

P B 8 0 - 1 0 1 6 9 4

X
**AN EVALUATION OF PROBATION-BY-MAIL
AS AN ALTERNATIVE TO MANDATORY
HEARING ATTENDANCE FOR NEGLIGENT
OPERATORS**

By
BEVERLY SHERMAN and MICHAEL RATZ

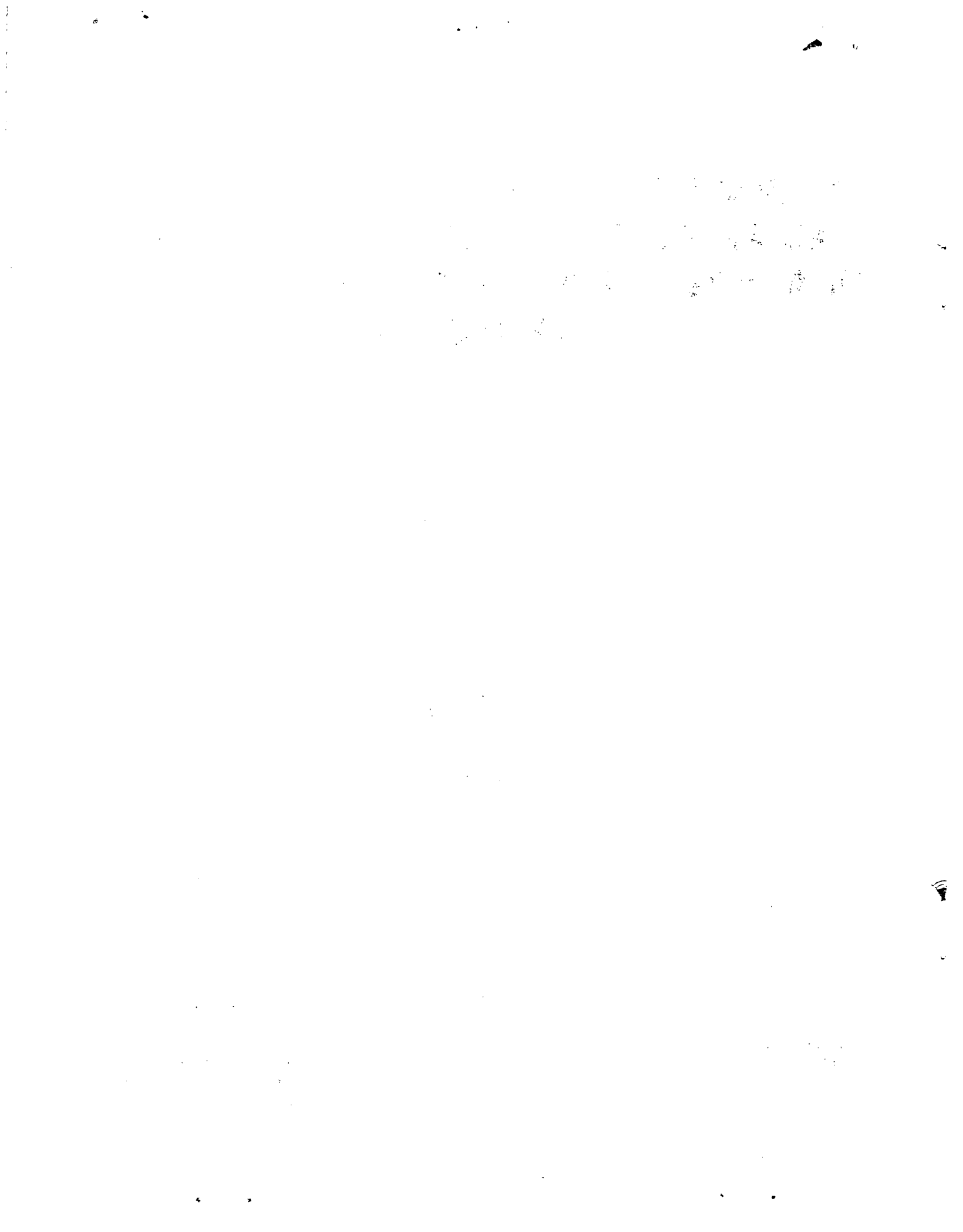


July, 1979

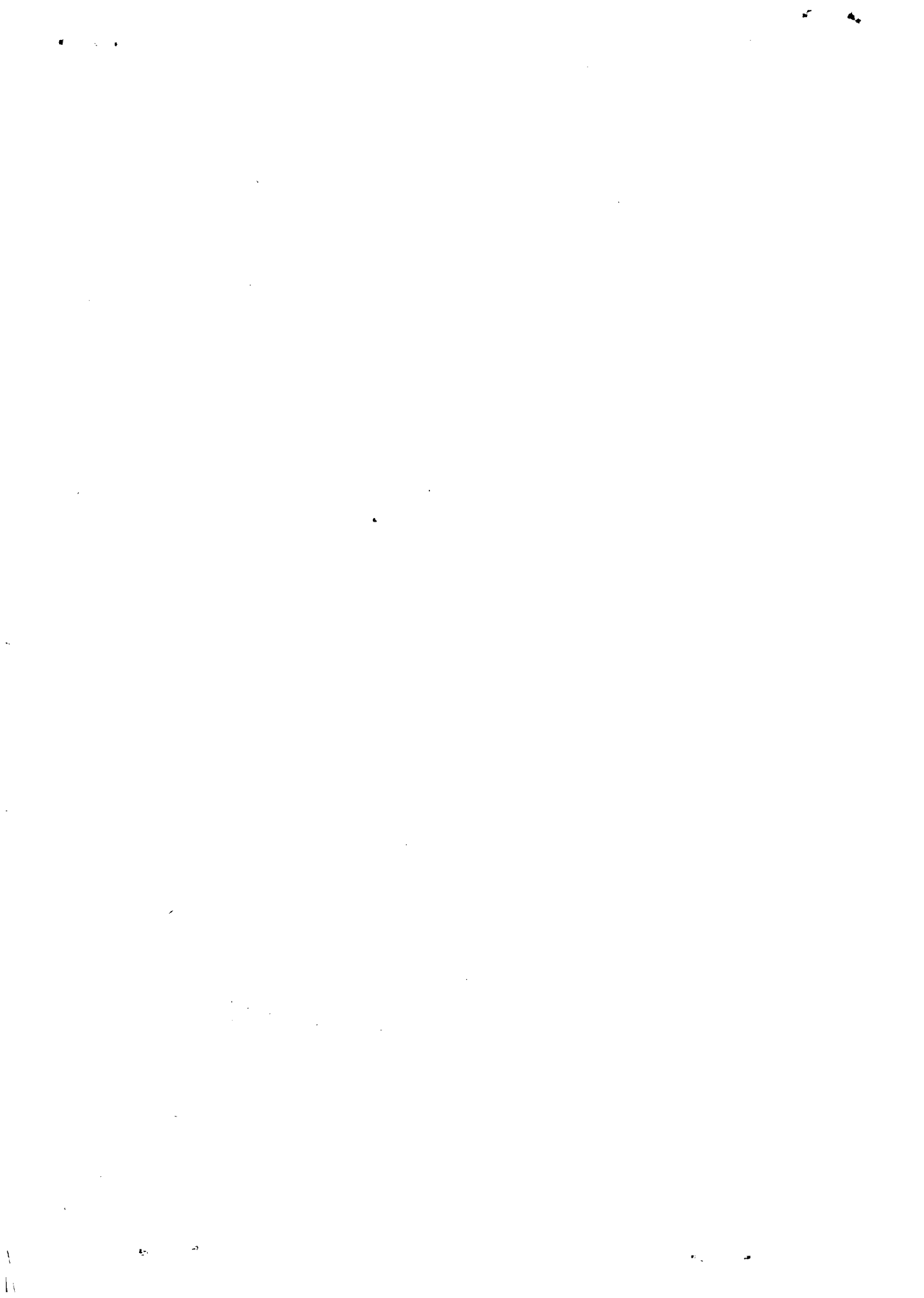
Development Section
Chief

State of California
Business & Transportation Agency
Department of Motor Vehicles
Doris Alexis, Director

74493



BIBLIOGRAPHIC DATA SHEET		1. Report No. CAL-DMV-RSS- 79-79	2.	3. Recipient's Accession No. N/A
4. Title and Subtitle An Evaluation of Probation-by-Mail as an Alternative to Mandatory Hearing Attendance for Negligent Operators				5. Report Date July, 1979
7. Author(s) Beverly Sherman and Michael Ratz				6.
9. Performing Organization Name and Address Research and Development Section Department of Motor Vehicles P. O. Box 1828 Sacramento, CA 95809				8. Performing Organization Rept. No. 70
12. Sponsoring Organization Name and Address State of California Business & Transportation Agency Department of Motor Vehicles P. O. Box 1828, Sacramento, CA 95809				10. Project/Task/Work Unit No. N/A
				11. Contract/Grant No. N/A
15. Supplementary Notes				13. Type of Report & Period Covered
				14.
16. Abstracts Drivers who became eligible for negligent operator individual hearings, and whose records did not suggest that their inclusion in the program would represent an unacceptable traffic safety risk, were randomly assigned to a group which received the standard hearing or a group which received probation-by-mail. There were no significant differences in the subsequent accident records of the two groups. Drivers in the probation-by-mail group did have significantly more convictions with a resultant increase in probation violator hearings. Those drivers who were screened as high risk and received the standard hearing did not differ significantly from nonhigh risk drivers who received a hearing, with regard to either subsequent accidents or convictions. However, because high risk drivers were not randomly assigned to either an individual hearing or probation-by-mail group, it is not possible to determine, based on the present data, whether probation-by-mail would increase accidents in this subpopulation. A follow-up evaluation will address this question.				
17. Key Words and Document Analysis. 17a. Descriptors Motor vehicle accidents, traffic safety, collision research				
17b. Identifiers/Open-Ended Terms NCJRS JAN 5 1981 ACQUISITIONS				
17c. COSATI Field/Group 05J Behavior Social Sciences--Psychology (Individual and group behavior)				
18. Availability Statement		19. Security Class (This Report) UNCLASSIFIED		21. No. of Pages 30
		20. Security Class (This Page) UNCLASSIFIED		22. Price



SUMMARY

Drivers who became eligible for negligent operator individual hearings, and whose records did not suggest that their inclusion in the program would represent an unacceptable traffic safety risk, were randomly assigned to a group which received the standard hearing or a group which received probation-by-mail.

