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June 1987

Final Report

Deterrent Effects of
Mandatory License Suspension
for DWI Conviction

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16. Abstract

The present study examined the specific and general deterrent effects of Wisconsin's 1982 law mandating three to six month license suspensions for first-time convicted drinking drivers. Specific deterrence (stopping repeat drinking and driving among those convicted) was studied statewide before and after the new law. The results showed a reduction in subsequent convictions and crashes for those drivers convicted after May, 1982. General deterrence (stopping the general public from drinking and driving) was studied statewide and in Milwaukee. Statewide, the results suggested a substantial reduction in alcohol related crashes following passage of the law. In Milwaukee, a 1985 media campaign produced a substantial increase in the number of drivers aware of the mandatory suspension following a first drinking and driving conviction. It was concluded that 100% mandatory license suspension is an effective legal sanction against drinking and driving.

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Previous studies of traditional DWI sanctions (fines, jail, license suspension/revocation) have shown that a license action appears to offer the most promise in reducing recidivism (repeat DWI offenses). However, little is known about whether these sanctions, properly implemented, can serve as a general deterrent to DWI (reducing DWI among the general driving public).

In order for a general deterrent to be effective, the public must believe the penalty will be imposed on them if they are caught. In several states, the statutes specify that a license action is "mandatory," but a review of actual practices revealed that few states suspended or revoked the license of all or nearly all drivers following a first conviction.

One exception to this practice is the State of Wisconsin. In 1981, 45% of convicted Wisconsin drinking drivers lost their licenses. In 1982, mandatory loss of license legislation was implemented and from May 1982 to December 1985, 100% of convicted DWIs (reported to the Wisconsin Bureau of Driver Licensing) lost their licenses for at least 90 days.

The purpose of the present study was to examine the general and specific deterrent effects of mandatory license suspension within the context of Wisconsin's 1982 law. General deterrence refers to stopping drinking and driving among the general population and was measured using crash data. Specific deterrence refers to stopping repeat drinking and driving among those convicted and was measured using DWI recidivism rates.

General Deterrence

An examination of the trend in motor vehicle crashes under the old (pre-1982) and new Wisconsin DWI laws was conducted using a surrogate measure of alcohol related crashes (single vehicle night-time weekend accidents involving male drivers which resulted in an injury or fatality). It is known from previous research that these crashes are heavily alcohol involved.

(Continue on additional pages)

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A time series analysis of statewide accident data for the years 1977 through 1985 (108 months) showed a significant reduction in "alcohol" crashes beginning in 1982 and continuing through 1985. The average number of crashes decreased by approximately 25% following adoption of the new law (see Figure 1).
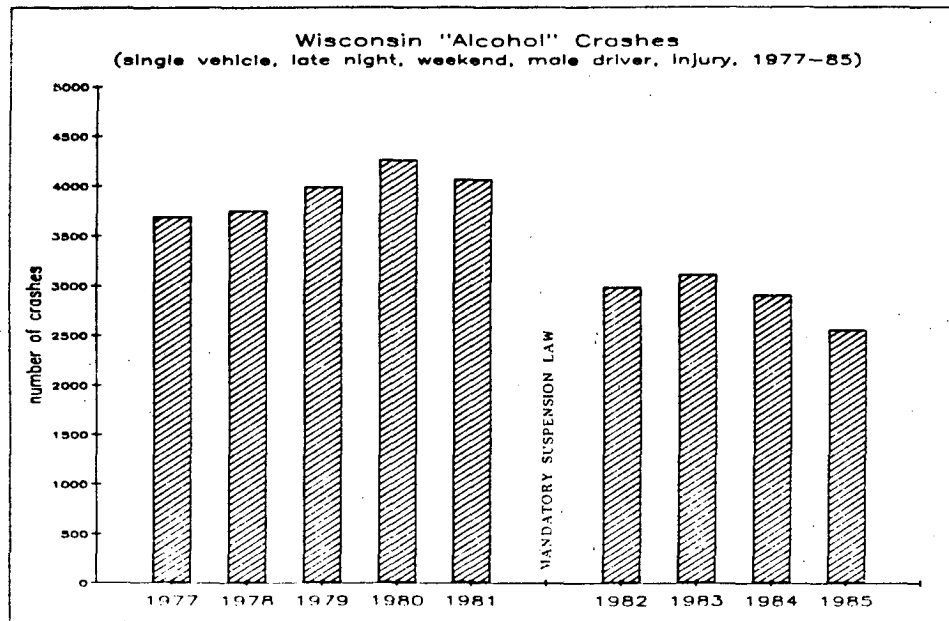

