

**New Jersey's License Plate Decal Requirement  
for Graduated Driver Licenses: Attitudes of  
Parents and Teenagers, Observed Decal Use,  
and Citations for Teenage Driving Violations**

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## **ABSTRACT**

**Objectives:** On May 1, 2010, New Jersey implemented a law requiring teenagers with learner's permits or probationary licenses to display reflective decals on the front and rear license plates when they drive. The current study examined attitudes of parents and teenagers toward this requirement, use of the decals, teenagers' reported violations of the graduated driver license law, and police enforcement of the law.

**Method:** Statewide telephone surveys of representative samples of parents and teenagers were conducted in February-April 2010 and March-June 2011. Interviews were conducted with parents of probationary license holders and their teenagers, if possible, and with parents of learner's permit holders. Use of decals among drivers with probationary licenses was observed at four high schools in fall 2010 and in spring 2011, and hand-out surveys were distributed to drivers. Monthly statewide and county data on citations issued for violations of the graduated driver license law were obtained.

**Results:** When interviewed about a year after the decal requirement took effect, a large majority of parents of probationary license holders, parents of learner's permit holders, and teenagers with probationary licenses disapproved of the decal requirement for probationary licenses; most said they strongly disapproved of it. In 2011, about two-thirds of both sets of parents and about half of the teenagers disapproved of decals for learner's permits. Support for the decals for both license types declined significantly from 2010 to 2011. For parents and teenagers alike, the main reason for opposing the decals was concern over the identification and/or targeting of teenage drivers by other drivers, predators, or police. In 2011, 77 percent of parents of probationary license holders said their teenagers had decals for the vehicles they drive most often; 46 percent said their teenagers always use decals when they drive. Fifty-six percent of parents of learner's permit holders said their teenagers had decals for the vehicles they drive most often; 37 percent said their teenagers always use decals when they drive. Teenagers' reported violations of graduated driver license restrictions either increased or were similar in 2011 compared with 2010. Observed rates of decal use by student drivers at four high schools in spring 2011 ranged from 24 to 64 percent. The percentage of drivers with either the decal backing or the decals ranged from 53 to 89 percent. The number of citations issued statewide for violations of the graduated

driver license law doubled in the year after the decal requirement took effect, compared with the year before. When citations for decal violations are excluded, the number of citations increased by 52 percent.

**Conclusions:** Most parents and teenagers oppose the New Jersey decal requirement, primarily due to concerns about the identification and potential targeting of teenage drivers. Many teenagers do not use the decals when they drive. A substantial increase in the number of citations issued for violations of the graduated driver license law suggests that the decal requirement is facilitating police enforcement. However, based on teenage drivers' self-reported violations of the law, the requirement does not appear to have achieved the ultimate goal of increased compliance.

**Keywords:** Graduated driver licensing; Teenage drivers; License decals; Teenage licensing laws

## INTRODUCTION

In the United States, teenagers drive less than all but the oldest people, but their numbers of crashes and crash deaths are disproportionately high (Insurance Institute for Highway Safety (IIHS), 2010). Graduated driver licensing laws are designed to reduce crashes among teenagers by delaying full licensure while allowing beginners to obtain initial driving experience under lower-risk conditions. Beginning with Florida in 1996, all U.S. states and the District of Columbia have enacted some form of three-stage graduated licensing programs (learner's permit, intermediate license with restrictions, and full license).

In jurisdictions that have adopted elements of graduated driver licensing, overall crash rates among young teenagers have declined 20-40 percent (Shope, 2007). Restrictions on nighttime driving and transporting teenage passengers have proven effective in reducing relevant crashes (Williams, 2007). National studies have found that stronger graduated licensing programs are associated with lower per capita rates of fatal crashes or fatalities among young teenagers (Chen et al., 2006; Dee et al., 2005; Masten et al., 2011; McCartt et al., 2010; Morrisey et al. 2006). National studies also found that strong restrictions on nighttime driving and teen passengers, as well as delayed licensing age, are associated with lower rates of fatal crashes and insurance collision claims among young teenagers (McCartt et al., 2010; Trempel, 2009). Despite the effectiveness of graduated driver licensing, teenage crash rates remain high. In 2008, the rate of police-reported crashes per mile driven for 16-19 year-olds was 4 times the rate for older drivers, and their rate of fatal crashes was twice that for older drivers (IIHS, 2011a).

It is known that some teenagers do not comply with nighttime and passenger restrictions during the intermediate license phase (Chaudhary et al., 2007; Goodwin and Foss, 2004; Goodwin et al., 2006; Mayhew et al., 1998; Williams et al., 2002). Parents may not always know the restrictions or enforce them (Williams et al., 2002) and may not always be aware of their teenagers' violations (Foss et al., 2002). There also is some evidence that enforcement of graduated driver licensing provisions is low, in part because police officers may not be familiar with the details of graduated licensing laws and may find graduated driver licensing provisions difficult to enforce (Goodwin et al., 2006; Steenbergen et al., 2001). Some police believe that thinking a driver is young is insufficient legal justification for stopping a driver suspected of violating teenage driver laws (Steenbergen et al., 2001).

New Jersey has been a leader among U.S. states in terms of teenage licensing laws. It is the only state to withhold licensure until age 17. When enacted in 2001, its graduated driver licensing system earned IIHS's highest rating of good. Notably, the probationary license with restrictions must be held for one year, making 18 the minimum age for a full license. In addition, New Jersey is one of only a few states that apply graduated driver licensing restrictions to all initial license applicants younger than 21. New Jersey's approach has been associated with significant reductions in the crash rates for 17 and 18 year-olds and the virtual elimination of crashes among 16 year-olds, without adverse effects on the crash rates for 19 year-olds (Williams et al., 2010).

Despite the strength of New Jersey's licensing laws, many teens still are involved in serious crashes. This recognition prompted the state legislature to establish a Teen Driver Study Commission in 2007 (New Jersey Teen Driver Study Commission, 2008). Three of the Commission's priority recommendations were adopted into law, taking effect on May 1, 2010. These included discontinuing an exception to the passenger restriction for the driver's siblings, expanding the nighttime curfew window from midnight-5 a.m. to 11 p.m.-5 a.m., and requiring an identifier to be affixed to a vehicle when driven by a learner's permit or probationary license holder. A summary of New Jersey's teenage licensing laws before and after May 1, 2010 is provided in Table I.

The requirement for license status identifiers on vehicles driven by teenagers is completely new to the United States. However, license status identifiers for teenagers with learner and/or provisional licenses are required in other jurisdictions around the world, including the Canadian provinces of British Columbia, Prince Edward Island, Newfoundland and Labrador, and the Yukon; Hong Kong; Japan; New Zealand; and the United Kingdom. This policy is most closely associated with Australia, where in all eight states, those in the learner stage are required to display L-plates, and provisional license holders must display P-plates. Although special plates have been a longstanding requirement in Australia, their effects on enforcement or on teenagers' compliance with teenage driving laws have not been rigorously evaluated. In a 1994 telephone survey of young drivers in four Australian states, more than 10 percent said they did not always display their L-plates when they were learner drivers (Haworth et al., 1994). About one-third of drivers said they did not always display their P-plates when required. A 2001 on-road

survey in Melbourne found that 77 percent of learner drivers displayed L-plates and 69 percent of probationary drivers displayed P-plates (Steer Davies Gleave, 2002).

