



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

DOT HS 807 678
Final Report

December 1990

Impact of Court Monitoring on DWI Adjudication

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1. Report No. DOT HS 807-702		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Impact of Court Monitoring on DWI Adjudication			5. Report Date December 1990		
			6. Performing Organization Code		
7. Author(s) Dr. David Shinar			8. Performing Organization Report No.		
9. Performing Organization Name and Address David Shinar, Ph.D 630 Ivy League Lane Rockville, MD 20850			10. Work Unit No. (TRAIS)		
			11. Contract or Grant No.		
12. Sponsoring Agency Name and Address Department of Transportation National Highway Traffic Safety Administration Washington, DC 20590			13. Type of Report and Period Covered Final Report Oct 1989 - Oct 1990		
			14. Sponsoring Agency Code		
15. Supplementary Notes					
16. Abstract <p>Court monitoring of Driving While Intoxicated (DWI) cases is a labor intensive effort conducted by over 300 concerned citizen groups across the U.S. The present project assessed the impact of court monitoring by analyzing the difference in court dispositions (guilty, not guilty, and dismissed) and case outcomes (jail, fine, and license suspension) between monitored cases and non-monitored cases. The data base for this study consisted of the court-tried 9137 DWI arrests in the State of Maine within one calendar year (1987).</p> <p>The results demonstrated that court monitoring is an effective tool in affecting the adjudication process. In the presence of court monitors the conviction rates of DWI offenders are higher and their case dismissal rates are lower than those of drivers not court-monitored. Furthermore, once convicted, the likelihood of a jail sentence is higher and the length of the jail sentence is longer for court-monitored DWI drivers than for non-monitored drivers.</p>					
17. Key Words DWI Court Monitoring DWI Enforcement Alcohol and Driving			18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 44	22. Price

ACKNOWLEDGEMENT

The data needed to generate this report required the cooperation of many agencies and individuals. Foremost I would like to thank the Maine MADD chapter director, Rev. Marilyn Robb and the Maine MADD court monitors - especially Pat and Roy McSorley, Tom Leeman, Jim Creighton, Jeanne Sawtell, Charlie Plumer, Ron and Gail White, Lori Sanborn and Janet Ames, - who contributed so much of their time to court monitoring and provided me with their monitoring data and many insights into the DWI adjudication process in Maine.

I am grateful to Howard Beach of the Maine Department of State, Motor Vehicle Division, for responding so promptly to our needs and providing us with the Maine 1987 DWI license data file. Polina McDonnel of the University of Southern Maine, who was responsible for the annual Maine DWI Report to the Maine Department of Human Services was also very helpful in clarifying for me many issues relating to the Maine DWI statistics for that year.

This project was done in cooperation with the Maine Department of Public Safety, with the active support of Richard Perkins, Official Highway Safety Representative, and Mike Martin, Program Manager. The project was supported by U.S. Department of Transportation Contract DTNH22-90-C-05129, Dr. William Tarrants, COTR.

IMPACT OF COURT MONITORING ON DWI ADJUDICATION

TECHNICAL SUMMARY

Court monitoring of Driving While Intoxicated (DWI) cases is a labor intensive effort conducted by over 300 concerned citizen groups across the U.S. Two previous studies to evaluate its effectiveness were fraught with methodological problems and yielded inconclusive results. The present study assessed the impact of court monitoring by analyzing the difference in court dispositions (guilty, not guilty, and dismissed) and case outcomes (jail, fine, and license suspension) between monitored cases and non-monitored cases.

The data base for this study consisted of 9137 DWI arrests in the State of Maine within one calendar year (1987), during which there were no changes in the DWI laws. This approach minimized the confounding effects of extraneous temporal, socio-demographic, and legal variables that plagued the previous studies. The effects of other confounding variables that have been shown to correlate with disposition and outcome such as age, sex, BAC, and recidivism were statistically controlled.

Statistical analysis showed that the monitored sample was highly representative of the total Maine file in terms of the mean driver age, BAC at time of arrest, number of previous DWI convictions, and proportions of males and females. Statistical tests comparing the monitored drivers and non-monitored drivers on the above measures did not yield any significant differences.

To assess the effects of court monitoring, comparisons between monitored and non-monitored DWI drivers were conducted at three levels: (1) Using the Total Maine File, all of the 397 cases court-monitored by MADD volunteers were compared to all of the 8737 non-monitored cases, (2) Limiting the analysis to five "highly monitored court locations", the 377 cases monitored in these courts were compared to the 1006 non-monitored cases tried in the same courts, and (3) to further eliminate potentially confounding effects, 392 monitored cases were compared with 392 non-monitored cases matched on age, sex, BAC at arrest, and recidivism.

The monitoring effects were consistent across all three levels of analysis, but the magnitude of the effects were typically greatest in the analyses based on the Total Maine File. These are given below:

1. The primary effect of court monitoring is manifested in a significantly higher likelihood of conviction and a significantly lower likelihood of case dismissals.
 - (a) The conviction rate was .92 for the monitored drivers and .87 for the non-monitored drivers.
 - (b) The dismissal rate was .06 for the monitored drivers and .11 for the non-monitored drivers.

2. Monitoring effects on court disposition are greatest at the threshold levels of BAC (.10-.11 mg/l) and in cases of alcohol test refusals; i.e. the two situations where judges seem to have the most discretionary powers.
 - (a) For drivers with BAC .10-.11 the likelihood of conviction was .82 for the monitored drivers and .74 for the non-monitored drivers; while the corresponding likelihoods for dismissals were .07 and .24.
 - (b) For drivers refusing the alcohol test the likelihood of conviction was .96 for the monitored drivers and .78 for the non-monitored drivers; while the corresponding likelihoods for dismissal were .02 and .19.

3. Recidivism is a critical determinant of the likelihood of conviction and the severity of the penalty. The likelihood of a driver with one or more previous DWI convictions to be convicted was essentially 1.0, regardless of whether or not the case was monitored. Monitoring effects are therefore more apparant on the convictions of first time DWI offenders:
 - (a) For first time offenders the likelihood of a conviction was higher for the monitored drivers than for the non-monitored drivers: .90 vs. .85, respectively.
 - (b) For first time offenders the likelihood of case dismissal was almost twice as large for non-monitored drivers as for monitored drivers: .14 vs. .08, respectively.
 - (c) The 75th percentile jail sentence for first time offenders was 3 days for the monitored drivers and 2 days for the non-monitored drivers. For repeat offenders the corresponding 75th percentile levels were 82 and 56 days.

4. Of the three case outcome measures - jail, fine, and license suspension - monitoring had a consistent effect on the jail sentence only. For guilty drivers:
 - (a) The likelihood of a jail sentence for monitored drivers was .81, while for non-monitored drivers it was .75.
 - (b) Monitored drivers received longer jail sentences than non-monitored drivers, but most drivers in both groups received relatively short sentences: the 50th percentile sentence was 2.0 days for the monitored drivers and 1.7 days for the non-monitored drivers. The 75th percentile sentence was 25.0 days for the monitored drivers and 6.2 days for the non-monitored drivers.
 - (c) When considered in combination with other variables, linear regression analysis failed to show any marginal benefits of monitoring on the mean length of the jail sentence, beyond that accounted for by the number of previous DWI convictions and the BAC at the time of arrest.

5. Monitoring did not have a significant effect on the outcome measures of fines and license suspensions.
 - (a) The likelihood of a fine and license suspension were

virtually 1.0 for all guilty drivers, regardless of whether or not they were monitored. Thus, there was a ceiling effect on these two measures.

(b) Monitoring did not affect the magnitude of the fine and license suspension. The average fine was \$407 and the average length of license suspension was 166 days.

6. The most consistent determinants of the mean length of jail, amount of fine, and duration of license suspension were the number of previous DWI convictions and BAC at the time of arrest. These two variables accounted for 14 percent of the variance of the mean jail sentence, 27% of the variance of the mean fine, and 45 percent of the mean length of license suspension. Driver age, sex, and whether or not he/she were monitored had negligible contributions to the regression function and its explanatory power. However this result should be interpreted with caution since the distributions of all the variables were extremely skewed.
7. The results did not reveal any statistically significant halo effects of monitoring from the monitored cases to non-monitored cases tried by the same judges in the same courts. Comparisons between non-monitored cases in the highly monitored court locations and non-monitored cases in jurisdictions not monitored at all, revealed some of the numerical trends found in comparisons between monitored and non-monitored cases, but none of the trends reached statistical significance.
8. Other general findings of the study, independent of the effects of monitoring, were as follows:
 - (a) The average probability of conviction was generally high - .88 - and essentially unaffected by the driver's age and sex.
 - (b) For repeat DWI offenders the likelihood of conviction was practically 1.00.
 - (c) The likelihood of conviction increased with BAC from .74 at BAC=.10 to .94 for BAC>.17. Drivers refusing the test had a likelihood of .90 to be convicted; i.e., the same as drivers with BAC=.14.
 - (d) For convicted drivers, number of previous DWI convictions was a significant predictor of the length of jail sentence ($r=.38$), amount of fine ($r=.54$), and duration of license suspension ($r=.65$).
 - (e) For convicted drivers there were positive significant correlations among all three outcome measures - jail, fine, and license suspension - $.31 < r < .66$.

In summary, this study demonstrated that court monitoring is an effective tool in affecting the adjudication process. In the presence of court monitors the conviction rates of DWI offenders are higher and their case dismissal rates are lower than those of drivers not court-monitored. Furthermore, once convicted, the likelihood of a jail sentence is higher and the length of the jail sentence is longer for court-monitored DWI drivers than for non-monitored drivers.

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INTRODUCTION

Over the past 10 years, there has been a steady decrease in the relative involvement of alcohol in highway fatalities. This has been apparent in both the rise of percent drivers involved in fatal accidents with 0.00 Blood Alcohol Concentration (BAC) (from 61.1% in 1982 to 67.5% in 1988), and the decline in the percent of drivers with BAC of .10 mg/l or more (from 30.0% in 1982 to 24.6% in 1988) (NHTSA, 1989). Many factors are probably responsible for this, but one that has probably had a most significant impact on raising the public awareness, on enacting stricter DWI laws, and on enforcing them, is the emergence of concerned citizen groups that have sprung up at both local and national levels. Best known among these groups are Mothers Against Drunk Drivers (MADD), Students Against Driving Drunk (SADD), and Remove Intoxicated Drivers (RID). All are volunteer organizations and many of their members' involvement in them began after suffering the loss of a loved one as a result of an alcohol related traffic accident.

Among their many activities, one of the more intriguing and labor-intensive ones is the court monitoring of Driving While Intoxicated (DWI) cases. Both MADD and RID promote this type of activity, and many of their local chapters are involved in it, typically by following the prescribed procedures of the national parent organization. Probst et al. (1987) identified 333 local organizations across the nation with court monitoring programs. Furthermore, a survey of 212 MADD chapters showed that it was considered one of the most effective deterrence measures, with 73 percent of the chapters rating it as "moderately" or "very" effective (Bloch and Ungerleider, 1988).

