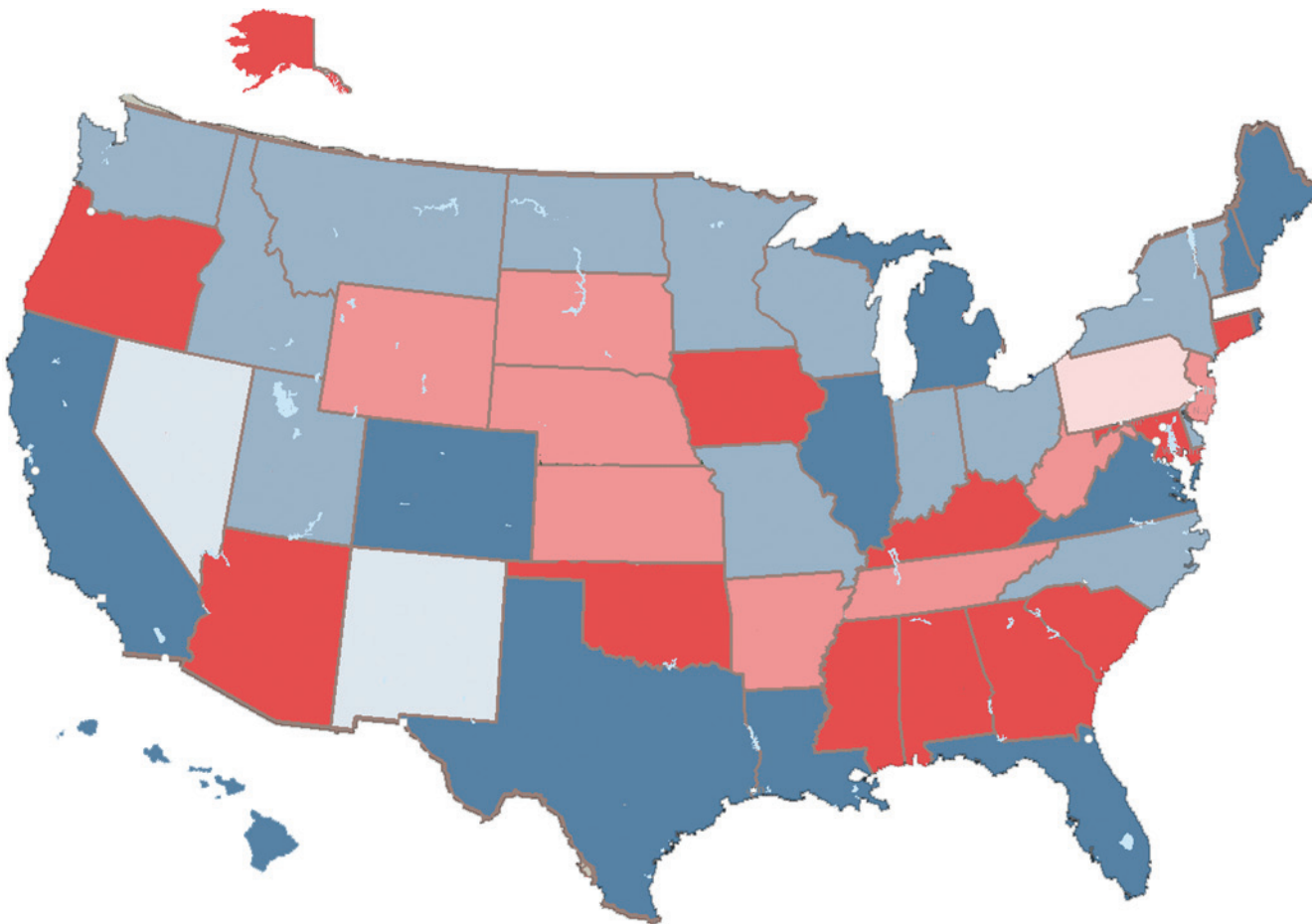


# Driver Education Practices In Selected States



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**



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16. Abstract This study examined how driver education courses are implemented in the United States. Driver education curricula currently in use in select States were compared with the latest recommendations of the American Driver and Traffic Safety Education Association. A panel of 57 pre-license teens from 18 States newly enrolled in driver education courses were recruited and asked to report periodically on their progress. All or nearly all of the recommended topics were included in curricula provided by the 18 states. Nearly all the teens reported receiving instruction on all or nearly all topics. Teens reported that the material was well presented and that their classes lasted for the full required 30 hours. Teens also reported that their on-road supervised driving covered all or nearly all of the recommended on-road topics. However, barely half of the teens said they received the full required 6 hours of on-road instruction (average 4.6 hours/student); only about 1 in 10 received the updated recommended 8 hours of on-road instruction.					
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## Background

Driver education (DE) has been taught in the United States for nearly 100 years, with the first programs emerging between 1910 and 1920 and more formal courses beginning in the 1930s (Stack, 1966; Nichols, 1970; Warner, 1972; Butler, 1982; Public Technology, 1986). Over time it has become a staple of the driving process and is well accepted by the public as a primary method of teaching new drivers the rules of the road and basic driving skills. However, there has not been any definitive evidence showing a positive safety impact of driver education. Some early studies have shown that some forms of DE were effective at reducing crashes among young novice drivers. However, there were methodological flaws in the designs that made confident interpretation of these results difficult. Better-controlled studies have failed to provide evidence for decreased crash rates among teen drivers as a result of DE courses and some even show an increase in crashes following DE.

This effect occurs in part because teens frequently receive their licenses earlier following completion of a DE course. Earlier licensure is linked with increased crash risk because of the increased opportunity to drive. Other supplemental types of training (e.g., skid training) have also been linked to an increase in crash risk.

There have been several proposed countermeasures to reduce the high crash rates among teen drivers. Graduated driver licensing (GDL) was implemented in the United States starting in 1995, when Florida enacted the first modern graduated system. GDL allows teens to learn to drive in less-risky environments, gradually introducing riskier situations over time. GDL systems often include a learner's permit period when driving is allowed only with a teacher (e.g., parent or instructor), a period of time when teens may drive unsupervised without crashes or citations, nighttime restrictions during late night hours, limitations on the passengers teens may carry, and prohibition of use of any electronic communication device while driving. Many of these countermeasures have been shown to be effective ways of reducing teen crashes (e.g., Chaudhary, Williams & Nissen, 2007; Ferguson, Williams, Leaf, & Preusser, 1996; Preusser & Tison, 2007).

(Continued on additional pages)

In 2006, the American Driver and Traffic Safety Education Association (ADTSEA) put forth new recommendations on what should be taught and how long the discussion of each topic should be. The original recommendation (ADTSEA, 2002) was that classroom DE should last 30 hours and behind-the-wheel training 6 hours. The newest recommendation (ADTSEA, 2006) calls for 45 hours of in-class and 8 hours of behind-the-wheel training. It is not known to what extent DE in the different States follow either the topics or time recommendations proposed by the ADTSEA curriculum.

## Objective

The objective of this study is to assess how driver education is typically implemented in the United States. Specifically, State curricula and self-report experiences of teens were compared to the ADTSEA recommended curriculum. These objectives were met by contacting State personnel and documenting their requirements for DE. When available, curricula from States were obtained and compared to the ADTSEA curriculum. Finally, teens about to enroll in DE were recruited to provide feedback on their course experience.

## State Curriculum Comparison

Curricula for 10 States were obtained. Seven were from States that required DE prior to licensure and had a single statewide curriculum. The remaining 3 were from States that do not require DE in order to obtain a driver’s license or whose curricula were not uniform across the State (i.e., local control over the curriculum). California, Illinois, Louisiana, Maine, Michigan, Rhode Island, and Texas require DE while Alabama, Minnesota, and North Dakota do not. State curricula were compared to the new ADTSEA curriculum topics and recommended hours of in-class and behind-the-wheel instructions.

In general State curricula covered the same topics as those suggested by ADTSEA. The table below shows that the number of hours required by each State are less than the current recommendation by ADTSEA. Most of these States conduct 30 hours of classroom instruction, two offered more, and California conducted 25 hours in the classroom. The biggest discrepancy is that none of these 10 States used all of the 13 supplemental textbooks, videos, and resources suggested in the updated curriculum; over half used 4 or fewer of the ADTSEA materials. Rhode Island does not require on-road training as part of its driver education curriculum, the other 9 States require at least 6 hours of on-road training. Only Maine requires more hours (10) than the new recommendations. The time devoted to each topic is lower than that proposed by ADTSEA given the shorter time requirements for the State courses.

Extent to Which State Curriculum Match ADTSEA Curriculum

"Topic"	ADTSEA	CA	IL	LA	ME	MI	RI	TX	AL	MN	ND
<b>Class Hours</b>	<b>45</b>	25	30	30	30	30	33	32	30	30	30
<b>Behind-the-Wheel Hours</b>	<b>8</b>	6	6	6	10	6	0	7	6	6	6
<b>Number of Textbooks, Videos and Resources</b>	<b>13</b>	4	6	3	4	7	4	5	0	4	3
<b>Number of In-Class Topics</b>	<b>10</b>	10	10	10	10	10	10	10	10	10	10
<b>Number of On-Road Lessons</b>	<b>6</b>	6	6	6	6	6	0	6	6	6	6

## Teen Topical Discussions

A panel of 57 teens from 18 randomly selected States (see table below) were recruited to take part in topical discussions of DE. All teens were about to start a DE course and agreed to participate for a \$40 honorarium. Teens were contacted three to four times over the course of their DE programs and asked about topics covered in their classes, the time spent on various topics and in behind-the-wheel training. The majority of teens reported being taught all of the in-class and on-road topics suggested by ADTSEA.