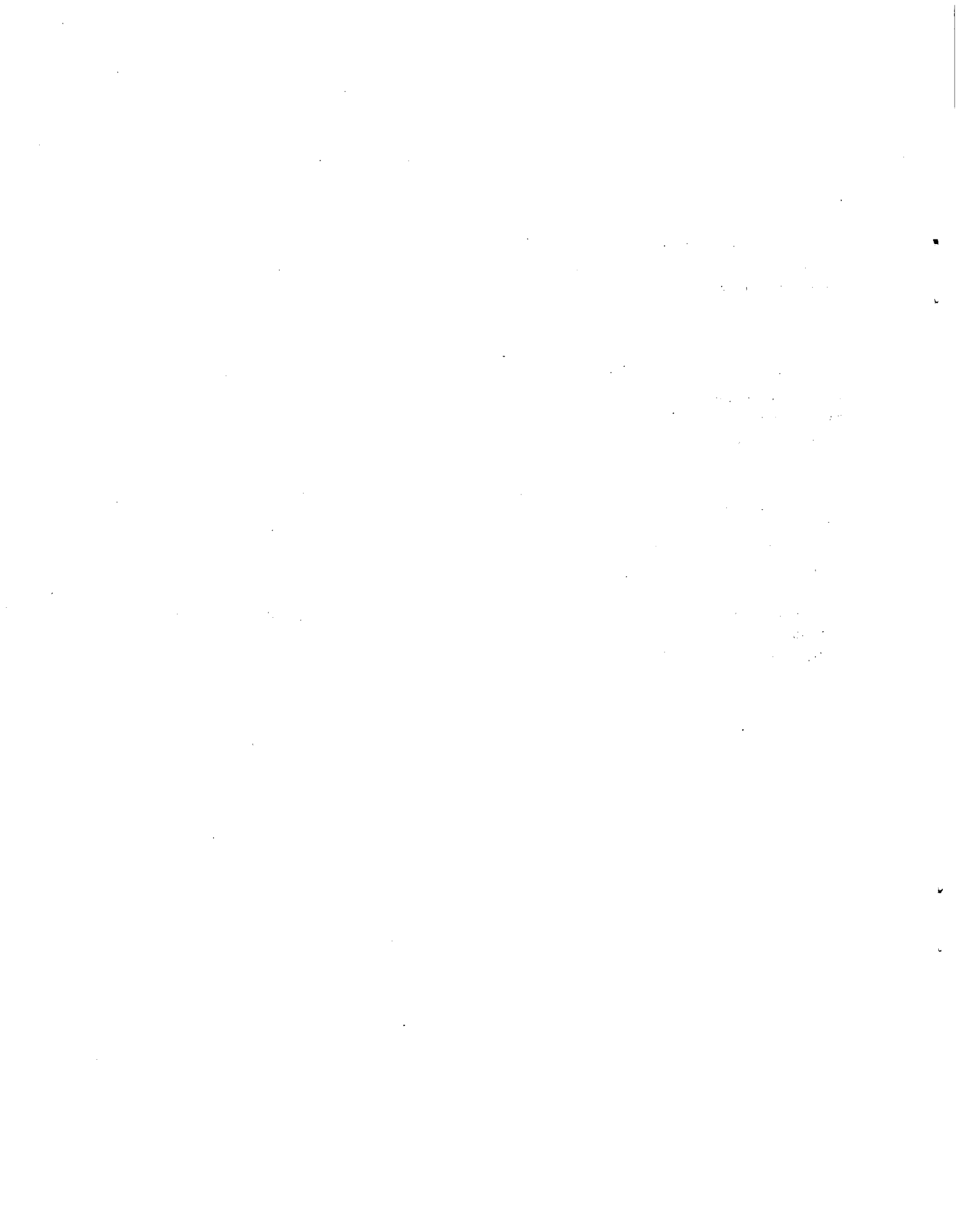
There were no significant differences in the subsequent accident records of the two groups. Drivers in the probation-by-mail group did have significantly more convictions with a resultant increase in probation violator hearings. Those drivers who were screened as high risk and received the standard hearing did not differ significantly from nonhigh risk drivers who received a hearing with regard to either subsequent accidents or convictions.

There was no evidence that minimizing the number of in-person contacts between the negligent operator and driver improvement analyst, adversely affected traffic safety.

In a closely related study (on "no action" hearings) no evidence was found that holding the hearing but not imposing probation had a detrimental effect on traffic safety.

Because there were no clear-cut accident effect differences between the two experimental programs (probation-by-mail and no action hearings) and probation-by-mail resulted in a greater budgetary savings, its implementation was recommended.

NCJRS
JAN 5 1981
ACQUISITIONS



ACKNOWLEDGMENT

The Office of Program Development and Evaluation, under the general direction of Ronald S. Coppin, proposed evaluating two modifications of the present individual hearing program for negligent operators. Both modifications were intended to reduce hearing costs. This report covers the evaluation of one of these alternatives, probation-by-mail.

Acknowledgment and appreciation are extended to the following departmental personnel for their contributions to the study: Sandreno Marchi for planning and implementation, the scheduling unit for subject identification and assignment to treatment, the Division of EDP Services for its role in data processing, and Marilyn Louie of the Cost Accounting Section for determining the program savings associated with probation-by-mail.

Technical assistance and supervision were provided by Raymond C. Peck, Research Program Manager; and Research Managers William Epperson and Maureen Miller.

Special thanks are extended to the clerical staff, Doris Johnson and Debra Shortino, for data coding; and Bonnie Grippen and Linda Moeckly for typing the final report.

Lloyde Bradley, William Mason, and Terrance Keenan of the Division of Drivers Licenses, warrant particular thanks for their constructive critique of a preliminary draft of the report.

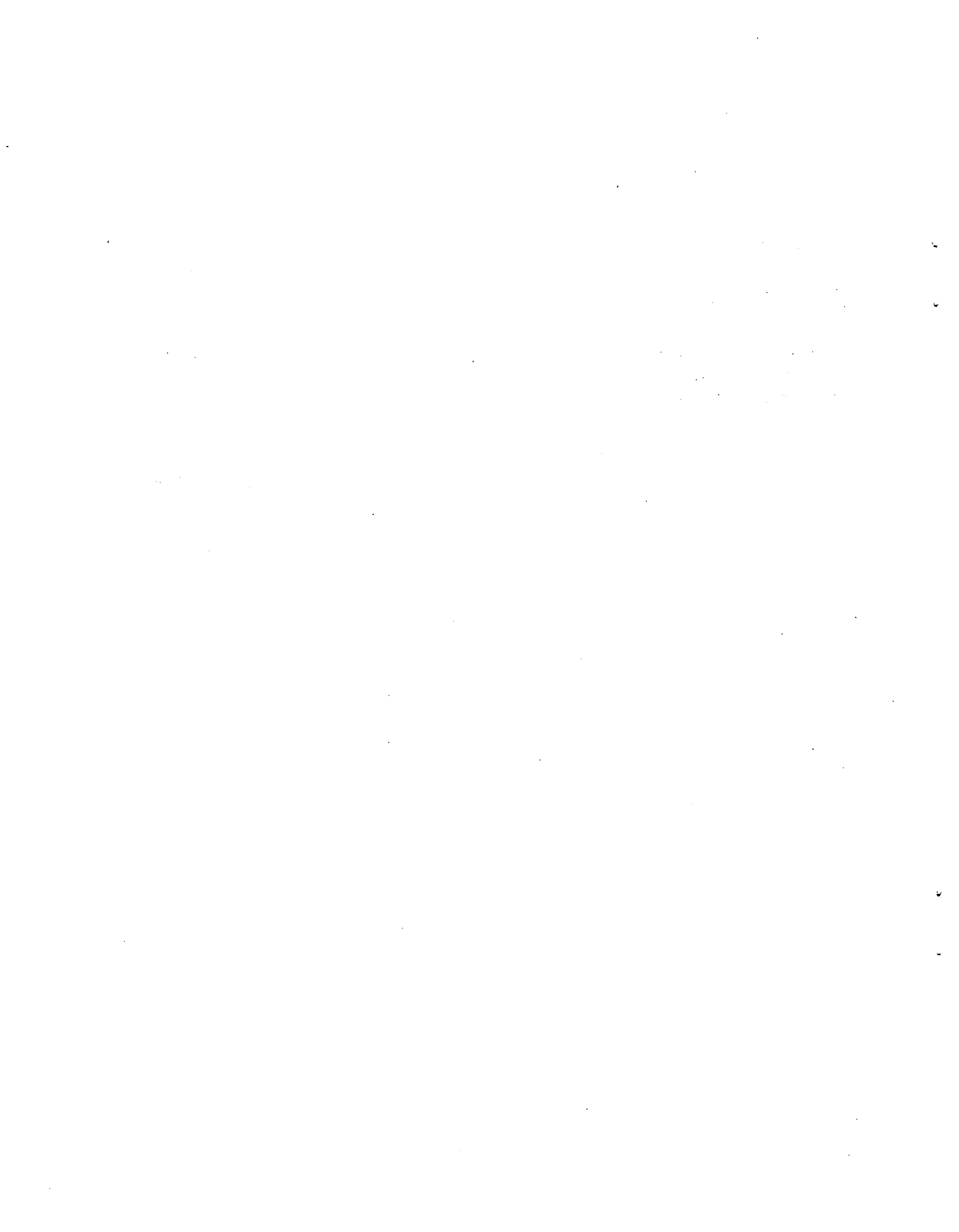


TABLE OF CONTENTS

	PAGE
Summary	i
Acknowledgment	ii
List of Tables	iv
List of Figures	iv
Introduction	1
Method	3
Subjects	3
Procedures	5
Probation-by-Mail Process	5
Individual Hearings	5
Attitude Questionnaires	5
Variables	5
Statistical Analyses	6
Benefit-Cost Analysis	7
Results	8
Nonhigh Risk Groups	8
Subsequent Treatment Effects	9
Probation-by-Mail Questionnaire Results	10
High Risk Versus Nonhigh Risk	10
Departmental Actions	12
Additional Hearings	13
Benefit-Cost Analysis	14
Assumptions	14
Program Cost Components	14
Direct Cost Savings of Probation-by-Mail	14
Direct Plus Indirect Cost Savings of Probation-by-Mail	15
Financial Impact Based on Total Departmental and Accident Savings	15
Discussion	18
Conclusions	20
References	21
Appendices	22
Appendix A - Notice/Order of Probation, Grounds Therefor, and of Opportunity to be Heard	23
Appendix B - Notice of Proposed Action, Grounds Therefor, and of Opportunity to be Heard	26
Appendix C - Probation-by-Mail Questionnaire	27
Appendix D - Analysis of Covariance Summary Tables for Subsequent Six-Month Accidents, Fatal and Injury Accidents, and Convictions Plus FTAs	30

