

Traffic Safety Facts

Research Note



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2007 Motor Vehicle Occupant Safety Survey: Driver Education and Graduated Driver Licensing

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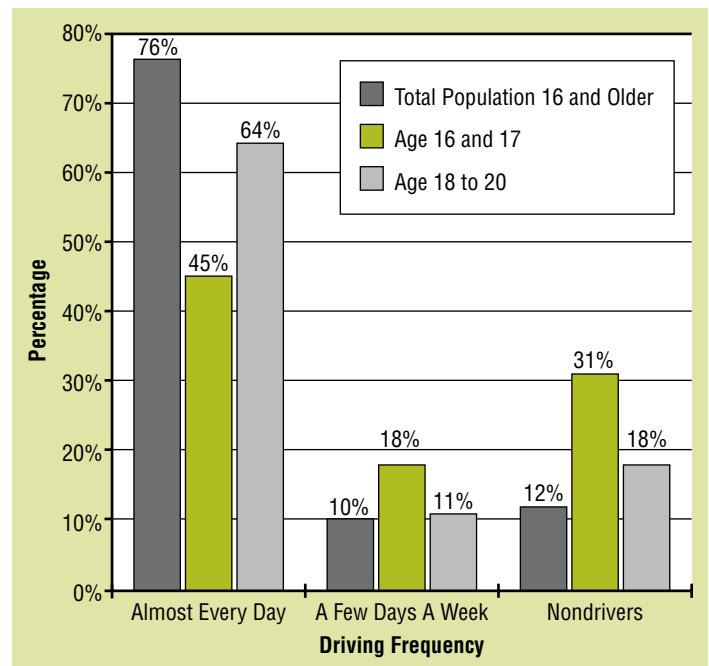
The Motor Vehicle Occupant Safety Survey (MVOSS) is a national telephone survey administered by NHTSA on a periodic basis to obtain data on attitudes, knowledge, and self-reported behavior primarily in areas of occupant protection. The sample is composed of randomly selected people 16 and older residing in the 50 States and the District of Columbia. People 16 to 39 are over-sampled to obtain more seat belt nonusers and more adults with children who should be using child restraints. The survey was first administered in 1994 and has been conducted five times since then. The most recent survey took place from January 9 to April 30, 2007.

The MVOSS is composed of two questionnaires, each administered to approximately 6,000 people. Version 1 focuses on seat belt use. It also contains shorter modules on air bags, drinking and driving, and driving speed. Version 2 focuses on children's use of restraints when riding in motor vehicles. It also contains shorter modules on driver education and graduated driver licensing (GDL), air bags, emergency medical services (EMS), and use of wireless phones while driving. Both questionnaires include a series of questions on crash injury experience as well as questions collecting basic demographic information. Prior to each administration of the survey, the questionnaires are updated to address new issues of concern, delete obsolete items, and revise questions as needed.

This Research Note summarizes selected results from the 2007 MVOSS. It focuses primarily on information collected regarding driver education and GDL. This was a new module introduced in 2007. The data are weighted to yield national estimates.

Driving Frequency - The vast majority of the population 16 and older drive a motor vehicle almost every day (76%) or a few days a week (10%). Most others (12%) are nondrivers. (See Table 1 of the 2007 Motor Vehicle Occupant Safety Survey, Volume 2: Seat Belt Report for detailed breakouts according to demographic characteristics.) As expected, youth are more likely than the general population to be nondrivers, particularly those 16 and 17 years old (Figure 1).²