Number of Teens per State

State	N	State	N
Alabama	2	Michigan	3
Arizona	1	Minnesota	3
California	7	Mississippi	2
Colorado	3	North Carolina	1
Connecticut	3	North Dakota	2
Florida	4	New Hampshire	3
Illinois	4	Rhode Island	5
Louisiana	4	Tennessee	6
Maine	3	Texas	1

The major difference between States was the time devoted to the driver education course. Teens reported the in-class portion of the courses lasted the designated amount of time; if the class was scheduled to run 30 hours, the teens spent 30 hours in the class. However, teens reported they spent an average of 4.6 hours actually driving during the behind-the-wheel part of the courses, which is less than the recommendation of 6 hours and the newer recommended 8 hours. About half (49%) of the teens reported they drove less than 6 hours during the courses, and only 11% of the teens drove for the minimum 8 hours recommended by the new ADTSEA curriculum.

## Discussion

The requirements for DE differ by State. Some States require that their young novice drivers take DE while others leave individuals to decide whether or not to take a driving course prior to licensure. States that require DE have different requirements for the course—some have a statewide curriculum while others leave the details up to local municipalities (e.g., school districts).

The topics taught in driver education generally match ADTSEA recommendations. The main differences came in the time allotted for topics and the specific material (e.g., text books, videos) required. None of the States required 45 hours of classroom training and most States required 6 hours of on-road training compared to the 8 now suggested by ADTSEA. Thus, driver education classroom sessions tend to be shorter than the recommended hours prescribed by ADTSEA.

Reports by students taking courses in both States that require and States that do not require DE indicate many commonalities between courses. Both groups similarly reported 69% (required) and 64% (not required) of their course topics matched the ADTSEA curriculum. Students who

were in States requiring DE were more likely to have other students in the car with them when they drove (as opposed to driving alone with the instructor). Students reported attending the classroom portion of the course for the full number of curriculum-required hours. Parents and State officials should note, however, that the number of hours students spend practicing driving with a driving instructor may be less than what is stated in the curriculum.

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# I. INTRODUCTION

Teen drivers have the highest crash rate per mile driven of any age group (Williams, Ferguson, & Wells, 2005). The problem is worst among 16-year-olds, the age group who has the least amount of driving experience and who are most likely to take risks behind the wheel. When compared to other age groups, young drivers 16 to 20 have the highest fatality and injury rates in motor vehicle crashes per 100,000 licensed drivers. The overall crash involvement rate for young drivers 16-20 is more than four times higher when compared to the average drivers of all other age groups combined.

Extensive research has identified specific areas where teen drivers tend to have the highest crash risks. For instance, teens tend to have problems when driving at night, carrying certain passengers (Doherty, Andrey, & MacGregor, 1998; Chen, Baker, Braver, & Li, 2000; Rice, Peek-Asa, & Kraus, 2003; Williams & Ferguson, 2002), traveling too fast (Gonzales, Dickinson, DiGuseppi, & Lowenstein, 2005; Williams, Preusser, & Ferguson, 1998; Williams, Preusser, Ulmer, & Weinstein, 1995) and traveling on slippery roads (Braitman, Kirley, McCartt, & Chaudhary, 2008, Laapotti et al., 2006).

Immaturity and inexperience are two proposed explanations for why novice teen drivers have such a high crash risk (Arnett, 1992; Mayhew, Simpson, & Pak, 2003; McCartt, Mayhew, & Ferguson, 2006). Immaturity includes the heightened risk-taking behavior teens exhibit. Lack of experience has been linked to crashes regardless of the age at which driving starts. These explanations are not necessarily mutually exclusive. That is, high crash risk by teens can be accounted for both by immaturity and inexperience acting simultaneously. Both explanations can account for the higher teen crash risks at night, due to speed, with passengers and on slippery roads, for example. Immaturity can lead teens to speed, drive recklessly in high-risk situations, and succumb to peer pressure. Inexperience can be especially problematic in difficult driving situations and when there are a greater number of distractions.

There have been several proposed countermeasures to reduce the high crash rates among teen drivers. Graduated driver licensing is one such countermeasure. GDL was implemented in the United States starting in 1995, when Florida enacted the first modern graduated system. GDLs allow teens to learn to drive in less risky environments, gradually introducing riskier situations over time. GDL systems can include a learner's permit period when driving is allowed only with a teacher (e.g., parent or instructor), a period of time when teens may drive unsupervised without crashes or citation, nighttime restrictions, limitations on the passengers teens may carry, and prohibition against use of any electronic communication device while driving. These countermeasures have been shown to be effective in reducing teen crashes (e.g., Chaudhary, Williams, & Nissen, 2007; Ferguson, Williams, Leaf, & Preusser, 1996; Preusser & Tison, 2007).

Driver education in the United States has taught basic driving knowledge and skills, but the effectiveness of driver education in terms of safety has not been demonstrated. Some early studies have shown that some forms of driver education are effective at reducing crashes among young novice drivers (Allgaier, 1964). However, there were methodological flaws in the designs of the studies that made confident interpretation of these results difficult. Better controlled studies have failed to provide evidence for decreased crash rates among teen drivers as a result of driver education courses and even show an increase in crashes following driver education.

However, driver education remains a standard for acquiring basic driving skills, and most States require driver education training for 15- to 18-year-old drivers.

There have been advances in DE training in recent years; some programs have gone beyond teaching teens the basics and have attempted to prepare them for extreme situations. One type of “second-level” driver education teaches advanced driving maneuvers such as skid control and evasive lane changes. These types of programs have become increasingly popular in the United States as a way to supplement traditional driver education. These supplemental classes are typically taught by police in advanced driving schools using test track facilities, or by professional racecar drivers. These skid training courses have not been generally adopted into the driver education curricula required by some States. There have been few evaluations of advanced driving skill programs to date, but Katila et al. (1996) suggest that this type of training could have unintended negative effects on teen driving safety (e.g., speeding resulting from overconfidence).

The method and extent to which DE has been implemented varies greatly from State to State, as does the curricula. Some States require driver education for novice drivers while others do not. Some States control the driver education curricula, while other States leave control of the curricula to other agencies (see Table 2).

The American Driver and Traffic Safety Education Association represents traffic safety educators throughout the United States and abroad. As a national advocate for quality traffic safety education, ADTSEA created and published a driver education curriculum, updated in 2002. According to ADTSEA’s *Recommendations on the Delivery of Driver Education* document (ADTSEA, 2002), driver education has historically consisted of a minimum of 30 hours of classroom instruction and 6 hours of on-the-road instruction. An update to the recommended curriculum in 2006 urges States to adopt 45 hours of classroom instruction and 8 hours of behind-the-wheel instruction (ADTSEA, 2006).

The purpose of the reported study was to assess driver education in terms of what is done in the States. This was done in two ways. First, when available, curricula were collected from States with a statewide curriculum that is overseen at the State level (as opposed to a local level, such as a school district). These curricula were compared to the new ADTSEA (2006) curriculum. Secondly, teens taking driver education from some States that require DE and some States that do not were recruited to gather information, not as research participants. Course teachers were unaware that the teens were reporting information regarding what they learned back to researchers. Teens were debriefed using a topical discussion guide during and immediately following completion of the driver education courses. Data include the topics covered during the courses as well as the teens’ attitudes regarding their courses. Data were compared between the States with different requirements.

## **II. STATE CONTACT AND CURRICULA COMPARISON**

### **METHOD**

Information about driver education in each of the 50 States and the District of Columbia was obtained through Internet research and interviews with State personnel by telephone and e-mail. Topics covered included general State licensure requirements for novice teen drivers; State driver education requirements; if applicable, the required State driver education course content and course guidelines; and which State or local agency, if any, was responsible for driver education content. States were also asked if they had adopted an ADTSEA program (see Table 1).

Requirements for teen drivers were also obtained including required student assessments and teacher requirements for the State. The structure of a driver education program was classified as school-based, commercial, or a combination of both. When available, the course curriculum was obtained for each driver education program.

### **RESULTS**

For comparison purposes, States were divided according to whether they require driver education or not; 29 States require that novice drivers take driver education. Hawaii is included in those 29, but two islands, Maui and Kauai, are exempt from the requirement. At least 13 of the States that require driver education do not have a single curriculum that covers all courses taught in the State. Massachusetts and New Mexico require such courses but it is unknown if their curricula are statewide or locally controlled. There were 15 States that had a statewide curriculum. Three of these States, Iowa, Kentucky, and Maryland, did not require that novice drivers take driver education. Table 2 summarizes the results of the data.

Curricula were not readily available from most States. States not requiring DE frequently did not have curricula and for some States the personnel we contacted could not direct us to their DE curricula. Curricula for 10 States were obtained; 7 were from States that required driver education prior to licensure and had a single statewide curriculum. The remaining 3 were from States not requiring driver education. The States requiring and controlling were California, Illinois, Louisiana, Maine, Michigan, Rhode Island, and Texas. Alabama, Minnesota, and North Dakota do not require driver education and do not have a statewide curriculum. Instead, the driver education curricula they use come from the localities. Each State's curriculum was compared to the ADTSEA curriculum (see Table 2). Several States claim to have based their curricula after the ADTSEA curriculum (original version). Maryland reported using "95%" of the ADTSEA (version 1) curriculum; however, the Maryland's curriculum was not obtained to verify its similarity to the new ADTSEA curriculum.