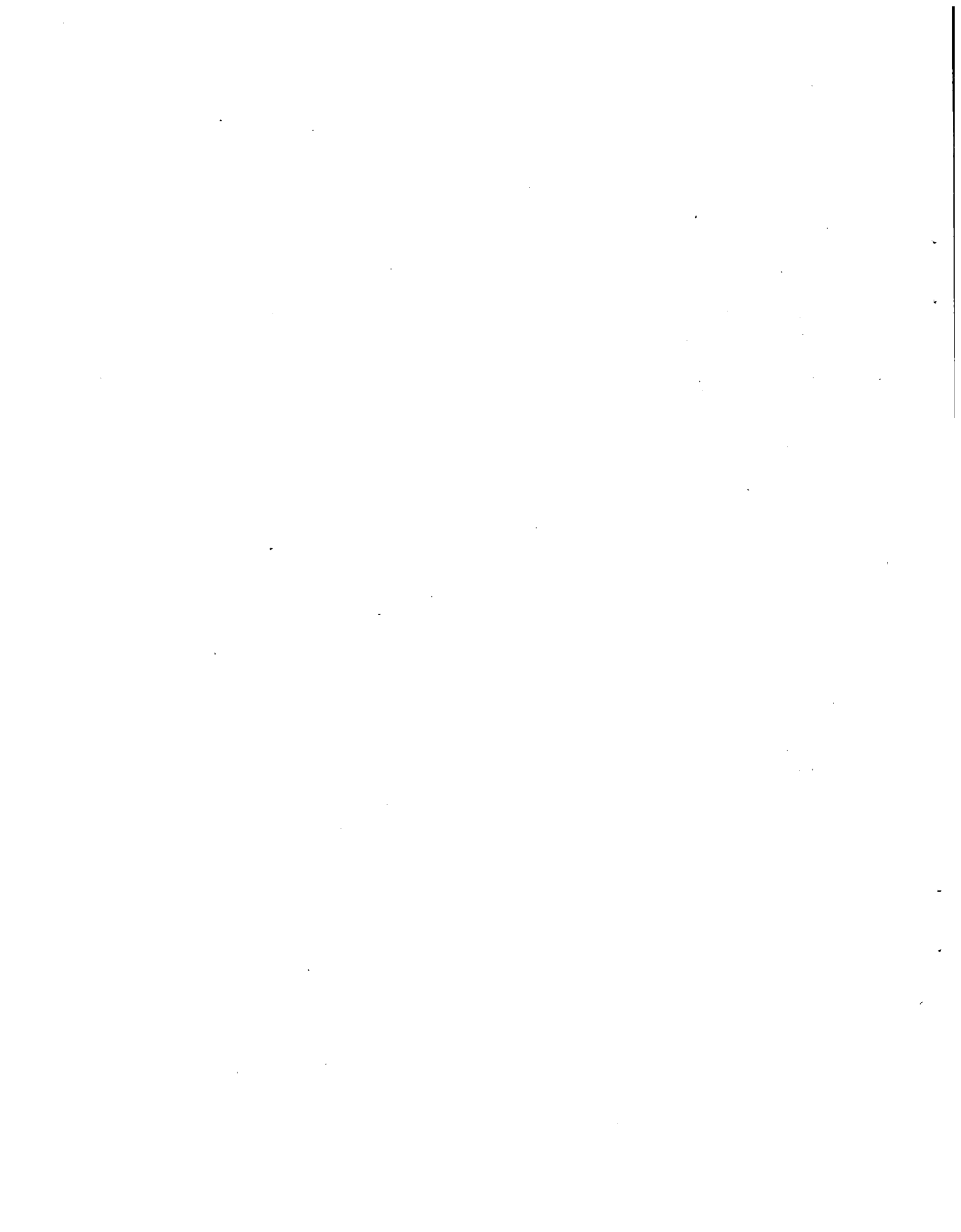


LIST OF TABLES

Number	PAGE
1 Biographical Data and Prior Three-Year Driving Record Variables for Nonhigh Risk Groups ...	8
2 Subsequent Six-Month Driver Record Variables for Nonhigh Risk Groups, Probation-by-Mail and Individual Hearing (per 100 drivers)	9
3 Proportion of Property Damage and Fatal and Injury Accidents for Nonhigh Risk Groups.....	9
4 Biographical Data and Prior Three-Year Driving Record Variables for High Risk Versus Nonhigh Risk Individual Hearing Groups	10
5 Subsequent Six-Month Driver Record Variables for High Risk Versus Nonhigh Risk Individual Hearing Groups (per 100 drivers)	11
6 Proportion of Property Damage and Fatal and Injury Accidents for High Risk and Nonhigh Risk Individual Hearing Groups.....	12
7 Percentages of DMV Actions Taken by Group.....	12
8 Proportion of High Risk and Nonhigh Risk Groups by Actions (Subsequent one-year)	13
9 Accident and Financial Impact Projections (per year)	16
10 Range and Expected Value of Net Financial Impact and Probability of Net Loss by Accident Cost Estimate (per year).....	16

LIST OF FIGURES

Number	PAGE
1 Subject identification and mailing results for the probation-by-mail experiment	4



INTRODUCTION

The Department of Motor Vehicles (DMV) has a sequence of treatments for drivers who violate traffic laws. Drivers with several violations in a short period of time are sent a warning letter. If their driving does not improve, they are scheduled for a voluntary group educational meeting (GEM). If more point counts are subsequently accumulated, an individual hearing is scheduled. In most cases, drivers attending individual hearings are placed on probation. A probation violator hearing is usually held if the driver is cited for violating traffic laws during the period of probation.

At the individual hearing level, the department's traditional procedure has been to require the violator to attend a hearing before a driver improvement analyst (DIA) to discuss the subject's driving record and determine what, if any, actions should be taken against his driver's license. The individual hearing may then be conceptualized as involving these two components: (1) the face-to-face interview, and (2) whatever license sanction results.

In an effort to find ways to reduce the cost of such hearings, two complementary pilot studies were conceived; in the first, the effect of giving the hearing but taking no action against the individual's license status was to be measured. The second pilot study would evaluate the effect of imposing the license sanction without holding a hearing. The imposition of a license sanction without a hearing (unless the driver requested one) took the form of placing each subject on a one year probation term, by mail.

A feasibility study was first performed for the probation-by-mail process (Sherman & Epperson, 1977). That study concluded that the department could save an estimated \$254,000 per year if probation-by-mail were implemented. It was also argued that the probation-by-mail option has the added advantage of public convenience, since it gives the driver a choice between attending a hearing or accepting probation-by-mail. The feasibility study found that 17% of drivers offered this option requested a hearing. However, the study was conducted on too small a scale to reliably measure the traffic safety implications of changing to probation-by-mail.

Some authors, such as Goldstein (1973), and Kaestner and Syring (1967), have argued that the individual hearing is more effective than other forms of driver improvement because they allow for a certain amount of problem diagnoses and customized treatment. Since probation-by-mail largely eliminates individualized counseling and problem diagnosis, it might be argued that the effectiveness would diminish. (For a review of empirical literature and theory concerning driver improvement see Peck [1976]; McGuire, Bernstein, Peck, Harano, and Stroad [1976]; and Goldstein [1973].)

Particularly in light of a recent major California study which has found the individual hearing to be an effective and cost-beneficial means of reducing accidents (Kadell & Peck, 1979), altering the program in any way, without first determining the effect such an alteration would have on the subsequent accident records of treated drivers, would involve unacceptable risk.

The traffic safety implications of the no action hearing were evaluated by Garretson and Peck (1979). No significant differences in subsequent accidents or convictions were found between a group which received the regular individual hearing and a group which received the no action hearing. The estimated departmental budget savings, if no action hearings were implemented on a statewide basis, was \$173,000.

The present study was performed to compare the traffic safety effects of probation-by-mail with those of the individual hearing. Taken together, the results of the two studies should indicate whether both components of the hearing (hearing and license sanction) contribute to its positive effect and, if not, which could be eliminated without producing an increase in traffic accidents.

METHOD

Subjects

Subjects were 13,899 drivers whose record of convictions placed them at or near the negligent operator level and who were to be scheduled for an individual hearing because of a one-point conviction (defined below) which did not involve an accident (see the study design in Figure 1). A negligent operator is defined as one who has accumulated four or more negligent operator points in the prior 12 months, six or more points in 24 months, or eight or more points in 36 months (moving violations are assessed at one point with the exceptions of driving under the influence of drugs or alcohol, reckless driving, and hit and run convictions, which count two points).¹ All drivers, regardless of the class of their license or the state where that license was issued, who met the subject criteria between June, 1977, and April, 1978, were included. (Because of the exclusion of individuals driving over 25,000 miles per year, very few subjects held class 1 licenses.)

Those drivers who fell into the categories given below were considered "high risk" and were eliminated from the population of drivers who were eligible for probation-by-mail. (High risk drivers were considered separately in this evaluation.)

- A point count of more than six in 12 months, eight in 24 months, or ten in 36 months.
- Three or more major convictions in the last seven years. (Major convictions are those defined above as counting two points.)
- Two majors in the last seven years if one was in the last 12 months.
- All drivers with three or more accidents in the last 12 months.
- Any negligent operator action (probation, suspension, etc.), from a prior DMV hearing, which had ended in the last 36 months.
- All X drivers license numbers. (These drivers do not have a California license, so a temporary X file is created to maintain a record of their driving performance.)
- Any driver who had a stop (i.e., a flag to prevent issuance of a license) on their driver record, or had a physical or mental condition.

Forty-four percent (6,148) of the drivers considered for this study fell into the high risk group. The remaining subjects were assigned to the probation-by-mail (n = 3,883) or individual hearing (n = 3,868) groups according to the terminal digit of their drivers' license number (a process which may be considered random).

¹Persons who drive 25,000 miles or more per year do not become eligible for a negligent operator hearing until they accumulate point counts of six or more in 12 months, eight or more in 24 months, or ten or more in 36 months.

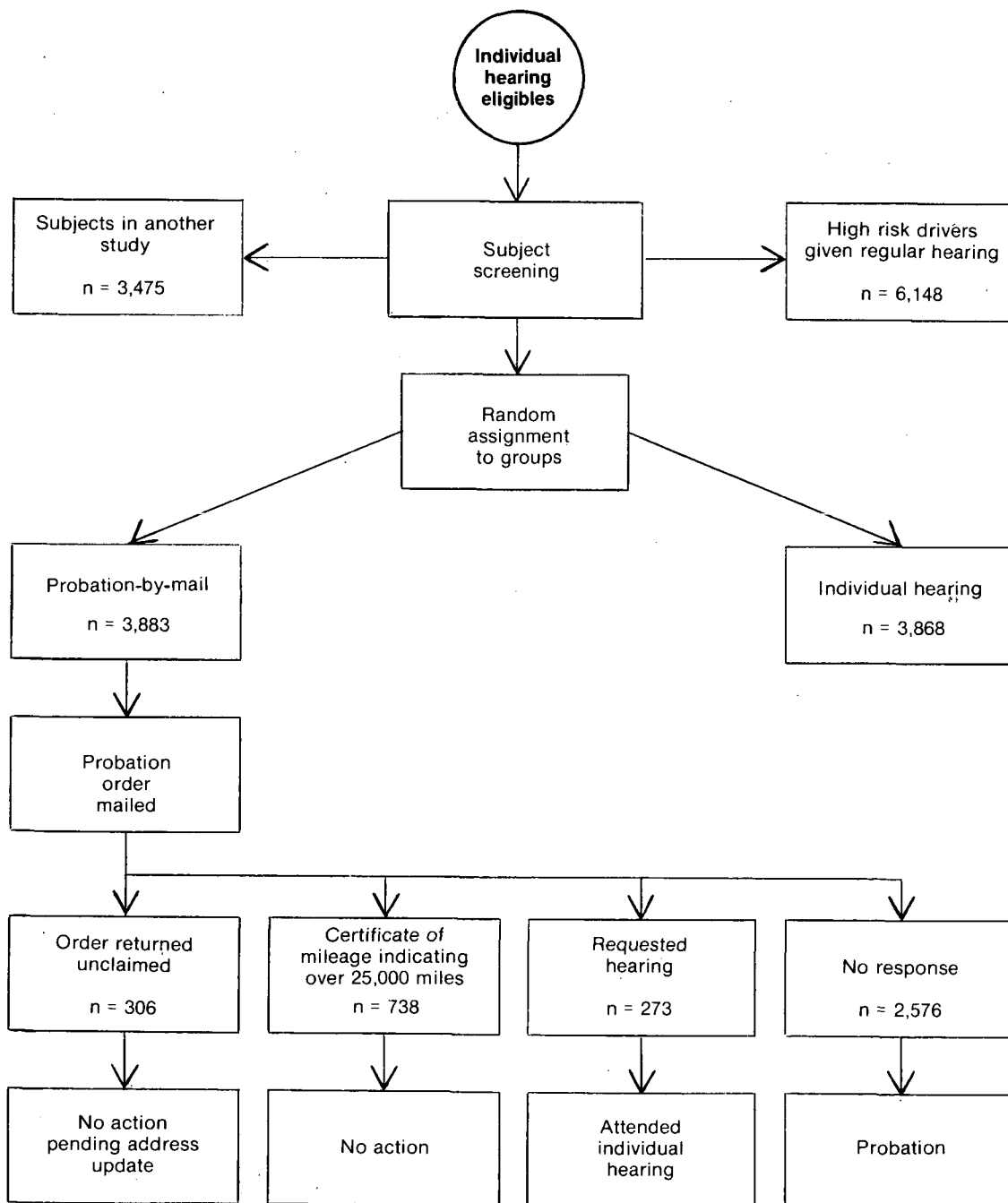


Figure 1. Subject identification and mailing results for the probation-by-mail experiment.

