

Teens have the highest crash rate of any group in the United States.



# Supplementary Driver Training for New Drivers

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## Author

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Bruce C. Hamilton  
AAA Foundation for Traffic Safety  
607 14<sup>th</sup> Street NW, Suite 201  
Washington, DC 20005  
[bhamilton@aaaafoundation.org](mailto:bhamilton@aaaafoundation.org)

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## About the AAA Foundation for Traffic Safety

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## Abstract

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This report summarizes the results of a study of supplementary driver training, conducted by Dunlap and Associates, Inc. for the National Highway Traffic Safety Administration (NHTSA). For the purposes of this study, “supplementary driver training” refers to programs that are intended to improve the abilities of young new drivers by teaching higher-order vehicle handling and cognitive skills not typically covered in traditional basic driver education (e.g., skid recovery and hazard anticipation). While such programs may take a variety of different forms, they typically pick up where basic driver education – which is designed to prepare teens to pass their state’s licensure exams – leaves off, and provide more advanced training to newly-licensed or permitted drivers.

These programs have been gaining in popularity due to persistently-high crash rates of young drivers, and increasing doubts about the effectiveness and safety benefits of traditional driver education. To date, however, very little research has been conducted on supplementary training programs; this NHTSA study represents an initial undertaking to document, classify, and describe the supplementary programs available to young drivers today and to lay the groundwork for future scientific evaluation of their effectiveness in creating safer drivers (such an evaluation was beyond the scope of the current study). Other types of advanced driver training programs – such as those designed solely for thrill seekers or professional drivers – fell outside the scope of the study.<sup>i</sup> The purpose of this AAA Foundation for Traffic Safety report is to highlight the study’s major findings, particularly those relevant to policymakers, driving school owners, and parents and other potential consumers of such programs. The full report, *Examination of Supplementary Driver Training and Online Basic Driver Education* (DTNH22-05-D-35043), is available from NHTSA.

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<sup>i</sup> In some cases, programs were included in the study even if their primary emphasis areas didn’t fall within its scope. For example, some fleet driver training programs would offer supplementary training for interested young drivers, and in such an instance these programs were included in the study.

## Introduction

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Young people continue to be among the nation's most vulnerable road users, with motor vehicle crashes responsible for more deaths of children, teens, and young adults in the United States than anything else. It is a devastating reality that has prompted decades of efforts to curb the trend, yet until the proliferation of graduated driver licensing (GDL) laws in the mid-1990s, few if any of these actually translated to a reduction in fatalities. Grounded in the knowledge that some of the primary causes of teen driver crashes – such as failures to anticipate hazards, poor speed management, and elevated tendency for risk-taking – stemmed from inexperience and immaturity, GDL programs were established to create as safe an environment as possible during teens' first months behind the wheel.<sup>1</sup> Under this structure, teens typically advance through three stages on the way to full licensure: the learner's permit phase, in which all driving must be supervised by a parent or other adult; the intermediate license phase, in which teens are subject to restrictions (e.g. no late-night driving, no passengers) while driving unsupervised; and finally full licensure. By gradually exposing novice drivers to increasingly-risky circumstances, GDL laws allow teens to get behind-the-wheel experience before confronting more hazardous driving scenarios, an approach that has been credited with reducing teen crashes and fatalities in recent years.<sup>1</sup> Moreover, studies have shown that parents and other supervisors during the learner's permit phase generally do a good job of creating a safe in-car environment, and that their presence has a positive impact on young drivers' behavior.<sup>2</sup> Teen fatalities and serious crashes, therefore, are generally rare during this phase.

