The Future of Traffic Safety Education and the Role of the Novice Teen Driver Education and Training Administrative Standards (NTDETAS)



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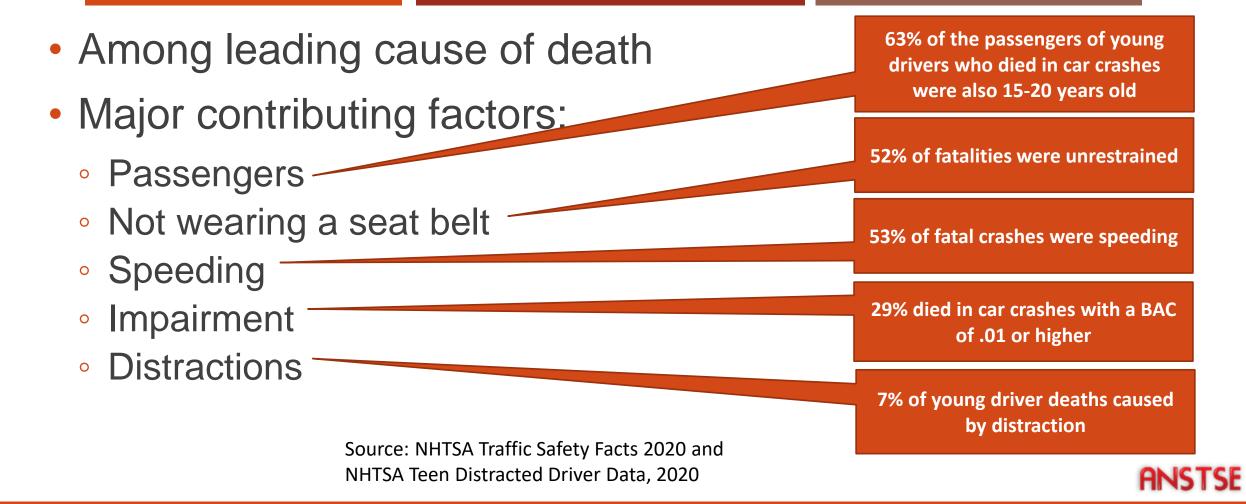




Overview

- Young Driver Motor Vehicle Crashes and Crash Data
- How Risky Are Teen Drivers?
- Young Driver Resources
- Recent Driver Education Evaluations
- Non-Traditional Driver Education
- What is being done to Improve Driver Education Nationally
- Driver Education Standards
- ANSTSE and ANSTSE Projects
- What States are Doing in Driver Education
- Vehicle Technologies
- Future of Driver Education

Young Driver Motor Vehicle Crashes



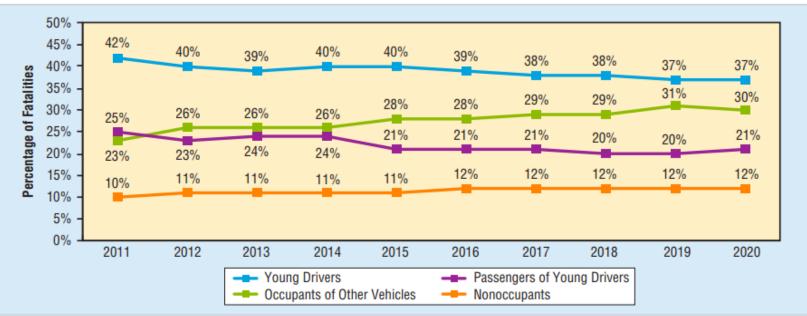
Young Driver Motor Vehicle Crashes

- Young drivers are twice as likely as adult drivers to be in a fatal crash.
- Immaturity and inexperience are primary factors contributing to these deadly crashes.
- Lead to high-risk behavior behind the wheel:
 - driving at nighttime
 - driving after drinking any amount of alcohol
 - driving distracted by passengers and electronic devices

- From 2011 to 2020
 5% In fatalities of young drivers in crashes.
- Fatalities for occupants of other vehicles †7% since 2011.
- Fatalities of passengers of young drivers ↓ 4% since 2011.
- Fatalities of nonoccupants (ped, bike) ↑ by 2% since 2011.