Figure 1 – Driving Frequency: Youth Compared to Total Population 16 and Older

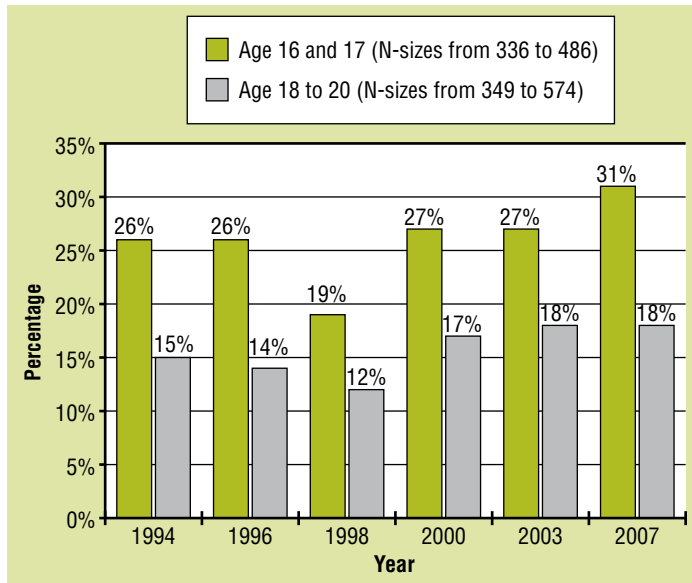


² N-sizes for Figure 1 are 11,918 for 16 and older, 346 for 16-17, and 349 for 18-20. N-size refers to the number of cases in the analysis. Figure 1 is based on a combined sample because the items analyzed appeared on both questionnaires. Most other analyses in this Research Note are based on items appearing on only one questionnaire, and therefore are restricted to the sample for that single questionnaire.

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The percentage of the total population 16 and older who are nondrivers has gradually increased since the survey was first administered in 1994: 8% in 1994 and 1996, 9% in 1998, 10% in 2000, 11% in 2003, and most recently 12% in 2007. Figure 2 shows the pattern solely for drivers under the age of 21. With the exception of 1998, the percentages are fairly stable from 1994 through 2003. Sample sizes are too small to make any definitive statement about the 4-percentage-point increase in 2007 among 16- and 17-year-olds.

Figure 2 – Percentage of Youth Who Are Nondrivers: 1994-2007



Nighttime Driving – The 2007 MVOSS included a new question asking drivers how often they drive at night, after 9 p.m. For the total population, about three-fifths of drivers typically drive at least a few nights a week (Table 1). GDL systems often have nighttime driving restrictions attached to them, making the responses of youth to this questionnaire item of particular interest. The information obtained from youth participating in the survey suggests that a considerable percentage of novice drivers drive after 9 p.m. at least a few nights a week, and that the pace increases among 18- to 20-year-olds (an age range where GDL restrictions do not apply). The survey is unable to provide conclusive statements about the magnitude that occurs because of the small number of drivers 20 and younger in the sample.

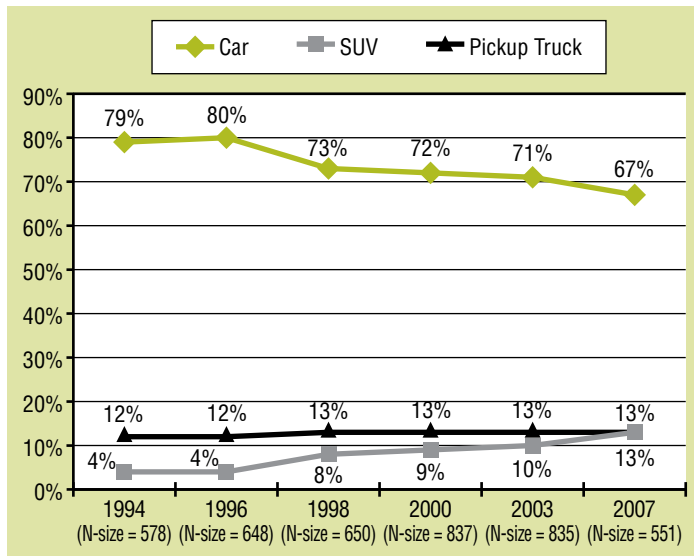
Table 1 – Drivers' Reported Frequency of Driving at Night by Age