Unfortunately, the danger to teens skyrockets during the first few months of unsupervised driving, the time during which their already-elevated crash risks are highest.<sup>1</sup> While drivers aged 16-19 have crash rates per mile driven that are quadruple those of drivers 20 and older, crash rates for 16-year-olds are double those even of 18- and 19-year-olds.<sup>3</sup> As part of the effort to further reduce young driver crash rates by speeding up this learning curve, interest has increasingly been focused on continuing the training process once new drivers have obtained their learner's permit or license. As such, a number of supplementary driver training programs have been gaining in popularity around the country.<sup>1</sup> While such programs may take a variety of different forms, they typically pick up where basic driver education – which is designed primarily to prepare teens to pass their state's licensure exams – leaves off, and provide more advanced training to newly-licensed or permitted drivers. This may include instruction in advanced vehicle handling skills not typically covered in traditional basic driver education – such as skid control, emergency braking, and hazard avoidance – as well as cognitive skills like hazard anticipation, visual scanning, and situational awareness.<sup>1</sup> Such programs almost always include an in-car training component.<sup>1</sup>

In the face of persistently high teen crash rates, the potential for additional training to create safer drivers has been the subject of much debate and scrutiny. There is broad agreement that young drivers need more practice – such as more supervised hours driving with a parent – than many currently get.<sup>2,4,5</sup> Much more controversial, however, is whether advanced skills instruction (such as skid recovery) is appropriate additional training for novices to receive. Research has suggested that teens do not get as much supervised driving experience during the learner stage of GDL as previously assumed, and that the practice they do get is often in the daytime, on nice days, and along familiar routes.<sup>2</sup> This limited

practice does not prepare teens for the range of circumstances they will encounter behind the wheel, suggesting they would benefit from more supervised hours and additional practice under varying weather and road conditions.<sup>2,5</sup> This finding was further supported by a recent detailed examination of the decline in teen driver crashes seen over the first months of unsupervised driving.<sup>4</sup> Researchers with the UNC Highway Safety Research Center found that some types of crashes – such as left-turn crashes – declined significantly more rapidly than did overall teen crashes during these first months, and suggested that this might indicate that practice can quickly erode some of the perceptual and judgment errors made by inexperienced drivers.<sup>4</sup> (In contrast, crashes associated with certain risky behaviors, such as tailgating, declined much more slowly, which researchers suggested might be related more to immaturity that is harder to address.)<sup>4</sup> Recognizing the importance of practice and experience for safe driving, the National Highway Traffic Safety Administration (NHTSA) and various stakeholders created and published the “Novice Teen Driver Education and Training Administrative Standards” to guide the teen driver learning process by increasing the scope, quantity, and quality of novice driver education and training.<sup>6</sup>

While findings such as these make a strong case that young drivers need more practice than they appear to be getting, it is unclear whether supplementary training programs of the type considered in this report provide the kind of additional experience that would be considered beneficial. Despite some claims that such programs can accelerate the learning curve and drive down crash rates of new drivers, no formal evaluations of the actual impact that these courses have on teen crash rates have been conducted to date. Moreover, a concern persists that there is a risk that these supplementary training programs might actually have a net adverse effect on safety by instilling in young drivers a degree of confidence that substantially exceeds their true skill level.<sup>1</sup>

Given increasing interest in supplementary driver training and the overall lack of knowledge about its potential impacts on teen driver safety, NHTSA funded a study to document the kinds of courses available to teens, the curriculum and emphasis areas being taught, and the characteristics of the providers and instructors of such programs.<sup>1</sup> In addition, researchers were interested in developing a meaningful system for classifying the programs on the market today, and examining commonalities and differences among course offerings.<sup>1</sup> The study was conducted for NHTSA by Dunlap and Associates, Inc. and the findings were presented in a report titled *Examination of Supplementary Driver Training and Online Basic Driver Education*.

## **Purpose and Objectives**

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The purpose of the NHTSA study was to provide an overview of the current state of supplementary driver training in the United States by documenting as many programs and providers of such courses as possible. Of interest were courses designed to pick up where traditional, basic driver education programs typically leave off; that is, courses that continue the training process of young, inexperienced drivers by providing instruction in more advanced cognitive and vehicle-handling skills. While determining the impacts that such programs have on safety was beyond the scope of the study, the focus was on young driver training because of an increased interest nationwide in the potential for

supplementary courses to reduce teen crashes. Advanced programs primarily intended for things like employee training or thrill-seeking were therefore not included in the study, unless – as was found in a few cases – these programs also offered skills instruction to young drivers.

