved in fatal crashes (57,695) were young drivers 15 to 20 years old, and 16 percent (1,621,000) of all drivers involved in police- reported crashes (10,558,000) were young drivers.
- Twenty-eight percent (378) of the 15- to 20-year-old drivers involved in fatal crashes who had invalid operator's licenses at the time of the crash also had a previous license suspension or revocation.
- Thirty-one percent of 15- to 20year-old drivers who were killed in motor vehicle crashes during 2006 had been drinking.
- In 2006, 64 percent of youth (age 15 to 20) who died in passenger vehicles were not wearing seat belts.

- In 2006, 39 percent of fatalities of 15- to 20-year-olds occurred in speed-related crashes.
- States with nighttime driving restrictions show crash reductions of up to 60 percent during restricted hours.
- GDL has been shown to reduce crashes by young drivers.

# How Effective Are GDL Systems?

Evaluations clearly show the benefits of adopting GDL laws and GDL components. Florida's GDL law resulted in a 9-percent reduction in crashes for drivers who were 16 and 17 years old. Ongoing research in Michigan and North Carolina has shown a 26percent and 25-percent reduction, respectively, in crashes involving 16-year-old drivers. Maryland and Texas GDL program showed similar success. GDL components adopted in the late 1970s and early 1980s also had positive effects. For instance, California reported a 5-percent reduction in crashes and a 10-percent reduction in traffic convictions for 16- and 17-yearold drivers, while Oregon saw a 16-percent reduction in crashes for male drivers age 16 and 17. A more recent evaluation of Oregon's GDL system demonstrated a 29- percent decrease in crash rates for 16-year-old drivers 3 years post-GDL implementation; there was a 16-percent decrease in crash rates for 17-year-old drivers.

Nova Scotia, Canada, reported a 29-percent reduction in crashes involving 16-year-old drivers while a preliminary report from Ontario, Canada, cites a 31-percent reduction in crashes for all drivers 15 to 19 years old. A

recent national evaluation of GDL programs by Johns Hopkins University concluded that the most comprehensive programs are associated with reductions of about 20 percent in 16-year-old drivers' fatal crash involvement rates.

NHTSA recently released an evaluation of passenger restriction laws in terms of teen crash involvements. This study evaluated passenger restriction laws in three States: California, Massachusetts, and Virginia. Results demonstrated that, on average, there were 740 fewer 16-year-old drivers in California involved in crashes per year as a result of the passenger restriction law. There were 173 fewer 16-yearold driver involved in crashes per year in Massachusetts, and 454 fewer 16-year-old drivers in Virginia, both as a result of their passenger restriction laws.

#### **How Does GDL Work?**

In the mid-1990s, the Insurance Institute for Highway Safety, the National Safety Council, the National Transportation Safety Board, and NHTSA met to establish a national model for GDL. By establishing a national model, the various traffic safety groups sought to provide guidelines for States considering a GDL system.

The three stages of the GDL system include specific components and restrictions to introduce driving privileges gradually to beginning drivers. Novice drivers are required to demonstrate responsible driving behavior during each stage of

licensing before advancing to the next level.

Each stage includes recommended components and restrictions for States to consider when implementing a GDL system. Examples of components and restrictions for each stage include:

#### Stage 1: Learner's Permit

- State sets minimum age for a learner's permit at no younger than age 16;
- Pass vision and knowledge tests, including rules of the road, signs, and signals;
- Completion of basic driver training;
- Licensed adult (who is at least 21 years old) required in the vehicle at all times;
- All occupants must wear seat belts;
- Teenage-passenger restrictions:
- Zero alcohol while driving;
- Permit is visually distinctive from other driver licenses;
- Must remain crash and conviction free for at least six months to advance to next level:
- Parental certification of 30 to 50 practice hours; and
- No use of portable electronic communication and entertainment devices.