	N-size	Percent
Total	5,310	
Almost every night		13%
A few nights a week		48%
A few nights a month		23%
Never drive after 9 p.m.		10%
16-17	134	
Almost every night		14%
A few nights a week		54%
A few nights a month		13%
Never drive after 9 p.m.		14%
18-20	146	
Almost every night		29%
A few nights a week		49%
A few nights a month		11%
Never drive after 9 p.m.		7%
21-29	600	
Almost every night		18%
A few nights a week		54%
A few nights a month		19%
Never drive after 9 p.m.		6%
30-39	1,309	
Almost every night		15%
A few nights a week		49%
A few nights a month		26%
Never drive after 9 p.m.		6%
40-64	2,194	
Almost every night		12%
A few nights a week		50%
A few nights a month		23%
Never drive after 9 p.m.		8%
65 and older	830	
Almost every night		4%
A few nights a week		34%
A few nights a month		28%
Never drive after 9 p.m.		23%

Type of Vehicle Driven – The MVOSS asked the type of vehicle driven most often by the respondent (i.e., the respondent's primary vehicle). Although the passenger car continues to be the most prevalent vehicle driven by the public, the trend for the total population 16 and older is for it to be a diminishing percentage of the vehicle fleet. Since 1994, the percentage of all primary vehicles that were passenger cars has dropped from 71% to 54%. Much of the lost market share transferred to sport utility vehicles (SUVs), going from 3% to 17%.

Figure 3 shows the percentage of youth 16 to 20 whose primary vehicle was a passenger car, SUV, or pickup truck (together exceeding 90% of primary vehicles). Youth were more likely than the total population 16 and older to drive passenger cars. However, the trend over time is similar to that of all drivers, proportionally fewer cars and more SUVs. A technical note: Some of the reported increase in SUVs from 1994 to 1998 may be from a change in MVOSS wording. The term “sport utility vehicle” was missing from the stem of the survey question in 1994 and 1996 (i.e., respondents had to volunteer the response), but was added beginning in 1998.

Figure 3 – Trend in Type of Primary Vehicle Driven by Youths 16 to 20, 1994-2007



Driver Education – Sixty-two percent of drivers had taken a driver’s education course before getting a driver’s license (Table 2). The percentage was about the same for age groups under 65, but lower for those 65 and older. Males and females did not appreciably differ. But differences appeared when analyzed by race, ethnicity, and socioeconomic status. African-Americans and Hispanics were less likely to have taken a course than were Whites and Non-Hispanics, respectively. Fewer years of formal education or lower household income also corresponded with a greater likelihood of not taking a driver’s education course.

Table 2 – Percentage of Drivers Who Took a Driver’s Education Course by Driver Characteristics

	N-size	Percent
Total	5,393	62%
Sex		
Male	2,556	63%
Female	2,837	60%
Age		
16-20	271	70%
21-29	588	71%
30-39	1,275	70%
40-64	2,322	69%
65 and older	839	27%
Race		
African-American	444	51%
White	4,199	63%
Ethnicity		
Hispanic	461	49%
Non-Hispanic	4,866	63%
Income		
Household Income Under \$30,000	1,060	50%
\$30,000-\$49,999	997	59%
\$50,000-\$99,999	1,660	67%
\$100,000 or more	948	75%
Education		
Not a High School Graduate	476	50%
Finished Grade 12/Obtained GED	1,472	55%
Some College Experience	1,293	65%
Graduated College	2,099	69%

With respect to geographic comparisons, about the same percentages of urban (62%), suburban (62%), and rural (59%) drivers had taken a driver’s education course. Greater variation appeared when examining Census regions, with the lowest percentage of course takers being found in the South (Figure 4).

Among drivers who had taken a driver’s education course, more than three-quarters (77%) had taken a course in school. Drivers also had taken courses from private companies (25%), from parents or family members (19%), and from the Internet (1%). Three percent had taken a driver’s education course from some other source than those specified above. As indicated by the percentages, the respondents could identify more than one source.