This AAA Foundation for Traffic Safety report serves as a summary and discussion of the study’s findings related to supplementary driver training programs (a separate AAA Foundation report dealing with the “online driver education” portion of the study is also available). The purpose of this report is to highlight the findings most pertinent to policymakers, driving school owners, and parents and other potential consumers for whom such information will be helpful while debating regulations and oversight, selecting topics for coverage, or examining course offerings. As the AAA Foundation is first and foremost concerned with safety, it is hoped that this document will help generate a larger discussion of the potential virtues and pitfalls of supplementary training for teens and novice drivers, and that this project will lay important groundwork for scientific, outcome-based safety evaluations of such programs.

## **Methods**

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Researchers conducted extensive internet searches and relied on a network of contacts in the driver education field to identify supplementary training programs and course providers. In order to prioritize programs for inclusion in the study, a five-point system was developed to rank the courses according to how well they fit within its scope. Contact with program providers was made through e-mails and follow-up phone calls, with greater efforts made to get in touch with providers of courses rated more highly on the scale. Discussion topics included program history, years in operation, student demographics, marketing techniques, instructor qualifications, and evaluation methods. Data from the responses were coded and subject to a descriptive analysis, with several programs then selected for site visits and inclusion as specific case studies.

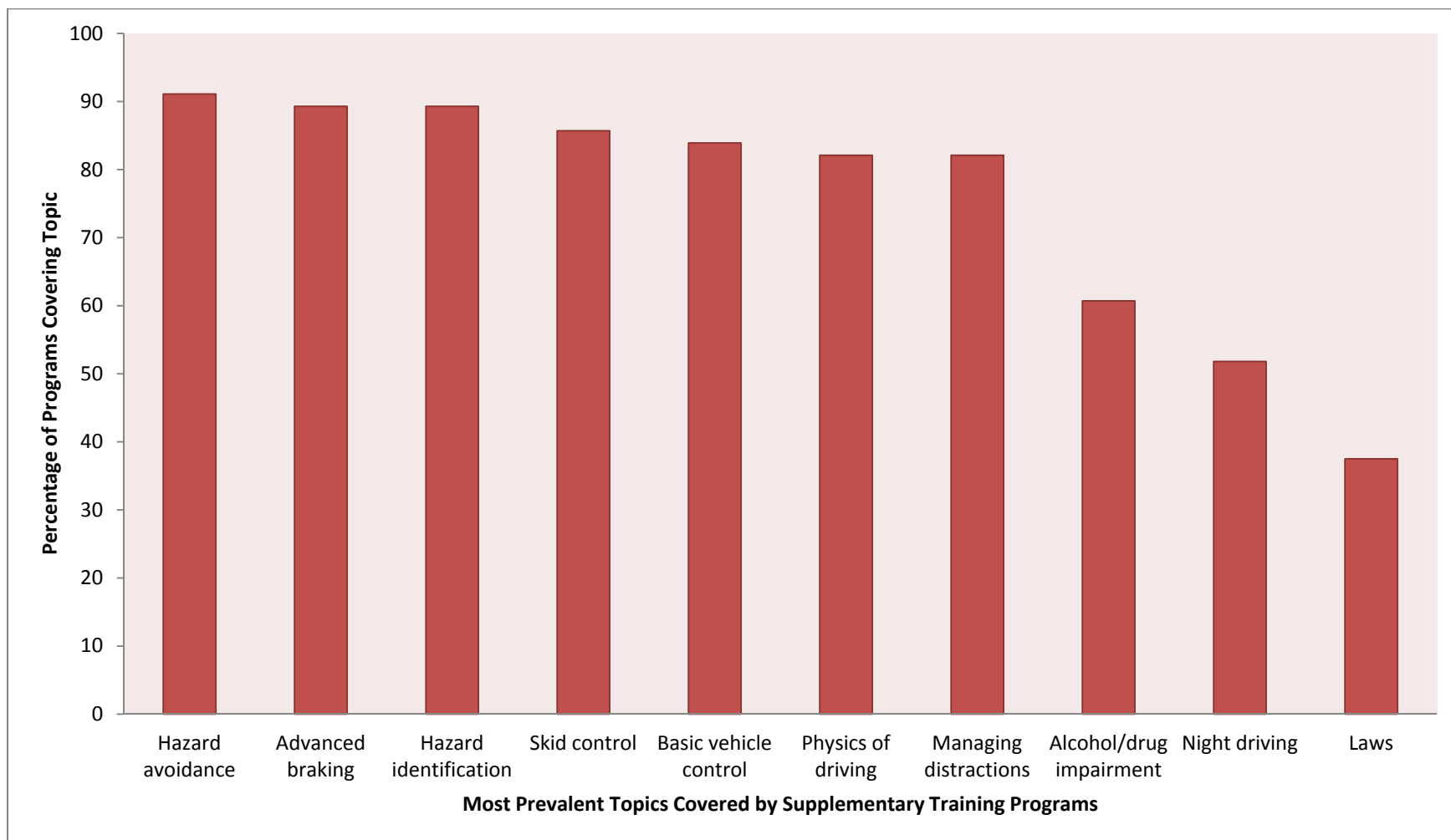
Unless otherwise cited, all information presented in this document is based on the findings of the study. More detailed analysis is available in the original report along with the write-ups of the selected case study programs.