Note: Some of the volumes are estimates based on data obtained in the probation-by-mail feasibility study.

Procedures

Probation-by-mail process. Nonhigh risk negligent operators assigned to the probation-by-mail process (treatment group) were mailed a Notice/Order of Probation (shown in Appendix A). The notice stated that DMV was placing the negligent operators on probation unless, within 14 days, they either requested a hearing or filed a certificate of mileage, claiming to have driven over 25,000 miles in the past year. If neither response was received during the 14 day period, the action of probation was set. For negligent operators returning the order within the 14 day period, the hearing request was reviewed by a DIA. If the negligent operator requested a hearing, the action of probation was stayed and a hearing was scheduled. As a result of the hearing, only one of two actions was possible:

Probation - A new order of probation was sent to the negligent operator showing the same effective date as the Notice/Order of Probation. (Probation is usually effective for a one-year period.)

Set aside - The original probation was removed upon a recommendation of "no action" by the DIA. A letter was sent to the negligent operator reinstating his license. (The department's legal staff decided that since the negligent operators had been offered probation, their request for a hearing could not place them in greater legal jeopardy. Therefore, no suspensions or revocations were possible for subjects in the probation-by-mail group.)

Notice/Order of Probation packages which were returned unclaimed were processed for a "no action" and set aside pending the negligent operators' address update. All such subjects were retained in the sample for data analysis.

Individual hearings. Drivers who become eligible for individual hearings are sent a notice giving the time and location where the hearing will be held and informing them that if they do not attend, their license will be suspended (see Appendix B). During the hearing, the DIA discusses the negligent operator's record of accidents and convictions with him and determines what, if any, sanctions should be placed against his license.

Approximately 60% of such hearings result in the driver being placed on probation (Sherman & Epperson, 1977), normally for one year. The DIA may also decide on more severe actions such as suspension or revocation, or could decide that no action is presently warranted.

Attitude questionnaires. Approximately 200 questionnaires were mailed to a sample of negligent operators who were given probation-by-mail (see Appendix C). The purpose of this 16-item questionnaire was to determine how the negligent operators felt about the probation-by-mail process, and to determine whether the contents of the Notice/Order of Probation were clearly understood. A second mailing wave was sent to first wave nonrespondents to increase the response rate.

Variables. Biographical and driving record data were extracted from the department's computer files. Prior three-year and subsequent six-month total accidents, fatal and injury accidents, and convictions plus failures to appear (FTAs) were included in the analysis.

Total accidents are all accidents in the DMV computer file. Law enforcement agencies throughout the state are required to report all fatal or injury accidents to the California Highway Patrol (CHP), which in turn reports them to DMV. Any accident involving damage to the property of any one person in excess of \$250 (at the time of the study) were supposed to have been reported to the department by the drivers involved (under penalty of mandatory license suspension). When such a report is reviewed, an accident is also added to the record of any other drivers listed in the report.

Fatal and injury accidents are all accidents reported to CHP which involved an injury or fatality.

Convictions plus FTAs include the count of all convictions for traffic violations reported to DMV by the courts plus citations for which the driver failed to appear in court or pay the fine in lieu of appearance.

A two-month lag time was allowed for the subsequent six-month data to make sure that court abstracts would have sufficient time to be input.

Due to an unusually large backlog of accident reports which had not yet been entered into the computer records at the time of the experiment, the total accident means reported here may be somewhat low. However, any backlog would have affected all group means equally and should, therefore, not have biased the results (though statistical power could be expected to decrease). This backlog only involved property damage accidents. Fatal and injury accident means were not affected.

Statistical analyses. Chi square and *t* tests were used to determine if the groups differed significantly on biographical or prior record variables. To further explore the equivalence and randomness of assignment for the two nonhigh risk groups, a multiple regression was performed using treatment group as the dependent variable.

An analysis of covariance was used to determine if there was a significant treatment effect on subsequent driver record variables (individual hearing vs. probation-by-mail groups). Covariates were age, sex, prior three-year total accidents, and prior three-year convictions plus FTAs.

Subsequent record comparisons between the high risk and nonhigh risk individual hearing groups were performed employing *t* tests. It should be noted that, in the absence of a comparison high risk group receiving probation-by-mail, the efficacy of high risk screening cannot be clearly established (or refuted). The comparisons made here can do no more than provide suggestive evidence.

Because of the relatively greater concern for Type II errors, when comparing prior record and biographical variables to determine if a sampling bias might have occurred, such tests used an alpha of .20 (two-tailed). All subsequent record statistical tests were two-tailed employing an alpha of .10. A power analysis was done for the nonhigh risk treatment effect on total accidents. For a two-tailed test with the level of significance of .10 for detecting a 10% difference in total accidents, the power was .41. The power for detecting the smallest effect size having benefit-cost implications was not calculated but would be substantially lower because that effect was much smaller. (Limitations on time and availability of subjects precluded obtaining higher power.)

Benefit-cost analysis. The expected financial savings to the department if probation-by-mail were implemented was compared to the estimate of accident increase or decrease based on the sample data. A 90% confidence interval was also calculated along with an estimate of the probability that program implementation would result in a net financial loss.

Probably the most controversial element used in such an analysis is the dollar value assigned to an accident. The analysis performed here employed two estimates: one from the National Safety Council (NSC), and one from the National Highway Traffic Safety Administration (NHTSA). When adjusted for inflation and for the disproportionately high number of fatal and injury accidents in which negligent operators become involved, these figures were \$3,426 and \$6,741, respectively. In using such widely divergent estimates, in separate cost analyses, it was hoped that the two resulting estimates of savings or losses would bracket the true net effect of program implementation.

RESULTS

Nonhigh Risk Groups

Biographical and prior driving record data are shown in Table 1 for the nonhigh risk groups. Tests for bias using chi square and *t* tests indicated there were no significant differences between the probation-by-mail and individual hearing groups on proportion of males, age, or prior convictions plus FTAs. However, a significant difference was detected for total accidents with the probation-by-mail group having more, $t(7,749) = 2.518, p < .02$. Since there was a significant difference for total accidents, a stepwise regression analysis, in which group membership was the dependent variable, was used to further explore the bias in group assignment. The following predictor variables were forced simultaneously into the regression equation:

- Scheduling process - manual versus computer²
- Age
- Sex
- Prior three-year total accidents
- Prior three-year driving under the influence convictions
- Prior three-year reckless driving
- Prior three-year hit and run
- Prior three-year total convictions plus FTAs
- Prior three-year suspensions and revocations
- Prior three-year DMV hearings

The overall equation was statistically significant ($F[10, 7740] = 1.90, p < .05$), with three variables, prior accidents, prior DMV hearings, and prior suspensions and revocations, proving to contribute significantly to discrimination ($p < .03, p < .10, \text{ and } p < .20$, respectively). Although the results of both the *t* tests and the regression analysis indicated that the difference in prior accidents was greater than chance, the absolute magnitude of the bias was small ($R^2 = .0025$ for the total equation with all variables entered) and had no discernible impact on the subsequent driver record comparisons. (The bias resulted in a negligible change in the criterion variable means that was eliminated through analysis of covariance procedures.) Since randomization was used in assigning the drivers to treatment, the authors can only suggest that the bias was due to "chance significance." There is no evidence that the prescribed assignment method was not followed, nor a reason to question its randomness.

Table 1

Biographical Data and Prior Three-Year Driving Record Variables for Nonhigh Risk Groups

Variable	Probation-by-mail (N = 3,883)	Individual hearing (N = 3,868)	Statistical test	<i>p</i> value
Proportion of males	0.947	0.946	$\chi^2(1) = .020$	> .90
Mean age	25.359	25.267	$t(7,749) = .444$	> .65
Mean prior total accidents (per 100 drivers)	72.3	67.3	$t(7,749) = 2.518$	< .02
Mean prior convictions plus FTAs (per 100 drivers)	786.4	784.3	$t(7,749) = .368$	> .70

² Computer scheduled hearings are precipitated when a driver reaches the standard individual hearing negligent operator point count. Manual scheduling results in cases where the driver has not yet reached standard individual hearing negligent operator point count but the violation was serious enough to warrant an evaluation of his record or an accident resulted from the violation.

Subsequent treatment effects. An analysis of covariance was applied to driver record variables. The means of these analyses are shown in Table 2 (for the covariance summary tables, refer to Appendix D).

Table 2

Subsequent Six-Month Driver Record Variables for Nonhigh Risk Groups, Probation-by-Mail and Individual Hearing (per 100 drivers)

Variables	Unadjusted group means		Adjusted group means	
	Probation-by-mail (N = 3,883)	Individual hearing (N = 3,868)	Probation-by-mail (N = 3,883)	Individual hearing (N = 3,868)
Total accidents	11.8	10.9	11.7	11.0
Fatal and injury accidents	3.5	3.6	3.4	3.6
Convictions plus FTAs	83.9	77.5	83.7	77.7*

*Differences between the adjusted groups means for probation-by-mail and individual hearing is significant at the .02 level.

A significant difference was detected between the two groups for convictions plus FTAs with the probation-by-mail group accumulating 8% more $F(1, 7741) = 5.57, p < .02$.

No significant differences were detected for subsequent total accidents or fatal and injury accidents. Because fatal and injury accidents were lower, and total accidents were higher for probation-by-mail subjects, a reporting bias (i.e., individual hearing subjects may have less often reported property damage only accidents), or a differential effect of treatments by accident type, was suggested. However, as shown in Table 3, the proportion of the types of accidents (property damage vs. fatal and injury accidents) did not vary significantly by treatment, $X^2(1) = 1.12, p > .20$. Thus, the evidence was not sufficient to support the hypothesis that a reporting bias or differential effect of treatment by accident type existed.

Table 3

Proportion of Property Damage and Fatal and Injury Accidents for Nonhigh Risk Groups

Accident type	Nonhigh risk probation by mail (N = 3,883)	Nonhigh risk individual hearing (N = 3,868)
Property damage only accidents	.7068	.6714
Fatal and injury accidents	.2932	.3286

Probation-by-mail questionnaire results. Of the 200 questionnaires that were mailed, 131 were returned after two contacts. The results are summarized in Appendix C, the modal response is circled. This response rate (65%) is fairly high and consistent with the return rate of other questionnaires mailed by the department. Overall, the results indicated that the Notice/Order of Probation gave the negligent operator clear and adequate information about their driving status. The results also indicated that the respondents were concerned about receiving the notice. The general consensus was favorable about having the option to either waive or attend a hearing.