## Stage 2: Intermediate (Provisional) License

- Completion of Stage 1;
- State sets minimum age of 16.5;
- Pass a behind the wheel road test;

- Completion of advanced driver education training (safe driving decision-making, risk education, etc.)
- All occupants must wear seat belts;
- Licensed adult required in the vehicle from 10 p.m. until 5 a.m. (e.g., nighttime driving restriction);
- Zero alcohol while driving; Driver improvement actions are initiated at lower point level than for regular drivers;
- Provisional license is visually distinctive from a regular license;
- Teenage-passenger restrictions: not more than one teenage passenger for the first 12
- months of intermediate license.
   Afterward, limit the number of teenage passengers to two until age 18;
- Must remain crash and conviction free for at least 12 consecutive months to advance to the next stage;
- Supervised practice; and
- No use of portable electronic communication and entertainment devices.

#### Stage 3: Full Licensure

- Completion of Stage 2;
- State sets minimum age of 18 for lifting passenger and nighttime restrictions; and
- Zero alcohol while driving.

# Which States Have a GDL System?

No State has a GDL law with all of the recommended components. To date, 46 States and the District of Columbia have three- stage systems. States that have a two-stage system and lack an intermediate stage are Arkansas, Kansas, Minnesota, and North Dakota.

#### References

Baker, S.P., Chen, L.H., & Li, G. (2006). *National Evaluation* of *Graduated Driver Licensing Programs*. DOT HS 810 614. Washington, DC: National Highway Traffic Safety Administration.

Chaudhary, N., Williams, A., & Nissen, W. (2007). Evaluation and Compliance of Passenger Restrictions in Graduated Driver Licensing Programs. DOT HS 810 781. Washington, DC: National Highway Traffic Safety Administration.

Clinton, K., & Lonero, L. (2006). Evaluating Driver Education Programs: Comprehensive Guidelines. Washington, DC: AAA Foundation for Traffic Safety.

Foss, R., Feaganes, J.R., & Rodgman, E.A. (2001). Initial effects of graduated driver licensing on 16-yearpold driver crashes in North Carolina. *Journal of the American Medical Association*, 286(13), 1588-1592.

Mayhew, D.R., Simpson, H.M., Desmond, K., & Williams, A.F. (2003). Specific and long-term effects of Nova Scotia's graduated licensing program. *Traffic Injury Prevention*, 4(2), 91-97.

Mayhew, D.R., Simpson, H.M., & Pak, A. (2002). *Ontario graduated licensing system evaluation-2002*. Toronto, Canada: Ministry of Transportation.

NHTSA (2006). *Beginning Teenage Drivers*. DOT HS 810 651.
Washington, DC: National Highway
Traffic Safety Administration.

NHTSA (2006). Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices. DOT HS 809 980. Washington, DC: National Highway Traffic Safety Administration.

NHTSA (2006) *Graduated Driver Licensing:* Q&A. DOT HS 810 652. Washington, DC: National Highway Traffic Safety Administration.

NHTSA, *Traffic Safety Facts:*Young Drivers 2005 Data. DOT
HS 810 630. Washington, DC:
National Highway Traffic Safety
Administration.

Raymond, P., Johns, M., Golembiewski, G. Seifert, R., Nichols, J., & Knoblauch, R. (2007). Evaluation of Oregon's Graduated Driver Licensing Program. DOT HS 810 830. Washington, DC: National Highway Traffic Safety Administration.

Scientific Research on Graduated Driver Licensing (2006). *Journal of Safety Research*, Volume 35, No. 1.

Shope, J. T., Molnar, L.J., Elliott, M.R., & Waller, P.F. (2001).
Graduated driver licensing in Michigan: early impact on motor vehicle crashes among 16-year-old drivers. *Journal of the American Medical Association*, 286(13), 1598-1599.

National Safety Council (2004). Teen Driver. A Family Guide to Teen-Driver Safety. Itasca, IL: National Safety Council.