Young Driver Motor Vehicle Crashes

Percentage of Fatalities in Crashes Involving Young Drivers, by Person Type, 2011-2020



Source: FARS 2011-2019 Final File, 2020 ARF



Young Driver Motor Vehicle Crashes

- From 2019 to 2020:
 - Fatalities increased by 17%
 - Fatalities among passengers decreased by 9%
 - Occupant fatalities in other vehicles increased by 32%
 - There were more fatalities of occupants in other vehicles than there were passenger fatalities of young drivers; this has been the trend since 2012
 - Nonoccupant fatalities (pedestrians, bicyclists) increased by 14%

Source: NHTSA Young Driver Traffic Safety Facts 2020

Young Driver Motor Vehicle Crashes

- In 2020:
 - Of those passengers who died in crashes with young people who were driving, 63% were 15 to 20 years old.
 - Of the young drivers killed with known restraint use, 52% were unrestrained at the time of the crashes in 20.



Young Drivers Over-Represented



8.5% of ALL DRIVERS involved in fatal crashes were young drivers.



However, young drivers were only **5.1%** of all licensed drivers.





The number of licensed young drivers decreased by **4.7%** from 2019 to 2020.

Source: NHTSA Young Drivers Traffic Safety Facts 2020



Young Driver Motor Vehicle Crashes

 NHTSA maintains a database of documents with Traffic Safety Information and Statistics.

Good tool for seeing trends

nationally.



Teens and Distracted Driving 2020

People killed in distraction-affected crashes in 2020	3,142
Teens 15 to 19 years old killed in distraction-affected crashes in 2020	186
Percentage of all distraction-affected fatalities in 2020 who were 15- to 19-year-olds	6%
	2,490
	2,490
Six percent of the people who died in distraction-affected crashes in 2020 were teens 15 to 19 years old. Teens 15 to 19 killed in all crashes in 2020 Teens 15 to 19 killed in distraction-affected crashes in 2020 Percentage of teens 15 to 19 killed in distraction-affected crashes in 2020	

Seven percent of all teen motor vehicle crash fatalities in 2020 involved distracted driving.

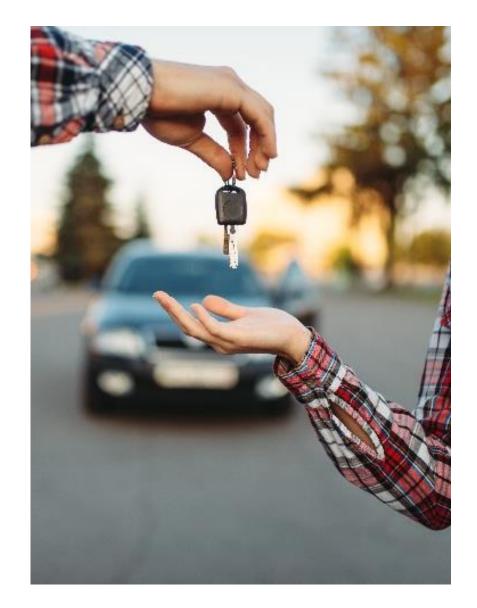
Available on www.anstse.info under Statistics / NHTSA's Traffic Safety Facts and http://crashstats.nhtsa.dot.gov



How Risky Are Teen Drivers?

- For every mile driven, teen drivers (16-19) have crash rates
 3 times higher than drivers aged 20 and older.
- Their crash risk is especially high during the first few months of driving solo.
- Unfortunately, teen drivers themselves are not the only ones affected by their high crash rates; out of a total of 5,037 people killed in fatal teen crashes, 3,152 were people other than the teen driver.