New Jersey's law is known as Kyleigh's law in recognition of a teenager who died while riding as a passenger in another teenager's vehicle in violation of the passenger restriction. It requires drivers younger than 21 in the learner and probationary stages to have highly visible, reflective decals on the front and rear license plates when they drive (Figure 1). The decals are removable and transferable, in recognition that many vehicles have multiple operators and that teenagers may drive more than one vehicle. A set of decals costs \$4, and there is a \$100 fine for not having the decals affixed to license plates while driving. When the policy was introduced, all who were still in learner and probationary stages as of May 1, 2010, were required to obtain and display the decals; that is, there was no grandfathering.

According to the New Jersey Teen Driver Study Commission *Recommendation Report* (2008), the primary rationale for the decals requirement was to improve compliance with the graduated driver license provisions. The Commission concluded that New Jersey police officers believe that a vehicle identifier would aid in enforcing the graduated license restrictions, while allaying concerns about police profiling of teenage drivers. The expectations also were that the decals may influence teens to drive more carefully and conform to the rules because they can be identified more readily, reducing the need for enforcement, and that other motorists may be more cautious and courteous around teenage drivers but also be alerted to suspicious or unlawful behavior by teenage drivers.

The decal requirement has proven to be controversial. According to media reports, much of the controversy has centered on parents' concerns that the decals will attract sexual predators, but reports also cite concerns about police profiling young drivers and describe low compliance with the decal requirement (e.g., Abdur-Rahman, 2010; DeMarco, 2011; Grossman, 2010; Henderson, 2010; Livio, 2010; St. Martin, 2010). New Jersey courts have upheld the constitutionality of the law (*Trautmann ex rel. Trautmann v. Christie*, 418 N.J. Super. 559 (App. Div. 2011)). In April 2011, following a survey of all law enforcement agencies across the state requested by Governor Christie, the New Jersey Attorney General issued a report identifying one case of a teenager who said she was pulled over and asked for her phone number by a man posing as an officer. When she refused, the man acknowledged he was not an officer and drove away. The driver quoted the man as saying he had stopped her because of the decal. No

other case of a teenager being targeted because of the decals was reported (New Jersey Division of Criminal Justice, 2011).

The current study examines attitudes toward the decal requirement among New Jersey parents and teenagers, as well as reported and observed use of the decals by teenage drivers. The chief goals of the decal requirement are to facilitate enforcement of the graduated driver license provisions and to increase compliance with the provisions. Therefore, teenagers also were questioned about their compliance with these provisions before and after the decal requirement, and patterns of citations issued to teenage drivers before and after the decal requirement were examined.

## **METHODS**

The study included telephone surveys of parents and teenagers, observations and hand-out surveys at four high schools, and analysis of data on citations issued for violations of the graduated driver license law.

### **Telephone Surveys of Parents and Teenagers**

Telephone surveys of New Jersey parents and teenagers were conducted during February 12-April 4, 2010, before the decal requirement took effect in May 2010, and during March 14-June 18, 2011, about a year after. The primary focus was families of teenagers with probationary licenses; parents and, if possible, their teenagers were interviewed. A secondary focus was parents of teenagers with learner's permits; teenagers with learner's permits were not interviewed. In 2010, interviews were conducted with 655 parents of teenagers with probationary licenses and 404 of their teenagers, as well as 501 parents of teenagers with learner's permits. In 2011, interviews were conducted with 700 parents of teenagers with probationary licenses, 401 teenagers with probationary licenses, and 283 parents of teenagers with learner's permits.

Interviews were conducted of representative samples of parents and teenagers living in New Jersey by OpinionAmerica, Inc. (Cedar Knolls, NJ), a professional survey organization. For each survey wave, a random targeted sample of New Jersey households that had a high probability of having an individual who was 16, 17, or 18 years old and living at home was obtained from a provider of market

research samples. The starting random pool of households for each survey was approximately 16,500 and included both land-line and cellphone numbers. For each survey wave, interviews were piloted with about 50 parents and their teenagers who were willing to participate. As only minimal revisions were made to the questionnaires, these interviews were included in the analyses.

Calls were placed at all times of the day and days of the week, with emphasis on late afternoons and early evenings. Numbers that were not answered initially were dialed up to 20 times, until the number was answered, before the numbers were abandoned. When qualifying households were reached, interviews were attempted if a parent was available, or callbacks were scheduled if no parent was available. If parents had eligible teenagers with both probationary licenses and learner's permits, parents were interviewed about the teenager with a probationary license. Upon completion of interviews with parents of teenagers with probationary licenses, interviewers set up appointments to speak with the teenagers. Some parents declined to allow their teenagers to participate, and some teenagers declined to participate when contacted or could not be contacted after 10 attempts. To ensure that at least 400 teenagers were interviewed, about 700 interviews with parents of probationary license holders were conducted. There was no target for interviews with parents of learner's permit holders. As the same protocol was followed in both the 2010 and the 2011 surveys, it is not clear why there was a smaller number of completed interviews with these parents in 2011.

From an initial sample of 16,470 numbers in the 2010 survey, 5,778 were reached. The cooperation rate (American Association for Public Opinion Research, 2011) for parents was 20 percent, resulting in 1,156 respondents. The households not participating included 2,112 that declined to participate or began but did not finish the survey and 2,510 that agreed to participate but did not meet the screening criteria. From an initial sample of 16,433 numbers in the 2011 survey, 4,677 were reached. The cooperation rate for parents was 21 percent, resulting in 983 respondents. The households not participating included 1,654 that declined to participate or began but did not finish the survey and 2,040 that agreed to participate but did not meet the screening criteria. Of the 655 teenagers with probationary licenses whose parents were interviewed in 2010, 404 were interviewed, 216 declined to participate or began but did not finish the interview, and 35 were not reached. Of the 700 teenagers with probationary

licenses whose parents were interviewed in 2011, 401 were interviewed, 169 declined to participate or began but did not finish the interview, and 130 were not reached.

In both surveys, parents and teenagers were asked about their awareness of the decal requirement and their attitudes toward it. In the 2011 surveys, both parents and teenagers were asked in some detail about teenagers' use of decals. Teenagers also were asked about the frequency with which they violated the nighttime and passenger driving restrictions and the frequency of talking on cellphones and texting while driving. The survey included several open-ended ("Why?") questions. The verbatim responses were recorded and these were post-coded by researchers into categories.

Results were analyzed with SAS version 9.2. The statistical significance of differences was tested with the chi-square statistic ( $p < 0.05$ ), with "don't know" and "refuse" responses excluded.

### **Observations and Hand-out Surveys of Teenage Drivers at High Schools**

Two rounds of observations were conducted at four high schools to obtain estimates of the use of decals among students with probationary licenses. Observations were conducted in October-December 2010, 5-7 months after the decal requirement took effect, and in April 2011, 11 months after. It was expected that the rate of decal use would be higher in April 2011, when a larger proportion of teenage drivers would have been subject to the requirement from the time they received their probationary license.

Four schools were sought with large numbers of students with parking permits and parking lot configurations that permitted the safe observation of student drivers as they entered the school parking lot at the beginning of the school day. Schools also were sought in communities that provided a reasonable mix of socio-demographic characteristics. Table II shows selected characteristics of the counties where the schools were located (U.S. Census Bureau, 2009, 2010) and the approximate senior class enrollments at the schools. One school asked to remain anonymous and is identified as "School X." Based on the 2009 median household income of \$68,444 in New Jersey, 3 of the 4 counties were more affluent than New Jersey as a whole. There was a mix of county population size and density.