Ulmer, R.G., Preusser, D.F., Williams, A.F., Ferguson, S.A., & Farmer, C.M. (2000). Effects of Florida's graduated licensing program on the crash rate of teenage drivers. *Accident Analysis and Prevention*, 32(4), 527-532.

Willis, D. K. (2006). Fatal Crashes Involving 16 Year-Old Texas Drivers Pre- and Post-GDL: Who, When, Where, and Why? Center for Transportation Safety, Texas Transportation Institute, College Station, TX: Texas A&M University System.

Insurance Institute for Highway Safety (2002). *Young Drivers: The High Risk Years*. 16-min. video, www.iihs.org

# Attachment F – NHTSA Uniform Guidelines for State Highway Program – Highway Safety Program Guideline No. 4 – Driver Education

# Uniform Guidelines for State Highway Safety Programs



Highway Safety Program Guideline No. 4

March 2009

### **Driver Education**

Each State, in cooperation with its political subdivisions and tribal governments, should develop and implement a comprehensive, culturally competent highway safety program, reflective of State demographics, to achieve a significant reduction in traffic crashes, fatalities and injuries on public roads. All programs should be data driven, and the highway safety program should include a driver education and training program designed to educate new drivers and provide remedial training for existing drivers. This guideline describes the components that the State driver education program should include and the minimum criteria that the program components should meet. Resources permitting, schools should also include traffic safety education for children and youth designed to engender knowledge of safe driving practices.

#### I. PROGRAM MANAGEMENT

Each State should have centralized program planning, implementation, and coordination to deliver comprehensive and uniform driver education that applies to both public and private programs. Evaluation should be used to revise existing programs, develop new programs, and determine progress and success. The State Highway Safety Office (SHSO) in collaboration and in cooperation with other State agencies involved in driver education, such as Transportation Departments, Motor Vehicle Departments, Licensing Departments, and Education Departments, should:

- Provide leadership, training, and technical assistance to public and private providers of driver education to ensure consistency and quality;
- Resources permitting, work with other relevant State agencies to identify staff resources to
  provide full-time oversight over driver education programs delivered within the State; and
- Evaluate the effectiveness of the State's driver education program.

#### II. LEGISLATION, REGULATION AND POLICY

Each State should enact and enforce laws and policies intended to reduce crashes caused by novice drivers. To enhance the effectiveness of driver education, States should:

- Enact Graduated Driver Licensing (GDL) laws that include three stages of licensure, and that place restrictions and sanctions on high-risk driving situations for novice drivers (i.e., nighttime driving restrictions, passenger restrictions, zero tolerance, portable electronic communication and entertainment devices restrictions, and required seat belt use);
- Ensure that the GDL restrictions and sanctions for GDL licensure are adapted for and applicable to motorcycle operators, and enforceable for motorcycle operators;
- Develop driver education standards and guidelines to which all driver education programs, whether public or private, must adhere to satisfy licensing requirements for novice drivers; and
- Ensure that completion of driver education programs will not reduce time required for novice drivers to proceed through a GDL system.

#### III. ENFORCEMENT PROGRAM

Components of a State driver education enforcement program should include:

- Visible and well-publicized law enforcement of the components of GDL and zero tolerance laws;
- Licensing sanctions for violations of these provisions;
- Evaluation of enforcement efforts to determine effectiveness;
- State agency oversight of driver education programs to ensure delivery of approved State curriculum; and
- Administrative or financial penalties for programs in noncompliance.

#### IV. DRIVER EDUCATION AND TRAINING PROGRAM

A driver education program should be available to novice drivers and all youths of licensing age and include the following criteria:

- The program is taught by instructors, public or private, certified by the State as qualified for these
  purposes; examples of such standards might include: minimum levels of education and
  continuing education, not being convicted of any felony or certain misdemeanor crimes, holding a
  valid driver license, and setting limits on numbers and types of driving violations.
- All vehicles used in public or commercial Behind the Wheel training have appropriate safety inspections and are equipped with, at a minimum, a safety brake accessible by the driver side passenger, a first aid kit, a fire extinguisher, an instructor rear view mirror and an eye check mirror for the instructor.