Sources: Insurance Institute of Highway Safety and NHTSA Traffic Safety Facts 2020



Why Do Teen Drivers Have Such High Crash Rates?

- New teen drivers lack driving experience
- Other key factors include:
 - Overconfidence
 - Sensation-seeking
 - Widespread sleep deprivation among teens
 - Intentional risky driving behaviors, such as speeding, tailgating, and distracted driving







Summary of Major Contributing Factors

- Passengers
- Not wearing a seat belt
- Speeding
- Impairment
- Distractions



Young Driver Resources

- NHTSA Campaigns: <u>www.trafficsafetymarketing.gov</u>
 - Impaired driving
 - Driver's education
 - National teen driver safety week
 - Distractions texting while driving
 - Speeding
 - Seat belt safety















Young Driver Resources

ADTSEA

- National Road Safety Foundation
- AAA / AAA Foundation for Traffic Safety
- Travelers Insurance
- State Farm
- National Safety Council
- Children's Hospital of Philadelphia
- Children's Hospital of Wisconsin Crossroads





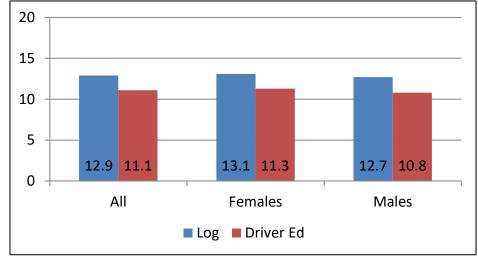
Recent Driver Education Evaluations

- Early studies did not find an effect.
- More recent studies involved larger numbers of teen drivers and more advanced methodologies.
 - Georgia (Strategic Research Group 2021) Georgia Driver's Education Commission Grant Scholarship Program & Joshua's Law Evaluation Report
 - Nebraska Driver Education and Teen Crashes and Traffic Violations in the First Two Years of Driving in a Graduated Licensing System (Shell, Newman, Córdova-Cazar & Heese, 2015)
 - Manitoba and Oregon *Evaluation of Beginner Driver Education Programs: Studies in Manitoba and Oregon* (Mayhew, et. al, 2014)



Recent Driver Education Evaluations

Reduced crashes and citations of teens who have taken driver education in Georgia, Nebraska, Manitoba and Oregon show promise.



Source: Nebraska Study



Non-Traditional Driver Education

- teenSMART and risk awareness and perception training (RAPT) show promise.
 - Improves specific driving skills taught in the program
 - Improves knowledge, driving-related skills and on-road driving performance
 - Improved hazard detection
 - Statistically significant lower collision rates

Sources: TIRF Dan Mayhew, "White Paper: Safety Performance of teenSMART" and NHTSA, Evaluation of an Updated Version of the RAPT Program for Young Drivers





What Has Been Done to Improve Driver Education Nationally?

- NHTSA is deeply involved in supporting efforts to improve driver education.
- According to Former NHTSA Administrator David Strickland, "Driver education is a key part of the...approach needed to reduce tragic young driver crashes..."
- NHTSA has also funded the creation of the Novice Teen Driver Education and Training Administrative Standards (NTDETAS) and support for ANSTSE.

Association of National Stakeholders in Traffic Safety Education

- Formed in 2010 as a result of the NTDETAS Standards project initiated by NHTSA.
- Made up of volunteers representing National Organizations involved in teen traffic safety.
- Premise of voluntary consensus partnerships that identify support areas of common improvement of education in America.



traffic safety



ANSTSE Members



American Automobile Association (AAA) Bill Van Tassel, Ph.D.



The Association for Driver Rehabilitation Specialists (ADED) Elizabeth Soles, OTR/L, CDRS, CAE



American Association of Motor Vehicle Administrators (AAMVA) Kevin Lewis



American Driver and Traffic Safety Education Association (ADTSEA) Connie Sessoms, Jr.