Two observers were stationed at entrances to the student parking lots. One observer recorded the following information for each vehicle: driver gender and seat belt use, number of passengers, and

decal use (decals present, decals backing present without decals, neither backing nor decals). Both the front and rear license plates were checked for decals. If a decal was present on either plate, the vehicle was coded as having decals. If there was not a decal on either plate but the decal backing was present on either plate, the vehicle was coded as having decals backing present without decals. If neither license plate displayed the decal or the decal backing, the vehicle was coding as having neither backing nor decals. The second observer handed drivers a one-page questionnaire and asked them to complete it before entering the school. It was explained that drivers would receive \$5 for the completed survey. The questionnaire requested information on the driver's age, license status (learner's permit, probationary license, full license), and the use of and attitudes toward decals. The observation information and survey responses for each student/vehicle were linked via an identification number that was recorded on the observation form and the hand-out survey given to the driver.

Drivers who said they had a learner's permit or a full driver's license were excluded from the analysis, as were drivers who did not provide their license status. Of 682 vehicles/students observed at the four high schools in fall 2010, 4 lacked complete information on the presence of decals, 71 lacked information on driver's license status, 13 were driven by students with learner's permits, and 78 were driven by fully licensed students. The analyses focused on the remaining 516 students/vehicles. Of 779 observations in spring 2011, 48 lacked information on driver's license status, 5 were driven by students with learner's permits, and 247 were driven by fully licensed students. The analyses focused on the remaining 479 students/vehicles.

Observed decal use and reported attitudes about the decals were tabulated for each school. Analyses compared differences among the high schools and differences between the initial and follow-up surveys at each high school. The statistical significance of differences was tested with the chi-square statistic ( $p < 0.05$ ).

### **Citation Data**

Information on citations issued for violations of the graduated licensing laws (N.J. Rev. Stat. §39:3-13.8) were obtained from the New Jersey Judiciary. The information included statewide monthly counts of citations issued during July 2008-May 2011, including the counts of all citations issued and the

counts for specific violations. Monthly counts of total citations issued also were obtained for the 21 county courts.

Analyses looked at the percentage changes in the counts of citations during the 12 months before and the 12 months after implementation of the decal requirement on May 1, 2010. The month of May 2010 was excluded so that the before period, May 2009-April 2010, and the after period, June 2010-May 2011, were one full year so that seasonal or other calendar effects were not present.

## **RESULTS**

### **Telephone Surveys**

A total of 655 parents of probationary license holders and 501 parents of learner's permit holders were interviewed in 2010. In 2011, interviews were conducted with 700 parents of probationary license holders and 283 parents of learner's permit holders. The majority of parents interviewed were mothers (69 percent in the 2010 survey, 70 percent in the 2011 survey). Interviews with teenagers with probationary licenses totaled 404 in 2010 and 401 in 2011. The sample of teenagers in each year was about equally divided into males and females (53 percent male in the 2010 survey, 51 percent male in the 2011 survey). Eighty-five percent of the teenagers interviewed in 2011 had obtained their probationary licenses on or after May 1, 2010, the effective date of the decal requirement.

**Awareness of decal requirement.** In the 2011 survey, conducted about 1 year after the decal requirement became effective, parents were asked if they were aware of any changes to the young driver licensing laws in New Jersey that had gone into effect in the past year. Parents aware of changes were asked to describe them. Sixty-nine percent of the parents of teenagers with probationary licenses and 60 percent of the parents of teenagers with learner's permits were aware of law changes and then mentioned the decal requirement. In the 2010 survey, 25 percent of parents of probationary license holders and 22 percent of parents of learner's permit holders said they were aware of changes in young driver licensing laws that would soon take effect and also mentioned the decal requirement. In both surveys, the decal requirement then was described to parents and they were asked a series of questions about it.

In the interviews of teenagers with probationary licenses, the decals requirement was described and then teenagers were asked if they were aware of it. The level of awareness increased from 69 percent prior to implementation of the decal requirement to 95 percent after.

**Opinions about decal requirement and its potential effects.** Table III summarizes opinions about the decal requirement among parents and teenagers. In the post-decal survey in 2011, a large majority of parents and teenagers opposed decals for probationary licenses: 75 percent of parents of learner's permit holders, 83 percent of parents of probationary license holders, and 90 percent of teenagers with probationary licenses. For parents and teenagers alike, approval declined significantly from the 2010 survey, shortly before the decal requirement took effect, to the 2011 survey, about a year after. For example, 44 percent of parents of probationary license holders and 53 percent of parents of learner's permit holders approved decals for probationary licenses in 2010, compared with 14 and 20 percent, respectively, in 2011.

Opinions about the decal requirement for learner's permits were somewhat more positive among both sets of parents and teenagers than were the opinions about decals for probationary licenses (Table III). Still, in 2011, 64 percent of parents of probationary license holders and 66 percent of parents of learner's permit holders disapproved of decals for learner's permits. This is a significant change from the 2010 survey, when 53 percent of parents of probationary license holders and 57 percent of parents of learner's permit holders approved of them. Teenagers with probationary licenses also were more likely to support decals for learner's permits than decals for probationary licenses; 41 percent supported decals for learner's permits in 2011, significantly down from 55 percent in 2010.

In both the pre-decal and the post-decal surveys and among both sets of parents, the main reason for supporting decals for probationary licenses and for learner's permits was because decals inform other drivers that a teenage driver is on the road. For example, in the 2011 survey, 35 percent of parents of probationary license holders and 43 percent of parents of learner's permit holders gave this reason for supporting decals for probationary licenses. Other common reasons noted were that decals help police enforce teenage driving laws (16 percent of parents of probationary license holders, 7 percent of parents of learner's permit holders), encourage other drivers to drive more safely around teenage

drivers (10 percent of both sets of parents), or help teenagers comply with the license restrictions (9 percent of parents of probationary license holders, 12 percent of parents of learner's permit holders).

Parents primarily opposed decals for probationary licenses because of concerns about targeting or profiling teenagers, and these concerns increased from the pre-decal survey to the post-decal survey (Table IV). In the post-decal survey, for example, parents of probationary license holders mentioned profiling or targeting of teenagers by other drivers (41 percent) or police (14 percent), identifying or drawing negative attention to teenage drivers (28 percent), and the risk of predators (23 percent). Concerns mentioned less often were perceptions that the decal requirement was not effective, beneficial, or needed (12 percent), or was inconvenient (5 percent) or discriminatory toward teenagers (8 percent). Many of the parents who disapproved decals for learner's permits also cited concerns with potential targeting or profiling of teenage drivers (Table IV). In the post-decal survey, for example, parents of learner's permit holders reported concerns with targeting or profiling teenage drivers by other drivers (31 percent) or the police (9 percent), identifying or drawing negative attention to teenage drivers (18 percent), or the risk of predators (8 percent). Other common reasons were that the decal is not needed with an adult in the vehicle (21 percent) or that the decal is not effective, beneficial, or needed (15 percent).

In both surveys, the teenagers who supported decals for probationary licenses most often said that decals would improve the safety of teenage drivers and help police enforce teenage driving laws, and that teenage drivers need more preparation. Teenagers' opposition to decals for probationary licenses was mainly based on concerns about profiling or targeting (Table IV). The next most common responses in the 2011 survey were that the decal requirement discriminates against teenagers (16 percent) and is not effective, beneficial, or needed (21 percent). The main reasons for teenagers' support of decals for learner's permits were the notification to other drivers that a teenager is driving (42 percent in both surveys) and that learners are the least experienced drivers and need the most monitoring (39 percent pre-decal, 29 percent post-decal). Teenagers who opposed decals for learner's permits most often said there is no need for the decals with an adult in the vehicle (36 percent pre-decal, 24 percent post-decal) (Table IV).