**Table 1. ADTSEA Topic Description**

<b>In Class</b>		
<b>Topic</b>	<b>Time (Hrs, Min)</b>	<b>Description</b>
Unit 1	3	Introduction to Novice Driver Responsibilities and the Licensing System -- Designed to introduce the student and parent/mentor/guardian to the structure, goals, policies ,and procedures of the driver education program and licensing system requirements including discussion of risk and risk management principles and emphasizing the importance of communication between all participants.
Unit 2	6	Introducing Operator and Vehicle Control Tasks in a Controlled Environment -- Student will be introduced to the location and operation of vehicle information, control devices and routine checks and adjustments to be made prior to and after entering the vehicle. This will include movement of a motor vehicle, stopping, vehicle operating space, use of signals, speed, intersection maneuvers, and right-of-way.
Unit 3	6	Space Management System -- Will introduce operator procedural and information processing tasks in a low risk driving environment including procedural steps, driver information processing. Space management system will be used to determine appropriate roadway position, appropriate vehicle speed and appropriate communication with other users. Roadway characteristics to be discussed-interaction with intersections, surface conditions and traffic controls.
Unit 4	5	Basic Maneuvering Tasks -- Introduce operator procedural and information-processing tasks including basic vehicle control-lane changing, turnabouts, parking, and the space management system.
Unit 5	2	Risk-Reducing Strategies for High-Speed, Multi-Lane Expressway -- Introduction to driver procedures and information-processing tasks in moderate to high-risk environments. Risk-reducing strategies will be presented for the driver to learn to drive collision-free in the high-speed expressway environment. Emphasis will be placed on entering, driving on, and exiting expressways. Smoothness of steering, speed control, lane position, and selection on expressways will also be covered.
Unit 6	7	Personal Factors Influencing Operator Performance -- designed to give the student an understanding of the significant effects of alcohol and other drugs on a person's ability to perform the driving task, as well as the effects of fatigue, drowsy driving, and impact of emotions on one's driving ability.
Unit 7	5	Environmental Conditions That Affect Safe Vehicle Operation -- Introduction to the problems associated with driving under conditions of inclement weather, limited visibility, and limited traction including the use of flashers and lights other than headlights, and the use of safety restraints. Specific attention will be directed to vehicular factors and increased time/space needs under such conditions relative to following, being followed, gap selection when crossing and turning, traveling with traffic in adjacent lanes, passing, and adjusting to the actions of pedestrians. Trip planning will be introduced with attention to purpose of trip, risk management, i.e., traffic density, time of travel, and anticipated travel time.
Unit 8	4	Vehicle Functions, Malfunctions and Collision Reporting -- Vehicle system functions and malfunctions will be introduced including dashboard warning lights and the techniques used to respond to various vehicle malfunctions such as loss of brakes, steering, tire blowouts, vehicle fires and others. What to do if involved in a collision in addition to collision reporting and yielding the right of way to emergency vehicles.
Unit 9	3	Sharing the Road with Commercial Vehicles -- Large commercial motor vehicles (CMVs) information will be introduced including types of CMVs, stopping distances for CMVs, CMVs' turning left and right, driving behind trucks, passing trucks, meeting on-coming trucks, trucks merging onto highways, and off-tracking.
Unit 10	3	Reducing the Influence of Distractions on the Driving Task -- Designed to help the student understand the substantial negative effects of distractions on a driver's ability to safely perform the driving task, including defining driving distractions, the various types of distractions, distractions' effects on the driving task, cost related to crashes due to distracted driving, and prevention of driving distractions.

**Table 1. (Continued) ADTSEA Topic Description**

<b>On Road</b>		
<b>Topic</b>	<b>Time (Hrs, Min)</b>	<b>Description</b>
Lesson 1	1,20	Pre-entry checks, preparing to drive, starting the engine, moving the vehicle forward, approaching intersections, turning at intersections, stopping at a curb, securing the vehicle for parking.
Lesson 2	1,20	Preparing to drive, starting the engine, entering traffic from the side of the roadway, concentrate on path of travel, changing lanes, turning at intersections, leaving traffic and parking up and down hill, with and without a curb, securing the vehicle for parking, exiting a parking space.
Lesson 3	1,20	Concentrate on path of travel, changing lanes, turning at intersections, using multiple turn lanes, using a shared left-turn lane to enter a driveway, using a shared left turn lane to enter traffic, backing straight, backing and turning.
Lesson 4	1,20	Concentrate on path of travel, assessing highway conditions, identifying and responding to traffic control devices, searching for clues to motorized user actions, searching for clues to non-motorized user actions, turning around by backing into an alley or driveway on the right, turning around by heading into an alley or driveway on the left, entering an angle parking space, exiting an angel parking space, entering a perpendicular parking space, exiting a perpendicular parking space.
Lesson 5	1,20	Concentrate on path of travel, assessing highway conditions, turning at intersections, expressway driving, meeting, following and being followed on two-lane roads, passing and being passed on two-lane highway, entering a parallel parking space, exiting a parallel parking space.
Lesson 6	1,20	ASSESSMENT: Students will demonstrate pre-drive procedures, knowledge and operation of information, communication, safety devices and vehicle control, basic vehicle maneuvers, intersection approach and safe turning procedures, time and space management through the selection of speed and position when traveling in a flow of traffic, driving through a curve, and the application of rules and laws.

(Source: Modified from ADTSEA, 2006)

**Table 2. State DE Information**

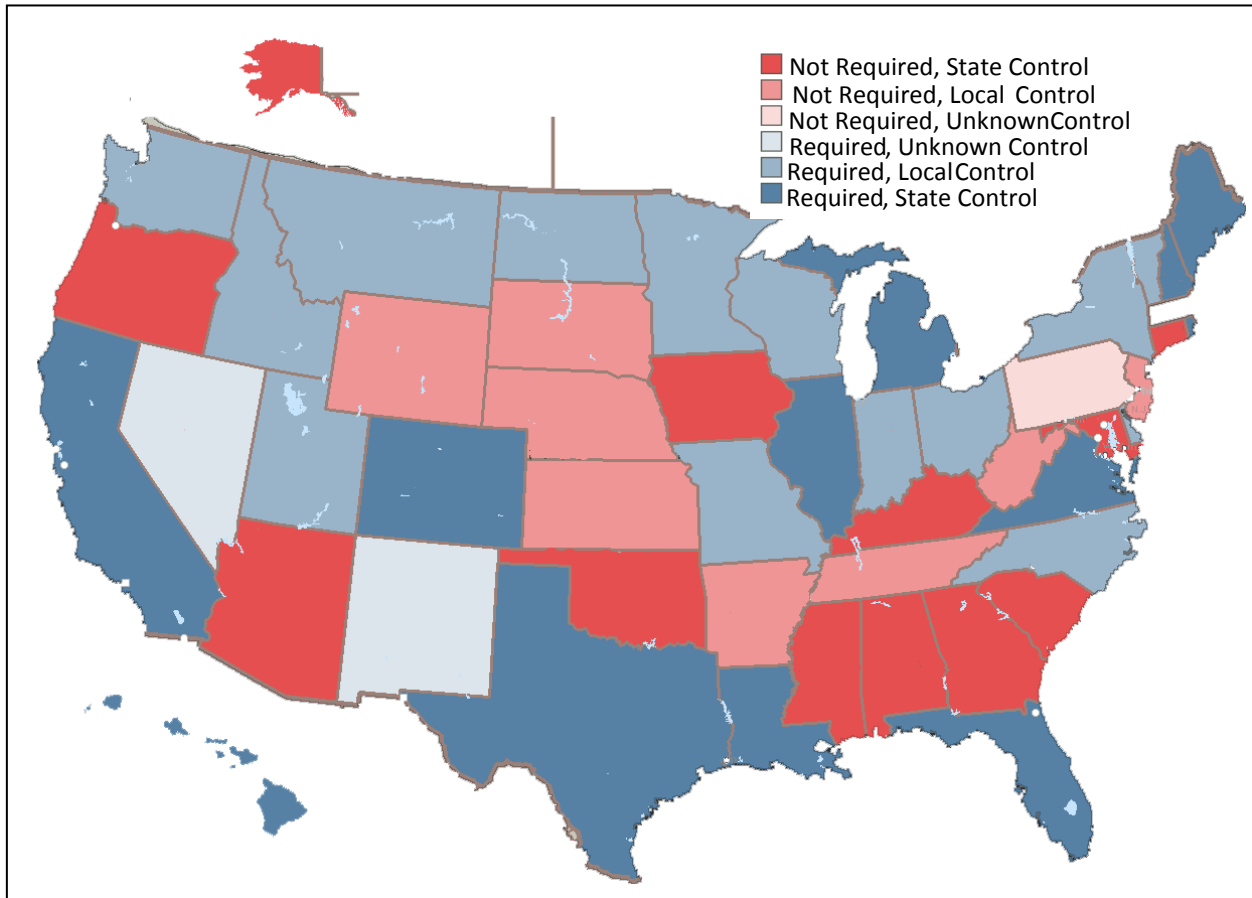
State	Driver Ed Req'd?	Curriculum Controlled by:	Earliest Start Age	Points of Interest	School-Based?
AK	No	Local	14	Parent (e.g.) must verify that student had a min. 40 hours of driving (10 hours in inclement weather and night)	No
AL	No	Local	15		Yes
AR	No	None	14		Unknown
AZ	No	Local	15, 7mo	25 hours of driving in inclement weather, night, etc.	Yes
CA	Yes	State	15, 6 mo	Offer online driver education courses and Workbook courses	Yes
CO	Yes	State	15		Unknown
CT	No	Local	16	Early licensure with driver education	Yes
DC	No	Local	16	3-level GDL under age 21	Unknown
DE	Yes	Local	15, 10 mo		Unknown
FL	Yes	State	15	Offer a traffic law and substance abuse course, classroom 2-level GDL	Unknown
GA	No	Local	15	Require Alcohol and Drug Awareness Program Card	Yes
HI	Yes**	State**	15, 6 mo		Yes**
ID	Yes	Local	14, 6 mo	Driver education required only < 17 yrs old	Unknown
IL	Yes	State	15	Driver education required only < 17 yrs, 9 months old	Yes
IN	Yes	Local	15	Driver education required only < 16 yrs old	Yes
IA	No	State	14	30 hrs of classroom instruction that must include 4 hrs substance abuse education, min. 20 minutes on railroad-crossing safety, and information on organ donation. 6 hrs lab, 3 hrs of which must be behind the wheel; simulators OK for remainder. No parental waiver of any behind-the-wheel drive time.	Unknown
KS	No	None	14	Allow farm permit	Unknown
KY	No	State	16	1 driver education curriculum developed by the KY Transportation Cabinet and Eastern KY Univ. A 4-hr graduated licensing education course req'd by 1yr AFTER license.	Yes
LA	Yes	State	15		
ME	Yes	State	15		Unknown
MD	No	State	15, 9 mo		Unknown
MA	Yes	Unknown	16		Yes
MI	Yes	State	14, 9 mo	2-segment driver education program	Yes
MN	Yes	Local	15	3-tier GDL, farm	Unknown
MS	No	Local	15		Unknown
MO	Yes	Local	15	Public school instructors must be DESE-certified	Yes
MT	Yes	Local	14, 6 mo	Driver education required only < 16 yrs old	Yes
NE	No	None	15		Unknown
NC	Yes	Local	15	Teachers take a driver education course at the college; independent instructors take a course at DMV	Yes
ND	Yes	Local	14		
NH	Yes	State	15, 6 mo		Yes
NJ	No	None	16	17 is the minimum age to receive a provisional license	Yes
NM	Yes	Unknown	15	Instructors must be certified by the Traffic Safety Bureau	Yes
NV	Yes	Unknown	15, 6 mo	Instructors must be certified and are required to take an exam plus a 6-credit driver education course	Yes
NY	Yes	Local	16	Instructors are State-certified Driver Traffic Safety Education. DTSE public schools all have the same curriculum. Commercial schools differ.	Yes
OH	Yes	Local	15, 6 mo	Teachers need to have 40 hrs training	Yes
OK	No	Local	15, 6 mo	Instructors need to pass exam	Yes
OR	No	Local	15		Yes