High Risk Versus Nonhigh Risk

Of all negligent operators involved in this study, 44% were screened as high risk and were scheduled for the standard individual hearing. Data was also collected on this high risk group to compare their prior and subsequent driving records with the nonhigh risk drivers who were given an individual hearing.

Table 4
Biographical Data and Prior Three-Year Driving Record
Variables for High Risk Versus Nonhigh Risk Individual Hearing Groups

Variable	High risk group (N = 6,148)	Nonhigh risk group (N = 7,751)	Statistical test	p value
Proportion of males	0.918	0.947	$\chi^2(1) = 3.211$	< .10
Mean age	26.174	25.327	$t(13,897) = 5.328$	< .001
Mean prior driving under the influence (DUI) convictions (per 100 drivers)	40.1	19.1	$t(13,897) = 25.591$	< .001
Mean prior reckless driving convictions (per 100 drivers)	43.3	13.9	$t(13,897) = 35.978$	< .001
Mean prior hit and run convictions (per 100 drivers)	6.7	1.7	$t(13,897) = 13.832$	< .001
Mean prior had been drinking accidents (per 100 drivers)	15.1	10.1	$t(13,897) = 7.928$	< .001
Mean prior total accidents (per 100 drivers)	70.8	69.8	$t(13,897) = .614$	> .50
Mean prior convictions plus FTAs (per 100 drivers)	826.2	785.3	$t(13,897) = 7.057$	< .001

Table 4 presents group means for all of the biographical and prior record variables examined; all of the group differences are significant except for that involving prior total accidents. Many of the above differences are, of course, consequences of the risk screening process, since traffic conviction variables were used to define the high risk group.

The difference in proportion males may be an artifact of subject assignment. Subjects without valid California licenses have special files created which do not normally indicate sex. These drivers (4% of the total sample) were all assigned to the high risk group. If it is assumed that the proportion males in this subgroup is equal to that in the remainder of the group, the difference found here is explained.

The slightly higher age for high risk drivers probably reflects the tendency of this group to contain more drivers with prior alcohol convictions. Reckless convictions often involve drivers accused of driving under the influence where the charge has been reduced because the driver was willing to plead guilty to a lesser charge. Therefore, the significantly higher number of reckless convictions for high risk drivers may also indicate a greater prior number of alcohol-related citations.

While prior accidents were also used to identify high risk drivers (three or more in the last 12 months), the lack of significance for this variable may probably be attributed to the small number of subjects who fell into this category, 0.3%.

Subsequent six-month driving record variables and comparisons are presented in Table 5. There were no significant differences between the high risk and nonhigh risk group for total accidents or fatal and injury accidents. As reported for the nonhigh risk groups, the proportion of property damage accidents versus fatal and injury accidents was not significantly different across risk groups, $X^2(1) = .851$, $p > .30$ (see Table 6).

Table 5
Subsequent Six-Month Driver Record Variables for High Risk
Versus Nonhigh Risk Individual Hearing Groups
(per 100 drivers)

Variable	High risk group individual hearing (N = 6,148)	Nonhigh risk group individual hearing (N = 3,868)	Statistical test	p value
Total accidents	11.1	10.9	$t(10,014) = .291$	> .75
Fatal and injury accidents	4.0	3.6	$t(10,014) = .941$	> .35
Convictions plus FTAs	82.4	77.5	$t(10,014) = 1.998$	< .05

Table 6
Proportion of Property Damage and Fatal and Injury
Accidents for High Risk and
Nonhigh Risk Individual Hearing Groups

Accident type	High risk individual hearing (N = 6,148)	Nonhigh risk individual hearing (N = 3,868)
Property damage only accidents	.6423	.6714
Fatal and injury accidents	.3577	.3286

A significant difference was detected for convictions plus FTAs, with high risk drivers having 6% more, $t(10,014) = 2.00, p < .05$. In comparing the high risk group with the nonhigh risk individual hearing group, the reader should bear in mind that the interpretation of the results is confounded since the high risk group was given more severe licensing sanctions such as revocation and probation with suspension. It is, therefore, possible that drivers in the high risk group would have had worse subsequent records had they received less severe actions or been placed on probation-by-mail.

Departmental Actions

Table 7 presents the percentage of departmental actions that were taken as a result of the hearing, by group. This table indicates that more of the negligent operators in the high risk group had probation with an alcohol clause, probation with suspension, or had their license revoked.

Table 7
Percentages of DMV Actions Taken by Group

DMV action	Subject group			
	Total	Nonhigh risk groups		High risk
		Probation- by-mail (treatment)	Individual hearing (control)	
Total	100.00	100.00	100.00	100.00
Revocation	5.83	N/A	1.81	11.89
Probation (alcohol clause)	5.42	N/A	1.63	11.07
Probation (suspension)	11.40	N/A	12.39	16.58
Probation	60.41	81.02	67.81	44.16
Set aside*	8.98	16.88	4.43	8.29
Personal contact**	5.51	N/A	10.04	4.96
Other	2.45	2.10	1.89	3.05

*When an action is taken and then removed it is referred to as "set aside", as when a subject was put on probation-by-mail and then returned a certificate of mileage indicating that he drove over 25,000 miles a year.

**When the hearing officer decides not to take any action against a driver's license status, the driver is sent a letter so stating. This is referred to as a "personal contact".

In the probation-by-mail group, the only actions that could be taken were probation or set aside, while in the individual hearing group the actions that could be taken against a negligent operator were more varied. Thus, Table 7 shows a higher percentage of the probation-by-mail group receiving probation than the high or nonhigh risk individual hearing group, and a wider variety of actions for these latter groups.

Additional Hearings

A majority of negligent operators are placed on probation as a result of the individual hearing. The probation period lasts for approximately one year. If there are additional driving convictions during this period, another hearing may be scheduled—usually for violation of probation. Table 8 shows the proportion of additional hearings within one year after treatment for drivers in the three groups.

Table 8
Proportion of High Risk and Nonhigh Risk Groups by Actions
(Subsequent one-year)

Group	Probation violator hearings	Informal hearings	Formal hearings	Financial responsibility suspension	13352C suspension*	Other hearings or activities
High risk	.132	.115	.004	.038	.029	.191
Nonhigh risk						
Individual hearing	.151	.089	.002	.044	.018	.161
Probation-by-mail	.237	.089	.001	.062	.018	.181

*Two drunk driving convictions within a five year period.

Nine percent more of the drivers in the probation-by-mail group were required to attend a subsequent probation violator hearing. Yet less than 5% more probation-by-mail group drivers had one or more subsequent convictions. The increase in probation violator hearings is, therefore, disproportionate and suggests that decisions regarding later hearings may have been influenced by the treatments given here (i.e., probation-by-mail subjects were more often scheduled for hearings because those doing the scheduling saw that they had been given probation-by-mail and, therefore, had not yet been called in for a hearing). If the probation violator hearing is effective, this would tend to dilute the effect of not being called in for an individual hearing in this study. However, because the absolute magnitude of additional hearings resulting from this later assignment bias was not great, and because the later hearing was probably most often held well into the criterion period (the follow-up hearing data covers one year, the accident and conviction data covers only six months) the effect on criterion data should be minimal. The assignment of additional later hearings to probation-by-mail subjects was presumably based on the assumption that a one-to-one contact with a DIA was necessary if accidents were to be reduced. Since many of the additional hearings were an artifact of the study, and the results of the study do not support the assumption that in-person contacts are necessary, an increase in hearings of the magnitude reported here would not be justified in an ongoing program.

BENEFIT-COST ANALYSIS

Assumptions

The significant increase in convictions for the probation-by-mail group (approximately 8%), caused (in part) an additional 9% of the drivers to require subsequent probation violator hearings. While it has been noted that this is, in part, an unnecessary procedure, the cost to this department to administer these additional hearings and the cost of the individual hearings given to that 7% of probation-by-mail subjects who requested one, were considered in the following analysis. The cost analysis also assumes that drivers categorized as high risk (44% or 11,728 annually), will be manually excluded from the probation-by-mail process and will continue to receive hearings.

The remaining nonhigh risk negligent operators have an estimated annual volume of 14,925. The present experiment was conducted employing only drivers whose hearing was to be scheduled upon receipt of a nonmajor and nonaccident-related traffic conviction (code 311 individual hearings). The cost analysis assumes that all 26,600 individual hearing subjects, including those whose hearing was precipitated by conditions other than nonmajor traffic convictions, will initially be considered for probation-by-mail (all code 300 series hearings). In doing this, it is further assumed that the effects measured here are accurate predictors of the effects of probation-by-mail when applied to these additional drivers. Finally, it is assumed that if the treatments had differential effects, those effects do not last longer than six months. This assumption is based on data reported by Kadell and Peck (1979).

Program Cost Components

Individual hearing cost estimates are based on data generated for the Post Licensing Control Reporting and Evaluation System (California Department of Motor Vehicles, 1977). Personnel cost estimates for probation-by-mail were generated by the Program Cost Accounting Section.

In determining the cost of a program, there are a number of types of costs that are considered. Total program cost includes the following components:

Direct costs are those costs directly associated with the program. All direct costs are reducible and would be eliminated if the program no longer existed.

Indirect costs are those costs related to the program of which a certain proportion, but not all costs, are reducible (e.g., supervision, training).³

Fixed costs are those costs which remain the same with or without the program.

Direct cost savings of probation-by-mail. The direct cost of an individual hearing was estimated to be \$26.30; for probation-by-mail the direct cost was estimated to be \$6.55. Estimating the annual departmental savings, based on direct costs only, the probation-by-mail process would save \$225,490 ($14,925 \times \$15.10 = \$225,490$).⁴

³It was estimated that 60% of all indirect costs were reducible.

⁴The actual direct cost savings of \$15.10 per eligible driver is a weighted average of several possible outcomes of being scheduled for a hearing or mailed a notice of probation (e.g., hearings resulting in no action, and probation-by-mail subjects requesting a hearing).

Direct plus indirect cost savings of probation-by-mail. Total costs for both the individual hearing and the probation-by-mail process include associated indirect costs. The proportion of total reducible costs which were indirect, was 71% for the individual hearing. These estimates were based on post licensing control costing data for the quarter ending December, 1977. (This data is, in part, based on assumptions which remain controversial, particularly the assumption that 60% of all indirect costs are reducible.) At this time no formal estimates have been developed for the indirect costs associated with probation-by-mail; therefore, it was assumed that the ratio of indirect to direct costs were the same for both the individual hearing and probation-by-mail programs. The probation-by-mail direct cost was, therefore, increased by 71% to give total reducible costs. If this assumption results in an overestimate of the amount of indirect costs which are truly eliminated, program savings would be overestimated. The total reducible cost of an individual hearing is estimated to be \$44.96. These are "ideal" reducible costs. Personnel reductions are not possible at all locations as, for example, an office with only one DIA where the workload is reduced by 20%. For the probation-by-mail process, the estimate of total reducible cost is \$11.20 per negligent operator. Therefore, the annual departmental savings if probation-by-mail were implemented, is estimated to be \$379,000. (Because this figure is based on the assumptions that a substantial amount of indirect program costs are currently reducible and that much of these costs would be eliminated if probation-by-mail were implemented, the \$379,000 figure could be a substantial overestimate of actual cost savings.)⁵

Financial Impact Based on Total Departmental and Accident Savings

To derive an estimate of the financial impact resulting from the differences in accidents between the two groups, the NHTSA and NSC accident cost figures were used. These amounts were derived by adjusting figures published by NHTSA and NSC for inflation and for the disproportionately high number of fatal and injury accidents in which California negligent operators are involved (NHTSA = \$6,741, NSC = \$3,426). Two such divergent figures were used because the societal cost of an accident remains a very controversial subject. It was hoped that the "true" accident cost would be bracketed by these estimates.