The intriguing aspect of court monitoring is the hypothesized combination watchdog-concerned citizen effect that the court monitors can have on judges and district attorneys by just demonstrating their presence in the court. Their physical presence in full view of the judge and prosecuting attorney is assumed to influence the attitudes of the latter. In this way they make their point of view more salient during the actual court proceeding, and thus hopefully more influential on the prosecuting attorney (typically an elected official) so that he/she will prosecute the cases to the fullest extent of the law, and on the judge (typically also an elected official), so that he/she will mete out the full penalty.

The Nature of Court Monitoring

Among the several hundred MADD and RID chapters and independent citizen groups that are involved in court monitoring, there are many variations in the specific procedures. In general, court monitoring can be conducted at three levels:

1. Records monitoring. Monitoring court procedures and outcomes from the court records only, without being physically present in the courtroom at the time the case is being adjudicated. The monitor tabulates the conviction rates and court outcomes for one or more judges, and these are then publicized in the local (voter) community..
2. Physical monitoring. Monitoring the court proceedings at the time they are held by being present in the courtroom. In these cases the monitoring guidelines typically specify that the monitor make his/her presence known to the judge and district attorney (often through the bailiff), but not wear any form of identification or make any comment during the proceedings, so as not to give cause for calling for a mistrial. It is the monitor's organization assumption that the physical presence of the monitor makes the district attorney and judge more acutely aware of the fact that their actions are being observed and recorded for the benefit of the voting public.
3. Victim tracking. This mode of monitoring is typically limited to injury and fatal accidents in which one of the drivers is suspected of DWI. In this mode the monitor actually 'accompanies' and supports the victim or victim's family following the accident, through the pre-trial and trial process. In these cases the involvement of the monitor is greatest and often begins (and can influence) the specific charges filed by the district attorney.

To operate a court monitoring program the local citizen group must prepare its monitors and become organized for that activity. NHTSA, the national organizations of MADD and RID, and some of the local chapters have published written documents on how to organize a court monitoring program (MADD, Undated; Northern Virginia Chapter of MADD, Undated; Probst and Lewis, 1987). Preparation involves not only the rules for the monitor's behavior but also learning about the adjudication process and the prevailing state DWI laws, so that when there is a discrepancy between the court disposition (in assigning guilt or innocence) and the case outcome (typically in terms of jail, fine, and/or license suspension), the monitor can point these out to the judge and the prosecuting attorney.

The rules for courtroom behavior and interactions with the judge are always very specific: the monitor is instructed to make his/her presence known to the judge and prosecuting and defense attorneys (often through the bailiff). However the monitor is not to make statements, question, raise objections, or interfere with the proceedings in any way while the case is in progress. Afterward, it is recommended that the monitor discuss cases with the judge and district attorney (DA) and make them aware of the citizen groups's interest, concern, and satisfaction or

dissatisfaction with the judge's or prosecuting attorney's performance. Thus when the court disposition does not appear to be consistent with the law, the monitor is encouraged to question and discuss it with them after the case is over. In this discussion (and in others between the citizen groups and the judges and attorneys) the court monitor is assumed to have an educational role; one that would have an impact on cases beyond the one just adjudicated. In summary the effectiveness of the monitor is partly dependent on his/her ability to walk a fine line that includes (1) making the judge and attorneys continuously aware of his/her presence and its implications for their public image, and (2) educating the judge and attorneys, without (3) doing anything that might be construed as interfering with or biasing the due process of the law.

Past Research on the Impact of Court Monitoring

While MADD and RID document their own court monitoring activities, they do not routinely conduct an evaluation of their effectiveness. Two past efforts have been specifically aimed at evaluating the effectiveness of the court monitoring activity: the so called ACE (Alcohol Community Education) Project (Grogan, 1986) and the NHTSA sponsored Assessment of Citizen Group Court Monitoring (Probst, Lewis, Asunka, Hersey, and Oram, 1987).

The ACE project attempted to measure court behavior and outcomes in DWI cases during periods of monitoring and non-monitoring, in five New York Mid Hudson counties. Monitoring was defined as "passive courtroom observation". The monitors were not limited to well trained and personally involved RID members, but a mixture of volunteer high school students, League of Women Voters, RID volunteers and "others", with a high rate of attrition and turnover. Furthermore, the distinction between the monitoring and the non-monitoring periods was blurred, since the monitors appeared in the courts in both periods. Thus the judges could not reliably determine when they were being watched and when they were not. Because of scheduling and volunteer recruitment difficulties, the beginning and start dates of the records assessment periods only partially corresponded to the actual monitoring and non-monitoring periods. Finally, a change in the DWI laws in the region was also confounded with the monitoring measure. Consequently the study found large and unexplained differences among the four counties on the relevant impact measures, and was generally unable to demonstrate any consistent positive effects of court monitoring. In fact, one highly significant finding was a lower conviction rate for DWI during the "monitoring" periods than during the "non-monitoring" periods.

The second evaluation effort, by Probst et al. (1987) compared court dispositions and case outcomes (a) between two locations with court monitors and two without any monitoring activities;

and (b) before and after monitoring began at the locations with the monitoring activities. The monitored locations were a small township in Tennessee with a RID chapter and a large county in Nebraska with a MADD chapter. The non-monitored locations were selected from the same states and partially matched the monitored locations in their population size and socioeconomic level. Effects were measured only by comparing convictions and outcomes on a community wide basis, rather than on a case-by-case basis in which monitored cases are compared with non-monitored cases. During the program there was a change in the DWI law in Nebraska, introducing minimum jail, fine, and license suspension.

The results of this study indicated a significant effect of monitoring at both locations on the mean fines. However, the introduction of a new DWI law in Tennessee overshadowed the effects of the monitoring on fines in the monitored township. In Nebraska, both average fine and the proportion of second offenders sentenced to jail increased in the monitored county during the monitoring phase. However, the change in dispositions and outcomes as a result of the change in the DWI law was much more dramatic and apparent in both the monitored and non-monitored sites.

Taken together the two studies stemmed out of the convictions of the monitoring organizations that court monitoring was effective in influencing court disposition and case outcome. Both studies suffered from acknowledged methodological shortcomings. In the ACE project the confounding factors were so severe as to nullify any measurable effects of monitoring. In the Probst et al. study the primary shortcoming was that it was (1) based on aggregate data from only two partially monitored locations (consequently not all cases included in the 'monitored' location were actually monitored), (2) involved very few monitors and judges, and (3) was partially confounded with changes in the DWI law. Still this study was able to demonstrate some effects of monitoring on fines and jail sentences.

Finally, any analysis of the effects of monitoring on court disposition or case outcome must take into account effects of other variables that could be either interactive with or confounded with monitoring. On the basis of a comprehensive literature review, as well as from the results of their own study of North Carolina drivers, Popkin, Stewart, Lacey, Rudisill, and Rodgman (1987) concluded that DWI convictions were most strongly related to the BAC at arrest and number of previous DWI convictions. Additional factors that correlated with DWI conviction rates were race, sex, and age; with white, under 25 or over 50 years old female drivers less likely to be convicted than nonwhite, 25-50 years old male drivers. With respect to BAC, it is interesting to note that drivers refusing the test had higher conviction rates than drivers with low but above-threshold BAC. In fact, in one study their conviction rates were higher than all

other BAC categories (Foley, Glauz, and Sharp, 1976). Thus, it seems that the court assumes that drivers refusing the test are generally intoxicated at significantly above-threshold levels.

General Objective, Approach, and Hypotheses of the Present Study

The objective of this study was to assess the impact of court monitoring on adjudication in terms of court disposition and case outcome. Possible dispositions of DWI arrests can be guilty, not guilty or dismissed (most often in exchange for a plea to a lesser charge such as driving to endanger- 48(a)). Possible case outcomes for guilty drivers are jail, fine, and/or license suspension.

Given the confounding variables in the previous studies, the present study sought to eliminate the effects of different geographical and socioeconomic conditions between monitored and non-monitored sites by analyzing the data from all courts in a single state - Maine. To ascertain that the effects measured are in fact due to monitoring, data were obtained on all individual cases as to whether or not they were monitored in court by a MADD volunteer. Finally, since DWI laws change quite frequently, the analysis was based on all of the data from a single calendar year during which no changes in the DWI laws were instituted.

This approach of comparing specific monitored cases with non-monitored cases in the same counties and courts eliminated many of the potential confounding factors present in the previous studies. Furthermore, since the level of monitoring activity varied among counties and court jurisdictions it was still possible to compare highly monitored jurisdictions with non-monitored jurisdictions, and to compare monitored cases against non-monitored cases in the same jurisdictions as well as in other jurisdictions where judges and DAs felt "immune" to court monitoring.

The specific hypotheses of this study were:

1. Monitored drivers will experience a higher rate of convictions and a lower rate of dismissals than non-monitored drivers.
2. Convicted monitored drivers will be more likely to receive jail sentences, fines, and license suspensions than convicted non-monitored drivers.
3. Mean durations of jail sentences and license suspensions and mean amounts of fine will be greater for convicted monitored DWI drivers than for convicted but non-monitored drivers.

4. The impact of monitoring will vary with the BAC level at arrest, with the highest impact expected for low levels of alcohol and 'refusals'. These are the situations where district attorneys and judges can exercise their personal biases the most (e.g., by plea bargaining or dismissing a case), and therefore this is where the presence of the court monitor is likely to be the most influential.
5. The impact of monitoring will be greater for repeat offenders. This was the result obtained in the Probst et al. (1987) study. The rationale for this effect is that in these cases the judge is likely to be more sympathetic to the goals of the court monitor, and conversely be more susceptible to public criticism if he/she ignores the monitor's expectations.

METHOD

Characteristics of the State of Maine

In 1987 the State of Maine had 870,716 licensed drivers, its fatality rate per 100,000 drivers was 26.6 (7% below the national average), and the rate of fatalities per 100 million vehicle miles was 2.2 (8% below the national average) (NHTSA, 1988). It has had a .10 mg/l BAC Driving While Intoxicated (DWI) Per Se law since September 1981. (The Per Se level was reduced to .08 in August 1, 1988 - but that is irrelevant to this study). Since the .10 BAC Per Se law went into effect the University of Southern Maine (USM) has compiled and reported annual statistics on Maine DWI arrests. Based on the USM data (which is a slight overestimate of the true numbers of DWI arrests since it includes DWI stops that did not end in an arrest), from 1982 to 1987 the total number of DWI stops/arrests varied from 9,464 to 11,293, and had been rising over the last three years from 9,464 to 9,976.

DWI cases are adjudicated in Maine by 16 superior courts (one in each county) and 33 district courts. Judges are nominated by the Governor and confirmed by the state legislature for a four-year period. Although defendants have a right to request a jury trial, most trials are by judge only (e.g., in Portland in 1989, only 70 out of the 2400 criminal cases were tried by jury). Thus in nearly 100% of the DWI trials, the court disposition is made by the judge.

Data Base for this Study

The data base for this study consisted of the driver license records of all Maine drivers arrested and charged in court for DWI in 1987. This file was provided by the Maine Department of Motor Vehicles and contained a total of 9137 cases.

The year 1987 was targeted for this study for two reasons. First, when the data file for this study was created at the end of 1989, it was the most recent year for which final court decisions would be available on all cases. This was important in order to prevent a possible bias due to excluding the more complicated or contested DWI cases. Second, it was the last full calendar year prior to the change in the DWI Per Se law from .10 to .08 BAC. Thus a more recent year might have confounded variability in judgements with the impact of the recent change in the law.