Driver Education and Training Administrators (DETA) Nina Saint, Ph.D.



Driving School Association of the Americas (DSAA) Sharon Fife



Governors Highway Safety Association (GHSA) John Saunders



Transportation Research Board (TRB) Dan Mayhew, M.A.



ANSTSE Mission

- Promote implementation of the Standards
- Maintain and update the Standards
- Support, encourage and strengthen shared-decision making
- Identify and make recommendations







NHTSA's Support for Driver Education

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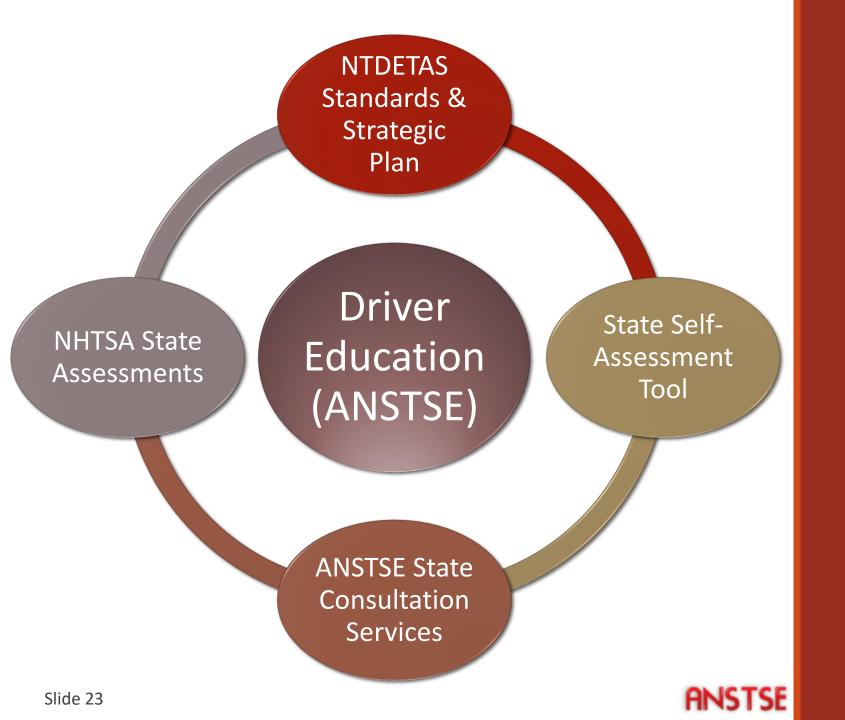
NHTSA

- The NTDETAS
- ANSTSE Activities
- Strategic Plan
- Technical Assistance for states
- NHTSA State DE Assessments
- Information Sharing System



Visit www.anstse.info and www.nhtsa.gov





NHTSA's Support for Driver Education

Novice Teen Driver Education and Training Administrative Standards



Novice Teen Driver Education and Training Administrative Standards (NTDETAS)



- 1. Program Administration
- 2. Education and Training (including instructional hours and online delivery)
- 3. Instructor Qualifications (program & materials)
- 4. Coordination with Driver Licensing
- 5. Parental Involvement



A. Content Standards

Two documents:

- ADTSEA Curriculum Standards
- DSAA Content Standards

Model standards for:

- Curricula, and
- Other teaching materials.