Figure 1.

In Milwaukee an intensive media campaign was launched in 1985 by the Milwaukee Safety Commission, community service groups, and the local media designed to publicize the fact that the law requires a mandatory license suspension for first offenders. Substantial TV, radio and print coverage was provided to the campaign. At the same time, the Milwaukee Safety Commission sponsored a driver survey monthly during the evaluation phase of the project.

The survey results showed that awareness of the law went from about 50% prior to the PI campaign to over 80% six months later. The number of respondents believing that everybody actually loses their license tripled during the campaign. In addition, the Milwaukee drivers perceived that a higher percentage of drunk drivers were being arrested and convicted (no actual increases occurred in Milwaukee in either arrest or conviction rates). In Green Bay, a Wisconsin city where no PI campaign was implemented, a similar survey indicated that no change occurred in the perceptions of the drivers surveyed.

Specific Deterrence (Recidivism)

A comparison was made between recidivism rates for drivers convicted of DWI before a license suspension was required for a first offense (drivers convicted between May 1980 and April 1981) and drivers convicted of DWI after the new law went into effect (drivers convicted between May 1982 and April 1983).

The results showed a substantial drop in recidivism rates for the first 12 months following conviction for the drivers convicted of DWI in the period following adoption of the mandatory license suspension. This reduction for the 19,126 first offense drivers convicted under the new law was greatest in the first three to six months following conviction when compared with the 19,719 first offense drivers convicted under the old law (see Figure 2).
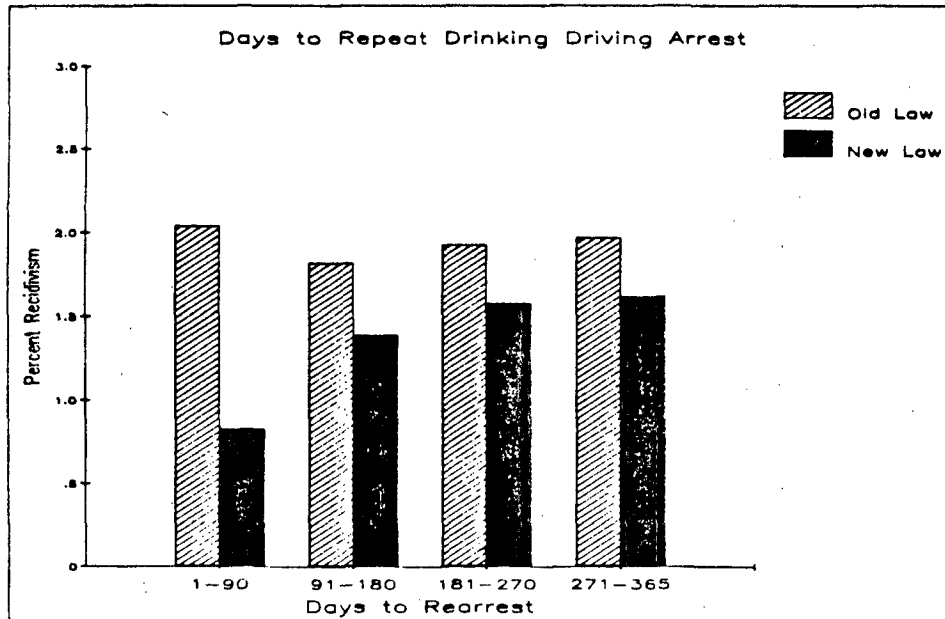
Figure 2.