The driver license record data provided by the Maine Department of Motor Vehicles contained the information on all items listed in Table 1 including:

1. Items needed for case verification (driver name, birth date, court location, and docket number),
2. Items specific to the DWI arrest (date, BAC, violation code),
3. Driver variables that could affect court outcome (age, sex, previous DWI arrests), and
4. Court disposition (guilty, not guilty, dismissed) and case outcome (jail, fine, license suspension).

Table 1

Driver License Data included in the DWI database.

Biographic variables

Driver Name (First, Middle Initial and Last)
 Date of Birth
 Sex

DWI arrest data

Violation date
 BAC level

Court data

Court Type (District or Superior)
 Court Location (By city/county)
 Docket number
 Conviction date
 Disposition (Guilty, Not Guilty, Dismissed, Filed)
 Outcome measures: Length of License Suspension
 Jail Sentence
 Fine

Past DWI record

Number of DWI convictions within the last 6 years.

Merging the Driver File with the MADD Court Monitoring Data

In our study the overwhelming majority of monitoring activity was of the second level: following cases as they were brought up in court and physically monitoring the court process. There were less than 10 cases of victim tracking, and a similar number of cases exclusively monitored from records only. Consequently only cases monitored through the physical presence of the court monitor are considered as "monitored" for purposes of this study.

Since individual differences in the personality of both the monitor and the judge are likely to impact court outcome, the specific monitor that monitored each case was also identified in the data file. Monitoring was conducted by 10 MADD volunteers, five of whom were responsible for 95 percent of the cases monitored. Since there was a complete confounding between monitor and judge (each court location was served by different judges and typically monitored by one specific monitor) the data analysis focused on the impact of all monitors pooled together, rather than on analyzing the impact of individual monitors.

The criteria for case selection for monitoring by the court monitor is important, since it may be confounded with the outcome of the case. Though case selection was not random or representative by design it can be described as a chance or convenience sample: the courts monitored and days and hours of monitoring were simply a function of the availability of a MADD volunteer in that geographic location, rather than the DWI-related characteristics of the specific court there. Similarly, the days and hours of monitoring, especially in the "highly monitored court locations" (defined below) were fairly consistent and regular, and dependent on the time available to the monitor rather than the specific DWI cases tried when monitoring took place.

Because the MADD monitoring records were not uniform across all monitors, and quality of record keeping also varied among them, the process of merging was manual, difficult, and required that a match be made on at least two of the three i.d. items (driver name, arrest date, and docket number) before a case was tagged as 'monitored'. The initial information on which cases were monitored, by whom, and at what level, came from the Maine MADD Chapter coordinator. All of the case files within each court jurisdiction where MADD had a monitor were sent to the monitor(s) in that jurisdiction with the request that they verify the cases marked as monitored, as well as the ones marked as not monitored, against their own records. Consequently we identified 397 cases as monitored.

It is important to note that all cases checked as monitored in the merged data file were noted so on the bases of written records. Consequently the only error possible in the data base is

one of "misses": cases monitored but not noted as such. The impact of such errors on the results of this study is not random. If monitoring has an effect on the measured court disposition or case outcomes, this type of error can only reduce the measured impact of monitoring in this study because it would assign cases with harsher penalties to the non-monitored group. Thus, this error can only lead to underestimates of the impact of monitoring and cannot lead to spurious effects of monitoring where none exist.

Analytical Approach

The general approach of this study was to compare court outcomes of monitored cases with outcomes of non-monitored cases. However the effects of monitoring can be considered at two levels of impact: (1) directly on the cases monitored, and (2) indirectly on cases not specifically monitored but tried in jurisdictions and by judges that are regularly monitored. The rationale for a halo effect of monitoring is justified because district attorneys regularly monitored are elected officials, sensitive to public opinion, very much aware of their being monitored (the monitor is required to inform them of his/her presence and affiliation before the trial), and know that their "DWI record" may be published in the local newspapers based on the data collected by the MADD monitors. Judges in Maine are appointed by the Governor and approved by the legislature. They are therefore less susceptible to pressures of public interest groups, though these groups can express their opinions in the confirmation (or reconfirmation) hearings. The exposure to the public and sensitivity to the public image was an implicit assumption in the Probst et al. (1987) study that compared monitored counties with non-monitored counties, mixing monitored cases with non-monitored cases in the monitored counties.

For all of the foregoing analyses we identified the following subsets of DWI cases:

1. Total Maine DWI case File (TMF). This included the 9137 cases from the 16 Maine counties on file.
2. Court Monitored Cases (CMC) - 397 Cases in which the monitor was physically present during at least one of the court sessions.
3. Non-court monitored cases (NCCM) - The complementary subset of 8737 cases not monitored by MADD volunteers
4. DWI Cases in Highly Monitored Court Locations (HMCL) - Of the 397 CMCs, all but 20 were monitored in five counties (Bath, Ellsworth, Dover-Foxcroft, Rockport, and Waterville), which accounted for 1380 DWI cases. Thus 95 percent of the

monitored cases were from 15 percent of the total accident file:

- a. Monitored cases in HMCL - 377 cases.
- b. Non-monitored cases in HMCL - 933 cases.

5. Matched Non-Monitored Sample (MNMS)- A control group of 392 non-monitored cases from the non-HMCL counties was sampled for comparison with the monitored cases (five monitored cases could not be matched). This set was matched in terms of the driver's age (+- 5 years), BAC level (+- .02), sex, and number of previous DWI arrests. All of these variables have been shown to be related to court dispositions and case outcomes.

Based on the above data subsets, the impact of court monitoring was assessed via three sets of comparisons, distinguished from each other primarily in the nature of the control - non-monitored - group:

1. Differences between the adjudication of all monitored cases (397) and the adjudication of all non-monitored cases (9137-397=8740). Here the control group consisted of the complete population of the 1987 non-monitored DWI drivers, yielding the highest n, with the best opportunity for demonstrating statistically significant effects.
2. Differences between the adjudication of the cases monitored in the Highly monitored court locations (HMCL=377) and the adjudication of the non-monitored cases in the same locations (1380-377=1006). Here the control group was matched on context variables that probably affect disposition and outcome by sharing the same judges and community outlook. The drawback of this control group is that, to the extent that these judges are influenced by the court monitor's presence, they may as well be influenced in cases where the monitor is absent (especially given the 'educational' role of the monitor). Thus a halo effect may extend from the monitored to the non-monitored cases, reducing the measurable effects of monitoring in this specific comparison.
3. Differences between the adjudication of all the monitored cases and the matched set of non-monitored cases from the counties not heavily monitored (392). Here the benefits of the large sample in the first set of comparisons are sacrificed in order to obtain a closer match between the monitored and non-monitored drivers on the selected predisposing variables (age, sex, BAC, and number of previous DWI convictions). The drawback here is that we get the smallest control group of all three sets, thereby increasing the potential variance from other, uncontrolled for, variables.

4. Differences between the non-monitored cases in the HMCL and the non-monitored cases in the remainder of the TMF. Such differences can be interpreted as reflecting either a bias in the selection of the HMCL (by the MADD organization) or a halo effect from the monitored cases to the non-monitored cases (since the latter are adjudicated by the same judges).

The measures of monitoring impact can be divided into two categories: court disposition and case outcome. Each is further divided into more specific measures as follows:

1. Court disposition involves the initial decision on the status of the DWI driver, and can be one of three:
 - a. Guilty by his/her own admission or by court decision.
 - b. Not Guilty based on the court ruling.
 - c. Dismissed by the judge, for insufficient evidence or for technical reasons; or by the district attorney, for insufficient evidence or as a result of plea bargaining to a lesser charge (typically 'driving to endanger').
2. Case outcome is defined here in terms of the penalty levied by the court, once the driver is convicted of DWI; i.e., when the court disposition is guilty. In Maine, DWI outcomes consisted of any combination of the following three:
 - a. Jail (optional for first time offenders and mandatory for repeat offenders).
 - b. Fine.
 - c. License suspension (independent of administrative suspension).

RESULTS AND DISCUSSION

Because of missing data on some of the variables, very few of the tables below will actually be based on complete data sets. This is inconsequential since in no case - with the exception of BAC - is there more than 1 percent missing data.

General Findings

On the basis of previous research, we initially hypothesized that four factors may correlate with DWI court dispositions and case outcomes: driver age, driver sex, BAC at the time of arrest, and number of previous DWI convictions. Accordingly, we sought to first measure the likelihood of conviction as a function of age, sex, number of previous DWI arrests and BAC.

Looking at the Total Maine File, there was no significant interaction between court disposition and driver sex or age. The odds of conviction were 0.87 for males and 0.89 for females, yielding an odds ratio of 0.98 (Chi Square = 4.39, $p=.22$). Once charged with DWI the average odds of being convicted of DWI were .88, and essentially the same ($\pm .01$) for the five age categories of <21, 21-29, 30-39, 40-49, and 50+ (Chi Square = 0.42, $p>.5$).

The effect of the number of previous DWI convictions was a significant factor in determining the likelihood of conviction simply because of a ceiling effect. Looking at the total Maine file, even for first time offenders the likelihood of a guilty sentence was .85, while for repeat offenders it was 0.99; yielding an odds ratio of 1.16. It is likely, that were it not for the generally high likelihood of convictions for first time offenders, the impact of recidivism would have been even greater.

The relationship between court disposition and BAC was similar for both the TMF and the HMCL, and it is illustrated in Table 2 for the TMF. A point-bi-serial correlation between Convictions (Guilty=1, Not Guilty=0) and BAC level was calculated separately for the HMCL cases and the TMF cases. A significant ($p<.001$) correlation was obtained for both data sets: .27 and .24, respectively. The relationship, apparent in Table 2, is quite obvious and consistent: the likelihood of a guilty judgement increases with increasing BAC, while the likelihood of either dismissal or not guilty disposition decreases with increasing BAC (Chi Square = 823.96, $p<.001$). It is also interesting to note that Refusals are treated as more incriminating than missing BACs: they are more often associated with a guilty verdict (90% vs. 79%), and less often with a not guilty (1% vs. 2%) or dismissed disposition (9% vs. 19%).

For the drivers convicted of DWI we also measured the correlations among these possible predictor variables and between

them and the possible case outcomes. The results (based on guilty

 Table 2

The Relationship between BAC level and Court Disposition in the Total Maine File. Cell entries indicate percent of drivers in each Disposition Given a particular BAC level (Twelve cases were listed as 'filed' and are not included in the table).

BAC	Disposition					
	Guilty * (N)	Not Guilty * (N)	Dismissed * (N)	Total * (N)		
<.10	28.9 (48)	3.6 (6)	67.5 (112)	1.8 (166)		
.10-.11	74.8 (359)	1.9 (9)	23.3 (112)	5.3 (480)		
.12-.13	88.5 (599)	1.0 (7)	10.5 (71)	7.4 (677)		
.14-.15	91.6 (711)	0.9 (7)	7.5 (58)	8.5 (776)		
.16-.17	92.1 (723)	0.5 (4)	7.4 (58)	8.6 (785)		
≥.17	94.1 (1660)	0.4 (7)	5.5 (97)	19.3 (1764)		
Refused	89.5 (3075)	1.2 (41)	9.3 (318)	37.7 (3434)		
Missing	78.9 (819)	2.3 (24)	18.8 (195)	11.4 (1038)		
Total	87.6 (7994)	1.2 (105)	11.2 (1021)	100.0 (9120)		

drivers only) are displayed in Table 3a and Table 3b for monitored cases (CMCs) and the non-monitored cases (NCMCs), respectively. The high similarity of the correlations in the two tables indicates that the monitoring variable does not interact with these variables. A similar correlation matrix for the Total Maine File (TMF) is presented in Table 3c.