**Table 2. (Continued) State DE Information**

State	Driver Ed Req'd?	Curriculum Controlled by:	Earliest Start Age	Points of Interest	School-Based?
PA	No	Unknown	16	Instructors complete a 3-credit course in driver education, Pennsylvania Department of Education examination, practical examination administered by the PA DOT for public schools; commercial: don't need the course.	Yes
RI	Yes	State	16	Public schools go through a program with the Community College of RI; commercial driver education does not	Yes
SC	No	Local	15	Driver education required only < 17 yrs old if night driving	Yes
SD	No	None	14		
TN	No	None	15		Yes
TX	Yes	State	15	4 levels of teacher certification: teacher asst.; TA-full; driver education teacher; supervising teacher. If parent-taught course must follow specific curriculum based on ADTSEA but school/commercial has no set curriculum.	Yes
UT	Yes	Local	15, 6 mo	Instructors need a course and exam at the Univ. of UT. All drivers (any age) required.	Unknown
VA	Yes	State	15, 6 mo	Driver education required only < 19 yrs old	Yes
VT	Yes	Local	15		Yes
WA	Yes	Local	15		Yes
WI	Yes	Local	15, 6 mo		Unknown
WV	No	None	15	Teachers must train for an additional 10 hrs in driver education to have it added to teachers' license	Yes
WY	No	None	15	No instructor requirements for first 3 years of teaching driver education at public schools after which teachers must get permit	Yes

Data obtained from State Education Departments in 2005  
 \*\* Some counties exempt from State requirement





**Figure 1. State Driver Education Requirements and Curriculum Control**

ADTSEA’s newest curriculum (Version 2.0) recommends 45 hours of training in class and another 8 hours behind the wheel. None of the States had the recommended number of hours. Most States require 30 hours in class. California requires 25 and Texas and Rhode Island require 32 and 33 respectively. The States requiring driver education averaged 30 hours of required in class training. All the States that did not require the program had 30 hours for in class training (Table 3).

None of the States except Maine had the recommended minimum 8 hours behind the wheel training; most had 6 hours. Maine requires 10 hours and Texas requires 7 hours. Rhode Island does not require any actual driving as part of the driver education but does require some behind-the-wheel training (e.g., by parents) prior to licensure. The States that require driver education (and that have an on-road component, excluding Rhode Island) average 6.8 required hours in vehicle. All 3 States not requiring driver education required 6 hours of in-vehicle training.

The States’ driver education curricula address *all* of the in-class teaching units suggested by ADTSEA. Similarly, with the exception of Rhode Island, all States include some elements of the behind-the-wheel lessons suggested by ADTSEA. Because the States permit a student to spend less time driving with an instructor than suggested by ADTSEA, some or all of the topics included in the behind-the-wheel segment of the driving curriculum are shorter than recommended by ADTSEA.

**Table 3. State Curriculum/ADTSEA Curriculum Comparison**

	Require DE							Do Not Require DE		
	CA	IL	LA	ME	MI	RI	TX	AL	MN	ND
<b>Course Hours</b>										
In-Class (ADTSEA = 45)	25	30	30	30	30	33	32	30	30	30
On-Road (ADTSEA = 8)	6	6	6	10	6	0	7	6	6	6
	25	30	30	30	30	33	32			
<b>Textbooks</b>										
Drive Right	√	√				√	√			
Handbook Plus		√								
How to Drive	√									
Responsible Driving	√			√			√			
<b>Videos</b>										
IHS		√			√					
Continental Teves					√					
NRSF										
US DOT - FMCSA										
NCADD					√					
Cingular Wireless										
AAA	√	√			√				√	
<b>Resources</b>										
Fact Sheets			√	√	√	√	√		√	√
Worksheets		√	√	√	√	√	√		√	√
Unit Tests		√	√	√	√	√	√		√	√
<b>ADTSEA In-Class Units*</b>										
Unit 1	√	√	√	√	√	√	√	√	√	√
Unit 2	√	√	√	√	√	√	√	√	√	√
Unit 3	√	√	√	√	√	√	√	√	√	√
Unit 4	√	√	√	√	√	√	√	√	√	√
Unit 5	√	√	√	√	√	√	√	√	√	√
Unit 6	√	√	√	√	√	√	√	√	√	√
Unit 7	√	√	√	√	√	√	√	√	√	√
Unit 8	√	√	√	√	√	√	√	√	√	√
Unit 9	√	√	√	√	√	√	√	√	√	√
Unit 10	√	√	√	√	√	√	√	√	√	√
<b>ADTSEA On-Road Units*</b>										
Lesson 1	√	√	√	√	√		√	√	√	√
Lesson 2	√	√	√	√	√		√	√	√	√
Lesson 3	√	√	√	√	√		√	√	√	√
Lesson 4	√	√	√	√	√		√	√	√	√
Lesson 5	√	√	√	√	√		√	√	√	√
Lesson 6	√	√	√	√	√		√	√	√	√

\* See Table 1

All the States requiring DE require at least one textbook. Five of the 7 States use at least one of the four ADTSEA “textbooks.” None of the 3 States that do not require driver education listed any required textbooks (regardless of whether or not they were the ones suggested by ADTSEA).

Three of the 7 States requiring driver education use at least one of the videos suggest by ADSTEA. One of the States that does not require driver education uses a suggested video.

Six of the 7 States requiring driver education require fact sheets, worksheets and unit tests similar to those recommended by ADTSEA. Five States of 7 use all of them; 2 out of 3 States that do not require the program suggest all of the “resources” suggested by ADTSEA.

We compared each State’s curriculum to 30 components of the ADTSEA curriculum (excluding number of hours). Generally the States that required driver education and controlled their curriculum had more components (66%) than the States that did not require driver education or control their curricula (61%). Rhode Island served to reduce that percentage for the “requiring and controlling” States as 6 points came from behind-the-wheel units. Excluding these 6 points, the new percentages show that the States requiring driver education and controlling curricula had 61% of the components compared to 51% for the non-required/non-controlled States.

In both types of States (required driver education/controlled curriculum versus non-required driver education/non-controlled curriculum) the curriculum components, excluding time requirements met approximately 65% of ADTSEA’s recommendations. Most of the difference is attributable to the required textbooks, material, and videos. To summarize, the States included in this study tend to include the topics suggested by ADTSEA with less time devoted to them than suggested by ADTSEA. The biggest difference, aside from time, comes from the use of different material.

### III. TEEN TOPICAL DISCUSSIONS

#### METHOD

Teens about to enroll in driver education courses were recruited to gather information about the courses. The goal was to conduct topical discussions/interviews with the teens in order to discover what is actually taught to the students, and gain some insight into their attitudes and knowledge of the driver licensing process.

#### *State Selection*

In order to gather process information, 18 States were randomly selected for the study. The selected States were then divided into two groups for comparison. The first group consisted of States known to require driver education, and the second States that do not. The States included and the number of interviewed teens from each State are listed in Table 4.