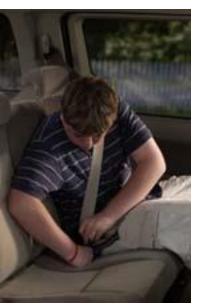
Content Standards

Cover contributing factors:

- Restraint use
- Speeding
- Alcohol
- Distracted Driving
- Driving at night
- Driving with passengers
- Adverse weather









The Importance of Standards

- Can improve your driver education program.
- All programs should utilize the standards even if the State doesn't implement or require them.
- Can help reduce the number of motor vehicle crashes and fatali



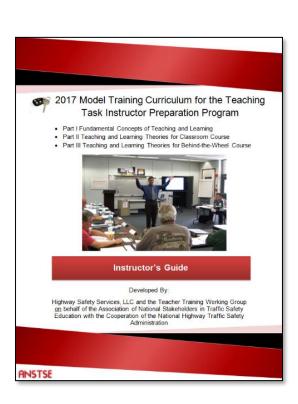
2023 Edition

Novice Teen Driver Education and Training Administrative

Standards (NTDETAS)

Instructor Training Materials

- Developed model curriculum for the teaching task of driver education teacher training.
 - Part I: Fundamental Concepts of Teaching and Learning
 - Part II: Classroom Teaching and Learning Theories
 - Part III: BTW Teaching and Learning Theories





Stage 3: The Teaching Task

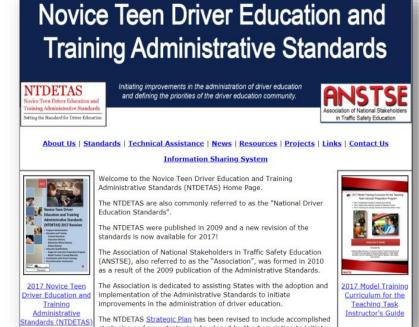
- Includes Instructor's Guide and Participant Workbook:
 - Lesson Plans with classroom and BTW activities
 - Slides
 - Videos for BTW part
 - Quizzes/Answer Sheets
 - Knowledge Tests/Answer Sheets

Activity	Activity #4: The Four-Step Teaching and Learning Process	Activity	Lesson Activity #4: The Four-Step Teaching and Learning Process
Show	Silde 4-38		Write in the correct answer for each question.
	Have instructor candidates write in the correct answer for each question.		1. The purpose of the motivation step:
	After instructor candidates have completed the activity, discuss the answers and explain any questions.		2. The learner's perspective during the presentation phase is:
	Answer Key 1. To get the learners ready to learn.		3. What is one way you can teach content using examples?
	2. "What should I learn?"		
	Use business examples (on-the-job), relate to real world, related to prior learning, ask learners to share other examples.		4. What is the purpose of evaluating the learner?
	 To evaluate learners' comprehension of the subject matter being taught. Helps learners determine how they are doing. 		5. What is the purpose of summarizing the lesson?
	Brings closure to the lesson, lets the learner know what they should have learned, and allows for transition into the next unit of instruction.		
Section Summary	Give a brief summary of Section 8. Ask a few short questions before proceeding onto the Module Summary.	Section 8 Summary	Section 8 covered how to summarize the lesson.

ANSTSE Website

www.anstse.info

- Revised NTDETAS
- Model teaching task instructor curriculum
- ANSTSE Strategic Plan
- NHTSA State assessment / ANSTSE technical assistance reports
- Driver education reports and research





ANSTSE Projects

- Develop and Disseminate Resources to Assist States in the Implementation of the NTDETAS
- Core Elements for a Driver Education
 Parent/Guardian Session
- Develop Materials for Training Driver Educators on Advanced Driver Assistance System Technologies

Develop Resources to Assist States in the Implementation of the NTDETAS

Objectives:

- Develop an Implementation Guide to provide states with strategies to take action to meet the NTDETAS.
- Collect and report data on the status of driver education programs nationwide.
- Enhance the resource library on the ANSTSE website to be searchable and provide description of documents.
- Increase states awareness of the benefits of conducting a NHTSA State Driver Education Assessment and ANSTSE Technical Assistance.