While the statistical test performed to check for an accident reporting bias did not show a significant difference in the proportion of fatal and injury versus property damage accidents, the probability obtained was high enough to dictate that the cost analysis consider these two categories of accidents separately (the probability approached .80).

The obtained data indicated a mean difference of -.0014 fatal and injury accidents and .0097 property damage accidents (a decrease in fatal and injury and an increase in property damage accidents). These differences were used to determine the financial impact because, under the present circumstances, an obtained difference in means is the best estimate. The reader is cautioned, however, that the differences were *not* significant and may simply represent sampling error.

⁵The division within the department most directly responsible for implementing the probation-by-mail program estimated that the total annual savings would be \$107,000. This estimate did not consider indirect costs and was based on the actual manpower reductions which could be made.

Table 9 provides an estimate of the number of injuries and fatalities which would be reduced and the number of additional property damage only accidents expected if probation-by-mail was implemented.

Table 9
Accident and Financial Impact Projections
(per year)

Variable	Quantity
Increase in property damage only accidents	144
Decrease in injuries	20
Decrease in fatalities	0.5
Departmental program savings	379,297

An analysis of covariance was performed using NSC and NHTSA accident cost figures broken down to fatal and injury, and property damage cost components. The criterion measures were accident frequency times cost within each accident category. Covariates included age, sex, prior total accidents, and prior convictions plus FTAs. Predictions of financial impact, based on the adjusted means and variance estimates from the covariance analysis, are presented in Table 10. The data indicate an expected savings both in terms of departmental costs and as a result of a net reduction in accident costs (because fatal and injury accidents cost so much more than property damage accidents, the small decrease there more than outweighed the larger property damage accident increase).

Table 10
Range and Expected Value of Net Financial Impact and
Probability of Net Loss by Accident Cost Estimate
(per year)

Accident cost estimate	Financial impact in dollars			Probability of losing money
	Expected value	Low 90% confidence interval	High 90% confidence interval	
High accident cost estimate (NHTSA)	592,620	-2,754,356	3,939,507	.39
Low accident cost estimate (NSC)	463,205	-1,255,289	2,181,639	.33

Note: Positive dollar values indicate net savings, negative values indicate net losses.

The probability of losing money with the probation-by-mail process is relatively low (.39 NHTSA and .33 NSC).⁶ The confidence intervals give an estimate of the degree to which the expected financial impact may be in error. Stated roughly, these values define the range within which there is a 90% probability that the true financial impact will fall. The magnitude of these ranges is due to the high cost of accidents and the high variability associated with accident data. Separating accidents into the fatal and injury and the property damage subcategories also increased the variability and, as a consequence, the confidence intervals. The fact that these ranges overlap zero is due, in large part, to the nonsignificance of the accident mean difference. (If direct program costs only had been used in this analysis, each dollar value in Table 4 would have been reduced by \$154,000.)

The decision to consider fatal and injury and property damage accidents separately was critical in this analysis. Had total accidents been used instead, the NHTSA accident cost figure would have yielded an estimated net loss, due to probation-by-mail, of \$365,000, whereas the NSC accident cost figure would have yielded an estimated savings of \$900. However, such a strategy does not seem justified in view of the nonsignificance of the total accident mean difference combined with the suggestive evidence of a variation in effect by accident type.

If a reporting bias is responsible for the disproportionate fatal and injury versus property damage means observed in the present study, a cost analysis based on total accidents or the analysis considering the two accident categories separately, would underestimate the benefit-cost resulting from probation-by-mail. This is because the individual hearing program would have received credit for a property damage accident reduction which is simply the result of under reporting (rather than a real reduction). Finally, if one assumes that none of the accident differences between the individual hearing and probation-by-mail groups are real, the benefit-cost results would still favor probation-by-mail by an amount equal to the cost savings of the program (\$225,000 to \$379,000 depending on the amount of indirect costs which are reducible).

⁶The probability of losing money is obtained from a frequency distribution with mean equal to the expected value of benefit-cost and variance obtained from the ANCOVA in which accident dollar figures were used as the dependent variable. When the abscissa is graduated in terms of dollars of benefit-cost, the probability of losing money is the area under the curve to the left (negative side) of the point where benefit-cost equal zero.

DISCUSSION

Forty-four percent of the drivers considered for this study were eliminated from the population eligible for probation-by-mail by the high risk screening criteria. In the related no action study (where the effects of a hearing without subsequent license sanctions were evaluated), the high risk screening criteria eliminated only 19% (Garretson & Peck, 1979). The criteria in the present study were altogether objective, while in the no action study, the judgment of the hearing officer played a critical role. No action high risk drivers were those whose hearing had resulted in suspension, revocation or probation with an alcohol clause (i.e., a specific prohibition against driving after doing any drinking).

The difference in the two high risk groups was as much qualitative as quantitative. No action high risk subjects had a mean age nearly four years older than those in the present study; they were apparently more often drivers with alcohol-related convictions, because 62% received probation with an alcohol clause, while only 11% of the high risk subjects in the present study received this sanction.

Prior evidence would suggest that to refer to a group composed largely of drivers with alcohol-related convictions as high risk is a misnomer, because majors do not predict accident risk as well as do one-point convictions in a correlational sense (Coppin, McBride, & Peck, 1967; Harano, 1974; Marsh & Hubert, 1974). However, because those who have major violations on their record are only a small part of the total population, any correlation would be severely attenuated and may not be an accurate reflection of one's accident probability given a prior history of major violation involvement.

Although neither risk assessment technique could be rigorously evaluated due to research design constraints, the results suggest that those identified as high risk in the present study represent a greater traffic safety threat than those identified in the no action study--a point which is further supported by their driving records. No action high risk drivers had significantly more prior accidents, but significantly fewer prior convictions and subsequent accidents and convictions, than nonhigh risk drivers in that study. High risk drivers in the present study had significantly more prior and subsequent convictions and slightly (not approaching significance) more prior and subsequent accidents. However, interpretation of these results is complicated by the fact that the no action high risk subjects' superior subsequent records may, in fact, have been due to the more severe actions they received (e.g., more often placed on suspension).

Even if drivers with a history of driving under the influence are not high risk by comparison to other negligent operators with similar point counts, it is not necessarily the case that they should not be given an individual hearing instead of the probation-by-mail or no action treatment. It is possible that alcohol-involved drivers could be more responsive than other negligent operators to the in-person hearing contact. If this is the case, then giving the more costly individual hearing to such drivers would be a more effective allocation of resources than giving similar hearings to drivers who are higher risks but less responsive to in-person hearings.

There is a clear need to empirically evaluate this "high risk" issue to ensure that if extra resources are devoted to giving hearings to drivers with particular types of prior records, the return, in terms of traffic safety, exceeds the investment. It is essential that future research along these lines allow random assignment to treatment-control modalities within the high risk sample.

In both the present and the no action studies, there was evidence that property damage accidents as opposed to fatal and injury accidents were affected differently (significant in the no action study, approaching significance here).⁷ This could be due to a real differential effect of treatment on the two types of accidents or it could result from a reporting bias, with drivers who received the more severe treatments being less inclined to report property damage accidents (fatal and injury accidents are much more often investigated and reported by the police). While this theory would suggest that actions taken against drivers in other studies would show the same effect, the evidence is mixed. Two recent reports (Ratz, 1978a; 1978b) found at least suggestive evidence of such an effect; however, the more extensive post licensing control report (Kadell & Peck, 1979) did not. Consequently, especially with regard to its generality, this theory is tentative at best.

The no action and present studies were designed to evaluate the two components of the individual hearing (the in-person contact and subsequent license sanction) in an effort to determine if either could be eliminated without reducing the effectiveness of the hearing to an extent that cost (in terms of an accident increase) more than it saved. The results of the two studies indicate that either component may be eliminated without detrimental effect, or, alternatively that both components are nearly equally as effective. In fact, there is a strong degree of similarity between the outcomes of the two studies. Both show a directional (i.e., nonsignificant) increase in total accidents, nonsignificant decrease in fatal and injury accidents and increase in convictions (for probation-by-mail, that increase was significant).

It could, of course, be argued that certain subpopulations benefit most from the hearing while others benefit most from the license sanctions, and these effects average out when the entire (nonhigh risk) population is measured (i.e., an interaction between treatment and certain biographical or prior record variables). However, because there was no evidence of nonparallel slopes in the covariance analysis, this argument is not supported, at least for those variables used as covariates (age, sex, prior three-year accidents, and prior three-year convictions plus FTAs).

The reader should bear in mind that because of differences in both number and kind between the two high risk groups, the effects of no action and probation-by-mail were not evaluated using exactly the same populations. If the effects of treatment vary for drivers with, as opposed to those without records involving drinking and driving, it would not be altogether appropriate to draw direct comparisons between the two studies.

Taken by itself, the data from the present study does not articulate well with the conclusion Goldstein reached in his extensive (1973) review of post licensing control literature. Goldstein hypothesized that treatments involving some degree of individualization are more effective than nonindividualized approaches, such as group meetings. Any individualization involved in California's individual hearing was virtually eliminated with probation-by-mail, yet the present study gives little indication that doing so had any detrimental effects.

⁷The decision to test for a differential effect across accident types was a posteriori. The cited alpha levels would, therefore, be nonconservative if each study is viewed separately. However, the probability of obtaining similar effects in both studies at $p \approx .20$ is substantially lower than the nominal (.20) level. The statistical test was treated as a priori because of the relatively greater concern for a Type II error when making what was primarily intended as a bias check.

CONCLUSIONS

In the no action study, where the effects of giving an individual hearing and then not imposing any license sanctions were evaluated, the annual departmental program savings were estimated to be \$173,000. This and the estimate for probation-by-mail (\$379,000) were derived by different cost analysts at different times (both figures are in 1977-78 dollars). While the methods of derivation were basically comparable, some deviations are likely to exist--most notably the fact that the \$173,000 includes a negligible amount of indirect costs, whereas the \$379,000 has a substantial indirect cost loading. Considering this, and even bearing in mind that probation-by-mail involves personnel reductions which cannot always be made in practice, it appears highly unlikely that no action could result in more departmental savings than probation-by-mail.

However, when the traffic safety impact is also considered, no action appears to be a slightly superior alternative. Considering only the NSC cost figures (the NHTSA figures are higher by an equivalent proportion for both programs) the net dollar savings for implementing no action is estimated to be \$886,000. For probation-by-mail, the estimate is \$463,000. However, the reader should bear in mind that the accident mean differences in both evaluations did *not* approach statistical significance. The effect of this, on the cost analysis, is best illustrated by the 90% confidence interval given in Table 10 (for the present study). The same interval for no action was from -\$1,416,000 to +\$3,188,000. The intervals for both programs are similar and greatly overlap zero. The probability of a net dollar loss is also similar for both programs (.26 for no action, .33 for probation-by-mail). All of these points raise questions about the utility of the accident component of these cost analyses for making a choice between the two programs.