Figure 4 – Percentage of Drivers Who Took a Driver’s Education Course by Census Region

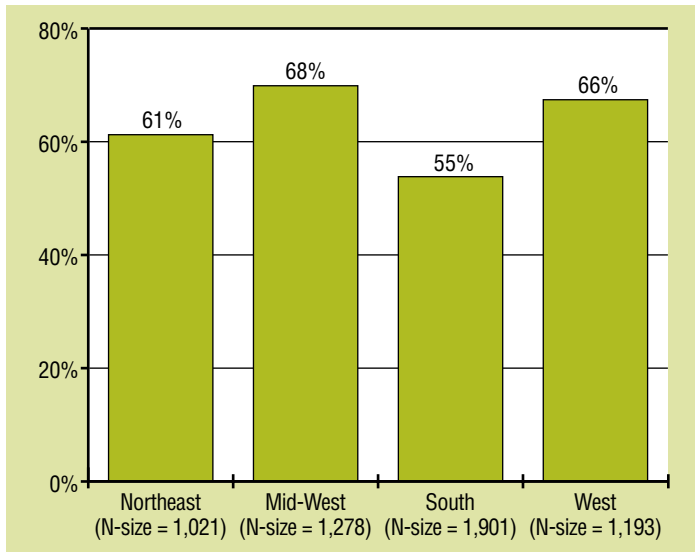
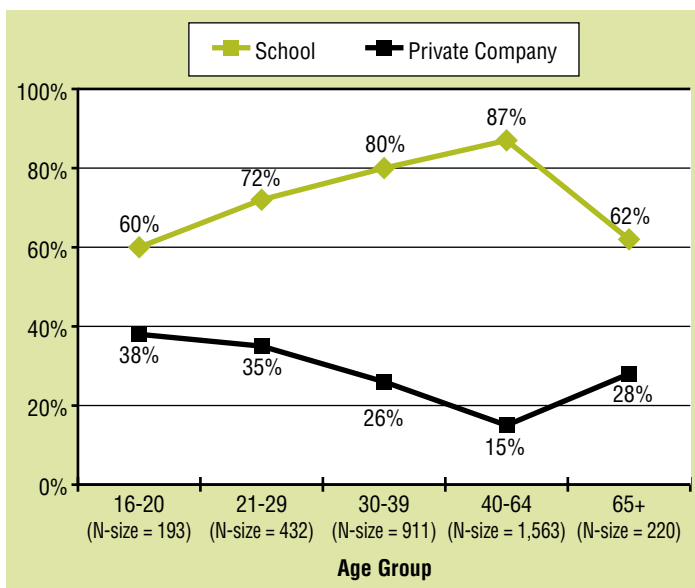


Figure 5 shows that the youngest (60%) and oldest (62%) drivers were least likely to have taken a driver’s education course in school. The youngest drivers were most likely of all age groups to have taken a course provided by a private company (38%).

Figure 5 – Source of Driver’s Education Course by Driver’s Age



Driver Licensing/GDL – Thirty-two percent of the population 16 and older believe the youngest age at which teenagers should be allowed to get a learner’s permit to drive is 15 or younger. Most of those favor age 15 (27%), but 4% prefer age 14 and 1% prefer younger. Thirty-nine percent believe the minimum age should be 16, 28% believe it should be older than 16, and 2% “don’t know.” Table 3 shows that the youngest age group is most likely to favor a lower age for obtaining the learner’s permit.

Table 3 – Preferred Minimum Age for Teenagers to Obtain A Learner’s Permit

	N-size	Younger Than 16	Age 16	Older Than 16
Total Population	6,010	32%	39%	28%
16-20	351	53%	35%	12%
21-29	689	38%	30%	31%
30-39	1,389	31%	37%	30%
40-64	2,474	30%	42%	26%
65 and older	997	16%	48%	32%

Among those living with a child 15 or younger, 36% favor a minimum age of 15 or younger for the learner’s permit compared to 29% among those not living with a child in this age range. The single year of age preferred most often by both groups was 16, with 35% of those living with a child believing that was the appropriate minimum age compared to 41% of those not living with a child.