Table 3a

Pearson Correlations among Biographic Measures, Driving Measures and Court Outcome Measures for All Guilty Court-Monitored Drivers (N= 367 for all correlations except those with BAC where N=236).

	Sex	BAC	Prev. DWI	Jail	Fine	License Susp.
Age	.00	.21**	.05	-.03	.07	.10
Sex		.00	-.09	-.09	-.07	-.07
BAC		1.00	-.06	.02	.22**	.03
Pre. DWIs				.43**	.61**	.78**
Jail					.30**	.48**
Fine						.74**

**P<.001

Table 3b

Pearson Correlations among Biographic Measures Driving Measures and Court Outcome Measures for All Non-Monitored Guilty Drivers (N=7627 for all correlations except ones w/BAC where N=3864).

	Sex	BAC	Prev. DWIs	Jail	Fine	License Susp.
Age	-.05**	.21**	.01	.00	.08**	.03**
Sex		.02	-.11**	-.06**	-.10**	-.10**
BAC			.09**	.11**	.19**	.12**
Prev. DWIs				.37**	.53**	.64**
Jail					.31**	.42**
Fine						.65**

** P<.001

Table 3c

Pearson Correlations among Biographic Measures, Driving Measures and Court Outcome Measures for All Guilty Drivers in the Total Maine File (Due to missing data N=7994 for all correlations except ones with BAC where N=4100)

	Sex	BAC	Prev. DWIs	Jail	Fine	License Susp.
Age	-.05**	.21**	.02	.00	.07**	.03**
Sex		.01	-.11**	-.06**	-.10**	-.10**
BAC			.08	.10**	.19**	.11**
Prev. DWIs				.38**	.54**	.65**
Jail					.31**	.43**
Fine						.65**

** P \leq .001

Some other patterns are also noteworthy in the three matrices of correlations:

1. The correlations among the three case outcome measures - jail, fine, and license suspensions - are all significant and higher than among any other variables in the analysis ($r=.30-.74$).
2. The Number of Previous DWI Arrests has a statistically and practically significant correlation with all three outcome measures: in the CMC the correlations accounted for 18%, 37%, and 61% of the variance in the length of jail sentences, amount of fines, and length of license suspensions, respectively. The corresponding correlations with the outcome measures for the non-monitored cases were also significant but 22-33 percent lower (accounting for 14%, 28%, and 41% of the variance, respectively).
3. The background variables of Age and Sex did not have any correlations of practical significance with any of the outcome measures. Although some of the correlations attained statistical significance, none accounted for more than 1% of the variance; indicating that once convicted, males and females

of all ages are essentially as likely to receive the same fines and license suspensions.

4. The correlations between the BAC levels and the three case outcomes are statistically significant, but fairly low, .02-.22: all associating higher BACs with more severe penalties. The correlation is highest and most consistent for Fines ($r=.19-.22$).

Ruling out Bias in Case Selection

To test for biases in case selection between monitored and non-monitored cases, we measured the differences between them in terms of background variables that correlated here or in previous research with court disposition and case outcome: driver sex, age, mean BAC, and number of previous DWI convictions. In general we found no significant differences between the two groups on any of these variables.

In the total Maine file (TMF) the mean levels of each were as follows:

1. The proportion of males was 87.4% among the non-monitored drivers and 88.2 among the monitored drivers (Chi Square = 0.19, $p=.66$).
2. The mean age of the monitored drivers was 30.9 years (SD=10.6) and the mean age of the non-monitored drivers was 30.3 years (SD=10.0) ($t=1.03$, $p=.30$).
3. Mean BAC level was .17 mg/l (SD=.05) for the monitored drivers and .17 mg/l (SD=.05) for the non monitored drivers ($t=-0.35$, $p=.72$).
4. Mean number of previous DWI arrests was 1.19 (SD=0.61) for the monitored drivers and 1.14 (SD=.61) for the non-monitored drivers ($t=-1.57$, $p=.11$).

In the highly-monitored court locations (HMCL) there were also no significant differences between the monitored and non-monitored drivers in terms of any of these variables. The mean levels were as follows:

1. The proportions of males were similar to those observed in the TMF: 86.4% of the non-monitored drivers and 88.1% of the monitored drivers, the difference between the two being non-significant (Chi Square = 0.628, $p=.428$).
2. Mean age level for the monitored drivers was 30.36 and for the non-monitored drivers it was 30.30 ($t=-0.08$, $p=.93$).

3. Mean BAC levels were .167 and .164 for the monitored and non-monitored drivers, respectively ($t=-0.68$, $p=.50$).
4. Mean number of previous DWI arrests was 1.23 for the monitored drivers ($SD=0.66$) and 1.22 for the non-monitored drivers ($SD=0.71$) ($t=-0.26$, $p=.79$).

Monitoring Effects in the Total Maine File (TMF)

Court Disposition

The initial possible impact of monitoring in the adjudication process is on the court disposition: the decision of whether to acquit the defendant, dismiss the case, or find the defendant guilty. Table 4 shows that the likelihood of case dismissal is 11.4% when no monitor is present vs. only 6.1% when a monitor is there; and the likelihood of a guilty judgement is 87.3% when no monitor is present vs. 92.4 when the monitor is there. These differences are statistically significant (Chi Square = 12.00, $p=.007$). Note that the total number of cases in Table 4 is 12 cases less than the TMF. This is due to 2 cases with missing disposition and twelve cases - all from the non-monitored category - listed as "filed": cases that are unresolved for various reasons such as failure of the defendant to appear at the trial.

Table 4

The Percentages and Absolute Frequencies of Different Court Dispositions as a Function of Monitoring in the Total Maine File. (Twelve non-monitored cases were listed as "filed" and are not included in the table)

Monitoring	Court Disposition			
	Dismissed % (N)	Guilty % (N)	Not Guilty % (N)	Total % (N)
No	11.4 (997)	87.5 (7627)	0.1 (99)	95.6 (8723)
Yes	6.1 (24)	92.4 (367)	1.5 (6)	4.4 (397)
Total	11.2 (1021)	87.7 (7994)	1.1 (105)	100.0 (9120)

The likelihood of a conviction has been shown above to be related to the BAC. The impact of monitoring within each BAC level is shown in Table 5 and Figure 1. From the Table and the Figure, it appears that with the exception of BAC<.10, monitored drivers are always more likely to receive a guilty verdict and less likely to be dismissed than non-monitored drivers. Since the drivers within each BAC category constitute independent samples, the joint effects of monitoring and BAC on court disposition were assessed via separate Chi Square analyses for each of the following BAC levels: <.10, .10-.11, .12-.13, .14-.15, .16-.17, >.17, and BAC test Refusals (R). The analyses indicated significant differences between the monitored and non-monitored groups for only two of the above groupings: BAC of .10-.11 and Refusals. The more detailed distributions of dispositions for these BAC categories as a function of monitoring are presented in Table 6. For both groups of drivers the analysis supports the impression from Figure 1: monitoring reduces the likelihood of case dismissal and increases the likelihood of guilty judgements.

Table 5

The Relationship Between Monitoring and Court Disposition as a Function of BAC for the Total Maine File.

BAC	Monitored		Non-Monitored		Total					
	Guilty %	Dismissed (N)	Guilty %	Dismissed (N)	Guilty %	Dismissed (N)				
<.10	0.0	(0)	90.0	(9)	30.8	(48)	66.0	(103)	1.8	(160)
.10-.11	82.1	(23)	7.1	(2)	73.7	(336)	24.1	(110)	5.3	(471)
.12-.13	97.4	(37)	2.6	(1)	87.8	(562)	10.9	(70)	7.4	(670)
.14-.15	92.5	(37)	5.0	(2)	91.6	(674)	7.6	(56)	8.5	(769)
.16-.17	100.0	(38)	0.0	(0)	91.7	(685)	7.8	(58)	8.6	(781)
≥17	96.2	(101)	3.8	(4)	93.9	(1559)	5.6	(93)	19.3	(1757)
Refused	94.3	(83)	5.7	(5)	89.3	(2992)	9.4	(313)	37.7	(3393)
Missing	96.0	(48)	2.0	(1)	77.8	(771)	19.6	(194)	11.4	(1014)
Total	4.1	(367)	0.3	(24)	84.6	(7627)	11.0	(997)	100.0	(9015)*

*Note: Sample size is smaller than in other tables since the 1.2% of Not Guilty cases are not included.

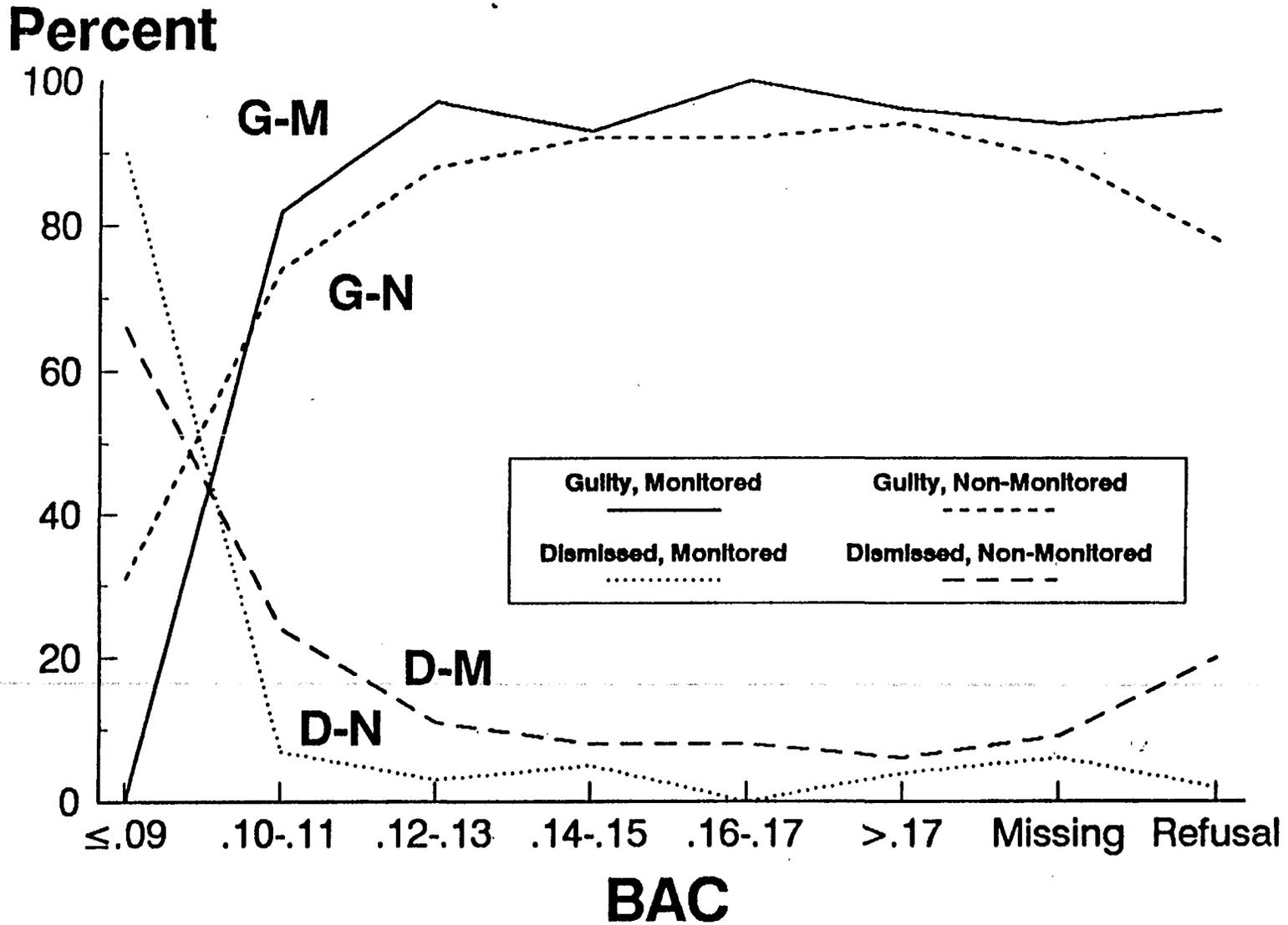


Figure 1. The percent of monitored and non-monitored drivers found guilty, and dismissed given the different levels of BAC in the Total Maine File.