Similar reductions were seen for injury crashes, all crashes and non-alcohol moving violations.

Conclusion

Short-term license suspension is a traditional sanction for a DWI conviction. In many states, this sanction is available but is not applied consistently to all convicted drivers. In Wisconsin, beginning in May 1982, license suspension was made a mandatory DWI sanction. The mandatory application of this sanction produced a statewide reduction in alcohol related crashes and reduced repeat offenses of driving while impaired among those that were convicted. Also, the Wisconsin data indicated that the impact of this sanction on the general driving public's attitudes and behavior regarding drinking and driving may be substantially enhanced by a well organized publicity campaign.

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I. INTRODUCTION

This is the final report under Contract Number DTNH22-83-C-07014 between the U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA), and Dunlap and Associates, Inc. The project reported herein was entitled "Deterrence Value of Traditional DWI Sanctions."

The problem of the drinking driver has been a major highway safety concern for some time. Numerous efforts have been mounted by federal, state and local governments as well as private organizations to reduce the role alcohol plays in highway deaths and injuries. One obvious way to accomplish this reduction is by deterring driving after the consumption of a quantity of alcohol which would raise a person's blood alcohol concentration (BAC) to a point at which accident risk is greatly increased. This point has been legally defined by most states as a presumptive limit, i.e., a BAC at which a driver is presumed to be intoxicated as a matter of evidence, and/or a "per se" level, i.e., a BAC at which it is, per se, illegal to operate a motor vehicle.

When considering deterrence in the context of drinking and driving, two separate notions arise. The first is typically called "general deterrence" and refers to the prevention of a driving while intoxicated offense (DWI or OWI--operating while intoxicated as it is referred to in some states) among the driving population. In essence, general deterrence focuses on stopping the initial DWI event. The second type of deterrence considered is "specific deterrence." This refers to the prevention of a subsequent DWI event, i.e., recidivism, among those drivers already arrested and convicted for the offense. This two part view of drinking and driving deterrence is a useful structure as it distinguishes the types of impact one could expect from specific countermeasure activities as well as the techniques required to assess such impact.

One class of countermeasures which is universally applied to the deterrence of drinking and driving is the law. In most state and local laws, there are vehicle and traffic sections as well as criminal statutes which address driving while intoxicated or under the influence of alcohol. Operationally, these laws provide a definition of the offense and specify sanctions for drivers convicted of a violation. It is anticipated that the contemplation of the applicable sanctions will deter people from committing the offense and that those exposed to the sanctions will thereby be deterred from repeating the offense. However, the issue of the relationship between the type and severity of the sanction imposed for DWI and the resulting effect on general and specific deterrence is largely unresolved.

In order to examine some of the relationships of sanctions to deterrence, NHTSA embarked on a program of research. This program divided the realm of sanctions into "traditional" sanctions, such as fines and license actions, and "innovative" sanctions, such as mandatory community service. This division separated the examination of new levels and methods of application of existing or "traditional" sanctions from research on new approaches which are being adopted in some locales.

The study reported herein was delimited to focus on traditional sanctions. Mandatory, short-term license suspension (nominally 90 days) for a first DWI offense was the particular traditional sanction selected for study. Although the suspension of a convicted DWI's license has been a generally available judicial or administrative sanction for some time, the notion of mandating it and thereby eliminating its discretionary employment in the sanctioning process is relatively new. It has been postulated that the sure, unavoidable loss of a drivers license would provide a greater deterrent effect than a possible suspension which might be avoided through plea bargaining or opting for an alternative such as entry into an alcohol education program. Short-term suspensions as opposed to longer-term license suspensions or revocations (i.e., 6 months to 1 year duration) were selected for study because they appear to be amenable to legislative adoption, likely to be viewed as "appropriate" by the general public and less likely to be ignored by those to whom the sanction was applied. That is, they are postulated to be sufficiently strong to yield a meaningful deterrent effect while not being viewed as so harsh as to discourage legislative enactment or causing disruption by significantly increasing contested case loads.