If a conviction increase, even in the absence of a corresponding accident increase, is considered a decision factor, the no action program is favored. Probation-by-mail resulted in a significant (8%) increase in convictions, $p < .02$ (with a resultant increase in probation violator hearings); whereas the slight observed increase for no action (3%) did not approach significance, $p > .30$.

Although both alternatives (probation-by-mail and no action) appear to be preferable to the existing program, a choice between the two alternatives is not clear-cut. However, because of the greater immediate cost-savings impact of probation-by-mail, and the ambiguity associated with the accident cost data, we recommend that it be implemented. An important consideration in this recommendation is that probation-by-mail has greater potential for increasing its cost savings by extending the option to some of the drivers comprising the sizeable high risk group that was screened from the program (the high risk group identified in the no action evaluation was less than half as large).

REFERENCES

- California Department of Motor Vehicles. *Post licensing control reporting and evaluation system*. Status report for quarter ending December 31, 1977. Sacramento: Author, 1977.
- Coppin, R. S., McBride, R. S., & Peck, R. C. The 1964 California driver record study, Part 9. *The prediction of accident involvement from driver record and biographical data* (Report No. 20). Sacramento: California Department of Motor Vehicles, 1967.
- Garretson, M. E., & Peck, R. C. *The effects of the "no action" negligent operator hearings as an alternative to hearings resulting in probation*. Sacramento: California Department of Motor Vehicles, 1979.
- Goldstein, L. *Driver improvement: A review of research literature*. Sacramento: California Traffic Education Task Force, Department of Education, 1973.
- Harano, R. M. *The psychometric prediction of negligent driver recidivism* (Report No 49). Sacramento: California Department of Motor Vehicles, 1974.
- Kadell, D., & Peck, R. C. *Post licensing control reporting and evaluation system: Negligent operator program costs and effectiveness*. Periodic status report #4. Sacramento: California Department of Motor Vehicles, 1979.
- Kaestner, N., & Syring, E. M. Accident and violation reduction through brief driver improvement interviews. *Traffic Safety Research Review*, 1967, 11, 99, 121-124.
- Marsh, W. C., & Hubert, D. E. *The prediction of driving record following driver improvement contacts* (Report No. 50). Sacramento: California Department of Motor Vehicles, 1974.
- McGuire, J., Bernstein, D., Peck, R., Harano, R., & Stroad, K. *Driver improvement analysis: Volume II*, Contract #DOT-H.5 - 4-00967, Public System Inc., Sunnyvale. March, 1976.
- Peck, R. C. Toward a dynamic system of driver improvement program evaluation. *Human Factors*, 1976, 18(5), 493-506.
- Ratz, M. *The effects of a traffic safety film or a drive test with counseling session for renewal drivers licensing applicants with poor prior records* (Report No 64). Sacramento: California Department of Motor Vehicles, 1978a.
- Ratz, M. *An evaluation of the California drive test in theme and variation. Volume II: Final report* (Report No. 62). Sacramento: California Department of Motor Vehicles, 1978b.
- Sherman, B. R., & Epperson, W. *A study on the feasibility of placing selected negligent operators on probation-by-mail*. Technical report. Sacramento: California Department of Motor Vehicles, 1977.

Section 10

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

Next, the document outlines the procedures for handling discrepancies. If there is a difference between the recorded amount and the actual amount, it is crucial to investigate the cause immediately. This could be due to a clerical error, a missing receipt, or a change in the underlying data.

The document also addresses the issue of data security. All financial information should be stored in a secure location, protected by strong passwords and access controls. Regular backups should be performed to prevent data loss in the event of a system failure or cyber attack.

Furthermore, it is recommended to conduct regular audits of the records. This helps to identify any potential issues or irregularities before they become significant problems. Audits should be performed by someone independent of the data entry process to ensure objectivity.

In conclusion, maintaining accurate and secure records is essential for the success of any organization. By following the guidelines outlined in this document, you can ensure that your financial data is reliable and trustworthy.

APPENDICES

STATE OF CALIFORNIA
DEPARTMENT OF MOTOR VEHICLES
DIVISION OF DRIVERS LICENSES
SACRAMENTO

**NOTICE/ORDER OF PROBATION,
GROUNDS THEREFOR, AND OF
OPPORTUNITY TO BE HEARD.**

IMPORTANT: →
Show this number on
all correspondence.

()

DRIVER'S LICENSE OR FILE NO.
VEHICLE CODE AUTHORITY SECTIONS 14103, 12809e, 13359, 14250
EFFECTIVE DATE OF PROBATION
DATE OF THIS ORDER

Your privilege to operate a motor vehicle upon the highways of this State will be placed on PROBATION on the effective date shown above.

THE GROUND FOR THIS ACTION IS: YOU ARE A NEGLIGENT OPERATOR OF A MOTOR VEHICLE.

The records of this Department show that because of traffic convictions you are presumed to be a negligent operator as defined in Section 12810 of the Vehicle Code. A COPY OF YOUR DRIVER RECORD IS ATTACHED.

You are hereby notified that because of such record, this Department will place your privilege to drive on probation as provided in Sections 12809, 13359, 14250 V.C.

AS A CONDITION OF PROBATION YOU SHALL OBEY THE PROVISIONS OF THE VEHICLE CODE OF CALIFORNIA AND ALL TRAFFIC REGULATIONS.

VIOLATION OR NON-COMPLIANCE of the terms and conditions of probation is cause for suspension or revocation of your driving privilege.

Prior to the above effective date you are entitled to request a hearing to show that the cause of the probation is not true. FAILURE TO MAKE A WRITTEN REQUEST FOR A HEARING IS A WAIVER OF YOUR RIGHT TO A HEARING PURSUANT TO SECTION 14103 OF THE VEHICLE CODE. Your written request for a hearing MUST BE POSTMARKED NO LATER THAN 14 DAYS FROM THE DATE OF THIS ORDER. On receipt of your written request for a hearing this order of probation will be stayed and an informal hearing will be scheduled unless a formal hearing is specifically requested. (See over for hearings). This means that the probation will not be imposed on the effective date shown on this order, rather you will be notified after the hearing of the Departments decision to reimpose or not reimpose the probation.

If no hearing is requested PROBATION WILL BE ENDED one year from the effective date of this order, if you have had no additional traffic convictions.

BE SURE TO READ THE INSTRUCTIONS ON THE REVERSE SIDE OF THIS NOTICE/ORDER.

DEPARTMENT OF MOTOR VEHICLES



TRAFFIC VIOLATION POINT COUNT AND NEGLIGENT OPERATOR DEFINED (IN PART)

12810. In determining the violation point count, any conviction of failure to stop in the event of an accident resulting in damage to property or otherwise failing to comply with the requirements of Section 20002, of driving a motor vehicle while under the influence of intoxicating liquor or any drug, or under the combined influence of intoxicating liquor and any drug, or of reckless driving shall be given a value of two points and any other traffic conviction involving the safe operation of a motor vehicle upon the highway shall be given a value of one point; provided, that conviction for only one violation arising from one occasion of arrest or citation shall be counted in determining the violation point count for the purpose of this section.

Any person whose driving record shows a violation point count of four or more points in 12 months, six or more points in 24 months or eight or more points in 36 months shall be prima facie presumed to be negligent operator of a motor vehicle.

NOTE: NEGLIGENT OPERATOR: MILES DRIVEN

12810.5. Notwithstanding Section 12810, a person who drives 25,000 miles or more per year shall be prima facie presumed to be a negligent driver of a motor vehicle only if his driving record shows a violation point count of six or more points in 12 months, eight or more points in 24 months, or 10 or more points in 36 months.

Added Ch. 1162, Stats. 1973. Effective Jan. 1, 1974.

NOTE: If the above applies please complete and mail the attached CERTIFICATE OF MILEAGE to this Department.

For your information, while your driving privilege is subject to probation, you may be under certain limitations. For example, you cannot give immediate supervision to an instruction permit holder who is practicing the operation of a motor vehicle or apply for or retain a driving instructor's license. You will not be able to apply for or retain a farm labor vehicle driver's certificate, a school bus driver's certificate or an ambulance driver's certificate.

However, you may retain your driver's license and use it in a lawful manner.

TO REQUEST A HEARING: Please use the preprinted and addressed hearing request sheet attached. In either type of hearing you have the right to be represented by an Attorney, but need not be.

INFORMAL HEARINGS (see Sections 14104 and 14105 of the Vehicle Code) are conducted in a completely informal manner. You may file a written answer to the charge or you may appear at the hearing and give oral testimony.

FORMAL HEARINGS (see Sections 14107 and 14108 of the Vehicle Code) are conducted in a more formal manner. All oral testimony will be taken under oath or affirmation. The entire proceedings may be electronically recorded. A transcript of the proceedings may be ordered before or after the hearing.

NOTE: A fee is charged for all transcripts ordered.

Following either type hearing, a review of your case is made. Any action, following the hearing, may be appealed through the Superior Court in your county of residence (Section 14400 CVC.)

STATE OF CALIFORNIA
DEPARTMENT OF MOTOR VEHICLES
DIVISION OF DRIVERS LICENSES
SACRAMENTO

REQUEST FOR HEARING
re: NOTICE/ORDER OF PROBATION
or/and CERTIFICATE OF MILEAGE

IMPORTANT: →
Show this number on
all correspondence.

DRIVER'S LICENSE OR FILE NO.
VEHICLE CODE AUTHORITY SECTION(S) 14103, 12809e, 13359, 14250
EFFECTIVE DATE OF PROBATION
DATE OF THIS ORDER

If a hearing is desired, a written request must be postmarked no later than 14 days from the date of this order.

(Fold Here)

Date _____

- I do not request a hearing on the above action.
- I request _____ hearing on the above action.

Signed _____

Telephone Number _____

You may be represented by counsel, but need not be.
Attorney: (Identify if represented and give telephone number.)

(Fold Here)

CERTIFICATE OF MILEAGE

I certify under the penalty of perjury that I drive _____ or more miles per year.

Drivers License No. _____

Signature _____

Date _____

NOTE: *It is unlawful to make any false statement, or knowingly conceal any material fact in any document filed with the Department of Motor Vehicles (Section 20 of the California Vehicle Code).*

1. The first part of the document is a list of names and addresses of the members of the committee.

2. The second part of the document is a list of names and addresses of the members of the committee.

3. The third part of the document is a list of names and addresses of the members of the committee.

4. The fourth part of the document is a list of names and addresses of the members of the committee.

5. The fifth part of the document is a list of names and addresses of the members of the committee.

**NOTICE OF PROPOSED ACTION,
GROUNDS THEREFOR, AND OF
OPPORTUNITY TO BE HEARD.**

STATE OF CALIFORNIA
Department of Motor Vehicles
DIVISION OF DRIVERS LICENSES

Driver's License _____

Field File _____

cc: Guarantor

The records of this Department show that because of traffic convictions you may be a negligent operator.

You are hereby notified that because of such record, this Department proposes to suspend or revoke your driving privilege or to place your privilege on probation as provided in Sections 12809, 13359, 13950-52, V.C.

You are entitled to a hearing to present any evidence, oral or written, as to why the Department should not take the proposed action against your driver's license. You have the choice of a formal or informal hearing. In either type of hearing, you may present any evidence on your behalf. You are not required to be represented by legal counsel, but your attorney may be present if you wish. In the formal hearing, a complete written record is made of the entire proceedings and is available for review of the courts.

An informal hearing has been scheduled by the Department of Motor Vehicles, to be held at

A Driver Improvement Analyst will act as referee at the informal hearing.