Table 6

The relationship between Monitoring and Court Disposition for the Total Maine File for the BAC categories with significant effects.

a. For $.10 \leq \text{BAC} \leq .11$

Monitoring	Disposition				Total			
	%	(N)	%	(N)	%	(N)		
Yes	7.1	(2)	82.2	(23)	10.7	(3)	5.8	(28)
No	24.3	(110)	74.4	(336)	1.3	(6)	94.2	(452)
Total	23.3	(112)	74.8	(359)	1.9	(9)	100.0	(480)

$\chi^2=16.32, P=.001$

b. For drivers refusing the BAC test

Monitoring	Disposition				Total			
	%	(N)	%	(N)	%	(N)		
Yes	2.0	(1)	96.0	(48)	2.0	(1)	4.8	(50)
No	19.7	(194)	78.0	(771)	2.3	(23)	95.2	(988)
Total	18.8	(195)	78.9	(819)	2.3	(24)	100.0	(1038)

$\chi^2=10.03, P=.018$

Case Outcome

Case outcome was measured in terms of penalties meted out by the courts to drivers judged guilty of DWI. Therefore the impact of monitoring on the three possible case outcomes - jail, fine, and

license suspension - was measured only on the subsets of guilty drivers.

Of the three types of penalties, there was a significant effect of monitoring only on the likelihood and length of the jail term, and a marginally significant effect on the amount of fine.

The mean duration of the jail term for the monitored drivers was 30.9 days (SD=83.4) while the mean duration for the jail term in the non-monitored cases was 50% shorter: 20.4 days (SD=70.1) ($t=2.78$ $p=.006$). However, the use of the average as a descriptive statistic can be misleading since (a) the jail distribution curves were extremely positively skewed (with most jail terms concentrated at the low end of the spectrum), and (b) the curves were bi-modal with nearly 2 percent of the guilty drivers in each category receiving jail sentences of one year or more. Thus a more appropriate description of the effect of monitoring on jail is in terms of frequencies of different jail terms or in terms of percentile levels.

The absolute and relative frequencies of different jail sentences as a function of monitoring are shown in Table 7. Across all cases (monitored and non-monitored), the likelihood of no jail for guilty drivers was 25.3%. The effect of monitoring is clear cut: the likelihood of no jail or a minimal jail term of one to two days is greater when the case is not monitored than when it is (65.1% vs. 50.1%). In contrast, the likelihood of jail terms of ten days or more is consistently higher when the case is monitored (29.2% vs. 17.7%). The Chi Square analysis indicated that this trend is highly significant (Chi Square = 56.3, $p<.001$).

In terms of percentile levels, the impact of monitoring on the jail sentence is best illustrated in the cumulative functions drawn in Figure 2. From this figure it can be seen that although the median jail sentence of the two groups was similar (2.0 days for the monitored guilty drivers and 1.7 for the non-monitored drivers), the difference between them increased thereafter. Thus, the 75th percentile jail sentence was 25.0 days for the monitored drivers and 6.2 days for the non-monitored drivers. There is a crossover point in the length of the jail sentence at 90 days. Thus, relative to 90 days, the likelihood of a shorter sentence is less when the case is monitored than when it is not, and the likelihood of a longer jail sentence is greater when the case is monitored than when it is not.

Table 7

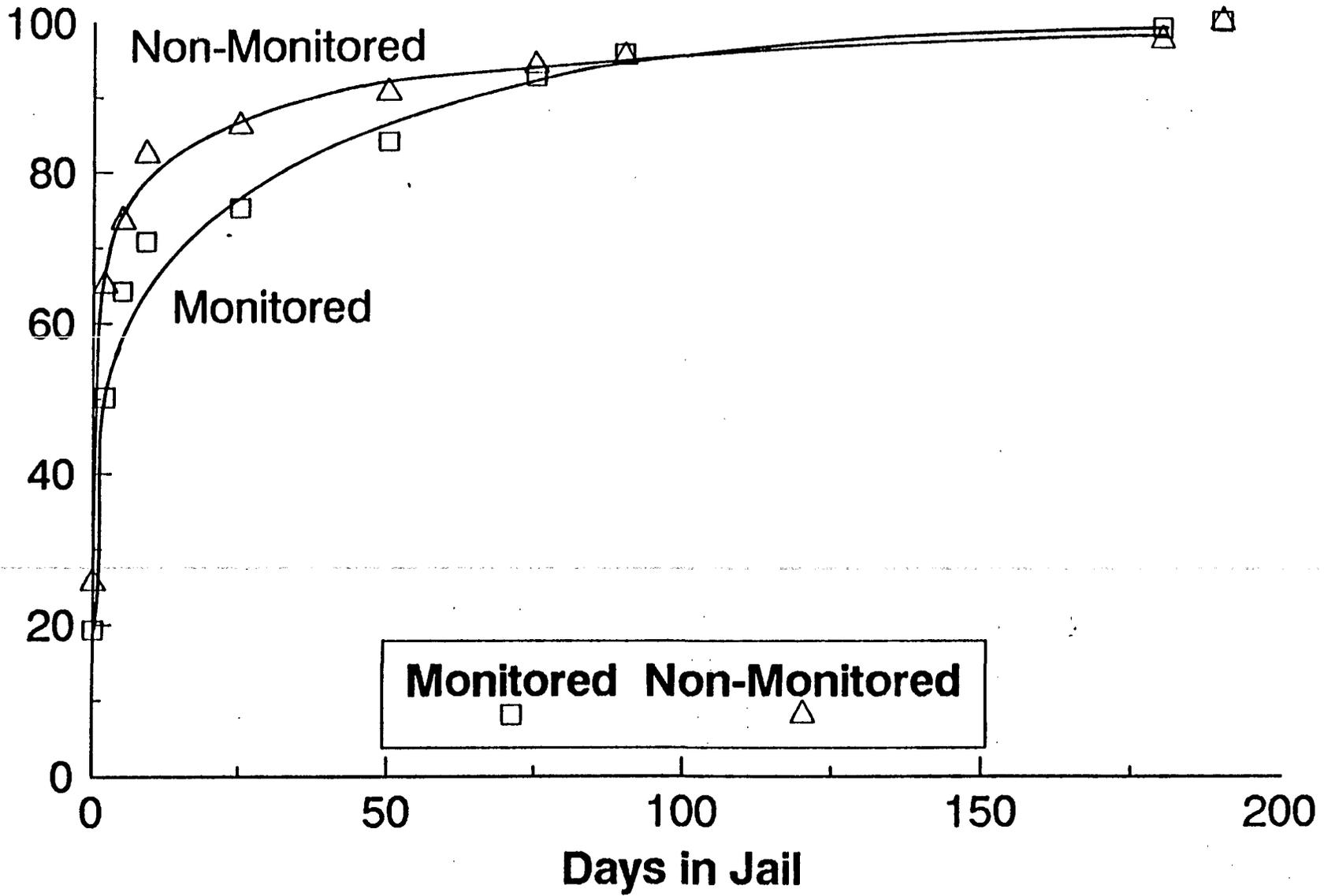
The relationship between Court Monitoring and length of Jail Sentence for Guilty Drivers Only, Based on the Total Maine File.

Jail	Monitoring		Total
	Yes % (N)	No % (N)	
0	19.3 (71)	25.6 (1953)	25.3 (2024)
1-2	30.8 (113)	39.5 (3009)	39.1 (3122)
3-5	14.2 (52)	8.4 (639)	8.6 (691)
6-9	6.5 (24)	8.8 (674)	8.7 (698)
10-29	4.4 (16)	3.8 (286)	3.8 (302)
30-89	17.4 (64)	9.0 (688)	9.4 (752)
≥90	7.4 (27)	4.9 (377)	5.1 (404)
Total	100.0 (367)	100.0 (7626)	100.0 (7993)

The likelihood of a fine and license suspension was extremely high for both monitored and non-monitored guilty drivers: 99.2% and 98.9% for fines, and 99.7% and 99.5% for suspensions, respectively. Because of this ceiling effect, the differences between the groups were not significant (Chi Square = 0.22, $p=.638$ for fine, and Chi Square = .44, $p=.509$ for license suspension). The average fine for the monitored guilty driver was slightly but significantly higher than that given the non-monitored driver: \$407.70 vs. \$393.58, respectively (SD= 124.03 vs. 119.73, respectively) ($t=-2.20$, $p=.028$). The average license suspension term for the guilty monitored driver was numerically more than that given to the non-monitored guilty driver, 176.9 days vs. 165.2 days, (SD= 154.9 vs. 166.0) but the difference was not statistically significant ($t=-1.31$, $p=.189$).

To assess the relative contribution of monitoring, a stepwise linear regression of the effects of each of these variables was conducted on each of the three outcome measures. This approach is appropriate because in the courtroom environment monitoring is one more factor - operating in conjunction with others - that contributes to the outcome. The other factors identified here and

Cumulative Percent



in prior research are driver age, sex, BAC, and previous DWI arrests. Using the SAS Stepwise procedure (SAS, 1985, p.764) with a .10 significance level for entry into the model, monitoring had a residual benefit - beyond that of the other four variables - only on the mean length of the jail sentence; and for this variable too the effect was of negligible practical significance (increasing multiple R from .378 to .379) The models for each of the three outcomes are provided in Table 8 and summarized below:

1. Jail. All five variables had a significant effect on the mean jail sentence, together yielding a multiple R of .38, accounting for 14 percent of the variance.
2. Fine. All variables except Monitoring entered the model, together yielding a multiple R = .52, accounting for 28 percent of the variance.
3. License suspension. Only the Number of Previous DWI Convictions, BAC, and Age entered the model, together yielding a multiple R = .67, accounting for 45 percent of the variance.