In order for a short-term, mandatory suspension law, or any law for that matter, to operate as a deterrent, its existence and consequences must be known by the target population. In the context of this study, then, the large majority of alcohol-using drivers would have to be aware of the fact that a first conviction for DWI would lead without fail to a loss of the driving privilege for a minimum of 90 days. To the extent that this fact is not known by the driving population, the law cannot be fully operative as a deterrent. One problem, therefore, which faced the current effort was to identify an environment in which a mandatory short-term suspension law for a first conviction DWI ("the law') was sufficiently operative to support an examination of its deterrent effect.

The ideal climate in which to examine the benefits of a mandatory short-term license suspension ("the sanction") would be a jurisdiction in which the law would be debated and passed after a set of baseline data had been collected. These data would include measures of pre-existing general deterrence, knowledge of sanctioning practices, an analysis of recidivism to assess specific deterrence and data on alcohol-related accidents. After the adoption of the mandatory license sanction, these measures would be repeated to determine if meaningful changes occurred. One or more comparison areas which were quite similar to the study site in all relevant aspects except the adoption of the sanction would be available and used as comparisons. This would yield a pre/post experimental design with comparisons.

Unfortunately, real-world situations rarely arise which fit this ideal mold. Such was the case when this study began. Several states were found which had recently adopted the sanction but none could be located in which a transition to a mandatory, short-term suspension sanction was likely to occur during the study period.

In light of these realities, a surrogate design was sought which could address all of the salient issues in a valid if not ideal manner. Such a design was devised and is described in detail in Section II. This design involved the use of a state, Wisconsin, in which the sanction had been passed but in which available data indicated that the prevailing operability of its deterrent effect

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was low. That is, relatively few people were aware that a license suspension for a minimum of 90 days was assured for a first DWI (OWI in Wisconsin) conviction. It was reasoned that raising the operability level of the law through public information and education (PI&E) efforts would be a reasonable surrogate for a pre/post situation in which the newly adopted law reached a level of operability consistent with that achieved by the PI&E efforts.

The adopted study approach necessitated the division of the research into several sub-studies. Since the Wisconsin law was already in effect, no true "before" or baseline data could be collected. However, existing state accident and driver records files did cover the period prior to the May 1, 1982 enactment of the sanction. Analyses of the law's impact on general deterrence were possible by mounting a PI&E campaign to increase the operability of the sanction to a level at which the law could truly be considered to be in effect. Specific deterrence could be examined from the state driver record files, but only for the limited time span over which records were retained in that file. Potential accident effects could be studied over a longer period of time because the data were available from previous studies, but no quantitative measures of alcohol involvement were contained in the accident files.

The differences in approach and scope among a PI&E campaign aimed at increasing awareness of an existing law, a recidivism (specific deterrence) analysis based on a driver records file and a multi-year accident analysis suggested the need to partition the current effort into sub-studies. In addition, there was interest in assessing the impact of the new law on the process of adjudicating OWI offenses in Wisconsin. Hence, four separate efforts were undertaken and are documented in the balance of this report. Section III covers the process evaluation. Section IV addresses the general deterrence analysis while Section V contains related analyses of Milwaukee and statewide traffic accident data. Analyses regarding specific deterrence are then presented in Section VI. Before turning to these various sub-studies, a detailed discussion of the criteria used to select Wisconsin as the study site and the overall experimental design philosophy and methods for all of the project's activities are reported in Section II. A discussion integrating the various findings concludes the report.

II. SITE SELECTION and METHODS

A. Introduction

The objective of this study was to investigate the general and specific deterrence value of traditional DWI sanctions in reducing drinking and driving. As just noted, this project focused on short-term license suspension.