Core Elements for a Driver Education Parent/Guardian Session

Objectives:

- Prepare parents/guardians for their critical role during their teen's learning-to-drive process
- Ease States' path toward the implementation of such seminars
- Advocate to all stakeholders the benefits of Seminars
- Provide a foundation for the prevention of novice driver motor vehicle crashes



Core Elements for a Driver Education Parent/Guardian Session

• The core elements can be used to:

- Develop, deliver and enhance the content of Seminars.
- Engage parents/guardians during their novice teen's learning-to-drive experience.
- Develop a process to require parent/guardian participation in the Seminar and the means to participate.
- Develop Seminar materials and make accessible to all providers.



Core Elements for a Driver Education Parent/Guardian Session

- Develop resources enabling parents/guardians to be active during the learning-to-drive experience.
- Develop and implement a plan to evaluate the Seminar.
- Establish a process to continuously review and update the Seminar.







Develop Training Materials for ADAS

Objectives:

- Raise the level of awareness and understanding of driver educators on vehicle technology systems.
- Prepare driver educators to teach new drivers about current and near-future vehicle technologies through instructor training and continuing development.
- Assist in informing driver educators on vehicle technologies and providing more familiarity with them.



Training Materials for ADAS

Deliverables:

- Lesson plans to train driver educators
- Workbook for participants
- Visuals to support lesson plans
 - Slides
 - Graphics
 - Videos

Resources for continued personal development



Training Materials for ADAS

- Expert working group
- Completion late 2020







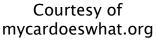
Vehicle Technology

- Rapid advances in vehicle technology
- Advanced Driver Systems (ADS) vs. Advanced Driver Assistance Systems (ADAS)
 - ADS within the decade
 - ADAS is here today
- ADAS will NOT remove the need for driver education will increase the need for driver training
- ADAS training for ALL drivers

Vehicle Technology

- New challenges for driver training & testing
- Educate drivers on new technology and to remain engaged in the driving task vs. complacency/dependency
- Technologies assist the driver, they do not replace the driver
- Drivers must be alert and attentive at all times, b even with safety technology
- Continuous driver education and training for all drivers on new technologies







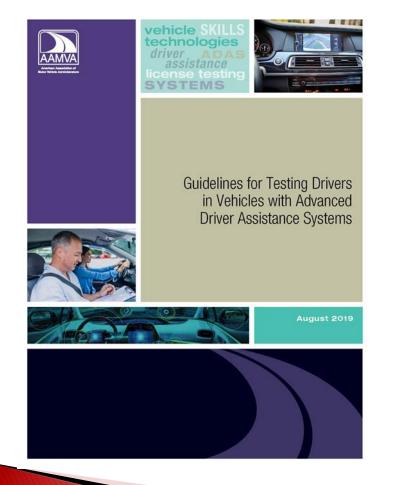
Advanced Driver Assistance Systems (ADAS)

- Assist the driver but do not perform the driving function
- Designed to enhance the safe operation of the vehicle by helping drivers with certain tasks
- Becoming increasingly common and more affordable
- In vehicles that drivers are using to take their road/skills tests today





AAMVA Guidelines for Testing Drivers in Vehicles with ADAS



- To assist jurisdictions prepare to incorporate ADAS into driver testing programs
- Provides a description of ADAS technologies and considerations for testing
- Guidance developed by AAMVA available now
- www.aamva.org



Types of Technologies

- 1. Vehicle Warning System Technologies notify the driver with a warning, by sound, light or vibration, that a crash is about to occur, or it provides an alert that there is a problem or malfunction.
- 2. Vehicle Assistance System Technologies assist the driver in avoiding a hazard or crash. Some automatically make adjustments to the operation of the vehicle and some assist the driver in making adjustments, such as braking or steering.



Safety vs. Convenience Technologies

- Safety Critical Technologies may prevent or reduce the severity of a crash (e.g., rear or other cameras, alerts, lane departure warning, emergency braking assist).
 - Should be permissible and not be disengaged during the testing process.
- Convenience Technologies provide conveniences for the driver (e.g., parking assist feature or auto-cruise control).
 - Are not permitted during testing.