Table 8

Regression Analysis Results of the Effects of Age, BAC, Sex, Number of Previous DWI Arrests In Past 6 Years, and Monitoring. For Guilty Drivers Only in the Total Maine File. Variables included are all those with additional significance of at least .10.

Outcome Measure	Independent Variable	Partial R ²	Model R ²	T	P
1. Jail	DWIs in 6 yrs	.14	.14	641.97	<.001
	BAC	.01	.14	25.77	<.001
	Sex	<.01	.14	5.80	.016
	Age	<.01	.14	5.22	.022
	Monitoring	<.01	.14	3.27	.070
2. Fine	DWIs in 6 yrs	.25	.25	1371.80	<.001
	BAC	.02	.27	120.43	<.001
	Sex	<.01	.27	14.29	<.001
	Age	<.01	.28	6.89	.009
3. License Susp.	DWIs in 6 yrs	.45	.45	3334.38	<.001
	BAC	<.01	.45	23.28	<.001
	Sex	<.01	.45	6.97	.008

Note that these results do not necessarily discount the effects of monitoring, because they are strictly limited to the mean effects. Furthermore, the validity of the linear regression model is somewhat questionable since (a) neither the outcome measures nor the predictor variables are normally distributed, and (b) the model is linear, whereas most of the underlying relationships between the predictor variables and the case outcome measures are not.

Monitoring Effects in the Highly Monitored Court Locations (HMCL)

Court Disposition

A Chi Square analysis of the three possible dispositions - dismissed, guilty, and not guilty - did not reveal any statistically significant differences between the two groups (Chi Square = 3.82, $p=.15$), although the percentage of guilty judgements was numerically higher for monitored cases (92.0 vs. 89.4), and the percentage of dismissals was numerically lower for the monitored cases (6.4 vs. 9.5). The not guilty rates were very low for both groups (1.6% and 1.1%).

Since the BAC correlated significantly with the court's disposition of a case - with higher BACs more likely to lead to guilty disposition - we examined the likelihood of different dispositions as a function of the joint effects of BAC and whether or not the case was monitored. There were no significant differences in court dispositions between the cases monitored and the cases not monitored for $BAC < .10$, and for all BAC levels $> .11$. Monitoring had a statistically significant impact in the expected direction in two cases: drivers with BAC levels of .10-.11, and drivers who refused to submit to an alcohol test (Refusals). The results for these two groups are presented in Table 9. At the marginal BAC .10-.11, monitoring effect was manifested primarily by a lower rate of case dismissals (but also by a higher rate of 'not guilty' judgements). However in the case of test refusals, monitoring was associated with both lower dismissal rates as well as higher 'guilty' rates.

Case Outcome

The impact of monitoring on the duration of jail sentences for guilty drivers was measured in terms of mean jail sentence as well as in terms of likelihood of different jail sentences meted to the two groups. Mean durations of the jail sentences meted to the guilty drivers were 30.1 days for the monitored drivers and 25.3 days for the non-monitored drivers, but this difference was not statistically significant (Table 10).

Table 9

The Relationship Between Monitoring and Court Disposition for Drivers in the Highly Monitored Court locations for the BAC categories with significant effects.

a. For $.10 \leq \text{BACs} \leq .11$

Monitoring	Disposition			
	Dismissed % (N)	Guilty % (N)	Not Guilty % (N)	Total % (N)
Yes	7.7 (2)	80.8 (21)	11.5 (3)	34.2 (26)
No	20.0 (10)	80.0 (40)	0.0 (0)	65.8 (50)
Total	15.8 (12)	80.3 (61)	3.9 (3)	100.0 (76)

$X^2=7.41, P=.025$

b. For drivers refusing BAC testing

Monitoring	Disposition			
	Dismissed % (N)	Guilty % (N)	Not Guilty % (N)	Total % (N)
Yes	2.1 (1)	95.8 (46)	2.1 (1)	30.2 (48)
No	15.3 (17)	84.7 (94)	0.0 (0)	69.8 (111)
Total	11.3 (18)	88.1 (140)	0.6 (1)	100.0 (159)

$X^2=7.97, P=.019$

The results of a categorical analysis comparing the likelihoods of the different jail sentences of the two groups are displayed in Table 11. Although the data in Table 11 show that monitored drivers are less likely to receive shorter jail sentences and more likely to receive longer jail sentences than non-monitored drivers, a Chi Square analysis failed to show any significant trends (Chi Square = 4.78, $p > .5$). Furthermore, note that the

magnitude of the effect is much smaller for the HMCL than for the TMF. The likelihood of guilty drivers to receive sentences of two days in jail or less was 55.3% when the cases were not monitored vs. 50.7% when they were. In contrast, the likelihoods of receiving longer jail sentences - 30 days or more - were reversed: 20.6% and 24.8%, respectively.

Table 10

Mean and Standard Deviations of Jail, Fine and License Suspensions for Guilty Monitored and Non-Monitored Drivers in the HMCL

Outcome Measure	Monitored (N=347)		Non-Monitored (N=896)		T	P
	Mean	Std	Mean	Std		
Jail	30.11	82.94	25.31	71.74	-1.01	0.31
Fine	406.84	125.00	404.80	123.70	-0.26	0.80
License Susp.	176.05	153.86	168.18	155.18	-0.80	0.42

Table 11

The Relationship Between Court Monitoring and Jail Sentence for Guilty Drivers Only, Based on Highly Monitored Court Locations

Jail	Monitoring				Total	
	%	Yes (N)	No (N)	%	%	(N)
0	20.2	(70)	22.4	(201)	21.8	(271)
1-2	30.5	(106)	32.9	(295)	32.3	(401)
3-5	14.1	(49)	14.3	(128)	14.2	(177)
6-9	6.1	(21)	5.5	(49)	5.6	(70)
10-29	4.3	(15)	4.3	(39)	4.3	(54)
30-89	14.7	(51)	13.3	(119)	13.7	(170)
>90	10.1	(35)	7.3	(65)	8.1	(100)
Total	100.0	(347)	100.0	(869)	100.0	(1243)

Chi Square = 4.78, P > .50

To determine the impact of monitoring on the other two outcomes - fines and license suspensions - Chi Square analyses and t tests similar to the ones conducted to measure the effects of monitoring on jail sentences were used. The Chi Square analysis examined the differences between the two groups in terms of likelihood of being fined or having the license suspended. For both monitored and non-monitored cases, once found guilty, the likelihood of receiving a fine and license suspension was nearly 100 percent (99.1 and 98.9 percent were fined and 99.7 and 99.1 percent had their license suspended, respectively). Given this ceiling effect, it is not surprising that the differences between the two groups were not significant (Chi Square = 0.15, $p=.70$ for fine, Chi Square = 1.27, $p=.26$ for suspension).

Mean fines and lengths of license suspension were \$405.37 and 170 days, respectively, and did not differ significantly between the monitored and non-monitored drivers, though for both outcomes the differences were in the expected direction (Table 10).

To assess the relative contribution of monitoring, a stepwise linear regression (similar to the one done for the TMF) of the effects of each of these variables was conducted on each of the three outcome measures. Using the SAS Stepwise procedure (SAS, 1985, p.764) with a .10 significance level for entry into the model, monitoring did not seem to have a residual benefit - beyond the effects of Number of Previous DWI arrests, BAC, and Age - on either the length of the jail sentence, the amount of fine, or the length of license suspension. The models for each of the three outcomes are provided in Table 12.

 Table 12

Regression Analysis Results of the Effects of Age, BAC, Sex, Number of Previous DWI Arrests, and Monitoring on Jail, Fine, and License Suspension. HMCL Guilty Drivers Only. Variables with additional significance of less than .10 are not included.

Outcome Measure	Independent Variable	Partial R ²	Model R ²	F	P
1. Jail	DWIs in 6 yrs	.18	.18	153.45	<.001
	BAC	.01	.19	6.78	.009
2. Fine	DWIs in 6 yrs	.20	.20	179.54	<.001
	BAC	.03	.24	29.11	<.001
	Age	<.01	.24	2.89	.089
3. License Susp.	DWIs in 6 yrs	.47	.47	627.40	.001
	Age	<.01	.48	5.44	.020

These models are summarized below, with the predictor variables listed in order of their relative contribution:

1. Jail. Only Number of Previous DWI convictions and BAC contributed significantly to the model, together yielding a multiple R of .44, accounting for 19 percent of the variance.
2. Fine. Only Number of Previous DWI Convictions, BAC, and Age entered the model, together yielding a multiple R = .49, accounting for 24 percent of the variance.
3. License suspension. Only Number of Previous DWI Convictions and Age entered the model, together yielding a multiple R = .69, accounting for 48 percent of the variance.

Comparing the Court Monitored Cases (CMC) to a Matched Non-Monitored Sample (MNMS)

The final set of procedures to assess the effects of monitoring consisted of creating a control group matched on driver age, sex, BAC at time of arrest, and number of previous DWI convictions, and then comparing the disposition and outcomes of that group with those of the court monitored cases. The control group of Matched Non-Monitored Cases (MNMC) was selected from among the non-monitored drivers in jurisdictions other than HMCL (where some halo effect could be operating). To maximize sample size, matching for age and BAC was only approximate: ± 5 years and $\pm .02$ BAC, respectively. Matching was successful for 392 of the 397 CMCs (yielding no significant differences between the two groups on any of these variables) and the two groups had the following mean characteristics:

Age = 30.9 for the MNMC drivers and 30.2 for the CMC drivers
 Sex = 87% males in both groups
 BAC = 16.6 for the MNMC drivers and 16.8 for the CMC drivers
 Number of Previous DWI arrests = 1.255 for both groups.

Court Disposition

The effect of monitoring on conviction rates was assessed through a Chi Square analysis of the three possible case dispositions: Dismissed, Guilty, and Not guilty. The results, detailed in Table 13 indicate that monitoring was significantly associated with higher guilty rates (93% vs. 89%) and lower dismissal+not guilty rates (combined: 6.9% vs. 10.7%) (Chi Square 8.23, $p=.016$).

A finer analysis of court dispositions as a function of monitoring, broken down by different BAC levels, indicated that while the trends were generally in the expected direction, almost all of them

failed to reach statistical significance, probably because of the small cell frequencies. The only exception was the result of the Chi Square test for the Refusals: conviction rates were higher for the monitored drivers than the non-monitored matched group (95.9% vs. 83.7%) and the combined dismissals + not guilty rates were lower for the monitored drivers than the non-monitored drivers (4.1% vs. 16.3%).

Table 13

The Relationship Between Court Disposition and Monitoring for the CMC and Matched Non-Monitored Sample.