Most states allow for license suspensions or revocations of one month to one year for a first conviction of drinking driving. Longer suspensions are common for second and third convictions. This suspension/revocation is listed as "mandatory" in several states, but a review of actual practice as well as site visits revealed that few states suspended or revoked the licenses of all or nearly all drivers following a first conviction. The objectives of this project suggested that license suspension/revocation should be studied in a pure form as opposed to situations in which some drivers are suspended and others are not. Therefore, the first requirement for site selection was to locate an area where all convicted drinking drivers lose their license for a first offense.

The second site selection requirement was to identify an area in which some form of pre versus post comparisons were possible. Ideally, for the study of general deterrence, this would have involved a state that was changing from no or only limited suspensions to a policy of suspending all convicted drinking drivers such that pre vs. post comparisons would be possible. Such a state was not found. Therefore, this situation was approximated by selecting an area where all drivers were suspended or revoked but in which the general population was largely unaware of this fact. In such an area, a public information program which reached all or most of the population could inform people of this fact and approximate a pre versus post situation. In other words, the population was unaware of the mandatory nature of the law and later became aware.

Following site visits to several States and extensive negotiations, the state selected was Wisconsin and the selected general deterrence test site was Milwaukee. In conjunction with state and local groups and individuals, initial knowledge and awareness measures were collected in Milwaukee and in Green Bay, Wisconsin; which was selected as the comparison community. A public information program aimed at achieving general deterrence was launched in Milwaukee and the effects of this program were monitored through monthly surveys. Specific deterrence was evaluated statewide by comparing drivers convicted prior to May 1, 1982, when mandatory suspension was introduced, to drivers convicted of first offense drinking and driving after that date. The following discusses the Wisconsin law, the characteristics of Milwaukee as a general deterrence test site, the general deterrence test and the specific deterrence test.

B. Wisconsin Law

In 1981, Wisconsin enacted new and greatly strengthened drinking driver legislation referred to as "Chapter 20" of the state budget bill and codified in Sections 346.63 and 343.30 of the Wisconsin Motor Vehicle Law. The major elements of this new legislation became effective on May 1, 1982. The

legislation included an illegal per se (.10%) provision, possible impounding of the vehicle of someone driving while under suspension, a $150 surcharge on the fine, mandatory minimum three month license suspension and a provision discouraging plea bargaining to a lesser charge. The law also strengthened an existing "Assessment" program under which a convicted drinking driver must undergo screening for alcohol problems and accept a treatment assignment based on the assessment results. Typically, this involved attending an alcohol-education school.

For this study, the key provision of the new legislation was the mandatory suspension of the license. Also, mandatory suspension was the most significant change in the new law as compared with existing statutes. An analysis of court activity conducted by the State showed that in 1981, the last full year under the old law, 45 percent of convicted drinking drivers had their licenses suspended or revoked. In 1983, the first full year under the new law, 100 percent of convicted drinking drivers had their license suspend or revoked. Also, the May 1, 1982 effective date was a convenient one for a pre versus post analysis of specific deterrence. As discussed later in this report, driver record data for the periods before and after the new law could be obtained and analyzed for repeat alcohol violations and accidents among people convicted before and after May 1, 1982.

The present project was concerned with assessing both the general and specific deterrent effects of short term license suspension as a mandatory sanction for first offense drinking and driving. General deterrence was studied in Milwaukee, the impact of adoption of the new law was examined statewide as was the question of the specific deterrent effects of the law. The paragraphs below discuss the characteristics of Milwaukee and the methods employed for the general deterrence test. Specific deterrence is discussed in the next section.

C.   General Deterrence

    1.   Milwaukee Overview

        Approximately one-third of Wisconsin's four million people live in the greater Milwaukee area. Milwaukee has an active chapter of Mothers Against Drunk Driving (MADD) and a Safety Commission with a full-time staff. No other city in the State is as large nor does any other city have Milwaukee's full range of media outlets. Therefore, Milwaukee was the obvious first choice as a Wisconsin test site for general deterrence.