The public does not believe that a teenager’s participation in a formal driver’s education course makes it unnecessary for parents to participate in the teenager’s training. Instead, 78% consider it very important that parents or guardians help teach their teenagers to drive in addition to the course instruction. Fifteen percent consider it somewhat important; 6% believe it not that important.

About four-out-of-five people (82%) recommend that parents or guardians spend 25 hours or more teaching their teenagers how to drive. More than one-third (35%) recommend 50 or more hours. Table 4 shows the recommended number of hours broken out by demographic characteristics. The numbers do not total 100% as the table excludes the percentages of those who said they did not know.

Table 4 – Recommended Number of Hours That Parents/Guardians Should Spend Teaching Their Teenagers How To Drive

	N-size	More Than 50 Hours	25-50 Hours	Less Than 25 Hours	None
Total Population	6,010	35%	47%	11%	2%
Sex					
Male	2,793	35%	48%	11%	1%
Female	3,217	35%	46%	10%	2%
Race					
African-American	561	31%	52%	14%	1%
White	4,503	36%	48%	10%	2%
Ethnicity					
Hispanic	634	31%	44%	17%	1%
Non-Hispanic	5,297	36%	48%	10%	2%
Age					
16-20	351	30%	55%	13%	1%
21-29	689	35%	51%	10%	1%
30-39	1,389	43%	44%	10%	1%
40-64	2,474	38%	46%	10%	2%
65 and Older	997	26%	45%	13%	4%
Education					
Not a High School Graduate	674	30%	47%	14%	1%
Finished Grade 12 or Obtained GED	1,705	35%	49%	9%	1%
Some College	1,387	37%	48%	9%	2%
College Graduate	2,175	36%	45%	12%	2%
Income					
Less Than \$30,000 Income	1,414	34%	45%	13%	1%
\$30,000-49,999	1,063	36%	52%	8%	1%
\$50,000-99,999	1,700	37%	50%	8%	2%
\$100,000 Or More	965	37%	46%	12%	2%
Population Density					
Urban	1,908	33%	46%	13%	2%
Suburban	2,983	36%	47%	10%	2%
Rural	1,119	35%	49%	9%	1%

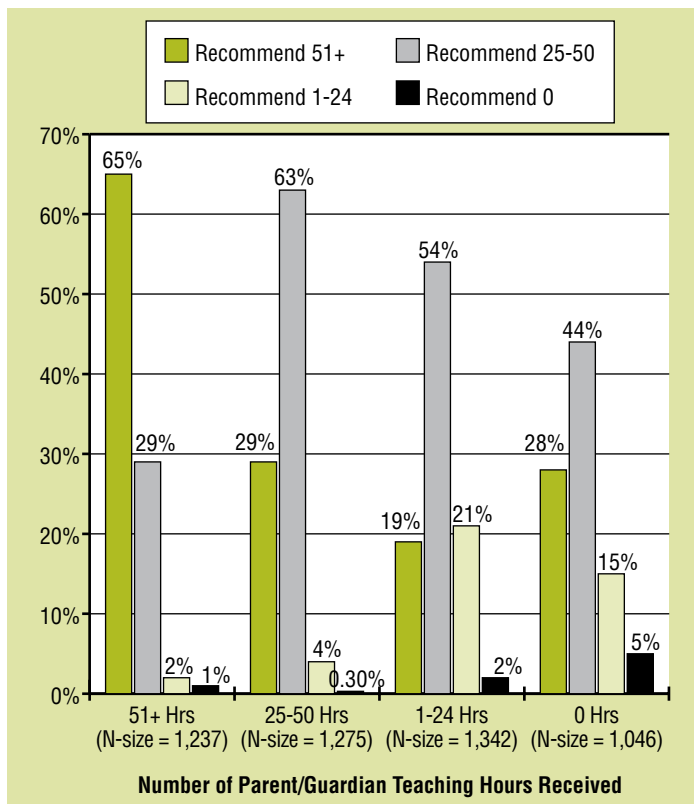
Table 5 – Number of Hours, Reported by Drivers, That Their Parents Spent Helping Teach Them To Drive