## **Key Findings: The Current State of Supplementary Driver Training**

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Researchers analyzed 56 separate providers of supplementary driver training programs in the United States, finding that the vast majority had been in existence for more than five years and offered courses falling both within and outside the scope of the study (i.e., were designed only for thrill-seeking).<sup>1</sup> Among the courses intended to supplement basic driver education by providing skills training for new licensees, great similarities were found both in terms of topics covered and training approaches utilized. Hazard avoidance, for example, was taught in 91.1 percent of programs, and skid control was covered in 85.7 percent of them.<sup>1</sup> Figure 1 shows the most prevalent topics encountered and the percentage of courses covering each one.

**Figure 1. Topics Covered by Supplementary Driver Training Programs, U.S., 2010**

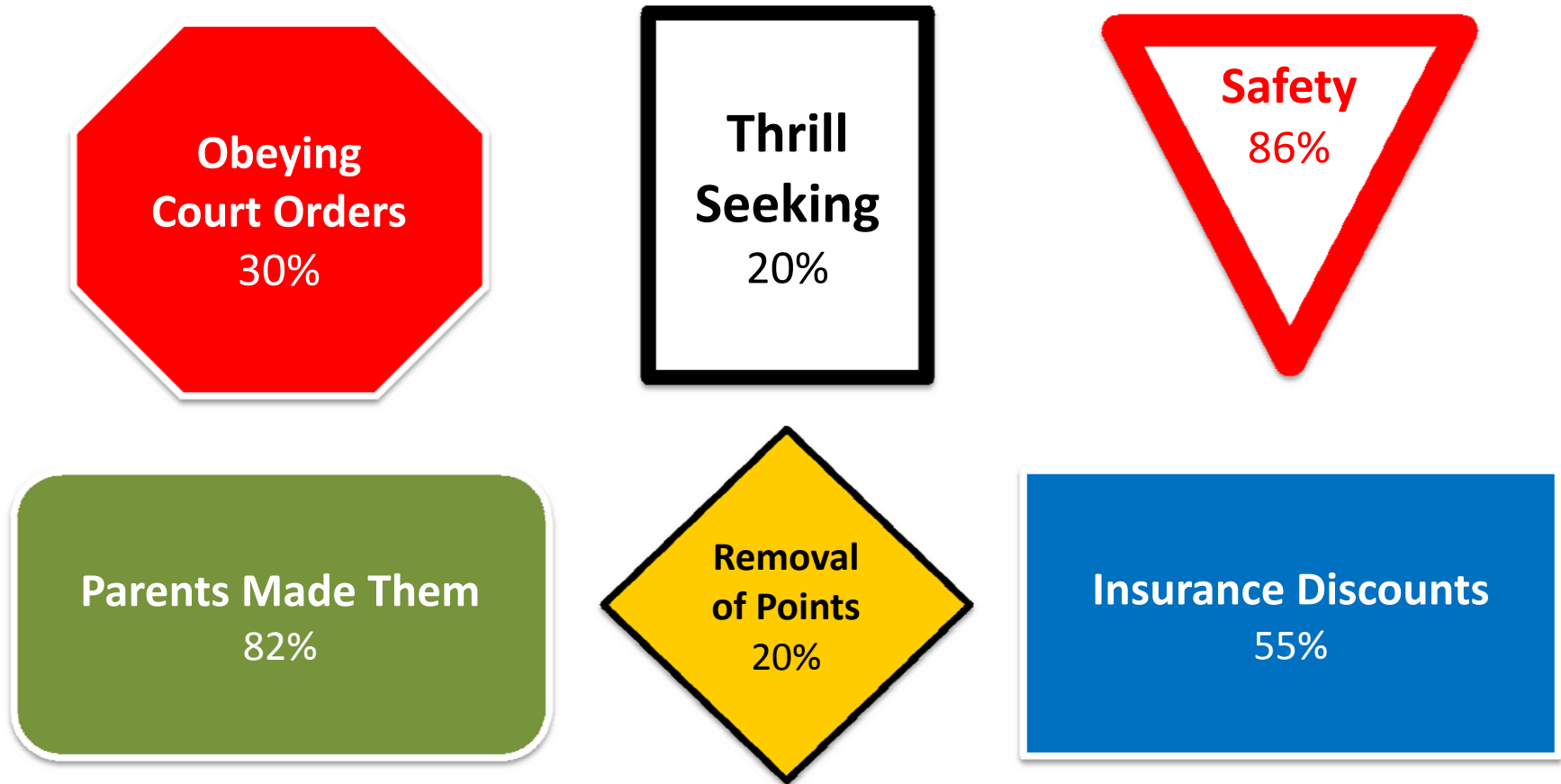


Nearly all programs began with classroom activities and lectures, with over 60 percent incorporating videos, half using pamphlets or handouts, and roughly one-third each using computer programs and books.<sup>1</sup> Courses then generally progressed to in-vehicle, instructor-led driving practice, with several courses providing multiple rounds of classroom and in-vehicle training components.<sup>1</sup> Most courses allowed students to participate during any stage of the GDL process, with 73.2 percent allowing holders of learner's permits to enroll; 21.4 percent, however, limited participation to drivers holding an unrestricted license.<sup>1</sup> Many courses took place over several hours on a single day, though a few took six or more days to complete.

Providers consistently stated that their supplementary training programs' primary objectives were ultimately related to safety, with 60.7 percent specifically saying safety and crash prevention were the primary goals, 82.1 percent saying their objective was to develop better drivers through skills improvements, and 21.4 percent saying car control and emergency avoidance were the focus.