Most Common Technologies

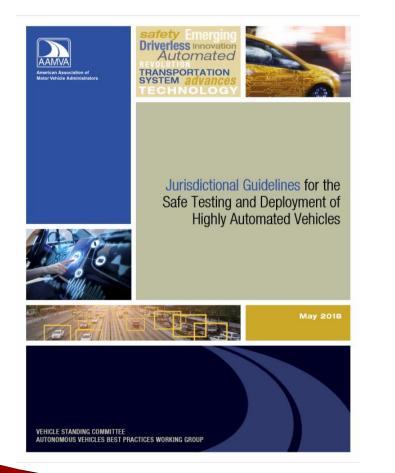
Technologies used in vehicles today.

- Back-up Warning
- Back-up Camera
- Parking Sensors
- Blind Spot Detection
- Adaptive Cruise Control
- Lane Departure Warning
- Lane Keeping Assist
- Automatic Emergency Braking





AAMVA Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles



- Addresses how automated vehicle technology will impact:
 - vehicle registration and titling programs,
 - driver training,
 - testing and licensing programs
 - enforcement of traffic laws and
 - first response to traffic related incidents.
- Provides recommendations for jurisdictions who regulate testing and deployment of HAVs.



AAMVA Guidelines – Related Sections

- 5.3 Driver Training for Consumers of Deployed Vehicles
- Jurisdictions should:
 - Promote consumer training on the use of HAV functions.
 - Encourage manufacturers, dealers, and insurance companies to provide incentives for consumers to receive proper training on the use of HAV functions.
- Jurisdictions may also need to encourage manufacturers and dealers to offer incentives to consumers to seek training from a fully qualified driving instructor.

AAMVA Guidelines – Related Sections, cont.

- 5.4 HAV Driver Training for Motor Vehicle Agency Examiners, Driver Education Programs, and Private Instructors
- Jurisdictions should:
 - Require driver education curricula to contain information on HAVs and to provide hands-on training in the use of HAV technologies.
 - Establish standards for the conduct and training of driver educators and private instructors for the training of drivers on the use of HAVs.

Benefits of ADS and ADAS

- Helps to avoid crashes with potential of saving lives and preventing injuries
- Economic and societal benefits by eliminating the vast majority of crashes
- Assists the driver to reduce human error
- Increased warning/reaction/response times from ADAS



Benefits of ADS and ADAS

- Increase in mobility
- Reduce driver fatigue and inattention
- Potential for smoother traffic flow and reduced traffic congestion (ride sharing)
- Advancement and evolution to ADS
- Increase in technology jobs

Potential for Driver to Misuse or Misunderstand ADAS

- Lack of understanding or confusion about the proper function of these ADAS technologies can lead to misuse or overreliance on the technology, which could result in a deadly crash
- Unfamiliarity drivers may not always drive a vehicle equipped with technologies or may borrow or rent





Challenges of ADAS

- Drivers may not understand the purpose and limitations
- Over confidence, dependency and complacency in technology
- Increased distractions from technology
- Confusing, manufacturers use different naming conventions for same type feature





Challenges of ADAS, cont.

- ADAS may not produce a reduction in crashes alone driver & vehicle
- Understanding how to use ADAS and the role of the driver in the safety equation
- Mix of all highway users (e.g., cars, motorcycles, commercial vehicles, bicyclists, pedestrians, public transportation, etc.)