	N-size	More Than 50 Hours	25-50 Hours	Less Than 25 Hours	None
Total Population	5,393	24%	24%	25%	19%
Sex					
Male	2,556	25%	24%	26%	18%
Female	2,837	22%	24%	23%	21%
Race					
African-American	444	21%	24%	23%	25%
White	4,199	25%	24%	25%	17%
Ethnicity					
Hispanic	461	18%	20%	21%	31%
Non-Hispanic	4,866	25%	24%	25%	17%
Age					
16-20	271	38%	33%	22%	4%
21-29	588	30%	31%	21%	12%
30-39	1,275	28%	25%	27%	14%
40-64	2,322	23%	23%	27%	19%
65 and Older	839	10%	12%	23%	38%
Education					
Not a High School Graduate	476	26%	21%	16%	25%
Finished Grade 12 or Obtained GED	1,472	21%	20%	28%	22%
Some College	1,293	25%	25%	22%	19%
College Graduate	2,099	25%	27%	27%	14%
Income					
Less Than \$30,000 Income	1,060	20%	20%	20%	28%
\$30,000-49,999	997	25%	22%	24%	20%
\$50,000-99,999	1,660	27%	26%	27%	14%
\$100,000 Or More	948	25%	28%	30%	14%
Population Density					
Urban	1,613	23%	25%	23%	21%
Suburban	2,748	24%	24%	25%	18%
Rural	1,032	27%	21%	25%	18%

Less than half of drivers (48%) had parents who spent 25 or more hours helping to teach them to drive. The figure was lower for Hispanics (38%) and people having household incomes under \$30,000 (41%). The youngest drivers were the most likely to report substantial parental participation. Table 5 shows the number of reported hours that drivers' parents spent helping to teach them to drive, broken out by demographic characteristics. The Table does not include the percentages of those who said they did not know, or the percentages of those who volunteered that an adult other than a parent taught the driver.

Figure 6 shows the relationship of parental/guardian assistance recommended by drivers to the amount of parental assistance that the drivers themselves received. Drivers usually recommend as many, or more, hours of parental assistance for teenagers as they themselves received. Drivers who received more than 50 hours assistance from their parents tend to recommend more than 50 for today's teens (65%); although about one-third instead recommend 25 to 50 hours (29%), less than 25 hours (2%), or no hours (1%). Drivers whose parents spent 50 or fewer hours helping teach them to drive tend to recommend 25 or more hours of parental assistance.

Figure 6 – Recommended Number of Parental Teaching Hours by Number of Hours of Parent/Guardian Assistance Drivers Themselves Received



The interviewers briefly described to respondents the possible driver licensing stages following teenagers' successful completion of the requirements of the learner's permit stage. Depending on the driver licensing law in the State in which the teenager is seeking the license, the teenager either becomes eligible to obtain the same driver's license adults get, or else must first go through a provisional license stage where there are special rules drivers must follow. The provisional license stage is a component of a graduated driver licensing system. GDL seeks to ease young drivers onto the roadways by gradually exposing them to progressively more difficult driving experiences. Young drivers are required to demonstrate responsible driving behavior at each stage of licensing before advancing to the next level.

The respondents were asked what they thought was best after the learner's permit; that teenagers get the same driver's license as adults, or that they get a provisional license with special rules. Four-out-of-five (79%) believe that teenagers should go through a provisional license stage rather than directly to an unrestricted adult license. The percentage varied little across demographic groups except for the youngest and least educated (Table 6). Those most affected, people 16 to 20, were about twice as likely as most other groups to want to skip the provisional licensing stage.