<sup>1</sup> Most providers (85.7 percent) also said safety topped the list of reasons students took their programs, with 82.1 percent also saying parents made their children enroll.<sup>1</sup> Other commonly-cited reasons are shown in Figure 2. Note that these figures represent second-hand information; that is, they reflect the percentage of providers reporting why students enroll in their programs. For example, 20 percent of providers reported training students who enrolled to remove points from their license; it is not the case that 20 percent of students enrolled for this purpose. Also note that while programs designed for thrill seeking were not considered in this report, some students reportedly enrolled in supplementary training programs that were within the study's scope for this purpose.



Figure 2. Provider-Reported Reasons that Students Enroll in Supplementary Training Programs, 2010



Despite numerous similarities between the 56 programs documented by the research team, a key difference was found to be the nature of the venues and facilities used to conduct them, with some taking place at race tracks, others on closed courses, and even a few traveling to multiple locations around the country.<sup>1</sup> These differences, therefore, factored heavily into the system developed to classify and categorize the supplementary training programs on the market today.<sup>1</sup> Researchers identified six classes of programs, noting that each category represented shared characteristics but did not represent “good” or “bad” types of courses.<sup>1</sup> The classes are:

- Basic Driver Education Plus
- Traveling (courses that travel to hold sessions at different venues nationwide)
- Closed Course
- Race Track
- Technology
- Fleet Driver Oriented

Note that while most fleet driver oriented programs are outside the scope of this study, those included here stated that they often offered instruction to young drivers.<sup>1</sup>

Figure 3 describes each of these six classes and shows how many programs fall into each class. The safety implications of each of these classification levels, however, cannot be assessed, due to the absence to date of formal evaluations of the safety impacts of supplementary training programs.