 For next several decades, or more, there will be a mix of level 0 - 5 vehicles. This will create a challenge for traffic safety and safety education



Opportunities for Driver Education and Training

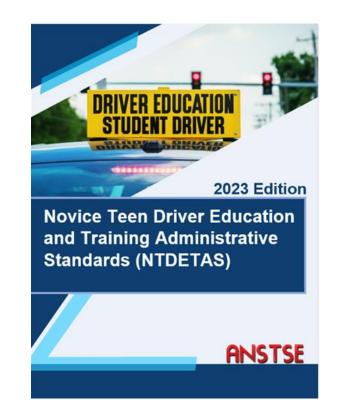
- Many opportunities for driver education, training and testing
- Enhanced training for novice teen drivers and consumers that meets recognized standards
- Coordination between driver testing and driver education and training





Driver Education Standards

- The NTDETAS contains Content Standards which lists training on technologies for all drivers:
 - Appendix A: ADTSEA Curriculum Standards, and
 - Appendix B: DSAA Curriculum Standards
- Driver licensing agencies should become engaged in what driver education, that meets the NTDETAS, can do to teach drivers on ADAS.





Summary of ADAS

- ADAS may not produce a reduction in crashes alone driver & vehicle – driver training and testing
- Understanding how to use ADAS and the role of the driver in the safety equation is critical
- Opportunities for States, manufacturers, dealers and insurance companies to work with professional driver educators
- The importance of national standards for quality in training
- Development of driver educator training resources



What are States Doing in Driver Education?

- Adopting parts of or all the National Standards (NTDETAS), such as:
 - Establishing a state-wide Advisory Board on driver education
 - Strengthening requirements for ongoing education for certified driving instructors
 - Strengthening instructor training requirements

- Conducting NHTSA assessments of their entire driver education program
- Utilizing technical assistance provided by ANSTSE/NHTSA to accomplish specific goals to improve driver education at the local level



What are States Doing in Driver Education?

- Requiring that teens take driver education, or increasing the incentives to take driver education
- Involving parents during the learning-to-drive process, such as through:
 - Parent/Guardian Seminars
 - Strengthening Parent-supervised practice driving requirements
 - Meetings with BTW teachers
 - Parents/Guardians observing BTW lesson by along





Driver Education Data Collection

- Track teen drivers with crashes and driver education completion
- Collect driver education data electronically (e.g., provider, student, completion information)
- Determining the average time between course completion and licensing
- Recording driver education completion on a driving record
- Driver citations and crashes

Driver Education Data Collection

- States should have a uniform, consistent and efficient driver education submission system
- Data fields should be uniform, and reports submitted electronically
- Reports should be transmitted as a course is completed or a student completes the course
- The course completion information should also be submitted to the DMV or MVA electronically at the same time so and individuals driving record could be updated
- Participate and collaborate with the state's traffic record coordination committee



- Teaching vehicle technology (new and existing drivers)
- Focusing on cognitive skill development
- Online driver education that meets the NTDETAS
- Non-traditional learning methods
 - Computer based independent student learning (e.g., RAPT)
 - Virtual reality (VR) training







- Enhanced and evolving materials on impaired operation, driver fatigue, driver distractions, speeding, etc. (leading crash causation factors for teens drivers)
- Delivery and evaluation methods that facilitate how teens learn today – and tomorrow
- Blended traditional classroom hours, more BTW instruction combine with non-traditional learning methods



Example of Blended Program

- Parent/Guardian seminars
- eLearning (pre, post, concurrent)
- Traditional classroom
- Non-traditional learning methods
 - computer based learning
 - virtual reality (VR)
 - simulation





We can't keep doing the same thing and expect different results...

Slide 63

ANSTSE

- BTW
- Observation
- Progress meetings with parents/guardians

- Enhanced GDL laws requiring driver education
- Driver education for >18-year-olds
- Enhanced parent/guardian participation
- Instruction for mature drivers (baby boomers)



- A new approach for training driver education teachers/instructors (driver educators)
- Ongoing / refresher training (continued education) for driver educators



- License waiver programs for successful completion of approved driver education.
- Continued and enhanced partnerships at the local, state and national levels
- Quality assurance / teacher evaluations
- A change/acceptance in SAFETY CULTURE



A continued vision to move driver education forward...



ANSTSE Contact

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Questions





Thank you!

Thank you for your support and interest in Driver Education and Training!

Advancing Quality in Driver Education!