Teenagers were asked whether they agreed with a series of statements about the possible effects of the decal requirement for probationary license holders (Table V). Prior to the implementation of the decal requirement, 68 percent of teenagers agreed that teenagers will drive more carefully and that teenagers will be less likely to violate night driving and teen passenger restrictions. This declined to 47 and 46 percent, respectively, after implementation. In the pre-decal survey, 51 percent believed that the \$100 fine for violating the decal requirement was sufficient to ensure compliance; this declined to 17 percent in the post-decal survey. In the pre-decal survey, 77 percent of teenagers agreed that some parents will not want their children to have decals; in the post-decal survey, 95 percent agreed that some parents do not want their teenagers to have decals. The proportion of teenage respondents who agreed that teenagers will not use the decals when violating the night driving or teen passenger restriction declined slightly from 90 to 87 percent; this was the only statement for which the pre-decal and post-decal opinions did not differ significantly.

**Reported use of decals.** In the 2011 survey, parents were asked about their teenager's use of decals (Table VI). Seventy-seven percent of parents of probationary license holders said their children have decals for the vehicle they drive most often. Among these parents, 60 percent said their teenagers always use them. Thus, 46 percent of parents reported that their probationary license holders had decals for the vehicles driven most often and always used them. Nine out of 10 of parents who reported their teenagers not having decals or not always using them said they were "okay" with that. When asked why they were okay, in both instances parents most often mentioned concerns with targeting or profiling teenagers by other drivers or that parents do not allow or oppose the use of decals.

Fifty-six percent of parents of learner's permit holders said their teenagers had decals for the vehicles they drive most often (Table VI). Most of the parents of teenagers without decals said they were okay with it, and parents most often attributed the lack of decals to not thinking the requirement applied to their teenagers (30 percent) or being unaware of the law or how to get the decals (26 percent). Among the parents whose learner's permit holders had the decals, 66 percent said their teenagers always used the decals when they drive. Thus, 37 percent of parents reported their learner's permit holders had decals for the vehicles driven most often and always used them. Among the parents whose teenagers do

not always use the decals, almost all (92 percent) are okay with it; 30 percent of these parents explained that they oppose or do not allow the use of the decals.

Teenagers with probationary licenses also were asked about their use of the decals. The responses were similar to the responses of parents of probationary license holders, although teenagers reported somewhat lower use of decals. For example, 73 percent of the teenagers said they have decals for the vehicles they drive most, compared with 77 percent of the parents. Fifty-one percent of teenagers with decals said they always use them, compared with 60 percent of the parents of probationary license holders. Teenagers who reported not always using the decals most commonly attributed this to concerns about targeting or profiling, including targeting or profiling by other drivers (32 percent), identification and negative attention to teenage drivers (11 percent), or not feeling safe (13 percent). Teenagers also noted forgetting to put the decals on their vehicles (15 percent), wanting to violate passenger or nighttime restrictions (13 percent), parental opposition to decals (11 percent), or not driving their own vehicles (10 percent). Similar percentages of teenagers and of parents said that the parents were okay with them not having decals or not using decals all the time.

Fifteen percent of the teenagers interviewed in 2011 had obtained their probationary licenses prior to May 2010. Fifty-eight percent of these teenagers said they had decals for the vehicles they drive most often, compared with 76 percent of the teenagers who received their probationary license in May 2010 or later ( $\chi^2 [1]=8.3, p=0.004$ ). Teenagers who reported having decals were asked whether it was easy to obtain them; 92 percent said it was easy. Of those who said it was not easy, 38 percent said the motor vehicle office was not convenient or that there was a long wait at the office, and 23 percent said there were not enough decals available.

**Enforcement of teen driving laws and reported violations.** Twenty-eight percent of the parents of probationary license holders and 33 percent of the parents of learner's permit holders thought it was likely that their teenagers would get a ticket if they were not using the decals. Twelve percent of parents of probationary license holders said they know teenagers who had been ticketed or warned for not using the decals; 10 percent of these parents said it was their teenagers. Six percent of the parents

of learner's permit holders said they know teenagers who had been ticketed or warned for not using the decals; 6 percent of these parents said it was their teenagers. Fifteen percent of the teenagers interviewed thought it was likely they would get a ticket if they were not using the decals. Twenty-six percent of the teenagers said they knew a teenager who had been ticketed or warned for not using the decals, and 8 percent of these teenagers said they had been ticketed or warned.

Parents of probationary license holders and their teenagers were asked whether the teenagers would be more likely to get a ticket for violating the passenger or nighttime driving restriction if they were using the decals. About half of both the parents and the teenagers (50 and 53 percent, respectively) said the ticketing would be more likely with the decals.

When asked about the extent to which police enforce the nighttime driving restriction and the passenger restriction, 45 percent of teenagers in each survey said police enforce nighttime restriction either a lot or some (Table VII). The percentage who believe police enforce passenger restriction a lot or some was 57 percent in 2010 and 59 percent in 2011.

Teenagers were asked about their recent violations of probationary license restrictions (Table VIII). As noted above, the nighttime restriction was strengthened effective May 1, 2010, to prohibit unsupervised driving during 11 p.m.-5 a.m. rather than midnight-5 a.m. In each survey, teenagers were asked whether they drove after midnight and also whether they drove between 11 p.m. and midnight. In 2010, 17 percent of teenagers said they had driven at least once after midnight, in violation of the nighttime restriction. In 2011, 57 percent of teenagers said they drove after 11 p.m., in violation of the nighttime restriction. The proportion who reported between 11 p.m. and 12 p.m. declined significantly from 68 to 54 percent. The proportion of teenagers who reported that they drove with more than one passenger other than a family member in the past month increased significantly from 41 percent in 2010 to 56 percent in 2011. In the 2010 survey, 19 percent of teenagers said they had talked on the cellphone while driving in the past week; this declined slightly to 17 percent in 2011, a nonsignificant change. The proportion of teenagers who said they had texted while driving in the past week declined from 12 percent in 2010 to 10 percent in 2011, a nonsignificant change.

**Predator Risk.** At the end of the interview in the 2011 survey, parents and teenagers were told that "there has been some talk or concern of teens being identifiable to predators because of the decals,"

and were asked whether they were aware of any teenage driver who had been targeted by a predator because of the decals. Ten percent of the parents of probationary license holders said they aware of a teenager targeted by a predator, and less than 10 percent of these parents (N=6) said it was their teenagers. Eighteen percent of the teenagers reported knowing a teenager targeted by a predator, and 14 percent (N=10) of these teenagers said it was themselves. This means that about 1 percent of the parents of probationary license holders said their teenagers had been targeted by a predator, and 2 percent of the teenagers interviewed said they had been targeted. When parents were asked whether they had concerns about the risk of predators for their teenagers, 75 percent said that they did. When teenagers were asked if they had concerns about the risk of predators for their own safety, 52 percent said that they did.