Monitoring	Dismissed % (N)	Guilty % (N)	Not Guilty % (N)	All % (N)
Yes	5.4(21)	93.1(365)	1.5(6)	50.0(392)
No	10.2(40)	89.3(350)	0.5(2)	50.0(392)
All	7.8(61)	91.2(715)	1.0(8)	100.0(784)

Case Outcome

Looking at the guilty drivers only, the comparisons between the CMC and MNMS did not reveal any practically or statistically significant differences in the likelihood of receiving a jail sentence or fine, and only a negligible but statistically significant increase in the likelihood of having the license suspended by the court for the monitored drivers relative to their matched control group. The odds of receiving a jail sentence were .81 for the monitored drivers, and .78 for the non-monitored drivers, yielding an odds ratio of 1.04 (Chi Square = 0.62, p=.43). The odds of receiving a fine were .99 for the monitored drivers and .98 for the non-monitored drivers, yielding an odds ratio of 1.01 (Chi Square = 2.56, p=.11). The odds of having the license suspended were almost 1.00 (.997) for the monitored drivers and .98 for the non-monitored drivers, yielding an odds ratio of 1.02 (Chi Square = 3.85, p=.05).

There were also no differences between the two groups in the mean levels of the three outcome, as indicated below:

1. Jail. Mean jail sentence was 30.2 days for CMC drivers vs. 26.1 for the MNMS; $t=-0.61$, $p=.54$.
2. Fine. Mean fine was \$399.03 for the CMC drivers vs. \$398.06 for the MNMS drivers; $t=-.10$, $p=.54$.

3. License suspension. Mean suspension duration was 165.2 days for the CMC drivers vs. 175.4 days for the MNMS drivers, $t=.79$, $p=.43$.

Regression analyses to predict court outcomes on the bases of Age, Sex, BAC, Number of previous arrests, and Monitoring, indicated that with a threshold of significance at .10, monitoring did not enter any of the three equations. The results were as follows:

1. Jail. Only Number of Previous DWI convictions contributed significantly to the model, yielding a R of .24, accounting for 6 percent of the variance.
2. Fine. Only Number of Previous DWI Convictions and BAC entered the model, together yielding a multiple R = .53, accounting for 28 percent of the variance.
3. License suspension. Only Number of Previous DWI Convictions entered the model, yielding a R = .67, accounting for 45 percent of the variance.

Halo Effects of Monitoring: Non-Monitored Cases in HMCL vs. TMF

Court Disposition

Based on DWI data from previous years, the courts in the HMCL were not any more lenient or severe in their treatment of drivers arrested for DWI than the Maine courts in the other counties. Thus, we looked for the halo effects of monitoring by comparing the court dispositions of all non-monitored HMCL cases with the disposition of the non-monitored cases in the rest of the Total Maine File (TMF). The results revealed that the two data sets did not differ significantly from each other in the court disposition (Chi Square = 5.90, $p=.117$), though there were slight numerical trends in the expected direction: dismissal rates were lower (9.5% vs. 11.7%) and guilty convictions were higher (89.4% vs. 87.1%) for the HMCL cases.

For a more focused examination of the differences between the two data sets, separate Chi Square analyses was conducted for each of the following BAC levels: <.10, .10-.11, .12-.13, .14-.15, .16-.17, >.17, and Refusals. The results indicated no statistically significant differences between the two non-monitored groups for any of the BAC groupings. There was a marginally significant effect for BAC .12-.13, showing dismissal rate of 2.8% vs. 12.0% and Guilty rate of 97.3% vs. 86.6% for the HMCL and Non-HMCL cases, respectively (Chi Square=6.93, $p=.074$). The significant trends that were observed in the comparisons between the monitored and non-monitored cases - for the BAC .10-.11 and Refusals groups - were also apparent in this analysis but they failed to reach acceptable levels of significance ($p>.10$ for both).

Court Monitoring and the Adjudication of Repeat Offenders

Since there was some indication in Probst et al.'s (1987) study that monitoring may have more of an impact on the disposition and outcome of repeat offender cases, a separate analysis compared the subsample of drivers with previous DWI convictions in the past 6 years with the drivers without any DWI convictions in the past 6 years. Of the total DWI file, 1794 (19.6 percent) drivers were repeat DWI offenders. Of the repeat offenders 99 were monitored (5.5%), and 1695 (94.5%) were not. Because of these relatively small numbers, the foregoing analyses were conducted only at the TMF level.

Court Disposition

Separate examinations of the conviction rates for repeat and first time offenders showed, a significant effect of monitoring only for first time offenders. The percentages in each category of court disposition are presented in Table 14 for the total Maine file (TMF). It is immediately apparent that the lack of an effect of monitoring on repeat offenders was due to a ceiling effect: 100 percent of these drivers were convicted even when the court monitor was not there. The impact of monitoring for first time offenders was consistent for all three aspects of court disposition: in their presence guilty rates were higher and dismissal and not guilty rates were lower.

Case Outcome

The likelihood of a guilty driver with a previous DWI conviction to receive a jail sentence was very high and did not differ significantly between the monitored and non-monitored drivers; the odds being .95 and .94, respectively. As has been noted above, for all drivers convicted of DWI, the odds of receiving a fine and license suspension were essentially 1.0, regardless of previous DWI convictions.

As was to be expected from the previous analyses (Tables 9a-c, and the regression analyses), there were significant differences in the magnitude of the jail, fine, and license suspension sentences between first-time and repeat offenders. However, the general lack of a statistically significant monitoring effect on these outcome measures that was observed for the total sample, was again observed after partitioning the sample into the first-time and repeat offenders.

Table 14

Court Disposition for First Time and Repeat DWI Offenders

Disposition

Offense	Monitoring	Dismissed		Guilty		Not Guilty		Total	
		%	(N)	%	(N)	%	(N)	%	(N)
First Time	Monitored	8.1	(24)	89.9	(268)	2.0	(6)	4.1	(7028)
	Non-Monitored	14.1	(989)	84.5	(5948)	1.3	(91)	95.9	(298)
	Total	13.8	(1013)	84.7	(6216)	1.3	(97)	99.8*	(7326)

$X^2 = 5.68$ $P = .06$

Repeat	Monitored	.0	(0)	100.0	(99)	.0	(0)	5.5	(99)
	Non-Monitored	.5	(8)	99.0	(1679)	.5	(8)	95.5	(1695)
	Total	.5	(8)	99.1	(1778)	.5	(8)	100.0	(1794)

$X^2 =$ Invalid because of empty cells

* Twelve non-monitored drivers (0.2%) were listed as 'filed'

The mean jail, fine, and license suspension sentences of the TMF are presented in Table 15. Despite the lack of a significant effect, it is worth noting that each of these measures shows a numerical difference in the expected direction; with more severe penalties given to the monitored drivers than to the non-monitored drivers. The largest numerical differences between monitored and non-monitored drivers were observed for the mean jail sentences but here too the level of significance could be considered marginal at best.

Table 15

Mean Jail (in Days), Fine (in dollars), and License Suspension (in Days) as a Function of Monitoring for First-time and Repeat DWI Offenders in the Total Maine File

	First Time Offenders		Repeat Offenders	
	Monitored	Not Monitored	Monitored	Not Monitored
Jail	13.6	9.0*	77.7	60.6**
Fine	366.9	361.2	518.2	508.5
License Susp.	107.8	110.7	363.9	358.5

* $T = -1.37$, $P = .169$

** $T = -1.66$, $P = .099$

Although the mean jail sentences of the monitored and non-monitored drivers did not differ significantly from each other, the pattern of jail sentences was still not the same for the two groups. The effects of monitoring on the jail sentence of convicted first-time DWI offenders and repeat DWI offenders are illustrated in Table 16. The difference between the monitored and non-monitored drivers is significant for both the first time offenders and the repeat offenders (Chi Square = 91.51, $p < .001$ and 74.46, $p = .011$, respectively). For both groups monitored drivers are less likely than non-monitored drivers to receive a jail sentence of two days or less, and more likely than non-monitored drivers to receive a jail sentence of 30 days or more. The corresponding cumulative functions of the jail sentences are presented in Figure 3. The figure shows that for first-time offenders, noticeable differences in the jail sentence first appear at the 75th percentile: 3 days for the court monitored drivers and 2 days for the non-monitored drivers. By the 85th percentile the jail sentence for first-time monitored DWI drivers is 9 days while for first-time non-monitored DWI drivers it is only 3 days. For repeat offenders, the two groups already differ from each other at the median (50th percentile) level: 26 days for the monitored drivers vs. 10 days for the non-monitored drivers. The corresponding 75th percentiles are 82 and 56 days.

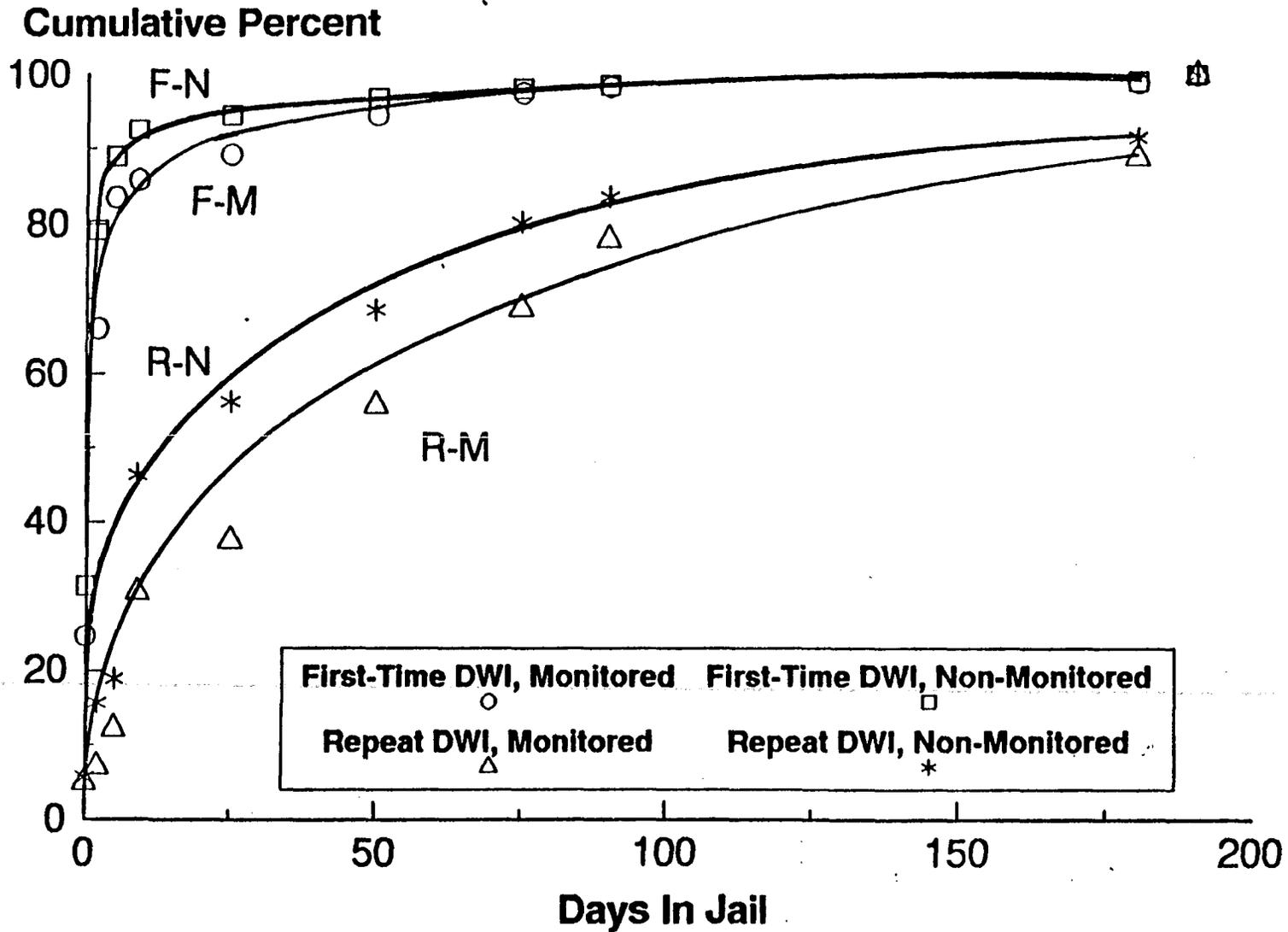


Figure 3. The relationship between the jail sentence and recidivism as a function of Monitoring, for the Total Maine File.

