

Evaluation of Iowa's Driver Improvement Program

tech transfer summary

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RESEARCH PROJECT TITLE

Evaluation of Iowa's Driver Improvement Program

SPONSORS

Iowa Department of Transportation
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The Midwest Transportation Consortium provided funding for a graduate research assistant assigned to this project.

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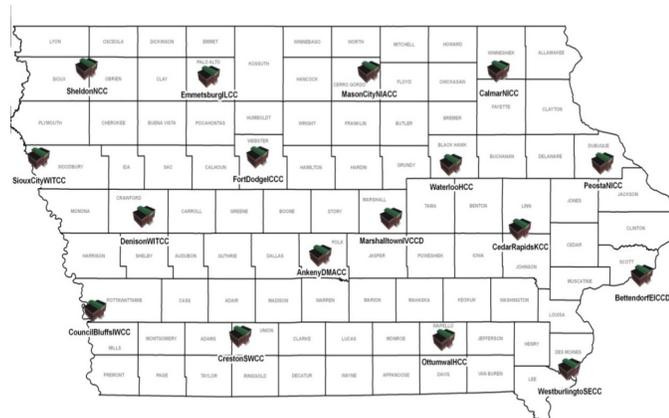
Iowa's Driver Improvement Program can help reduce the number of traffic violations and crashes for high-risk drivers.

Objectives

- Examine the effectiveness of Iowa's Driver Improvement Program (DIP) in terms of the number of convictions participants receive after attending the program.
- Examine the impact of DIP location on the program's effectiveness.
- Determine the factors that impact frequency and probability of subsequent convictions.

Background and Problem Statement

Drivers who repeatedly violate traffic rules or who are repeat crash offenders pose a safety risk and are often required to participate in a DIP. In Iowa, drivers participating in the DIP attend, at the driver's expense, a program approved by the Iowa Department of Transportation's Motor Vehicle Division. Currently, 17 community colleges across Iowa offer the approved program.



Community colleges in Iowa offering driver improvement courses

Drivers in Iowa are required to attend a DIP if convicted of three or more countable moving violations (including out-of-state violations) within a 12-month period or if convicted of driving 25 to 29 mph over the posted speed limit. From 2004 to 2007, a total of 23,597 drivers were sent to a DIP or volunteered to attend.

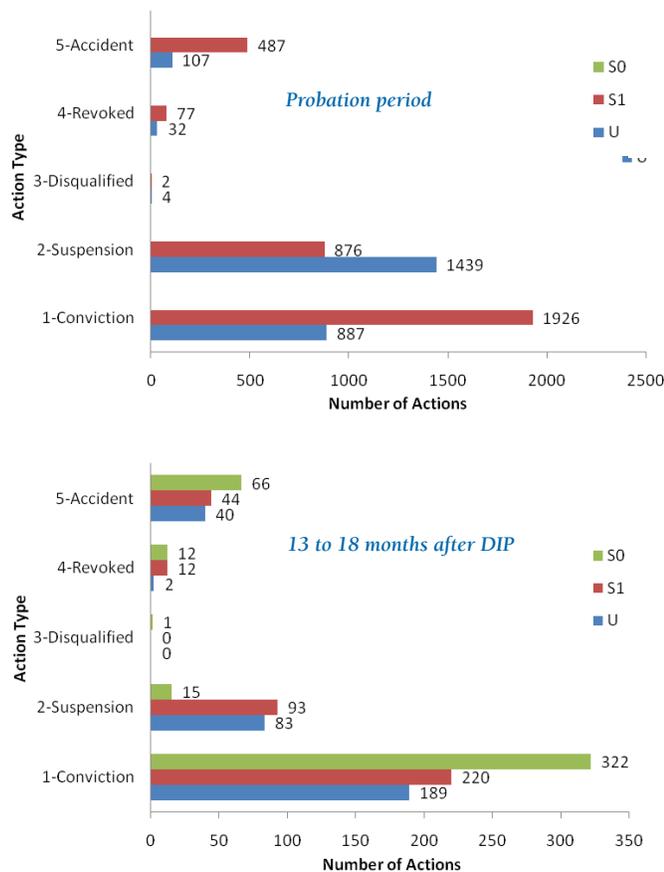
While many studies have found that DIPs initially reduce the number of traffic violations for participants, the programs' effectiveness is less certain in the long term. Moreover, research is needed to measure the effectiveness of Iowa's DIP as an overall program and its effectiveness at each DIP location.

Research Description

To evaluate the Iowa DIP's effectiveness, the researchers gathered data on a random sample of 9,055 drivers required to attend DIP between 2006 and 2008. The Iowa Motor Vehicle Division (MVD) provided data on drivers' citations, convictions, crashes, and driver education training. Additional MVD data included

- Community colleges hosting a state-approved DIP
- Number of DIP classes offered by each college
- Cost of each program
- DIP outcome (drivers completing the program or not)
- Driver gender and age

Drivers were divided into two categories—satisfactory or unsatisfactory DIP completion. These were used to track drivers during the one-year probation period after the DIP and during the period from 13 to 18 months after the DIP. Drivers' traffic convictions and crashes four years before attending the DIP were also tracked. Statistical tests, econometric models, and probabilistic models were used to analyze the data.



Comparison of actions during probation period and 13–18 months after DIP, by action type and driver group for drivers who did not complete DIP (U), completed DIP with no actions during probation period (S0), and completed DIP with an action during probation period (S1)

Key Findings

- Iowa's DIP is effective in reducing the number of traffic convictions that participants receive after the program.
- Among the 9,055 drivers, 6,790 (75%) completed the program satisfactorily, while 2,265 (25%) did not.
- During the probation period, 73% of the 6,790 drivers in the "satisfactory" group had no traffic convictions, and 93% were not involved in a crash.
- During the probation period, drivers in the satisfactory group had fewer convictions than drivers in the unsatisfactory group. But during the period 13 to 18 months after the DIP, DIP outcome was not a significant predictor of subsequent convictions.
- Most drivers were required to attend the DIP due to speeding. Speeding remained the major citation during the probation period. After speeding, driving without a license or with a suspended license were frequent subsequent citations for DIP participants.
- Factors that impact DIP effectiveness include age (young drivers have a higher subsequent conviction risk than older drivers), driver history (drivers with fewer crashes or convictions had a lower risk of subsequent convictions), and DIP location (Ankeny participants were less likely to have a conviction 13 to 18 months after DIP, while Cedar Rapids participants were less likely to have a conviction during the probation period). There was no significant difference in DIP outcome between male and female drivers.

Recommendations

- Consider implementation of additional driver education mechanisms, including online courses and a mature driver improvement program.
- Send advisory letters, customized by age, as an early intervention method before drivers convicted of violations become high-risk drivers.
- Given the analysis results, send a letter to high-risk drivers (younger drivers and those with multiple convictions) after completing the DIP and again after the probation period to emphasize future sanctions.
- Because speeding and suspended driving were frequent citations during the probation period, addressing these violations can be a principal DIP objective.
- Because a large number of suspended drivers continued to drive, consider measures to reduce driving-while-suspended offenses, such as vehicle control measures.

Implementation Benefit

Iowa's DIP can help reduce the number of repeat traffic violators and high-risk drivers and improve safe driving behaviors.