**Table 4. States Included and Number Interviewed**

<b>State</b>	<b>N</b>	<b>State</b>	<b>N</b>
<b>Alabama</b>	<b>2</b>	<b>Michigan</b>	<b>3</b>
<b>Arizona</b>	<b>1</b>	<b>Minnesota</b>	<b>3</b>
<b>California</b>	<b>7</b>	<b>Mississippi</b>	<b>2</b>
<b>Colorado</b>	<b>3</b>	<b>North Carolina</b>	<b>1</b>
<b>Connecticut</b>	<b>3</b>	<b>North Dakota</b>	<b>2</b>
<b>Florida</b>	<b>4</b>	<b>New Hampshire</b>	<b>3</b>
<b>Illinois</b>	<b>4</b>	<b>Rhode Island</b>	<b>5</b>
<b>Louisiana</b>	<b>4</b>	<b>Tennessee</b>	<b>6</b>
<b>Maine</b>	<b>3</b>	<b>Texas</b>	<b>1</b>

#### *Topical Discussion Guide*

Teens answered questions about the in-class and behind-the-wheel components of their DE courses. Students structured their course schedules dependent upon what the State requirements were in order to receive their driver education certificates. Some students took both in-class and behind-the-wheel instruction at the same time, others took one course at a time, and others only enrolled in one aspect of the course. Course requirements for study material, enrollment age, missed-class policies, practice hours, and certification procedures varied. Appendix A contains the entire topical discussion guide.

#### *DE Students*

Contacts were made by randomly selecting different geographic areas within each of the 18 States to recruit students. The majority of the teens were recruited through contacting Students Against Destructive Decisions (SADD) chapter leaders. In States without SADD chapters or when SADD chapters were unable to provide names, high school teachers and counselors were asked to recommend teens to help with the process evaluation.

SADD leaders, teachers, or counselors were asked to provide names of two students — preferably a male and female student. It is important to note that this selection method was not a

random sample of teens. The goal was to recruit teens who would be likely to attend all the classes and provide accurate feedback about course information instead of teens who would be representative of most teens. The courses included were the random sample, not the teen students.

Parental permission was obtained prior to any discussion with teenage DE students. Teens were given an honorarium of \$40 for participating in this aspect of data collection. Teens provided information about when their classes would start as well as how long the class would last. Courses that lasted 8 weeks or less were contacted only three times: once prior to the course, once halfway through, and once at the end of the course. If the courses lasted longer than 8 weeks, teens were contacted once prior to the course, once a third of the way through, then 2/3 of the way through, and on completion. Interviews were tape-recorded with the teens' knowledge and consent, then transcribed and entered into a database.

## RESULTS

### *Student Profile*

Of the 57 teens (27 male students, 30 female students) who completed the topical discussions, 43 came from States that required DE and 14 did not. The disparate N's stem from the fact that it was more difficult to find teens taking such courses in States that do not require them. The average age of the teens was 15 years and 10 months. There was no statistical difference in student age between States that require driver education and States that do not.

A little more than half the students (53%, n= 30) took their DE courses in high-school-based programs, more so in States that required driver education (65%) than States that did not (14%). Less than a third (30%) of the students taking high-school-based programs took them during the school day. Among the 48 teens who responded to the question of who paid for their driver education course, 77% said their parents paid and 23% said that it was paid for by their high schools (i.e., a service or class offered by the schools). In States that require driver education, 31% of the students reported that the schools paid for DE. In contrast, no teen reported that the schools paid for the class in States that do not require driver education.

All teens reported having their driving permits by the first telephone call, but 18 students (38%) reported having no driving experience. The teens without driving experience were from States that required DE. On average, prior to taking DE, the teens in the States requiring driver education practiced, presumably with a parent, less ( $\underline{M}$  = 10.0 hours) than those in States not requiring driver education ( $\underline{M}$  = 15.7 hours).

Sixteen teens reported not ever having driven in public (13 did not respond to the question of when had they first driven in public). Of the remaining 28, teens reported having first driven in public about four months ( $\underline{M}$  = 3.75 months) prior to the first call. On average the teens in States requiring DE started practicing a bit later ( $\underline{M}$  = 5.2 months) than the teens not requiring DE ( $\underline{M}$  = 6.4 months).

### *In Class Education*

Teens were asked how long the classroom portion of the classes were scheduled to run and how long they actually ran. The 50 teens who answered both questions reported a mean running time

of 3.6 hours per class. This was identical to the actual time the classes were supposed to have run (i.e., students were not let out early or held longer). A large majority (93%) of the students reported that some classes contained in-class videos; only 4 students, all in the required driver education group, reported no videos. Teens were asked to identify the topics contained in the videos. Fifty percent (46% required; 53% not required) reported that there was a video on the “driving rules” (e.g., stopping distances, pedestrian right-of-way). Forty-eight percent (46% required; 53% not required) reported that there was video on drinking and driving and 62% (61% required; 65% not required) reported a video on driving safety tips (e.g., blind spots, weather).

Teens were asked at each interview to identify topics covered in class. Teens were asked to identify topics via free recall and a list of topics was not read. The interviewer identified which topic of the ADTSEA recommendations the teen’s response best fit (if it did indeed fit a topic). Once the topics were identified, the interviewer asked teens to identify how much time was spent on a given topic. Table 5 shows what topics were covered and the perception of the student of how much time was spent on each topic. The table shows results separately and combined for States that require driver education and States that do not.

In order to identify the extent of coverage of the ADTSEA topics we scored responses as follows. A “not covered” scored a 0; covered “very little” scored a 1, covered “in the middle” a 2 and “a lot” was scored as a 3. The interviewer prompted these categories after respondents’ initial response if it was not obvious which category the response should fall into. This scoring method led to a possible high score of 3,249 for all States combined. That is, if all students (N= 57) gave 3 points to each of the 19 topics, the score would be 3,249. A percent of maximum was the metric used to compare the groups. Using students from all States combined there was 67% coverage of the ADTSEA topics in class. There was a relatively small difference in the scores for coverage between States that required driver education (69%) and States that did not (64%).

**Table 5. Topics Covered In-Class (Student Recall of Topics)**

TOPIC		States Requiring DE				States Not Requiring DE				Both States			
		Not Covered	Covered*			Not Covered	Covered*			Not Covered	Covered*		
			Very Little	"In Between"	A Lot		Very Little	"In Between"	A Lot		Very Little	"In Between"	A Lot
	%	0%	16%	28%	56%	14%	8%	17%	75%	4%	15%	25%	60%
Rules to Operate	N	0	7	12	24	2	1	2	9	2	8	14	33
	%	7%	13%	25%	63%	14%	0%	17%	83%	9%	10%	23%	67%
Seat Belt Use	N	3	5	10	25	2	0	2	10	5	5	12	35
	%	7%	10%	33%	58%	14%	17%	50%	33%	9%	12%	37%	52%
Space/Time	N	3	4	13	23	2	2	6	4	5	6	19	27
	%	14%	38%	27%	35%	14%	33%	50%	17%	14%	37%	33%	31%
Steering	N	6	14	10	13	2	4	6	2	8	18	16	15
	%	5%	15%	44%	41%	21%	18%	36%	45%	9%	15%	42%	42%
Brake Use	N	2	6	18	17	3	2	4	5	5	8	22	22
	%	9%	13%	26%	62%	21%	9%	9%	82%	12%	12%	22%	66%
Risk Reduction	N	4	5	10	24	3	1	1	9	7	6	11	33
	%	5%	0%	17%	83%	14%	0%	8%	92%	7%	0%	15%	85%
Personal Factors	N	2	0	7	34	2	0	1	11	4	0	8	45
	%	5%	15%	46%	39%	21%	9%	45%	45%	9%	13%	46%	40%
Vision/ Perception	N	2	6	19	16	3	1	5	5	5	7	24	21
	%	9%	38%	33%	28%	14%	17%	58%	25%	11%	33%	39%	27%
Night Driving	N	4	15	13	11	2	2	7	3	6	17	20	14
	%	12%	47%	32%	21%	14%	50%	25%	25%	12%	48%	30%	22%
Railroad Crossings	N	5	18	12	8	2	6	3	3	7	24	15	11
	%	14%	51%	27%	22%	43%	63%	25%	13%	21%	53%	27%	20%
Dashboard Symbols	N	6	19	10	8	6	5	2	1	12	24	12	9
	%	5%	12%	37%	51%	25%	8%	42%	50%	10%	11%	38%	51%
Lane Changes	N	2	5	15	21	4	1	5	6	6	6	20	27
	%	12%	16%	42%	42%	14%	42%	25%	33%	12%	22%	38%	40%
Parking	N	5	6	16	16	2	5	3	4	7	11	19	20
	%	9%	8%	31%	62%	14%	17%	33%	50%	11%	10%	31%	59%
Turning Procedures	N	4	3	12	24	2	2	4	6	6	5	16	30
	%	5%	22%	32%	46%	14%	8%	17%	75%	7%	19%	28%	53%
Weather Conditions	N	2	9	13	19	2	1	2	9	4	10	15	28
	%	12%	26%	37%	37%	29%	20%	30%	50%	16%	25%	35%	40%
Vehicle Funct/ Collision Report	N	5	10	14	14	4	2	3	5	9	12	17	19
	%	9%	21%	33%	46%	14%	33%	50%	17%	11%	24%	37%	39%
Sharing the Road	N	4	8	13	18	2	4	6	2	6	12	19	20
	%	16%	19%	17%	64%	13%	7%	7%	86%	15%	16%	14%	70%
Reducing Distractions	N	7	7	6	23	2	1	1	12	9	8	7	35
	%	9%	36%	36%	28%	14%	17%	42%	42%	11%	31%	37%	31%
Traffic Statistics	N	4	14	14	11	2	2	5	5	6	16	19	16
	%	98%	0%	0%	100%	86%	0%	0%	100%	95%	0%	0%	100%
Other	N	42	0	0	1	12	0	0	2	54	0	0	3

\*Percentages reflect responses of those reporting at least some coverage of that topic

Students were asked if they had taken any tests in class. All the respondents in States requiring driver education said yes; 83% of respondents from States that do not require DE courses reported having taken tests in class. When asked if it was possible to fail the course, 93% of the respondents from States requiring driver education said yes and 91% of respondents from the other States said yes.