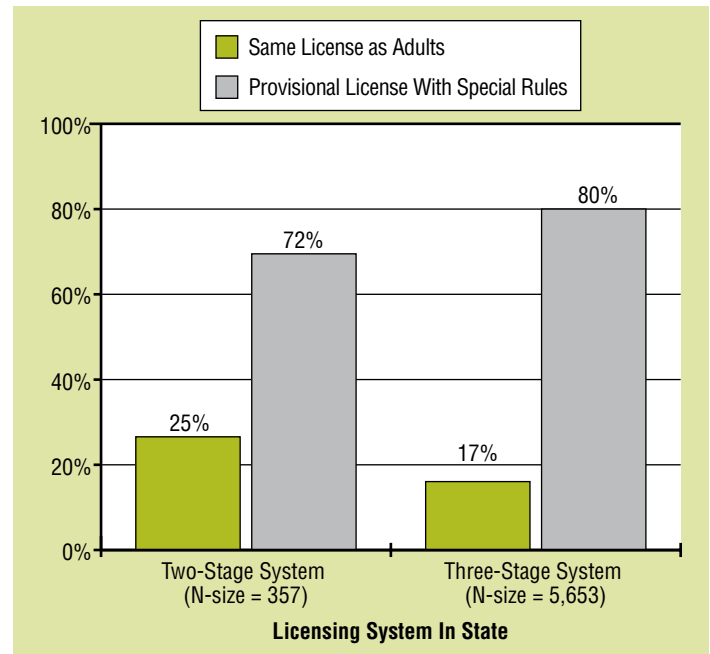
At the time the MVOSS was administered in 2007, no State had a GDL system encompassing all components of the model system recommended by NHTSA and its partners. However, 45 States and the District of Columbia had a three-stage licensing system for novice drivers, with attached restrictions varying across States. Five States had a two-stage system with no intermediate stage: Arizona³, Arkansas, Kansas, Minnesota, and North Dakota. Figure 7 compares those latter States to the rest of the country in preference for a two-stage versus three-stage licensing system. Support for a two-stage system was somewhat higher in States with two-stage systems compared to States with three-stage systems. However, even in States with two-stage systems, the vast majority of people 16 and older preferred a provisional license stage.

³ Restrictions attached to an intermediate stage of licensing went into effect in Arizona on July 1, 2008. This Research Note treats Arizona as a two-stage system for the above analysis because the restrictions were not yet in effect at the time the survey was taken.

Table 6 – Type of Driver’s License Preferred for Teenagers After They Have Successfully Completed The Learner’s Permit Stage

	N-size	Same Driver’s License As Adults	Provisional License With Special Rules	Don’t Know
Total Population	6,010	17%	79%	3%
Sex				
Male	2,793	19%	78%	3%
Female	3,217	15%	82%	3%
Race				
African-American	561	21%	75%	3%
White	4,503	17%	81%	3%
Ethnicity				
Hispanic	634	18%	78%	4%
Non-Hispanic	5,297	17%	80%	3%
Age				
16-20	351	37%	61%	2%
21-29	689	19%	78%	3%
30-39	1,389	15%	83%	2%
40-64	2,474	13%	84%	3%
65 and older	997	12%	83%	4%
Education				
Not a High School Graduate	674	28%	66%	6%
Finished Grade 12 or Obtained GED	1,705	16%	81%	3%
Some College	1,387	15%	82%	2%
College Graduate	2,175	14%	83%	2%
Income				
Less Than \$30,000 Income	1,414	18%	78%	4%
\$30,000-49,999	1,063	17%	80%	2%
\$50,000-99,999	1,700	17%	81%	2%
\$100,000 Or More	965	14%	84%	2%
Population Density				
Urban	1,908	18	79	3
Suburban	2,983	16	81	3
Rural	1,119	20	76	3

