

TRAFFIC TECH



Technology Transfer Series

Number 399 November 2010

Driver License Testing of Young Novice Drivers

Driver license tests are designed to ensure that people using public roadways have a minimum level of driving skill and an awareness of safe driving practices and road laws. License applicants proceed through the administrative processes of their respective licensing agencies, and must take and pass the actual examinations. In addition to successfully navigating the testing process, young novice drivers also must adhere to graduated driver licensing (GDL) policies, which govern driving practice both before and after licensure.

Popular belief holds that license tests of increased difficulty require more preparation, and that more study and practice increase knowledge and driving competence, leading to safer driving. While a logical assumption, the relationship between testing rigor and safe driving is unclear. This relationship was explored via contract work, supported by the National Highway Traffic Safety Administration. The researchers documented the methods of driving licensure in the United States, classified the tests by quality and difficulty, and compared States with more rigorous testing to States with less rigorous testing in terms of teens' self-reported risky driving behaviors, teen crashes, suspensions, and convictions. The researchers also completed a review of licensing exams in other countries. During this project, Connecticut upgraded its driver licensing exam, providing an opportunity to conduct a case study to evaluate the impact of the new testing requirements on teens' behavior and perceptions.

Driver Licensing Exam Inventory and Analysis

Information about licensing procedures and test requirements was sought from each State (e.g., State-employed executives, administrators, managers, or staff members in each State's driver licensing agency) through telephone, e-mail, or postal mail. Table 1 shows the criteria used to distinguish States with relatively more or less rigorous licensing exams.

The States selected for analyses were Connecticut, Minnesota, Rhode Island, and Tennessee (more difficult); and Arkansas, Iowa, Kansas, and West Virginia (less difficult).

A cross-sectional analysis of Fatality Analysis Reporting System (FARS) data determined differences in crash rates among teens, controlling for the crash experience of older drivers in each State and State graduated driver licensing (GDL) laws.

Table 1. Licensing Requirements and Testing Information

	<u> </u>	
	Whether the test is optional	
Knowledge Test Components	Number of content areas	
	Length of test	
	Scoring criteria	
	Method of delivery	
	Number of languages available	
	Average amount of time to complete	
	Length of time required before retest	
In-Vehicle Test Components	Whether the test is optional	
	Scoring criteria	
	Testing environment	
	Use of personal versus testing vehicle	
	Availability of interpreters	
	Average amount of time to complete	
	Length of time required before retest	
Vision Test Components	Whether the test is optional	
	Level of visual acuity	
	Visual field perception	
Test Failure Rates	Not available for all States	

The analysis of fatal crash rates found no evidence that the driver license test by itself had any effect.

Connecticut's Licensing Exam Upgrade

The Connecticut Department of Motor Vehicles (DMV) lengthened its knowledge test from 16 to 25 questions and increased the passing threshold from 75 percent to 80 percent. The Connecticut DMV conducted surveys with teen drivers in their licensing offices in fall 2008 before the changes were enacted, and then again in February 2009, after the changes had been enacted. There were no strong trends from pre- to post-changes in Connecticut. The test failure rate was very low, and it appeared unlikely that merely lengthening the test had any measurable impact on preparedness for licensure.

Connecticut also changed the number of practice driving hours for teen drivers from 20 to 40. This change did not significantly increase the number of self-reported hours of supervised driving practice. Learners in the 20-hour group (prior to the law change) spent an average of 32.7 hours prac-

ticing; learners in the 40-hour group (after the law change) spent an average of 33.1 hours.

Connecticut strengthened the penalties associated with GDL violations. Self-report surveys of license applicants indicated that most teens affected by the policies were aware of the changes with two exceptions: (1) teens were least aware of special penalties for passengers in the vehicles of teen drivers who are under the GDL law; and (2) many were not aware that police have the authority to confiscate their license and vehicle for certain violations. Table 2 indicates the extent to which surveyed teens thought the police would enforce these new policies.

Table 2. Perceived Enforcement of GDL Provisions

Perceived Likelihood of Being Stopped and Cited by Police for Cell Phone Violations			
Likelihood of Stop	2008 Sample (N=259)	2009 Sample (N=280)	
Very Likely	17%	21%	
Likely	27%	30%	
Somewhat Likely	33%	31%	
Unlikely	18%	13%	
Very Unlikely	5%	5%	
Perceived Likelihood of Being Stopped by Police if Violating Night or Passenger Restriction			
Likelihood of Stop	2008 Sample (N=259)	2009 Sample (N=279)	
Very Likely	17%	12%	
Likely	28%	26%	
Somewhat Likely	38%	39%	
Unlikely	14%	20%	
Very Unlikely	4%	3%	
If Stopped for Night or Passenger Violation, Perceived Likelihood Police Would Take Your License/Seize Your Vehicle			
Likelihood of Stop	2008 Sample (N=258)	2009 Sample (279)	
Very Likely	31%	22%	
Likely	30%	33%	
Somewhat Likely	26%	28%	
Unlikely	10%	15%	

An International Review

The testing regimens of the other graduated licensing countries (New Zealand, Australia, and Canada) were also reviewed. These countries updated license tests in recent years as GDL systems were introduced. The revised license

2%

3%

tests are generally more difficult than in the United States and include additional tests to move to the next GDL level.

In 1999, an exit test was introduced in New Zealand to assess whether drivers should be allowed to graduate from the restricted phase to full licensing. This exit test is a three-phase on-road test: Phase 1, basic driving skills; Phase 2, hazard recognition and identification skills in urban areas; and Phase 3, hazard recognition and identification skills on higher speed roads, such as highways.

Other countries and jurisdictions have integrated hazard perception testing within their GDL systems, including New South Wales, Victoria, Western Australia, Queensland, South Australia, Ontario, British Columbia, and Alberta.

New tests are a logical accompaniment to GDL systems, but they have not been a part of the GDL movement in the United States. International testing regimens may be models for the United States to consider, although they have not been evaluated to determine the extent to which they alter the young driver problem through improved driver performance or license delay.

Conclusion

Even though GDL system requirements have changed dramatically, there have been few upgrades in U.S. driving tests, and overall the tests are poorly correlated with driving performance and safety. Improvements made to the California test occurred in the early 1990s prior to the GDL movement. The only test update subsequent to the GDL movement was a longer knowledge test in Connecticut, which appears to have had minimal impact. There may be future changes in testing protocols in the United States, inspired by the American Association of Motor Vehicle Administrators' recent recommended uniform testing requirements. More difficult licensing exams and additional testing between GDL stages in other countries may serve as models, pending evaluation, for improved testing in the United States.

How to Order

Download a copy of *Driver License Testing of Young Novice Drivers* (48 pages), prepared by Preusser Research Group from www.nhtsa.gov, or write to the Office of Behavioral Safety Research, NHTSA, NTI-130, and 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394. Patty Ellison-Potter, Ph.D. was the project manager for this study.



Very Unlikely

U.S. Department of Transportation

National Highway Traffic Safety

Administration

1200 New Jersey Avenue SE., NTI-132 Washington, DC 20590

TRAFFIC TECH is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to receive a copy, contact Angela H. Eichelberger, Ph.D., Editor, fax 202-366-7394, e-mail: angela.eichelberger@dot.gov.