### *On-Road Education*

Students were asked if the experiences in the driving portion of the class matched what they were currently learning in the classroom. For instance, did they practice on the road what they learned in-class immediately (as recommended by ADTSEA)? Overall, 90% of the students questioned said their on-road and in-classroom experiences did match, 89% in States that either required or controlled driver education, and 91% in the States not requiring driver education.

During each interview teens were asked to identify the topics covered during the on-road portion of the course. Teens reported based on “free recall” and the interviewer categorized responses into topics covered by the ADTSEA curriculum. Teens were then asked to report how much time was spent on a given topic. Table 6 shows what topics were covered and the perception of the student of how much time was spent on the topic. Table 6 shows results separately as well as combined for States that require DE and States that do not. For each topic listed, an average of one-third of the teens did not report that the topic was covered. An overall coverage percentage was calculated for the on-road portion of the course using the same scoring method used for the in-class portion. Overall, there was 53% reported coverage of the on-road portion of the course. Surprisingly, States that require DE had lower coverage scores (45%) than States that do not require DE (77%).

In the States that require driver education, 80% of respondents (16 students did not answer the question) reported driving between 2 and 6 times as part of the course. In the States that do not require driver education, 79% of those responding (all teens answered in these States) reported driving between 1 and 3 times as part of their course. There were 27 students in States requiring driver education who responded to the question about how many students were in the car (including the respondent) during on-the-road training (16 did not answer and the response of 1 student was unknown). All responded with between 1 (i.e., they drove alone with the instructor) and 3 (1: 27%; 2: 46%; 3: 27%; Mean = 2.0). In the students in the States not requiring DE, all responded with 1 (92%) or 2 (8%; Mean = 1.1). On average, students in States that require DE spent 4.6 hours with their instructors (N = 20) and students in the other States also spent 4.6 hours (N = 11). Forty-nine percent of the teens got less than the 2002 ADTSEA-recommended 6 hours of behind the wheel training and only 11% got the new (2006) recommended minimum of 8 hours.

### *Attitudes/Knowledge of Requirements*

When looking at both types of States (DE required versus DE not required) 91% (52 out of 57) of students know the legal requirements in their States to get driver licenses. Most thought the requirements in their States were fair. Specifically, 78% rated the requirements between 8 and 10 (on a scale of 1 to 10 with 10 being very positive) with no one giving the requirements less than a 5 (2 students did not respond). The most “bothersome” part of the requirements, according to the students, was the waiting period between getting the permit and taking the road test. Specifically, of those reporting some requirements were bothersome (n = 28), 11 identified the waiting period as being more “bothersome” than any other single requirement.



Students were asked about driving restrictions. Of those reporting that some restrictions were “particularly bothersome,” 12 (of 34) cited the passenger restriction as being problematic (note: not all States have a passenger restriction). However, teens generally felt that the restrictions in their States were fair. On a scale of 1 to 10, with 10 being extremely fair, 38 of 54 students (70%) responded with an 8, 9, or 10.

For the most part, students in both DE-required and non-required States had positive opinions about the classroom portions of the courses. Data show that 39 of 43 students in States requiring DE gave ratings between 7 and 10 on a 1-to-10 scale (10 being positive). In the other States 11 of 12 responded with 7 to 10 (2 students did not respond). When asked if they thought the classroom portions were helpful, 31 of 43 students (72%) said yes in States requiring DE while 7 of 12 (58%) students responded with a yes in States not requiring it.

Students were then asked to specify the extent to which each topic in the in-class portions of the courses were helpful. The results for both types of States and all States combined are reported in Table 7. Students were first allowed to freely recall and then prompted with items not freely recalled.

Students were asked to rate the on-road portions of the courses on a scale of 1 to 10; 46% of students in States requiring DE gave a 10, and 75% gave either a 9 or a 10. Students in the other States (not requiring the course) rated the on-road portions a little higher than students in the States requiring and controlling DE. They gave a 10 some 62% of the time and a 9 or 10 100% of the time. No one in either category of State gave a rating less than 7. When students were asked if they thought the on-road portion was helpful they said yes 75% of the time in States that require DE and 64% in those States that do not.

Students were then asked to specify the extent to which each topic for the on-road portions of the courses was helpful. The results for both types of States and all States combined are reported in Table 8.

**Table 6. Responses to On-Road Topics Covered (Student Memory of Topics)**

TOPIC		States Requiring DE				States Not Requiring DE				Both States			
		Not Covered*	Very Little	"In Between"	A Lot	Not Covered*	Very Little	"In Between"	A Lot	Not Covered*	Very Little	"In Between"	A Lot
Safety Checks	%	49%	14%	27%	59%	14%	17%	33%	50%	40%	15%	29%	56%
	N	21	3	6	13	2	2	4	6	23	5	10	19
Seat Belt Use	%	47%	0%	9%	91%	0%	14%	7%	79%	35%	5%	8%	86%
	N	20	0	2	21	0	2	1	11	20	2	3	32
Adjusting Mirrors	%	47%	4%	30%	65%	0%	21%	21%	57%	35%	11%	27%	62%
	N	20	1	7	15	0	3	3	8	20	4	10	23
Starting Engine	%	44%	33%	25%	42%	14%	42%	17%	42%	37%	36%	22%	42%
	N	19	8	6	10	2	5	2	5	21	13	8	15
Intersections	%	42%	0%	28%	72%	0%	0%	14%	86%	32%	0%	23%	77%
	N	18	0	7	18	0	0	2	12	18	0	9	30
Basic Maneuvers	%	44%	8%	21%	71%	0%	7%	29%	64%	33%	8%	24%	68%
	N	19	2	5	17	0	1	4	9	19	3	9	26
Stopping Vehicle	%	44%	8%	25%	67%	0%	7%	36%	57%	33%	8%	29%	63%
	N	19	2	6	16	0	1	5	8	19	3	11	24
Parking	%	47%	0%	22%	78%	7%	23%	23%	54%	37%	8%	22%	69%
	N	20	0	5	18	1	3	3	7	21	3	8	25
Turning	%	44%	0%	29%	71%	0%	14%	21%	64%	33%	5%	26%	68%
	N	19	0	7	17	0	2	3	9	19	2	10	26
Coordinated Driving Skills	%	49%	14%	9%	77%	0%	0%	21%	79%	37%	8%	14%	78%
	N	21	3	2	17	0	0	3	11	21	3	5	28
Visual Steering	%	49%	23%	45%	32%	14%	25%	33%	42%	40%	24%	41%	35%
	N	21	5	10	7	2	3	4	5	23	8	14	12
Speed Control	%	40%	0%	27%	73%	0%	7%	7%	86%	30%	3%	20%	78%
	N	17	0	7	19	0	1	1	12	17	1	8	31
Passing	%	49%	23%	41%	36%	14%	42%	33%	25%	40%	29%	38%	32%
	N	21	5	9	8	2	5	4	3	23	10	13	11
Highway Driving	%	53%	15%	35%	50%	7%	15%	46%	38%	42%	15%	39%	45%
	N	23	3	7	10	1	2	6	5	24	5	13	15
Gap Assessment	%	49%	9%	41%	50%	7%	31%	23%	46%	39%	17%	34%	49%
	N	21	2	9	11	1	4	3	6	22	6	12	17
Time/Space Management	%	47%	13%	17%	70%	0%	7%	29%	64%	35%	11%	22%	68%
	N	20	3	4	16	0	1	4	9	20	4	8	25
Risk Management	%	47%	22%	26%	52%	0%	7%	57%	36%	35%	16%	38%	46%
	N	20	5	6	12	0	1	8	5	20	6	14	17
Other	%	98%	0%	0%	100%	100%	0%	0%	0%	98%	0%	0%	100%
	N	42	0	0	1	14	0	0	0	56	0	0	1

**Table 7. Reported “Helpfulness” of In-Class Topics (Student Memory of Topics)**

TOPIC		States Requiring DE			States Not Requiring DE			Both States		
		Very Little	"In Between"	A Lot	Very Little	"In Between"	A Lot	Very Little	"In Between"	A Lot
Rules/Procedures to Operate	%	10%	31%	60%	17%	25%	58%	11%	30%	59%
	N	4	13	25	2	3	7	6	16	32
Seat Belt Use	%	22%	22%	56%	0%	25%	75%	17%	23%	60%
	N	9	9	23	0	3	9	9	12	32
Space/Time	%	14%	17%	69%	8%	33%	58%	13%	20%	67%
	N	6	7	29	1	4	7	7	11	36
Steering	%	24%	34%	41%	25%	50%	25%	25%	38%	38%
	N	10	14	17	3	6	3	13	20	20
Brake Use	%	19%	29%	52%	25%	33%	42%	20%	30%	50%
	N	8	12	22	3	4	5	11	16	27
Risk Reduction	%	5%	36%	60%	8%	8%	83%	6%	30%	65%
	N	2	15	25	1	1	10	3	16	35
Personal Factors	%	0%	24%	76%	0%	25%	75%	0%	24%	76%
	N	0	10	32	0	3	9	0	13	41
Vision/Perception	%	12%	43%	45%	17%	25%	58%	13%	39%	48%
	N	5	18	19	2	3	7	7	21	26
Night Driving	%	26%	45%	29%	25%	25%	50%	26%	41%	33%
	N	11	19	12	3	3	6	14	22	18
Railroad Crossings	%	31%	33%	36%	25%	50%	25%	30%	37%	33%
	N	13	14	15	3	6	3	16	20	18
Dashboard Symbols	%	38%	35%	28%	40%	60%	0%	38%	40%	22%
	N	15	14	11	4	6	0	19	20	11
Lane Changes	%	10%	23%	68%	17%	42%	42%	12%	27%	62%
	N	4	9	27	2	5	5	6	14	32
Parking	%	20%	29%	51%	27%	36%	36%	21%	31%	48%
	N	8	12	21	3	4	4	11	16	25
Turning Procedures	%	8%	28%	65%	8%	42%	50%	8%	31%	62%
	N	3	11	26	1	5	6	4	16	32
Weather Conditions	%	20%	20%	61%	8%	33%	58%	17%	23%	60%
	N	8	8	25	1	4	7	9	12	32
Vehicle Funct/Collision Report	%	21%	31%	48%	0%	45%	55%	17%	34%	49%
	N	9	13	20	0	5	6	9	18	26
Sharing the Road	%	15%	34%	51%	25%	50%	25%	17%	38%	45%
	N	6	14	21	3	6	3	9	20	24
Reducing Distractions	%	14%	19%	67%	8%	17%	75%	13%	19%	69%
	N	6	8	28	1	2	9	7	10	37
Traffic Statistics	%	32%	34%	34%	25%	25%	50%	30%	32%	38%
	N	13	14	14	3	3	6	16	17	20