Table 16

Distribution of Jail Sentences for DWI Drivers in the Total Maine File as a Function of Monitoring and Recidivism (in Percentages)

Jail	First-Time DWI		Repeat DWI	
	Monitored	Not Monitored	Monitored	Not Monitored
0	24.6	31.3	5.0	5.6
1-2	41.4	47.8	2.0	10.0
3-5	17.5	9.8	5.1	3.2
6-9	2.3	3.6	18.2	27.5
10-29	3.4	2.0	7.1	9.9
30-89	8.2	3.4	31.3	23.8
≥90	2.6	2.1	31.3	20.0
Total	100.0	100.0	100.0	100.0

Court Monitoring and DWI Enforcement

An argument made by some of the court monitors is that their impact extends beyond the courtroom and into the road. The hypothesis is that police officers who are aware of the DWI court monitoring activities in their jurisdictions are more likely to pursue and cite DWI drivers, knowing that they will have a "friend" in court. Only a weak test of this hypothesis was possible in this study, and it was based on analyzing the rates of DWI citations in the different Maine counties (i.e. DWI court cases) relative to the level of court monitoring activities in each of these counties.

The results, presented in Table 17, fail to support this hypothesis. The average rate of DWI citations that reached the courts was 1.065 percent; i.e., approximately 1 DWI arrest for every 100 licensed drivers. The five Highly Monitored Court Locations are starred next to the county name, and as is obvious from this table, the average DWI arrest rate for these counties (1.028) is not significantly higher than in the other counties. While in two counties the rates were the highest in the state (Piscataquis and Sagadahoc), in the remaining three (Cumberland, Hancock, and Kennebec) it was at or

below the average state level. Since in the latter three counties there were more than one district court in each, but only one was heavily monitored, it is difficult to reach any conclusions on the impact of court monitoring in these counties. Consequently, while the impact of monitoring on enhancing DWI arrests cannot be ruled out, the present data are not sensitive enough to support it.

Table 17

Number of licensed drivers and DWI arrests by county. The Highly Monitored Court Locations are indicated by a star.

<u>County</u>	<u>Licensed Drivers</u>	<u>DWI Cases</u>	<u>Percent DWI</u>
Androscoggin	69,709	585	0.839
Aroostook	57,481	594	1.033
* Cumberland	175,368	1566	0.893
Franklin	19,681	148	0.752
* Hancock	34,416	293	0.851
* Kennebec	79,770	876	1.098
Knox	25,943	252	0.971
Lincoln	23,534	258	1.096
Oxford	36,209	241	0.666
Penobscot	101,862	1235	1.212
* Piscataquis	13,013	209	1.606
* Sagadahoc	21,514	386	1.794
Somerset	33,866	348	1.028
Waldo	21,731	196	0.927
Washington	24,775	303	1.223
York	118,853	1647	1.385
<hr/> TOTAL	<hr/> 857,725	<hr/> 9137	<hr/> 1.065

CONCLUSIONS AND RECOMMENDATIONS

Before conclusions are drawn from the results of this study, the context in which these results were obtained must be considered. The analyses above were limited to files of Maine drivers charged with DWI. However, the adjudication process begins at the time of arrest, when the district attorney (DA) decides whether or not to charge a driver with DWI. Thus, the district attorney's inclination to charge a driver with DWI is a major variable that would affect the ensuing court disposition and case outcome. The level of screening cases before charging them with DWI varies widely among court jurisdictions. Consequently, DAs who are reluctant to submit all but the most flagrant DWI violators, are likely to demonstrate higher conviction rates and lower "not guilty" and dismissal rates, than DAs who are willing to process cases with relatively lower BACs. Such reluctance could also account for some of the ceiling effects observed in the data, and the consequent lack of ability to demonstrate impact of court monitoring in these situations. Based on the 9976 DWI stops recorded in Maine for 1987 (McDonnell et al., 1988), the present data base indicates that Maine DAs actually charged 92% of the stopped drivers with DWI, thus greatly reducing this potential biasing factor.

Overall, the court monitored cases were shown to be a representative sample of the total Maine DWI cases, in terms of potential predisposing factors such as age, sex, BAC at time of arrest, and number of previous DWI convictions. The different sampling strategies used for the control group - against which monitoring effects were measured - yielded relatively similar results, ruling out some of the methodological concerns that necessitated the use of the different parallel sets of comparisons and statistical tests.

Conclusions

Table 18 contains a partial summary of the principal findings of this study relative to the effects of monitoring on court disposition and case outcome, at the three levels of analyses: TMF, HMCL, and the matched sample. The conclusions from this summary and the preceding analyses are:

1. Across all DWI cases, the conviction rates in Maine are very high with 88% of the drivers found guilty.
2. Even with the high conviction rates, court disposition is significantly influenced by the presence of monitors. In their presence dismissal rates are cut by close to 50%, with a parallel increase in the guilty rates.
3. When the drivers are stratified by BAC, the impact of the monitors appears to be primarily on the conviction of drivers with BAC .10-.11 and drivers who refuse the test. It is in these marginal

situations, where the judge may be initially ambiguous, that they are most influential. For BAC < .10 the judge is practically obliged by law to find the defendant "not guilty", and for higher BAC levels a "guilty" judgement is almost uniform, probably reflecting the impact of past educational efforts and heightened public concern in this area.

4. When drivers are divided into first time DWI offenders vs. repeat DWI offenders, monitoring effects are concentrated in the disposition of first-time offenders who are more likely to receive a guilty sentence and less likely to be dismissed or found not guilty. With repeat offenders the conviction rates in Maine are already 1.0 even for the non-monitored drivers.
5. The likelihood of a jail sentence was significantly higher for the monitored cases than for the non-monitored cases. Here too we may be approaching a ceiling effect with 75% of the non-monitored defendants receiving a jail sentence (compared to 80-81% of the monitored drivers).
6. Monitoring failed to reach a statistically significant effect on the mean length of the jail sentence, but did affect the distribution of different jail sentences: the likelihood of monitored drivers to receive a jail sentence of 2 days or less was .50 while the likelihood of non-monitored drivers to receive a jail sentence of 2 days or less was .65. For jail sentences of 30 days or more the relationship was reversed: .25 for the monitored drivers and .14 for the non-monitored drivers.
7. The likelihood of a fine and a license suspension is almost 1.0 for all drivers convicted of DWI in Maine. Consequently, because of this ceiling effect, court monitoring added nothing to the likelihood of these penalties.
8. The presence of the monitors does not appear to have any effect on the amount of the fine. In fact the variance in the fines was relatively small, with 95% of the drivers receiving fines of \$273-\$513, so that even when the effect of monitoring was statistically significant, it was negligible (raising the mean fine from \$394 to \$408).
9. Monitoring did not appear to have a significant effect on the mean length of the license suspension (175 days).
10. When considered in combination with the other predisposing variables - age, sex, BAC, and number of previous DWI convictions - the marginal impact of monitoring on the average length of jail sentence, amount of fine, and length of license suspension is negligible. In light of the lack of effect of monitoring on these variables in isolation, this finding is not particularly surprising, and only reinforces the conclusion that the average jail sentence, fine, and license suspension meted to

the convicted DWI offender is not affected by the presence of a court monitor.

Table 18

Summary of Statistically Significant Findings at the Three Levels of Analysis. ¹

	Disposition		Outcome		Comments
	Guilty	Dismissed	Jail	Fine Lic. Susp.	
<hr/>					
<u>TME</u>					
Prob.	.92/.87	.06/.11	.81/.75	*	* Conviction effects significant also for BAC = .10-.11, R
Avg.			20/31	408/394	166
<hr/>					
<u>HMCL</u>					
Prob.	**	**	.80/.78	*	* Conviction effects significant only for BAC = .10-.11, R
Avg.			26	405	170
<hr/>					
<u>Matched Sample</u>					
Prob.	.93/.89	.07/.11	.80	*	* Conviction effects significant also for BAC = R
Avg.			28	399	170
<hr/>					

* Ceiling effect with all probabilities approaching 1.0

**See Comments

¹ Singular cell entries represent mean values for all cases in which the difference between the monitored and non-monitored cases is statistically non-significant. Double entries represent the mean values of the monitored/non-monitored cases when the difference is statistically significant.

11. The data available did not show a halo effect of monitoring - beyond the specific cases that are physically monitored - to other cases adjudicated in the same courts by the same judges. No significant differences in court disposition of non-monitored drivers were found in the comparisons between the HMCL and the remaining jurisdictions. However, the data manifested the same trends observed in the comparisons between monitored and non-monitored cases, suggesting that if the intensity of monitoring were to be increased - by either more monitoring in the same jurisdictions or monitoring at the same level in more jurisdictions - such effects could be demonstrated.

In summary, this study demonstrates that court monitoring has significant effects on both court disposition and case outcome of DWI cases. Furthermore, the results indicate that the effect is not a general one of equal impact on all measures and in all situations, but rather specific to (a) situations of marginal and disputable BAC levels (.10-.11, and test refusals), (b) first time DWI offenders, and (c) certain dispositions (primarily dismissal and conviction rates rather than 'not guilty') and outcome measures (primarily the likelihood of a jail sentence).

Recommendations

Based on the findings of this study the following recommendations can be made:

1. Volunteer court monitoring activity should be continued in places where it already exists, and promoted in locations where it does not yet exist.
2. The effectiveness of court monitoring could be enhanced by making it more selective in terms of the following:
 - a. Focus monitoring efforts so that they will exceed a threshold level of repeated attendance in the same courts and with the same judges. Sporadic monitoring is probably ineffective. With repeated attendance the judges and attorneys (for both sides) get to know the monitors, are more aware of their presence, and apparently are more influenced by them.
 - b. Where feasible, screen cases in advance to identify those that would give the judge the most discretionary power. In the Maine experience these were the low but above-threshold alcohol levels, test refusals, and first-time DWI offenders. The contribution of monitoring in the cases of high BAC and repeat offenders is negligible, at least in courts that are as strict as the ones observed here.

- c. Focus monitoring efforts in court jurisdictions that have a "poor" DWI adjudication record. Given the present levels of public awareness of the harm of DWI and the public's inclination to deal with it severely, "good" judges are already nearing 100% convictions with a high inclination to jail the DWI offenders. In such courts the cost/benefit ratio of monitoring is relatively high.
3. Additional research on the impact of court monitoring should focus on assessing the specific situations where they are most likely to have an impact, so that monitoring efforts can be directed at these situations.

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