        The various activities of this project impacted differentially on Milwaukee City, County and full Standard Metropolitan Statistical Area (SMSA). That is, all PI&E activities involved the City, nearly all involved County communities beyond the City and only some activities involved communities in the fringe areas of the SMSA. Therefore, for practical purposes, the test site for this project should be considered as Milwaukee County with possible impact in the outlying areas of the SMSA.

        The primary target group was the driving age public in Milwaukee County. The minimum licensing age in Wisconsin is 16 years, therefore, as per the 1980 U.S. Census, the primary target group consisted of 743,791 people 16 years of age and older who resided in Milwaukee County. These people are 85 percent White, 13 percent Black, and 2 percent Hispanic. They come from

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households with a median income of $18,122 (1979) and 87 percent consider English as their primary language. The city has many ethnic neighborhoods of German and Eastern European extraction. It is a major port on Lake Michigan, is a center for banking and commerce and has several large industrial facilities.

The selected comparison city for Milwaukee was Green Bay. Green Bay is substantially smaller than Milwaukee (population 175,280 in Brown County) but has many of Milwaukee's characteristics and is sufficiently distant from Milwaukee to avoid contact with Milwaukee media. Green Bay is also a major port on Lake Michigan, is basically an industrial city and, most importantly, is subject to the same Wisconsin Vehicle and Traffic Law as Milwaukee.

2. Milwaukee Awareness of Law

The selection of Milwaukee as the test site rested on the noted existence of the recent Wisconsin legal changes, the willingness of individuals, groups and government agencies to cooperate and on the city's characteristics key among which was low awareness among the population of OWI sanctioning practices. That is, to be appropriate, the general deterrence test in Milwaukee required that drivers be generally unaware of mandatory license suspension at the outset of the project.

In September of 1984, a locally sponsored telephone survey was conducted among 100 licensed drivers from the greater Milwaukee area. This survey, conducted through the Milwaukee Safety Commission, had the limited objective of assessing driver awareness of the mandatory provisions of the law. That is, the survey ascertained how many licensed drivers in the general population were aware that a first offense drunk driving conviction entailed certain loss of license for at least three months. The survey was conducted between September 11 and September 14 from 5:30 to 9:00 in the evening. The sample was drawn using randomly selected residence telephone numbers from the Milwaukee Metro Area Telephone Directory.

The results indicated that only ten percent of the respondents were aware of the mandatory aspect of license suspension following a first conviction for drinking driving. An additional one percent were aware after the interviewer provided a "prompt" for license suspension and an additional two percent were aware of the certainty of suspension but felt that it was for a period of less than three months. Of the remaining respondents, many mentioned license suspension as a penalty for drinking driving but none felt that a large majority of convicted drivers lost their license. As 100 percent of convicted drinking drivers have lost their licenses since May 1982, these results suggested that a pre versus post evaluation was feasible in which the intervening treatment was a public information program informing drivers that a drinking driving conviction guarantees certain loss of license. These small-sample telephone results ultimately were found to be very similar to the larger sample baseline survey results collected at the driver licensing stations after Milwaukee was formally selected as the general deterrence test site (see Section IV).

3. Program Organization

The primary local agency in the Milwaukee program was the Milwaukee Safety Commission. The Commission is composed of government and private

sector leaders who have an interest in safety. Private and public schools, city transit, industry etc., are represented. The Commission has a full-time Managing Director, a senior staff of safety professionals and a support staff. These individuals implement safety programs for the schools, for industry and for private groups.

The Safety Commission was approached in early September, 1984 and asked if they would be interested in not only having the general deterrence test in Milwaukee, but in serving as the coordinating agency and assisting in the distribution of materials. They expressed interest in the project and sponsored the pilot telephone survey mentioned above. Contact was also made with the Milwaukee Chapter of MADD. They strongly supported the project and offered their help both in the distribution of materials and in promoting the project within their own activities.

The Safety Commission provided the project team with introductions to various other officials in Milwaukee including those officials who were members of the Commission. In this way, liaison for the project was established with the school system, the police, the Municipal Court, the Office of the Mayor, local media and others. For the remainder of the general deterrence test, all press and media releases prepared by the project were distributed under the auspices of the Commission. While it was clear that funding for this effort was coming from NHTSA, every attempt was made to utilize local resources and build the media effort as a local program.