**Table 8. Reported “Helpfulness” of On-Road Topics**

TOPIC		States Requiring DE			States Not Requiring DE			Both States		
		Very Little	"In Between"	A Lot	Very Little	"In Between"	A Lot	Very Little	"In Between"	A Lot
Safety Checks	%	8%	58%	33%	15%	38%	46%	11%	51%	38%
	N	2	14	8	2	5	6	4	19	14
Seat Belt Use	%	8%	36%	56%	15%	46%	38%	11%	39%	50%
	N	2	9	14	2	6	5	4	15	19
Adjusting Mirrors	%	36%	12%	52%	42%	33%	25%	38%	19%	43%
	N	9	3	13	5	4	3	14	7	16
Starting Engine	%	8%	8%	84%	0%	7%	93%	5%	8%	87%
	N	2	2	21	0	1	13	2	3	34
Intersections	%	0%	12%	88%	14%	29%	57%	5%	18%	77%
	N	0	3	22	2	4	8	2	7	30
Basic Maneuvers	%	12%	28%	60%	0%	29%	71%	8%	28%	64%
	N	3	7	15	0	4	10	3	11	25
Stopping Vehicle	%	8%	32%	60%	14%	43%	43%	10%	36%	54%
	N	2	8	15	2	6	6	4	14	21
Parking	%	8%	12%	80%	14%	29%	57%	10%	18%	72%
	N	2	3	20	2	4	8	4	7	28
Turning	%	0%	20%	80%	7%	21%	71%	3%	21%	77%
	N	0	5	20	1	3	10	1	8	30
Coordinated Driving Skills	%	20%	48%	32%	15%	38%	46%	18%	45%	37%
	N	5	12	8	2	5	6	7	17	14
Visual Steering	%	21%	42%	38%	29%	50%	21%	24%	45%	32%
	N	5	10	9	4	7	3	9	17	12
Speed Control	%	4%	31%	65%	0%	21%	79%	3%	28%	70%
	N	1	8	17	0	3	11	1	11	28
Passing	%	21%	25%	54%	33%	42%	25%	25%	31%	44%
	N	5	6	13	4	5	3	9	11	16
Highway Driving	%	9%	26%	65%	0%	54%	46%	6%	36%	58%
	N	2	6	15	0	7	6	2	13	21
Gap Assessment	%	4%	57%	39%	7%	36%	57%	5%	49%	46%
	N	1	13	9	1	5	8	2	18	17
Time/Space Management	%	8%	46%	46%	14%	57%	29%	11%	50%	39%
	N	2	11	11	2	8	4	4	19	15
Risk Management	%	8%	21%	71%	8%	31%	62%	8%	24%	68%
	N	2	5	17	1	4	8	3	9	25

## IV. DISCUSSION

There are clear differences in the requirements for driver education between States. Some States require DE for young new drivers prior to licensure while other States let the individual decide whether to take DE. Some States vary the permit holding period depending on whether a driver chooses to take driver education. That is, licensure may be obtained earlier in some States if a teen opts to take driver education. Other differences exist in terms of the extent to which States control the curriculum for driver education. Some States have their own curricula which are required to be used by facilities that teach the courses. Other States leave the details of the driver education curricula up to local entities (e.g., school district). In some States driver education is taught as part of high school. All States have commercial driver education classes. Although not covered in this report, some States allow the entire in-class portion of the course to be completed on-line.

There were some limitations to this study. We had a relatively small sample size in terms of the number of teens contacted, and in some States such as Texas finding participants was difficult. In States without DE requirements young drivers may forgo the courses, adding to the difficulty of recruiting teens. Participants were not a random sampling of students taking DE courses, nor were they intended to be. The goal was to select students who would serve as data collectors rather than subjects in a study. Indeed the subjects were the individual DE courses rather than the students who took them. It might have been useful to know what the “average” student felt and remembered about the DE experience. We would have liked to include all States in the design instead of a random sampling of States that required and did not require DE.

Curricula were obtained for only 10 States, so it is difficult to determine whether these States are likely to be typical. It may be that States willing to distribute their curricula have greater interest in DE; certainly the States included in this sample that do not require driver education are not typical of other States in the same category. Curricula were relatively similar to what ADTSEA suggests (at least for the States from which curricula were obtained). Generally the topic areas proposed by ADTSEA are covered; it is unclear whether States follow ADTSEA’s recommendations for the amount of time devoted to each topic. On average, less time than currently proposed by ADTSEA is spent on the entire course.

The greatest variation from ADTSEA other than amount of time spent is the material used to teach the courses. This is also where the greatest difference exists between States that require driver education and those that do not. It is not clear why this difference exists. Speculatively, it could be that more of the material in States that require driver education are funded by public sources where costs in States that do not require DE are shouldered by the students or their parents.

It is likely that there is a different rate of enrollment in DE for students under 18 years old. In some States all teens licensed before 18 take driver education, and in other States the courses are optional. However, there is little difference between what students report learning in States that require DE and those that do not. There could be a difference in what teens learn during the on-road training in States that require DE versus States that do not require DE. These results indicate that States that do not require driver education tend to have on-road training that more closely resembles ADTSEA’s suggested training. Attitudes regarding driver education are also

somewhat similar between students in both types of States although these students' attitudes may not reflect those of the general student population.

Students reported attending their classroom portion of the course for the amount of time that it was scheduled. That is, if the total class time was 30 hours, they reported that they spent 30 hours in the class. The same was not true of the on-road portion of the course in terms of actual time behind the wheel. On average, students spent 4.6 hours behind the wheel. This does not meet the old (2002) ADTSEA requirement of 6 hours much less the newer 8-hour requirement. Nearly half of all students interviewed reported that they did not get 6 hours of behind-the-wheel training and only 11% got 8 hours. Thus, while the classroom portion of the course seemed to conform to the suggestions by ADTSEA (at the time) the actual time behind the wheel was less.

In conclusion, most DE programs provide the 30 hours of in-class instruction, which typically cover all or nearly all of the ADTSEA recommended topics. Students believe that the material presented in class was helpful and well presented. However, students were more critical of the on-road supervised driving. While the topics covered were consistent with ADTSEA recommendations, barely half of the students got the full 6 hours behind the wheel as required by most States.

## V. REFERENCES

- ADTSEA. (2002). Traffic safety education life long learning process: Recommendations on the delivery of driver education. Available:  
[http://www.adtsea.iup.edu/adtsea/pdf/Driver\\_Education\\_Delivery\\_Systems.pdf](http://www.adtsea.iup.edu/adtsea/pdf/Driver_Education_Delivery_Systems.pdf)
- ADTSEA. (2006). Traffic safety education life long learning process: Driver education standards. Available: <http://www.adtsea.iup.edu/adtsea/pdf/ADTSEA%20Standards.pdf>
- Allgaier, E. (1964). Driver Education Reduces Accidents and Violations (No. 3782). Washington, DC: American Automobile Association.
- Arnett, J. (1992). Reckless behavior in adolescence: a developmental perspective. *Developmental Review, 12*, 339-373.
- Braitman, K. A., Kirley, B.B., McCartt, A.T., & Chaudhary, N.K. (2008). Crashes of novice teenage drivers: Characteristics and contributing factors. *Journal of Safety Research, 39*:47-54.
- Butler, G. T. (1982). Effectiveness and efficiency in driver education programs. DOT HS 806 135. Washington DC: National Highway Traffic Safety Administration.
- Chaudhary, N. K., William, A. F., & Nissen, W. (2007). Evaluation and compliance of passenger restrictions in a graduated driver licensing program. DOT HS 810 781. Washington DC: National Highway Traffic Safety Administration.
- Chen L., Baker, S. P., Braver, E. R., & Li, G. (2000). Carrying passengers as a risk factor for crashes fatal to 16-and 17-year-old drivers. *Journal of American Medical Association, 283*, 1578-1582.
- Doherty, S. T., Andrey, J. C., & MacGregor, C. (1998). The situational risks of young drivers: The influence of passengers, time of day, and day of week on accident rates. *Accident Analysis and Prevention, 30*, 45-52.
- Ferguson, S. A., Williams, A. F., Leaf, W. A., & Preusser, D. F. (2001). Views of parents of teenagers about graduated licensing after experience with the laws. *Journal of Crash Prevention and Injury Control, 2*, 221-227.
- Gonzales, M. M., Dickinson, L. M., DiGuseppi, L. M., & Lowenstein, S. R. (2005). Student drivers: A study of fatal motor vehicle crashes involving 16-year-old drivers. *Annals of Emergency Medicine, 45*, 140-146.
- Katila, A., Keskinen, E., & Hatakka, M. (1996). Conflicting goals in skid training. *Accident Analysis and Prevention, 28*, 785-789.
- Laapotti, S., Keskinen, E., Hatakka, M., Hernetkoski, K., Katila, A., Peraaho, M., et al. (2006). Driving circumstances and accidents among novice drivers. *Traffic Injury Prevention, 7*, 232-237.