### **Surveys of Teenage Drivers at High Schools**

Decal use was observed among students arriving at four high schools in fall 2010 and spring 2011. As shown in Table IX, the use of decals varied across the four high schools. In the 2011 survey, about one-quarter of probationary license holders at School X and North Hunterdon high schools displayed the decals on their vehicles, compared with 33 percent at West Morris High and 64 percent at North Warren; these differences were significant ( $\chi^2[3]=46.7$ ,  $p<0.001$ ). Also in 2011, the percentage of students with either the backing or the decal ranged from 53 percent at School X to 89 percent at North Warren; these differences also were significant ( $\chi^2[3]=34.1$ ,  $p<0.001$ ) The proportion of students displaying decals increased somewhat at two schools between fall 2010 and spring 2011 and declined somewhat at the other two schools; none of these differences was significant ( $\chi^2[1]=1.2$ ,  $p=0.277$ , School X;  $\chi^2[1]=0.8$ ,  $p=0.360$ , North Hunterdon;  $\chi^2[1]=0.1$ ,  $p=0.724$ , North Warren;  $\chi^2[1]=1.4$ ,  $p=0.229$ , West Morris). The proportion of students with either backing or decals increased significantly between fall 2010 and spring 2011 at School X ( $\chi^2[1]=9.1$ ,  $p=0.003$ ) and at West Morris ( $\chi^2[1]=35.4$ ,  $p,0.001$ ). Students were asked whether they obtained their probationary licenses before or after May 1, 2010, when the decal requirement took effect. In the 2011 observations, the proportion of students displaying the decals was higher among students licensed before May 1, 2010 at two schools and lower at two schools. The difference was significant only at School X, where the rate of decals displayed was 7 percent for students licensed prior to May 2010 and 31 percent for students licensed in May 2010 or later ( $\chi^2[1]=6.7$ ,  $p=0.010$ ).

The proportion of students in 2010 with either the backing or the decal did not vary at any of the schools with regard to whether the student was licensed before or after May 1, 2010.

These analyses of decal use excluded 18 of the observed students who said they had learner's permits. Of 13 learner's permit holders observed in fall 2010, 4 displayed the decals, 1 had the backing only, and 8 had neither the backing nor decals. Of the 5 learner's permit holders observed in fall 2011, 2 had decals, 2 had only the backing, and 1 had neither.

The hand-out survey included a series of statements about the decals, and students were asked to indicate whether they agreed with each statement. The results for the 2011 survey are summarized in Table X. At all four schools, most students believed decals are an inconvenience; are a tool for police to target teens, even if teenagers are doing nothing wrong; lead other drivers to be more aggressive around teenage drivers; and have no effect on their own driving. About half of students agreed that decals help police enforce teenage driving laws. Few students believed decals would make them more careful drivers, and less than one-third of students at any school believed decals would help them obey the laws more or that other drivers are more careful around teenagers with decals. Nineteen percent of students at North Warren said that the motor vehicle office ran out of decals, but far fewer students reported this at the other three schools. The proportion of students who said their parents had told them not to use the decals ranged from 35 percent at School X to 56 percent at North Hunterdon.

### **Citations Issued to Teenage Drivers**

Figure 2 displays the monthly statewide counts of citations issued for violations of the learner's permit or probationary license requirements from July 2008 through May 2011. The figure depicts a large increase in the numbers of citations issued after the decal requirement took effect in May 2010.

Table XI summarizes the statewide counts of citations issued for violations of the graduated driver license law for the year prior to the decal requirement and the year after, excluding May 2010, when the decal requirement took effect. The total number of citations issued to teenagers, including violations of the decal requirement, nearly doubled. When decal violations were excluded, the number of

citations increased by 52 percent. Citations issued for each type of violation also increased from the year before to the year after the decal requirement (Table XI). The percentage increases ranged from 20 percent for violations of the learner's permit supervision requirement to 125 percent for "other violations." The "other" category includes "any other motor vehicle-related law the chief administrator determines to be significant," including, for example, violations resulting in two or more license points and alcohol-related offenses.

Figure 3 displays the counts of citations issued before (May 2009-April 2010) and after (June 2010-May 2011) the decal requirement in each of New Jersey's 21 counties. The number of citations declined only in the counties of Cape May (5 percent) and Cumberland (8 percent). In the other counties, the percentage increase in the number of citations ranged from 29 percent in Salem County to 289 percent in Morris County. In each of the four counties (Hunterdon, Morris, Somerset, Warren) where observations were conducted at high schools, the percentage increases in citations were larger than the overall statewide increase of 91 percent.

## **DISCUSSION**

New Jersey is the first U.S. state to institute a decal requirement for teenage drivers, but there has been some interest in license status identifiers in other states. Since 2010, the legislatures in Alaska, Iowa, Kentucky, Michigan, Minnesota, and North Carolina have introduced bills requiring vehicle identifiers for learner's permit and/or intermediate license holders. None of the bills has been enacted. A recent national telephone survey of parents of 15-18 year-olds found that 65 percent approved of decals on vehicles for restricted license holders (Williams et al., 2011). A national survey of 15-18 year-olds found teenagers evenly divided in their opinions about decals for restricted license holders (IIHS, 2011b). Even though license plate identifiers have been required for teenage drivers for many years in Australia, there is little current published research about the use of the identifiers or their effects on compliance with license restrictions or enforcement. Nor is there published research about the effectiveness of decal requirements in other jurisdictions around the world. Thus, there has been considerable interest in New Jersey's experience with a decal requirement.

The current study indicates that the decal requirement is very unpopular among the majority of parents and teenagers and that many teenagers do not comply with the requirement. In observations at

four high schools, the rate of decals displayed was much higher at North Warren than at the other high schools (64 vs. 24-33 percent in 2011). A likely factor in the higher decal use at North Warren was that a police officer typically stands at the entrance of the student parking lot, whereas this is not the practice at the other schools. Notably, approval of the decal requirement declined substantially between spring 2010, shortly before the requirement took effect, and spring 2011. The reasons for this decline are unclear.

According to the New Jersey Motor Vehicle Commission, teenagers obtaining a learner's permit must purchase the decals for \$4 either at the Motor Vehicle Commission offices or through a driver training school. Teenagers are not allowed to take the driving test to obtain the probationary license in a vehicle that lacks decals. Teenagers who already had a learner's permit or probationary license on May 1, 2010, when the decal requirement took effect, were required to go to a Commission office to purchase the decals. The expectation was that the observed use of the decals would be higher in spring 2011 than in fall 2010 as a larger proportion of students in the 2011 survey would have obtained their probationary licenses on or after May 1, 2010. The rate of decal use was higher in spring 2011 at two of the four schools and lower at the other two schools, but none of these differences was significant. Examination of the rate of observed decal use in 2011 by whether or not students obtained their probationary licenses before or after May 1, 2010 did not produce a consistent pattern at the four schools. Most of the teenagers in the 2011 telephone survey received their licenses on or after May 1, 2010; those who received their licenses prior to May 1, 2010, were significantly less likely to say they had decals for the vehicles they drive most often.

It might also be expected that decal use would be higher among learner's permit holders who obtained their permits on or after May 1, 2010. When surveyed in late spring 2011, parents of learner's permit holders were not asked when their teenagers obtained their permits. It is likely most obtained their permits on or after May 1, 2010, given that the minimum holding period for the permit is 6 months. Regardless, parents of learner's permit holders were much less likely than parents of probationary license holders to say their teenagers had decals for the vehicles they drive most. In explaining why their learners did not have decals, parents most commonly said they did not believe the requirement applied to their teenagers or that they were unaware of the requirement or how to get the decals.