- It provides each student with practice driving and/or instruction in at least the following:
  - Basic driving techniques, including starting, stopping, turning, and basic interaction in controlled environments in light and moderate traffic;
  - o Additional driving techniques, including balanced vehicle movement through steering, braking, and accelerating in a precise and timely manner;
  - Cognitive aspects of driving, including gap management, recognizing blockage and hazards, responding early and appropriately to hazards and potential hazards, signaling techniques, methods for speed management and effective visual searching, and decision-making and habit-development strategies;
  - Risk prevention techniques such as skid prevention;
  - o Rules of the road and other State laws and local motor vehicle laws and ordinances;
  - o Attitudinal awareness training that includes how attitudes can have an impact on driving behavior;
  - Peer pressure training including how vehicle operators and passengers can say no in unsafe peerpressure situations and how to utilize leadership skills in managing the driver and the passengers in a vehicle;
  - Vehicle technology and the benefit of braking, traction, intelligent handling, and stability systems;
  - o Critical vehicle systems and sub-systems requiring preventive maintenance;
  - o Vehicle and highway features (including different vehicle and roadway conditions) that:
    - Aid the driver in avoiding crashes;
    - Protect the driver and passengers in crashes; and
    - Maximize the care of the injured.
  - Signs, signals, and highway markings and highway design features that require understanding for safe operation of motor vehicles;
  - o Differences in characteristics of urban and rural driving including safe use of modern expressways;
  - Safe Driving Practices, including making good driver decisions; use of occupant restraints; not driving under the influence; and dealing with fatigue, distractions, and aggressive drivers; and
  - Sharing the roadway with other users, especially pedestrians, bicycles, scooters, and motorcycles, who
    are more physically vulnerable to injury or death in the event of a crash. This should include
    techniques to increase awareness of motorcycles and other road users.

#### Each State should also ensure:

- That research and development programs include adequate research, development, and procurement of
  practice driving facilities, simulators, online teaching resources, and other similar teaching aids for both
  school and other driver training use;
- There is a program that engages parents and/or guardians in the driver education and GDL programs;
- There is a program for adult driver training and retraining; and
- Commercial driving schools are licensed and instructors are certified in accordance with applicable State laws, regulations or other criteria.

#### V. COMMUNICATION PROGRAM

States should develop and implement communication strategies directed at supporting policy and program elements. The SHSO, in collaboration and cooperation with driver education and training and highway safety partners, should consider a statewide communications plan and campaign that:

- Informs the public, especially parents, about State GDL laws;
- Identifies audiences at particular risk and develops appropriate messages;
- Provides culturally competent materials;
- Informs parents/guardians and young drivers about the role of supervised driving and the State's GDL law;
- Informs novice drivers about underage drinking and zero tolerance laws (in effect in all 50 States and the District of Columbia), such as including information in manuals for new drivers and including a question about the topic on the written test for a learner's permit;
- Informs the public on the role of parental monitoring/involvement; and
- Informs the public about State guidelines and regulation of driver education.

#### VI. PROGRAM EVALUATION AND DATA

The SHSO, in collaboration and cooperation with the State agencies responsible for driver education and training, should develop a comprehensive evaluation program to measure progress toward established project goals and objectives and optimize the allocation of limited resources. The State should promote effective evaluation by:

- Supporting the analysis of police accident reports;
- Encouraging, supporting, and training localities in process, impact, and outcome evaluation of local programs;
- Evaluating the use of program resources and the effectiveness of existing countermeasures for the general public and high-risk populations; and
- Ensuring that evaluation results are used to identify problems, plan new programs, and improve existing programs.

# February 2017 National Driver 🎙 Education Standards