

The following is only an abstract of one of our earlier reports. An email request for a printed or PDF copy of the complete report can be generated by clicking on the **Report Number** of this report in the table of reports on the [Research Studies and Reports](#) page. The PDF copy of the complete report was created by scanning an original, printed copy, and thus is only *partially* searchable and *is not* accessible, but is fully printable.

A printed or PDF copy of our studies and reports may also be requested by mail or phone at:

Department of Motor Vehicles  
Research and Development Branch  
2570 24th Street, MS H-126  
Sacramento, CA 95818-2606  
(916) 657-5805

For a request by mail, please include the report number and your name, address, and phone number. Also, please state whether you are requesting a printed copy, a PDF copy, or both. For a PDF copy, please include your email address.

TITLE: Annual Tabulations of Mature Driver Program Driving Record Comparisons (1989-1993). Annual Report to the Legislature of the State of California.

DATE: June 1989

AUTHOR(S): Lee Stylos & Mary K. Janke

REPORT NUMBER: 119

NTIS NUMBER: None

DATE: June 1990

AUTHOR(S): Eric Berube & Robert A. Hagge

REPORT NUMBER: 125

NTIS NUMBER: PB92-101575

DATE: June 1991

AUTHOR(S): Kevin K. Foster

REPORT NUMBER: 130

NTIS NUMBER: PB92-101591

DATE: June 1992

AUTHOR(S): Eric Berube

REPORT NUMBER: 136

NTIS NUMBER: PB93-176352

DATE: June 1993

AUTHOR(S): Eric Berube

REPORT NUMBER: 140

NTIS NUMBER: None

FUNDING SOURCE: Departmental Budget

PROTECT OBTECTIVE:

To provide annual tabulations comparing the accident and conviction records of Mature Driver Improvement (MDI) course participants and of a randomly selected group of drivers of similar age (55 and above).

SUMMARY:

Each annual report was designed to assess (1) the relationship between MDI course attendance and subsequent accidents and convictions and (2) the actuarial validity of providing auto insurance premium reductions to MDI course graduates.

Report #1 Driver record comparisons were made between 40,399 MDI course graduates and 75,604 randomly selected comparison drivers aged 55 or older who had not taken an MDI course (1988 subjects). The study found MDI graduates to have significantly lower unadjusted and statistically adjusted (for relevant covariates) rates of fatal/injury accidents and total convictions during the first 6 months following course completion. It was concluded that the program may have contributed to a reduction in accident and conviction rates, but it was believed that the rate differentials were more likely due to subjects' selecting themselves into the program (volunteers presumably

being safer drivers). It was recommended that graduates of the MDI program continue to receive auto insurance premium reductions commensurate with the actuarial casualty-accident rate differential.

Report #2 Follow-up comparisons of an additional 12 months of driver record data (7-18 months from reference date) were made for the 1988 subjects. Comparisons were also made on the 6-month subsequent driver records of an additional 45,520 MDI graduates and 75,034 randomly selected comparison drivers (1989 subjects). No significant differences in casualty-accident rates were detected for either the 1988 or 1989 cohorts. These findings were inconsistent with the findings of the first report (although both reports showed MDI graduates to have significantly lower adjusted and unadjusted rates of total convictions). It was recommended that any judgments concerning insurance premium reductions for MDI graduates be withheld until the findings of the third annual report became available.

Report #3 Follow-up comparisons were made for the 1988 subjects on an additional 12 months of driver record data (19-30 months from reference date), and for the 1989 subjects on an additional 12 months of driver record data (7-12 months from reference date). Comparisons were also made on the 6-month subsequent driving records of an additional 36,075 MDI graduates and 65,620 randomly selected comparison drivers (1990 subjects). No significant differences were found for either adjusted or unadjusted casualty accident rates for either the 1988 or 1990 cohorts. For the 1989 cohort, the MDI graduates and the comparison group were not significantly different on subsequent adjusted accident rates, but the graduates had a significantly lower unadjusted rate. All three MDI graduate groups had significantly lower adjusted and unadjusted total conviction rates than did their corresponding comparison groups. It was concluded that there was some evidence of a lower actuarial casualty-accident risk for course graduates, supporting continuing auto insurance premium reductions for MDI graduates. However, there was no compelling evidence that program participation was associated with a reduced accident rate.

#### IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

The MDI program, including the offering of insurance reductions to course graduates, is continuing at the time of writing. The DMV is mandated to provide annual tabulations to the Legislature, comparing the accident and conviction records of course graduates with those of drivers of equivalent age who did not take the course. Legislation is being proposed to amend this requirement by providing a sunset date.

#### SUPPLEMENTARY INFORMATION:

Driver record statistics on older drivers can be found in Romanowicz and Gebel'S, Report #126 and Gebel'S, Romanowicz, and McKenzie, Report #141.

An overview of the entire series of reports was presented by Janke in January 1993 at the *Annual Meeting of the Transportation Research Board* (Transportation Research Record, No. 1438). A paper, by Exuzides & Peck, utilizing a different statistical model was published in the *Proceedings of the Western Users of SAS Software Conference*, Santa Monica, CA, under the title "A Modification of Two Stage Least Squares in Quasi Experiments," 1993, 120-128.