Thus, the picture is mixed with regard to whether obtaining and using decals is increasing along with an increase in the proportion of teenagers receiving their learner's permits or probationary licenses on or after May 1, 2010.

Among parents and teenagers alike, opposition to the decal requirement primarily was attributed to concerns that identifying teenager drivers may lead to profiling, targeting, or other negative attention from other drivers, predators, or police officers. Much of the news coverage about the decal requirement has focused on concerns about the decals attracting predators. Most parents of probationary license holders in the current study said they had this concern for their teens. Ten percent said they were aware of a teenager who had been targeted by predators because of the decals; about 1 percent said it was their own teenagers. About half of the probationary license holders who were interviewed said they were concerned about predators. Eighteen percent of teenagers said they knew a teenager who had been targeted by a predator, and 2 percent said they had been targeted themselves. The circumstances of these reported incidents are not known. A report by New Jersey's Attorney General, issued in April 2011, found one documented case of a teenage driver reporting that she was inappropriately approached by someone because of the decals.

Concerns that vehicle identifiers for teenage drivers may attract predators or targeting by other drivers are not unique to New Jersey. The Connecticut Governor's Task Force on Teen Safe Driving (2008) considered the use of stickers, medallions, or other means to indicate provisional driver license status to law enforcement. However, the Task Force rejected this approach, noting it was impractical and strongly opposed, in part because of fears of teenage drivers being targeted. In December 2010, it was reported that parents of teenagers in British Columbia feared that L-decals and N-decals required since 1998 for learner drivers and novice drivers, respectively, may attract sexual predators (Moneo, 2010). These concerns were apparently fueled by the disappearance or death of 18 women in northern British Columbia. There do not appear to be any published reports about targeting of teenagers displaying L-plates or P-plates in Australia.

Some parents expressed concerns that police officers would target teenage drivers because of the decals. This is ironic, given that the New Jersey Teen Driver Study Commission noted that police officers believed the decals might allay concerns about police profiling of teenage drivers and that a main

objective of the requirement is to facilitate enforcement of the graduated licensing laws. It is unknown to what extent news coverage of efforts to repeal the decal requirement or other negative publicity has affected the attitudes of parents and teenagers or the use of the decals.

Based on a comparison of the number of citations issued for violations of the graduated driver licensing law during the year before and the year after the decal requirement took effect, there was a substantial increase in the total number of citations issued as well as increases in the number of citations issued for each type of violation. Further, the number of citations increased in all but 2 of New Jersey's 21 counties. This suggests the decal requirement achieved the goal of increasing enforcement of the teenage driving laws, although it is unknown whether the drivers who received citations for offenses other than the decal offenses were displaying the decals. It also is possible that publicity about the decals and the other changes to the graduated licensing law effective May 1, 2010, or other unknown factors, led to a greater awareness among police officers of the law and heightened enforcement.

Although the decal requirement led to increased enforcement of the graduated licensing laws, teenagers' reported violations of the graduated license restrictions either increased or were similar in 2011 compared with 2010. However, teenagers did report driving less between 11 pm and midnight following the strengthening of the nighttime driving restriction. The teenagers' reported views are mixed with regard to whether or not the decals will increase enforcement of teenage driving laws. Their perceptions about the level of enforcement of the nighttime driving and the passenger restrictions changed little from 2010 to 2011.

Although it appears the decal requirement has increased enforcement of graduated licensing restrictions, the requirement does not seem to have achieved the ultimate goal of increased compliance with the restrictions. If the requirement has, in fact, increased enforcement and this increase is sustained, it is unknown whether this will translate into higher rates of compliance over time.

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**Table I** New Jersey teenage licensing requirements

	Pre-May 2010 law	Changes effective May 2010
Learner's permit	<p>Minimum age 16 (with driver education)</p> <p>Supervised driving with adult age 21 and older</p> <p>No driving midnight-5.am. (11 p.m.-5 a.m. if age 16)</p> <p>No more than 1 passenger in addition to supervising driver, excluding household members</p> <p>No use of cell phones, hand-held video games, other electronics</p> <p>Driver and all passengers must use seat belts</p> <p>Minimum 6 months in this license stage</p>	<p>No driving 11 p.m.-5 a.m.</p> <p>No more than 1 passenger in addition to supervising driver, excluding parent, guardian, or dependent</p> <p>Vehicle decals required</p>
Probationary (restricted) license	<p>Minimum age 17</p> <p>Unsupervised driving allowed except midnight-5 a.m.</p> <p>No more than 1 passenger, excluding household members</p> <p>No use of cellphones, handheld video games, other electronics</p> <p>Driver and all passengers must use seat belts</p> <p>Minimum 1 year in this license stage</p>	<p>Unsupervised driving allowed except 11 p.m.-5 a.m.</p> <p>No more than 1 passenger, excluding driver's dependents unless accompanied by a parent or guardian</p> <p>Vehicle decals required</p>
Unrestricted license	<p>Minimum age 18</p>	

**Table II** Characteristics of high schools in surveys

High School	Town and County	County population in 2010	Median household income of county in 2009	Population per square mile in 2010	Approximate senior class enrollment, 2010-11 academic year
School X*	County of Somerset	323,444	\$90,125	1,072	460
North Hunterdon	Town of Annandale, Hunterdon County	128,349	\$100,485	300	460
North Warren	Town of North Warren, Warren County	108,692	\$70,092	304	300
West Morris	Town of Chester, Morris County	492,276	\$96,300	1,070	320

\*Note this school requested anonymity.

**Table III** Opinions about decal requirement among parents and teenagers

	Parents of teenagers with probationary license		Parents of teenagers with learner's permit		Teenagers with probationary license	
	Pre-decals (N=655) percent	Post-decals (N=700) percent	Pre-decals (N=501) percent	Post-decals (N=283) percent	Pre-decals (N=404) percent	Post-decals (N=391) percent
What is your view of the decal requirement for probationary license holders?						
Strongly approved	20.9	5.1	25.3	8.8	5.9	0.8
Somewhat approve	23.5	8.9	27.9	11.7	21.0	8.2
Somewhat disapprove	15.1	14.6	14.6	19.4	20.0	27.2
Strongly disapprove	37.4	68.7	28.1	55.8	51.5	62.6
Don't know/refuse	3.1	2.7	4.0	4.2	1.5	1.2
	$\chi^2[3]=173.5,$ p<0.0001		$\chi^2[3]=86.2,$ p<0.0001		$\chi^2[3]=47.2,$ p<0.0001	
What is your view of the decal requirement for drivers with learner's permits?						
Strongly approve	31.0	13.0	31.9	11.7	21.0	8.0
Somewhat approve	21.8	17.0	25.0	16.6	33.7	33.4
Somewhat disapprove	13.6	17.0	11.2	14.1	20.5	26.2
Strongly disapprove	29.5	47.4	26.7	52.3	21.5	28.4
Don't know/refuse	4.1	5.6	5.2	5.3	3.2	4.0
	$\chi^2[3]=85.2,$ p<0.0001		$\chi^2[3]=70.1,$ p<0.0001		$\chi^2[3]=30.2,$ p<0.0001	