- Mayhew, D. R., Simpson, H. M., & Pak, A. (2003). Changes in collision rates among novice drivers during the first months of driving. *Accident Analysis and Prevention*, 35, 683-691.
- McCartt, A. T., Mayhew, D. R., & Ferguson, S. A. (2006). Effects of age and experience on young driver crashes: Review of recent literature. Arlington VA: Insurance Institute for Highway Safety.
- Nichols, J. L. (1970). Driver education and improvement programs. In Heimstra, N. W. Injury Control and Traffic Safety. Springfield IL: Charles C. Thomas.
- Preusser, D. F., & Tison, J. (2007). GDL Then and Now. *Journal of Safety Research*, 38, 159-163.
- Public Technology. (1986). Driver education: Fifty years of youth instruction. Falls Church, VA: AAA Foundation for Traffic Safety.
- Rice, T. M., Peek-Asa, C., & Kraus, J. F. (2004). Effects of the California graduated driver licensing program. *Journal of Safety Research*, 35, 375-381.
- Stack, H. J. (1966). History of driver education in the United States. Washington DC: National Commission for Safety Education, National Education Association.
- Warner, W. L. (1972). A brief history of driver education. *Journal of Traffic Safety Education*, 19(2).
- Williams, A. F., & Ferguson, S. A. (2002). Rationale for graduated licensing and the risks it should address. *Injury Prevention*, 8 (Suppl 11):ii9-ii16.
- Williams, A. F., Ferguson, S. A., & Wells, J. K. (2005). Sixteen-year-old drivers in fatal crashes, United States, 2003. *Traffic Injury Prevention*, 6, 202-206.
- Williams, A. F., Preusser, D. F., & Ferguson, S. A. (1998). Fatal crashes involving 16-year-old drivers: narrative descriptions. *Journal of Traffic Medicine*, 26, 11-17.
- Williams, A. F., Preusser, D. F. & Ledingham, K. A. (Under Review). Feasibility Study on Evaluating Driver Education Curriculum. Washington DC: National Highway Traffic Safety Administration.
- Williams, A. F., Preusser, D. F., Ulmer, R. G., & Weinstein, H. B. (1995). Characteristics of fatal crashes of 16-year-old drivers: implications for licensure policies. *Journal of Public Health Policy*, 16, 347-360.



# **APPENDIX A. SURVEY INSTRUMENT**

## **ADTSEA TEEN PRE-COURSE DISCUSSION GUIDE**

Introduce yourself and explain:

- Calling for the National Highway Traffic Safety Administration on a contract to study driver's education classes.
- We were given your name by your SADD chapter leader - did he or she mention this project to you? Are you currently enrolled or about to be enrolled in Driver's Education?
- We will call you, in addition to this call, about 2 or 3 times to ask you about what you are learning in your class. Each call will likely last only about 10 – 15 minutes.
- After the last call—soon after your class ends, we will send you \$40.
- I will need permission from a parent before I can continue. Is someone home now? If not, reschedule.

### **I. INTRODUCTORY IN-CLASS QUESTIONS**

- Participant age in years and months
- Current or planned enrollment status
- Name of the driver's education program (school based, private, website, other?)
- Date scheduled to begin driver's education course
- Date scheduled to complete driver's education course
- Course schedule (days of the week, duration of class meetings)
- Have you already received any course information in the mail or at school (e.g., syllabus, guides, handouts, etc.? If so, what content was provided?
- Do you know if there is a policy on missed classes?

### **II. OBTAIN CONTACT INFORMATION**

- Phone number and preferred contact times
- Mailing address
- Email address

### **III. EXPLAIN COMPENSATION AND FUTURE DISCUSSIONS**

- Total of \$40 at the conclusion of the program
- Direct attention to the following:
  - Syllabus
  - Guides
  - Handouts
  - In-class work, schedule, students per class
  - On-road experience, students per car, driving situations
  - License requirements
  - Attendance policy

## ADTSEA TEEN DISCUSSION GUIDE

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- Calling again for the National Highway Traffic Safety Administration on a contract to study driver's education classes.
- Determine whether it is a convenient time to discuss the driver's education course they have just started. If not, determine an alternative time that would be.

### I. INTRODUCTORY CLASSROOM QUESTIONS

- Dates and duration of driver's education course
- Number of students in the course
- Course materials received (e.g., syllabus, guides, handouts, other)
- Scheduling of in-class meetings
  - How many hours and minutes is the course supposed to run?
  - How many hours and minutes does it actually run?
- Scheduling of on-road activities
  - How many hours and minutes are you supposed spend on the road?
  - How many hours and minutes have you actually spent on the road?
- Are classroom and on-road experiences scheduled for the same day?
- Which, if any, films have been watched?

### II. IN-CLASS CONTENT COVERED

- Have the teen describe in detail what was actually covered. Do not read topics to teen – Record verbatim and then check all topics that the response relates to and the amount of time studied. If response does not fit into a topic check "Other."

√	Topic	Very Little	Somewhere in the Middle	A Lot
	1. Rules and procedures of operating an automobile			
	2. Seat Belt Use			
	3. Space & Time Management (distance between cars)			
	4. Steering			
	5. Brake Use			
	6. Risk Reduction Strategies			
	7. Personal factors that may influence your driving (i.e., alcohol & other drugs, fatigue, sleep needs, emotions & driving, aggressive driving behavior)			
	8. Vision and perception requirements			
	9. Driving at night			
	10. Railroad Crossings			
	11. Dashboard warning symbols			
	12. Lane changes			
	13. Parking			
	14. Turning procedures			
	15. Weather Conditions			
	16. Car Functions and Malfunctions, Collision Reporting			
	17. Sharing the Road with Commercial Motor Vehicles			
	18. Reducing the Influence of Distractions			
	19. Traffic statistics			
	20. Other:			

## ADTSEA TEEN DISCUSSION GUIDE

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### III. EXAMINATIONS

- Quizzes and exams taken
- Policy on missed classes
- Number of classes missed so far
- Consequences of failing the course – probe for responses such as:
  - Ability to re-take the course
  - Ability to still drive in the on-road portion of the course
  - Impact on the chances of getting a license
- Awareness of steps following completion of driver's education

### IV. ON-ROAD COURSE PROCESS

- Experience with on-road exercises
  - How many times have you gone out to drive so far?
  - How many hours have you spent in the vehicle with your instructor?
  - How many students are in each vehicle, including you?
  - How much time does each student spend behind the wheel during each session?
  - Did all students get the same amount of time? If not, why not?
- Correspondence between driving experience and classroom topics
- Have the teen describe, in some detail, what was actually covered under the topic. Do not read topics to teen – Record verbatim and then place a check next to all topics that the response relates to and mark the amount of time teen has spent on each topic. If response does not fit into a topic check "Other."

√	Topic	Very Little	Somewhere in the Middle	A Lot
	1) Pre-entry safety checks			
	2) Seat Belt Use			
	3) Adjusting Mirrors			
	4) Starting the engine			
	5) Approaching & turning at intersections			
	6) Basic vehicle maneuvers			
	7) Stopping and securing the vehicle			
	8) Parking			
	9) Turning			
	10) Coordinated use of turn signals, accelerator, brakes and steering wheel			
	11) Visual steering			
	12) Speed control			
	13) Passing			
	14) Driving on the Highway, Expressway, &/or Interstate			
	15) Gap assessment techniques			
	16) Time & Space Management			
	17) Risk management			
	18) Other:			

## **ADTSEA TEEN DISCUSSION GUIDE**

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### **V. ATTITUDES REGARDING REQUIREMENTS & RESTRICTIONS**

- Assess awareness of legal requirements to obtain a driver's license
- On a scale from 1 (extremely unfair) to 10 (extremely fair), what do you think about the legal requirements to get a license?
- Are any legal requirements particularly bothersome? If yes, why?
- Based on the fact that you are a new driver, not based on driving history or parental restrictions, what are the restrictions you will have placed on your driver's license by law?
- On a scale from 1 (extremely unfair) to 10 (extremely fair), what do you think about the fairness of the legal restrictions?
- Are any legal restrictions particularly bothersome? If yes, why?

### **VI. CONCLUSION**

- Total of \$40 at the conclusion of the program

### **FOR LAST INTERVIEW ADD IN THE FOLLOWING QUESTIONS:**

### **VII. OVERALL EVALUATION**

- In-class component
  - On a scale from 1 (not at all effective) to 10 (extremely effective), how effective did you think the in-class component was
  - Do you find any particular parts of the classroom component more helpful than others? If yes, record which topics are discussed as effective
  - Summary evaluation of in-class experience (A, B, C, D, or F)
- On-road component
  - On a scale from 1 (not at all effective) to 10 (extremely effective), how effective did you think the on-road component was
  - Do you find any particular parts of the on-road component more helpful than others? If yes, record which topics are discussed as effective
  - Summary evaluation of on-road experience (A, B, C, D, or F)
- Summary evaluation of the complete course (A, B, C, D, or F)

### **V. CONCLUSION**

- Thank for participation and explain \$40 compensation