**Figure 3. Classification of Supplementary Driver Training Programs, 2010**

Category	Description	Number of Providers Identified
Basic Driver Education Plus	Courses were primarily standard basic driver education programs, but included a degree of training beyond that required to prepare students to pass state licensure test (e.g., skid recovery)	11
Traveling	Programs may have had a home base of operations, but spent the great majority of time traveling around the country to deliver the courses	2
Closed Course	Programs held at private driving facility with an on-road training course for participants; generally included classroom facilities as well	19
Race Track	Programs conducted at a race track facility, but excluding thrill-seeking courses	16
Technology	Programs used simulators or other technologies as a primary component of the training; also included online supplemental skills training	6
Fleet Driver Oriented	Programs primarily for companies and corporate employees, but did offer training for young individuals	2

Only the Fleet Driver Oriented, Basic Driver Education Plus, and Technology categories featured any supplementary training programs lasting more than one day. In addition, the costs of the 56 programs varied greatly. Most in the Closed Course category, for example, fell in the \$250 – \$450 range, with Race Track programs generally costing \$300 – \$500; the most expensive courses in these two categories, however, were around \$1,200.<sup>1</sup> Technology courses – which did not all include driving components – varied substantially in price, with those delivered only by computer generally costing less (around \$100) and those involving simulators or on-road components costing more. Large variation was also seen among the Basic Driver Education Plus programs. The Traveling courses appeared to be the cheapest, with one being free and the other costing \$75.<sup>1</sup>

Another key difference encountered between the various classification categories was the background of the instructors employed. Past teaching experience was required by many of the programs, including 100 percent of the Basic Driver Education Plus and Traveling courses, two-thirds of the Technology programs, and 42.1 percent and 37.5 percent of the Closed Course and Race Track programs, respectively.<sup>1</sup> (The Fleet Oriented courses did not have this requirement.) Overall, background checks on instructors were run by 71.4 percent of programs, and periodic instructor re-training or re-certification was required by 80.5 percent of programs.<sup>1</sup> Figure 4 highlights some additional variations in the background of instructors employed by programs in each of the six classes. Because many programs hired instructors of different backgrounds, keep in mind that the percentages indicated here do not add up to 100. For example, looking at the first row, 81.8 percent of Basic Driver Education Plus programs hire school teachers, 27.3 percent hire active police officers, 54.5 percent hire retired police officers, and so on. Naturally, then, there is some overlap, with many programs hiring multiple instructors from different backgrounds.

**Figure 4. Instructor Background Variation by Course Classification, 2010**

*Percentage of programs hiring instructors of a given background*

	<b>School teachers</b>	<b>Active police officers</b>	<b>Retired police officers</b>	<b>Professional drivers</b>	<b>Certified instructors</b>	<b>Race car drivers</b>	<b>Emergency med. drivers</b>
<i>Basic Driver Education Plus</i>	<b>81.8%</b>	27.3%	54.5%	27.3%	72.7%	0%	9.1%
<i>Traveling</i>	<b>100%</b>	<b>100%</b>	50%	<b>100%</b>	50%	50%	50%
<i>Closed Course</i>	10.5%	36.8%	36.8%	15.8%	36.8%	<b>47.4%</b>	10.5%
<i>Race Track</i>	18.8%	18.8%	25%	12.5%	12.5%	<b>93.8%</b>	0%
<i>Technology</i>	<b>66.7%</b>	16.7%	33.3%	33.3%	16.7%	0%	16.7%
<i>Fleet</i>	0%	50%	<b>100%</b>	0%	0%	0%	0%