**Table IV** Reasons disapprove of decal requirement among parents and teenagers\*

	Parents of teenagers with probationary license		Parents of teenagers with learner's permit		Teenagers with probationary license	
	Pre- decals (N=343)	Post- decals (N=583)	Pre- decals (N=214)	Post- decals (N=213)	Pre- decals (N=289)	Post- decals (N=360)
Reasons disapprove of decals for probationary license						
Profiling/targeting by other drivers	33.2	41.0	30.8	39.4	24.2	36.4
Identifies/draws negative attention to teenage drivers	26.2	28.1	27.1	32.4	20.4	18.3
Police profiling/targeting teenage drivers	16.6	14.4	16.8	8.9	30.1	21.4
Not effective/beneficial/needed	15.7	12.0	15.4	13.1	19.0	20.6
Inconvenient	12.8	5.0	14.5	8.0	5.5	3.3
Discriminates against teenagers	12.0	7.5	10.7	9.9	14.5	15.8
Risk of predators	9.9	22.6	11.7	17.8	7.3	18.9
Outside government's responsibility	5.2	1.4	5.6	2.3	0	0
Stupid/ridiculous/do not like	1.5	2.7	2.3	4.7	4.5	2.2
Teenagers won't comply	0.6	2.2	0	2.3	0	0
Too restrictive	0	0	0	0	11.8	4.2
Other	8.5	5.0	5.6	5.6	7.3	3.3
Reasons disapprove of decals for learner's permit	(N=280)	(N=452)	(N=190)	(N=188)	(N=170)	(N=220)
No need for decal with adult in vehicle	33.6	25.9	28.9	20.7	35.9	24.5
Profiling/targeted by other drivers	18.6	28.1	19.5	30.9	16.5	20.5
Not effective/beneficial/needed	17.1	14.6	17.9	14.9	10.0	15.9
Identifies/draws negative attention to teenage drivers	11.4	18.1	13.2	17.6	10.6	9.1
Inconvenient	8.2	2.9	11.6	9.6	8.8	2.7
Police profiling/targeting teenage drivers	7.5	6.4	10.5	9.0	18.2	10.0
Discriminates against teenagers	6.1	6.6	10.0	5.9	12.9	11.8
Risk of predators	4.3	10.4	6.3	8.0	5.9	6.4
Outside government's responsibility	5.4	2.2	3.7	3.2	0	0
Do not like it	3.2	4.0	2.6	5.9	0	0
Too restrictive	0	0	0	0	1.8	1.4
Other	9.6	6.6	4.7	1.0	11.8	14.1

\*Multiple responses permitted; percentages sum to more than 100%

**Table V** Percentage of teenagers with probationary license who agree with statements about possible effects of decal requirement on probationary drivers

	Pre-decals (N=404)	Post-decals (N=401)
With the decals, teens with probationary licenses (will) drive more carefully knowing that they are more readily identifiable by the police.	68.3 $\chi^2[1]=35.3, p<0.0001$	47.4
With the decals, teens with probationary licenses (will be) are less likely to violate the nighttime and passenger restrictions.	68.1 $\chi^2[1]=41.1, p<0.0001$	45.9
The \$100 fine for not using the decals (will ensure) ensures that teens will use the decal when they drive.	51.0 $\chi^2[1]=103.3, p<0.0001$	16.7
Some parents (will) do not want their teens to have the decals on their vehicle.	77.0 $\chi^2[1]=58.9, p<0.0001$	95.3
Teens (will) do not use the decals when they know they are going to be in violation of night or passenger restrictions.	90.3 $\chi^2[1]=1.6, p=0.207$	86.5

**Table VI** Teenagers' use of decals as reported by parents

	Parents of teenagers with probationary license percent	Parents of teenagers with learner's permit percent
Percentage of teenagers with decals for vehicle drive most often	(N=700) 76.9	(N=283) 55.8
(Among parents of teenagers without decals) Why doesn't your teen have decals?	(N=151)*	(N=119*
Parent does not allow/opposes	27.2	11.8
Targeting/profiling by other drivers	15.9	1.7
No particular reason	11.9	11.8
Did not think decals applied to child	9.3	30.3
Unaware of law or how to get decals	9.3	26.1
Inconvenient	8.6	5.9
Identifies, negative attention to teenage drivers	4.6	0
Predator risk	4.0	0.8
Police profiling/targeted teenage drivers	4.0	0
Not effective/beneficial/necessary	2.6	0.8
Discriminatory to teenagers	2.6	0
Weren't available to family	2.0	6.7
Completely new driver	0	9.2
Other	11.9	5.0
(Among parents of teenagers without decals) Percentage who are okay with teenager not having decals	(N=151) 89.4	(N=119) 84.9
(Among parents of teenagers with decals) To the best of your knowledge, how often does your teen use the decals when he/she drives?	(N=538)	(N=158)
Always	59.9	66.5
Sometimes	11.9	8.9
Rarely	6.7	1.9
Never	18.8	20.9
Don't know/refuse	2.8	1.9
(Among parents of teenagers who do not always use decals) Percentage who are okay with teenager not using decals every time he/she drives	(N=201) 91.0	(N=50) 92.0
(Among parents who are okay with teenager not always using decals) Why are you okay with it?	N=183*	N=46*
Targeting/profiling by other drivers	26.2	19.6
Parent does not allow/opposes	19.7	30.4
Identifies, negative attention to teenage driver	13.1	4.3
Unsafe	12.6	4.3
Not effective/beneficial/necessary	10.4	8.7
Did not think decals applied to child	9.8	15.2
Risk of predators	9.3	0
Police profiling/targeted teenage drivers	7.1	2.2
Inconvenient	3.8	4.3
Discriminatory	4.4	2.2
Other	9.8	19.6

\*Multiple responses permit; percentages sum to more than 100%.

**Table VII** Perceptions about police enforcement of teenage driving restrictions among teenagers with probationary license

	Pre-decals (N=404) percent	Post-decals (N=401) percent
To what extent do police enforce the nighttime restriction?		
A lot	14.1	11.2
Some	30.7	33.9
Not much	30.2	40.9
Don't know/refuse	25.0	14.0
	$\chi^2[2]=5.4, p=0.066$	
To what extent do police enforce the passenger restriction?		
A lot	24.3	21.4
Some	32.4	37.9
Not much	28.2	34.4
Don't know/refuse	15.1	6.2
	$\chi^2[2]=3.1, p=0.21$	

**Table VIII** Percentage of teenagers with probationary license who reported violations of graduated driver license restrictions or drove while talking on cellphone or texting

	Pre-decals (N=404)	Post-decals (N=401)
In past month, drove after midnight	17.1	36.2
	$\chi^2[1]=37.6, p<0.0001$	
In past month, drove between 11 pm and midnight	68.1	54.1
	$\chi^2[1]=18.3, p<0.0001$	
In past month, drove after 11 pm	68.6	57.1
	$\chi^2[1]=11.3, p=0.001$	
In past month drove with more than one passenger in the car other than a family member	41.3	55.9
	$\chi^2[1]=16.2, p<0.0001$	
In past week talked on cellphone while driving	18.6	17.5
	$\chi^2[1]=0.7, p=0.6$	
In past week texted while driving	12.1	10.0
	$\chi^2[1]=0.95, p=0.33$	

**Table IX** Observed decal use among high school students with probationary driver's licenses arriving in the morning at New Jersey high schools