Contacts were also initiated with the Office of Highway Safety for the State of Wisconsin. The Alcohol Coordinator in this Office arranged meetings for the project team with the Office of Communications (to coordinate the Milwaukee program with statewide efforts), the Director of Field Operations (to implement the Milwaukee Safety Commission survey at Driver Licensing Stations) and the Driver Licensing Bureau (to arrange for the driver records which would be needed for the specific deterrence evaluation). Provisions were also made to secure accident data for use in evaluating both the Milwaukee and statewide portions of this project.

4.   Media Plan

The primary general deterrence "treatment" in this study was a city-wide public information program to increase awareness of the fact that loss of license is guaranteed following a drinking driving conviction in Wisconsin. The project-developed campaign was launched through the Milwaukee Safety Commission and was supported by the local MADD Chapter. Elements of the campaign were coordinated through the State's Office of Highway Safety.

The campaign began in late 1984 and ran until June of 1985. Obviously, as with any public service campaign that is scheduled to run for six months, campaign materials and activities had to be phased in and scheduled such that the campaign remained active and new materials were continually available to maintain interest. This was accomplished by conducting the campaign in four phases.

Phase 1 of the campaign was conducted utilizing donated production and air time of WTMJ-TV and WTMJ-AM and FM radio. WTMJ was planning to conduct an alcohol public service campaign for the Christmas season of 1984.

They had discussed their plans with the Safety Commission. Thus, when the present project began, the first media contacts were with this station and they agreed to offer a substantial amount of help. WTMJ donated studio and finishing time to produce six 30 second television, six 10 second television and six radio spots.

Each of the six WTMJ 30 second television spots begins with a voice-over announcer and graphic information concerning the certainty of loss of license. Then, one of six local personalities or officials reiterate the basic message:

> "The day you are convicted of drunk driving is the day you will lose your license. In Milwaukee, it's guaranteed!"

The six people delivering the message were: The Milwaukee Chief of Police; the Managing Director of the Safety Commission; a Judge from the Municipal Court; the local President of MADD; a student from the University of Wisconsin at Milwaukee; and Bob Lanier, a former star with the Milwaukee Bucks basketball team. These same individuals also recorded the companion radio spots.

The Phase 1 materials aired on the WTMJ stations from Thanksgiving to Christmas in 1984. WTMJ continued to air the spots, though at a reduced level, for the remaining five months of the campaign. All spots were "tagged" as public service messages from WTMJ and the Milwaukee Safety Commission.

Phase 2 of the campaign marked the formal county-wide kickoff. One new 30 second television spot, and three new radio spots were produced for distribution to all stations. The theme of these materials was that "Nobody", not the judge, not your lawyer, and not the prosecutor can keep you from losing your license if you are convicted of drinking and driving - "In Milwaukee it's Guaranteed." Also, five live copy radio spots were prepared for use by on-air radio announcers and a slide package was prepared for Safety Commission presentations to industry and civic groups.

The starting date for the main campaign was January 15, 1985. The campaign began with a press conference at the Municipal Court in the same court room where convicted drivers routinely lose their licenses. The purpose of this press conference was to demonstrate total community support for the program and to obtain news coverage for the campaign theme. The following groups, organizations and agencies were represented:

> Milwaukee Safety Commission
> Municipal Court
> Milwaukee Police
> Milwaukee County Sheriff
> City Attorney
> Wisconsin State Highway Patrol
> Wisconsin Department of Transportation
> Wisconsin Office of Highway Safety
> Milwaukee Mother's Against Drunk Driving
> Milwaukee Council on Alcoholism
> Outdoor Advertising Association

All three Milwaukee network television affiliates covered the press conference and approximately five radio stations were represented. The Milwaukee Journal wrote a story based on the news release. This newspaper coverage is shown in Figure 1. The new television and radio spots were distributed to all Milwaukee stations immediately following the press conference. In Milwaukee, there are three network television stations, two major television independents and 16 radio stations.