## Supplementary Training Programs in Canada

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*In addition to documenting and analyzing the supplementary training programs found in the United States, researchers conducted a separate examination in which they catalogued and studied 59 such courses in countries around the world. About half of these (28) were in Canada, and there researchers made several observations:*

- As in the United States, nearly all programs cited improving safety through developing driver skills as their primary objective.
- Basic vehicle control, advanced braking, and skid control were among the topics often covered by Canadian programs.
- Only a single Canadian provider identified in the study primarily served youth for the purposes of supplementary driver training; the traditional focus for providers was on fleet driver training, thrill-seeking for enthusiasts, or basic driver education.
- As in the United States, no Canadian program had been formally and scientifically evaluated to assess its effectiveness in improving safety and reducing crashes.
- Nearly every Canadian program featured a classroom component in addition to the on-road training.

## Discussion and Conclusions: Safety Impact Unknown

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Despite the fact that safety-related objectives featured prominently in most supplementary driver training programs, and that most providers reported safety as the main reason people completed such courses, the most important finding is that **“no scientific evaluations of the safety impact of these types of training courses [have] been conducted to date.”**<sup>1</sup> The study’s literature review noted that some research into skid training – in which drivers are taught how to recover from a skid and perform evasive maneuvering to avoid an emergency – suggested that such “advanced driving performance” training could have adverse safety impacts by engendering overconfidence in inexperienced drivers.<sup>1</sup> This is echoed in concerns expressed by AAA, which has questioned the ability of short-duration (1/2-day or less) courses to substantially improve the skills of inexperienced drivers in just a few hours, particularly with total driving time per student generally comprising only a small percentage of overall course time. Such a concern may be very pertinent to the courses examined in this study, many of which were only four hours long, and at least one of which was only half that length.<sup>1</sup> Some programs were of longer duration, including several Technology and Basic Driver Education Plus courses, but it remains to be seen whether a longer, more in-depth program would have a different impact on safety than a shorter one.

Noting that teens often already have unrealistically high expectations about their driving abilities, AAA and other organizations have indicated a fear that young drivers will apply the skills acquired in supplementary training courses for performance benefit, rather than safety enhancement. Along these lines, concern has also been expressed that teens may leave such courses thinking they have all the skills needed to address an emergency and correctly execute the proper maneuvers if faced with one, thereby reducing their appreciation for their own limitations and the importance of using caution behind the wheel.

In the literature review, researchers noted that some studies have indicated positive safety impacts of supplementary training addressing cognitive skills, such as hazard anticipation.<sup>1</sup> Such findings may support the increasing push to provide new drivers with more practice and instruction, and also highlight the distinction between additional training that is widely believed to be beneficial, and advanced vehicle handling training that remains controversial. Researchers did note that some supplementary program providers avoided skid pad training because of the overconfidence concern, though most believed that it demonstrated first-hand for inexperienced drivers the factors that lead to a skid and the techniques used to recover from one.<sup>1</sup>

Given increased interest nationwide in supplementary driver training, it is worth keeping in mind the numerous uncertainties surrounding these types of programs:

- Despite the fact that a majority of the training providers report safety as a core objective of their programs and a major reason students enroll, there is no evidence that these courses reduce crash rates of young drivers.
- Existing research covered in the literature review has suggested that certain cognitive skills training may have positive safety impacts.

- Concerns persist that training inexperienced drivers in advanced vehicle handling may breed overconfidence and thrill-seeking, rather than safety-conscious, behaviors.
- It is unclear what impact, if any, characteristics such as course length, curriculum, instructor background, training venue, etc. have on subsequent driving records and crash outcomes of students who complete a supplementary program.

Course providers – and researchers conducting this study – indicated a belief that the advanced driving skills taught may give students a greater appreciation for the factors involved in crashes and loss of vehicle control.<sup>1</sup> But it's also possible that the takeaway for teens is that cars can be pushed to greater limits than they previously believed or that emergency situations are easier to recover from than, in fact, they are. Research into the effects that this type of training has on the mindset and, ultimately, the safety of new drivers is therefore sorely needed, especially since this entire field is virtually unregulated. Many of the supplementary driver training providers indicated a willingness to participate in such an effort.



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