Figure 7 – Type of Driver’s License Preferred for Teenagers After They Have Successfully Completed The Learner’s Permit Stage, by Licensing System In State



The interviewers read five different restrictions that might be attached to a provisional license to respondents who favored a provisional license stage (a small number of respondents who said they were unsure if they favored a provisional license stage also received the question and are included in Table 7). The respondents were asked if they agreed or disagreed that a provisional license for teenagers should include each restriction. Table 7 shows substantial support for all of the specified restrictions, with the percentage in agreement that the restriction should be included ranging from 73% to 99%. A seat belt requirement, and a prohibition against using a cell phone while driving, ranked the highest. Teenagers were least likely to favor the restrictions, particularly the unsupervised nighttime driving restriction. This again is based on a small number of teenage respondents.

Table 7 – Support for Attaching Specified Restrictions To a Provisional License, Among People Who Favor a Provisional License Stage

Restriction	Age	N-size	% Who Agree
The teenager must wear a seat belt at all times while driving.	16 and Older	5,115	99%
	16-20	218	97%
	21-29	558	99%
	30-39	1,186	99%
	40-64	2,195	99%
	65+	867	99%
The teenager cannot use a cell phone while driving.	16 and Older	5,115	94%
	16-20	218	82%
	21-29	558	92%
	30-39	1,186	94%
	40-64	2,195	97%
	65+	867	97%
The teenager has a restriction on the number of teenage passengers when he/she is driving.	16 and Older	5,115	86%
	16-20	218	69%
	21-29	558	80%
	30-39	1,186	87%
	40-64	2,195	90%
	65+	867	92%
The teenager must drive at least one year without any violations on his or her driving record before getting a regular adult license.	16 and Older	5,115	83%
	16-20	218	71%
	21-29	558	84%
	30-39	1,186	87%
	40-64	2,195	82%
	65+	867	86%
The teenager cannot drive unsupervised after 9 p.m.	16 and Older	5,115	73%
	16-20	218	46%
	21-29	558	77%
	30-39	1,186	78%
	40-64	2,195	74%
	65+	867	75%

All drivers in the sample who usually had a cell phone in the vehicle with them were asked how often they themselves talked on the phone while driving. Sixteen percent talk on the phone during most or all trips while driving, 17 percent talk on the phone for about half their trips, 44 percent talk on the phone for fewer than half their trips, and 22 percent reported never talking on the phone while driving. Yet regardless of how frequently drivers themselves talk on the phone while driving (i.e., which category in the previous sentence they fall into), more than 90% believe there should be a cell phone restriction attached to provisional licenses for teenagers.

Discussion – The MVOSS data showed strong support both for parental participation in driver training as well as for GDL systems that gradually integrate novice drivers into the traffic environment. In February 2007, NHTSA and other organizations sponsored a symposium to review the status of GDL and assess its needs. In summarizing the symposium deliberations, Hedlund⁴ remarked on the effectiveness of GDL and identified a series of “next steps” to improve its application. Those recommended steps included communicating the value of GDL in order to build greater support. The MVOSS findings pointed to an already receptive audience. But the MVOSS results also showed differences in support across groups. Efforts at developing communication strategies may benefit from taking such differences into account and refining strategies accordingly. Hedlund also noted the importance of bringing parents into the GDL process. The MVOSS showed a general willingness in principle among the public to support parental participation. Turning that willingness into action will require not just motivating parents to become actively involved, but also determining what assistance they may need to overcome deterrents. In obtaining reaction to several types of novice driver restrictions, MVOSS obtained weakest support for a provision that precludes driving at night unsupervised. Yet a nighttime driving restriction was one of the GDL components that the symposium agreed had solid research support. Hedlund wrote there are still questions regarding the details of this and other components, and more research is needed to answer those questions. Such research may help to better define the components, and build a stronger case for support.

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⁴ Hedlund, James (2007). *Novice teen driving: GDL and beyond*. Journal of Safety Research, 38(2).