A formal hearing, if requested, will be scheduled in place of the informal hearing.

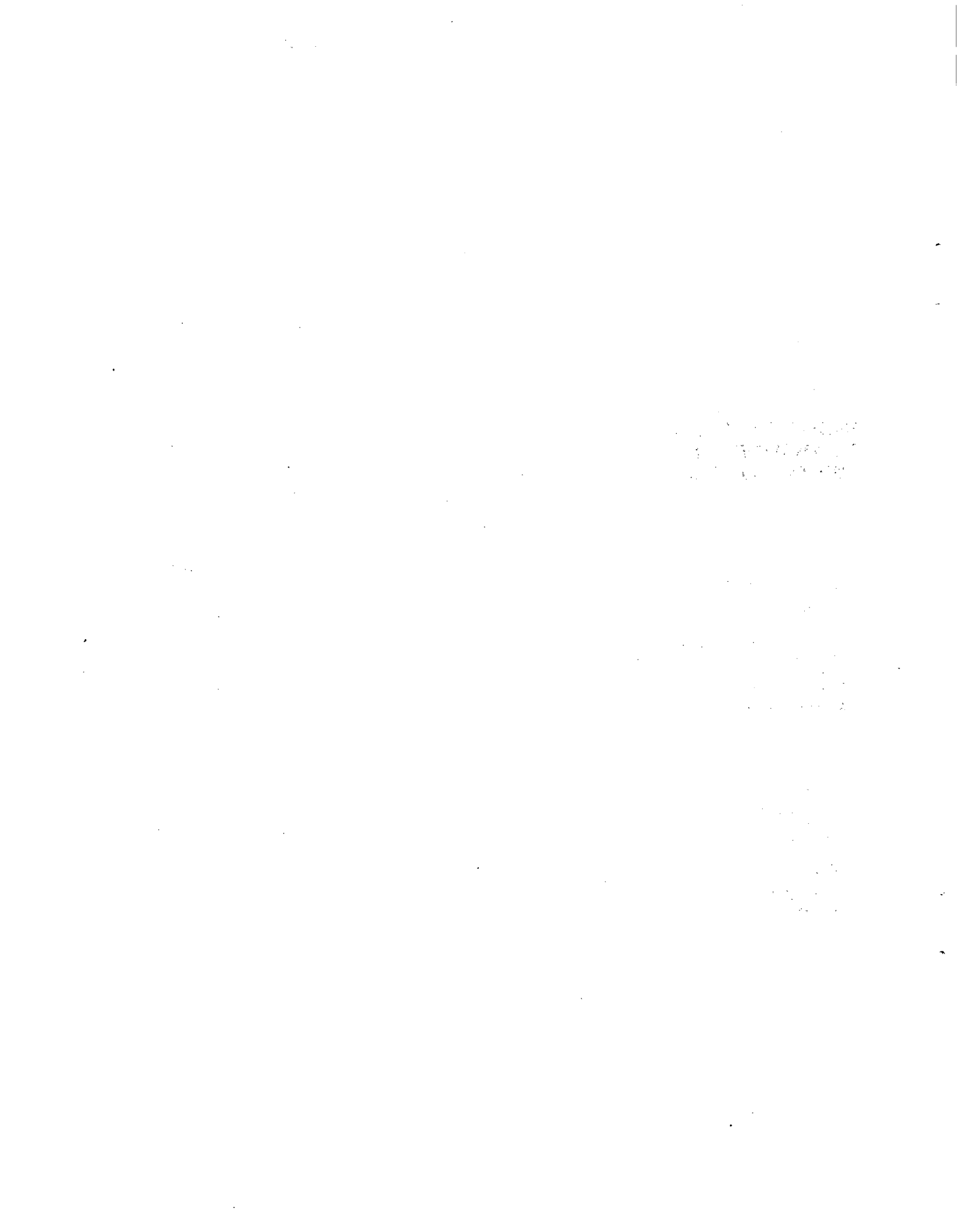
You may respond to this notice either through appearance at the informal hearing or by demanding a formal hearing within 14 days from the date of this notice. Failure to respond to this notice is a waiver of the right to a hearing, and the Department may take action without hearing as authorized in Section 14103 V.C. Please bring to the hearing any Driver's License which has been issued to you.

Dated

Division of Drivers License

SACRAMENTO, CALIFORNIA 95812
DL 205 (REV. 1-76)





APPENDIX C

PROBATION-BY-MAIL QUESTIONNAIRE

Please answer each question by circling the response or number that best describes what you think about this new process.

* * *

Age _____ Sex _____ Marital status _____

Education (circle one):

Elementary / Junior High / High School / Some College / College Grad

Number of years driving _____ Annual mileage _____

Miles driven on job _____

1. Did you receive the Notice/Order of Probation?
(If you did not receive the notice, circle the answer no and return this form to DMV.)

yes

no

2. Did you think that the content of the Notice/Order of Probation gave you adequate information about your driving status?

1	2	3	4	5
extremely adequate	<input checked="" type="radio"/> adequate	no feeling	inadequate	extremely inadequate

3. What was your reaction when you received the Notice/Order of Probation?

1	2	3	4	5
<input checked="" type="radio"/> extremely concerned	concerned	no feeling	unconcerned	extremely unconcerned

4. How has the probation action changed your driving?

1	2	3	4	5
<input checked="" type="radio"/> much safer	safer	no change	less safe	much less safe

APPENDIX C (Continued)

12. Have you been called in for a Group Educational Meeting (GEM) at the Department of Motor Vehicles? (circle one)

- (A) never called in for a Group Educational Meeting (GEM)
- (B) less than 1 year ago
- (C) 1-2 years ago
- (D) 3-5 years ago
- (E) over 5 years ago

13. Have you ever received a warning letter from the Department of Motor Vehicles?

yes 50 no 50

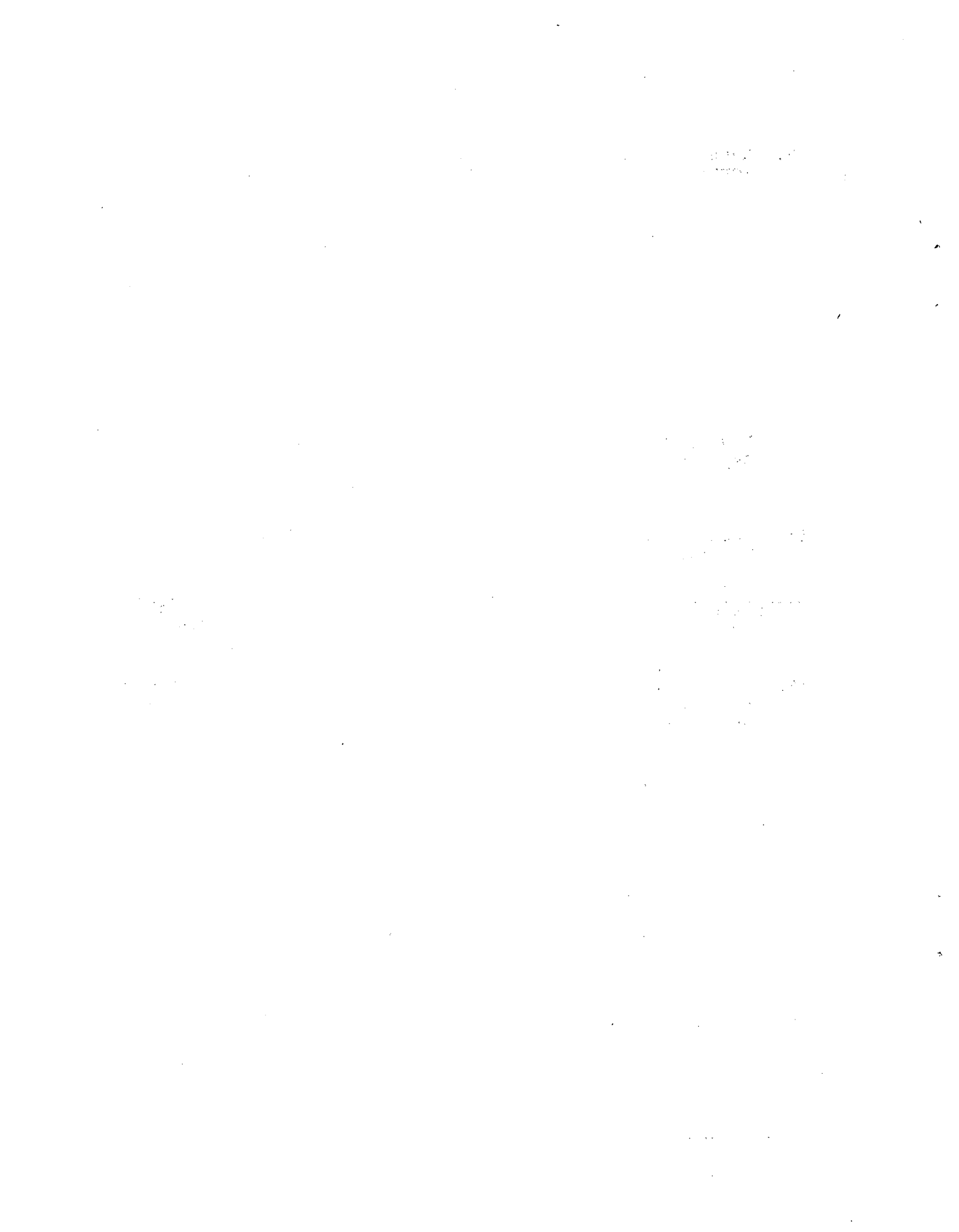
14. What is your attitude about the Department of Motor Vehicles?

1	<input checked="" type="radio"/> 2	3	4	5
extremely good	good	no feeling	bad	extremely bad

15. What do you think might happen to your driving privilege should you receive additional traffic violations while under probation? (circle one)

- (A) don't know
- (B) nothing
- (C) warning
- (D) hearing
- (E) extended probation
- (F) suspension/revocation

16. Do you have any comments about this new process?



APPENDIX D

**Analysis of Covariance for Subsequent Six-Month Total Accidents
for Nonhigh Risk Groups, Probation-by-Mail and Individual Hearing**

Source	Sum of square	df	Mean square	F value	<i>p</i>
Treatment	.11	1	.11	.90	> .30
Zero slope	6.05	4	1.51	12.94	< .001
Error	905.50	7745	.12		
Equality of slopes	.14	4	.03	.30	> .85
Error	905.36	7741	.12		

**Analysis of Covariance for Subsequent Six-Month Fatal and Injury Accidents
for Nonhigh Risk Groups, Probation-by-Mail and Individual Hearing**

Source	Sum of square	df	Mean square	F value	<i>p</i>
Treatment	.00	1	.00	.12	> .70
Zero slope	.43	4	.11	3.05	< .02
Error	274.90	7745	.04		
Equality of slopes	.04	4	.01	.25	> .90
Error	274.86	7741	.04		

**Analysis of Covariance for Subsequent Six-Month Convictions Plus FTAs
for Nonhigh Risk Groups, Probation-by-Mail and Individual Hearing**

Source	Sum of square	df	Mean square	F value	<i>p</i>
Treatment	6.91	1	6.91	5.57	< .02
Zero slope	789.02	4	197.25	158.97	< .001
Error	9610.08	7745	1.24		
Equality of slopes	2.28	4	.57	.46	> .75
Error	9607.80	7741	1.24		