	School X		North Hunterdon		North Warren		West Morris	
	Fall 2010 (N=85) percent	Spring 2011 (N=127) percent	Fall 2010 (N=168) percent	Spring 2011 (N=131) percent	Fall 2010 (N=84) percent	Spring 2011 (N=92) percent	Fall 2010 (N=179) percent	Spring 2011 (N=129) percent
Decal present	18.8	25.2	29.2	24.4	66.7	64.1	26.3	32.6
Decal backing only	12.9	27.6	40.5	48.1	19.0	25.0	8.4	36.4
No backing or decal	68.2	47.2	30.4	27.5	14.3	10.9	65.4	31.0

**Table X** Percentage of probationary license holders who agree with statements about decals when surveyed at high schools in spring 2011

	School X (N=127) percent	North Hunterdon (N=131) percent	North Warren (N=91) percent	West Morris (N=129) percent
Decals will help make me a more careful driver	11.0	6.9	19.8	3.9
Decals are an inconvenience	78.7	84.0	70.3	86.8
Other drivers are more aggressive around teen with decal	63.0	56.5	58.9	58.1
Decals are a tool for police to target teens, even if teens are doing nothing wrong	87.4	84.0	75.8	91.5
Decals will make me obey the laws more	18.1	19.1	31.9	13.2
Decals will have no effect on my driving	82.7	74.8	70.3	76.0
Decals will help police enforce teen driving laws	57.1	48.9	57.1	47.7
Other drivers are more careful around teen with decal	26.2	19.8	25.3	19.4
My parents told me not to use the decals	35.2	55.7	39.8	45.0
DMV had run out of decals and I was asked to come back	4.8	6.9	18.7	9.4

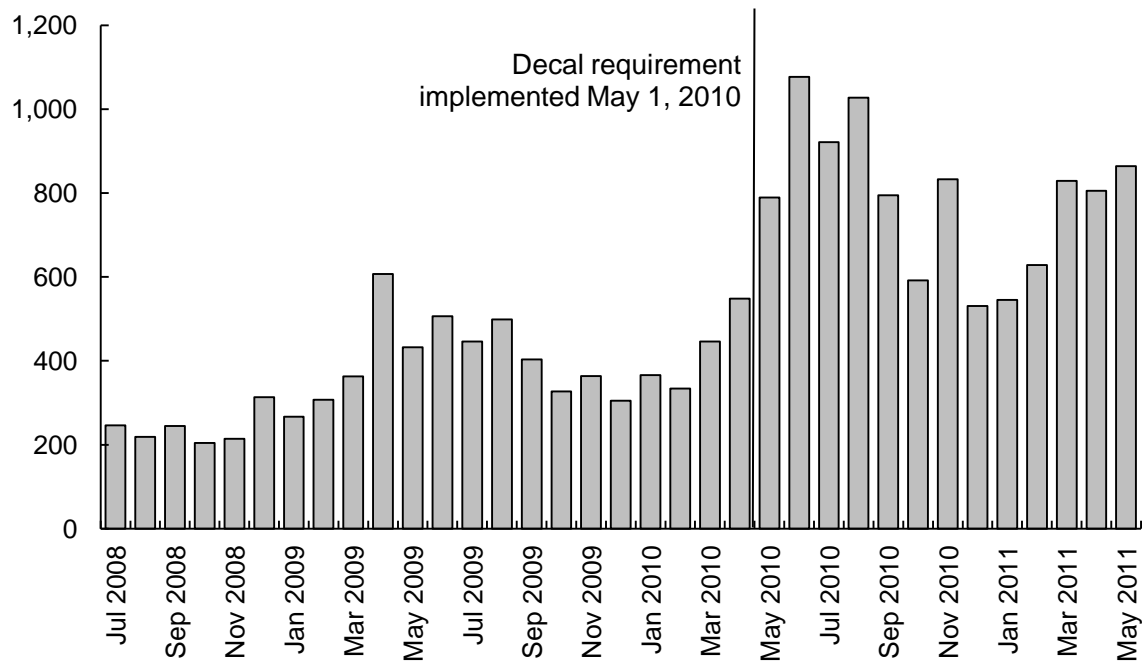
**Table XI** Citations issued to New Jersey teenage drivers for violations of graduated driver license law before and after the implementation of the decal requirement

	Type of Violation								Total without decal citations
	Supervision requirements for permit holders	Passenger restriction	Night restriction	Seatbelt	Wireless device use	Other	Decal	Total*	
Before decals: May 2009 to April 2010	269	2,364	1,749	205	87	195	0	4,976	4,976
After decals: June 2010 to May 2011	322	3,324	2,882	310	174	439	1,869	9,447	7,576
Percentage change	19.7	40.6	64.8	51.2	100.0	125.1	—	89.9	52.3

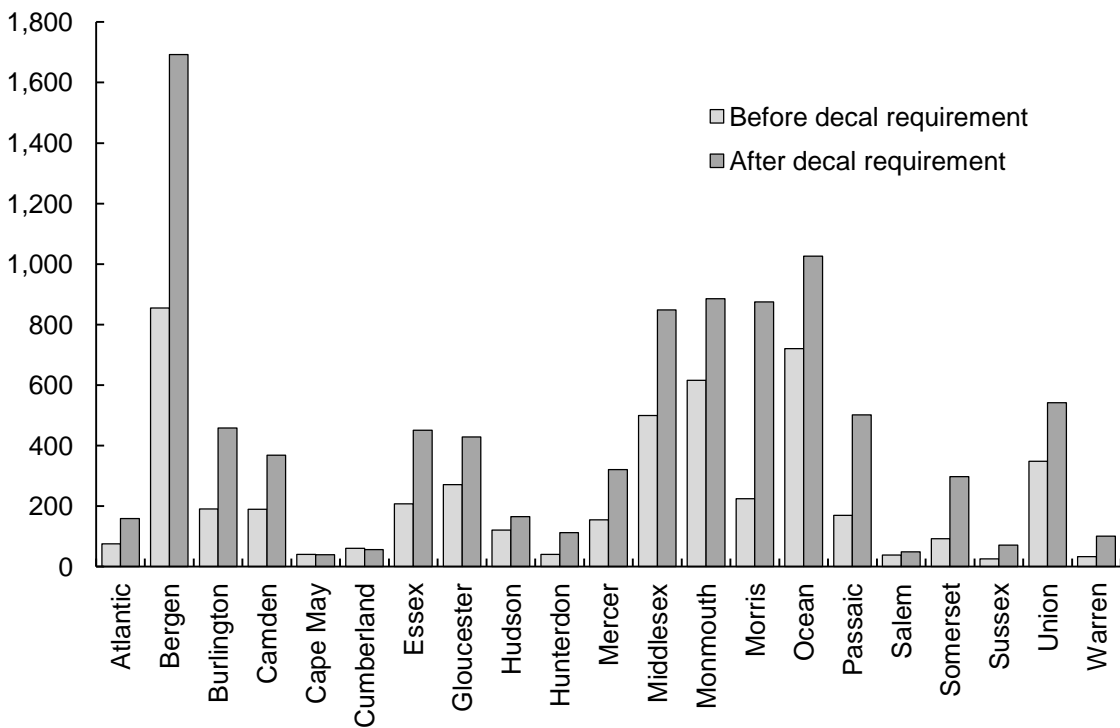
\*Total includes citations issued for violations of graduated driver license law without specific violation noted.



**Fig 1** Removable license plate decal required on front and rear license plates of vehicles driven by New Jersey teenagers with learner's permit or probationary license



**Fig 2** Monthly statewide number of citations issued for violations of graduated driver license law during July 2008-May 2011



**Fig 3** Counts of citations issued for violations of graduated driver license law by county before and after implementation of decal requirement