Phase 3 of the campaign also began immediately after Phase 1 and consisted of the distribution of print materials. The first print item was a large poster which read:

"The day you are convicted of drunk driving is the day you will lose your license ...... GUARANTEED

This was distributed to the 500 largest employers in the City, schools and City office buildings. Distribution was accomplished by the Safety Commission and MADD.

The second print item was an outdoor billboard which depicted the fact that a drunk driving conviction equals a suspended license ... GUARANTEED. Foster and Kleiser, Inc., through the Outdoor Advertising Association, donated 100 billboards in Milwaukee County for the four month period February to May, 1985. The commercial value of this advertising space was approximately $136,000. The first billboard was unveiled by the Mayor of Milwaukee on February 8.

Phase 4 of the campaign consisted of re-editing the original WTMJ spots from Phase 1 and distributing these to the other television stations in the city. Originally, these spots contained a tag line which said that they were a public service of WTMJ and the Safety Commission. With the permission of WTMJ, the tag line was changed to say only that they were a public service of the Safety Commission. The spots were distributed to the other stations in early April, 1985. It was felt that the original distribution to these stations in January would have run its course by this time and that this second distribution would help continue the campaign.

The progress of the campaign was continually monitored both through reports from the Safety Commission and local groups and through the Safety Commission survey which was being conducted at the Driver Licensing Stations. Anecdotal evidence clearly indicated that the television and radio materials were being aired frequently, and, at least for the months of March, April and May, it was virtually impossible to drive for any distance in the County without passing one of the billboards.

5. Evaluation

Three very different activities were undertaken to evaluate the effects of the Milwaukee test of general deterrence. First, a driver survey was conducted by the state as part of the photo-licensing process at Driver Licensing Stations in Milwaukee and in Green Bay. The objectives of this survey, conducted for one week per month during each month from November, 1984 to June, 1985, were to: measure exposure to the campaign materials; measure knowledge of guaranteed loss of license for a first drinking driving

Got the message about drinking and then driving?

Milwaukee area residents will be hearing a lot about the penalties for drunken driving over the next six months as part of a national highway safety program.

Henry Wantoch, managing director of the Milwaukee Safety Commission, said Milwaukee was chosen as the test site for the National Highway Traffic Safety Administration program because of strong community support for reducing alcohol-related traffic accidents.

The program will consist of a series of television, radio and newspaper advertisements containing the message, "The day you are convicted of drunk driving is the day you will lose your license. ... In Milwaukee, it's guaranteed."

State law requires that anyone convicted of drunken driving have his or her license suspended for three to six months. A second conviction could result in the revocation of a license and jail.

Wantoch noted that since the law was passed in 1982 more than 50,000 Wisconsin drivers were convicted of drunken driving and all lost their licenses for at least 90 days.

He said a telephone survey conducted last fall indicated that most Milwaukee drivers did not know that it was certain they would have their driver's licenses suspended if they were convicted of drunken driving.

Wantoch said the program was based on the belief that if all Milwaukee drivers understood how tough the drunken-driving penalties were, fewer would decide to drive after drinking.

The safety commission and the Milwaukee Chapter of Mothers Against Drunk Driving will be coordinating the program.

**THE
MILWAUKEE
JOURNAL**

Tuesday, January 15, 1985

Figure 1.   Newspaper Coverage of Press Conference.

conviction; and to measure any changes in attitudes and behavior concerning drinking and driving as the campaign developed. Second, a process evaluation was conducted examining arrest and adjudication for drinking and driving offenses both before and during the campaign. Third, accident data supplied by the state were examined for any effects of the campaign on alcohol related crashes. The specific methods employed in conducting each of these evaluation activities are discussed in those sections of this report which deal with the evaluation results.

6. Accident Data

Through the cooperation of the Wisconsin Department of Transportation, statewide accident data tapes covering the period 1974-85 were obtained. General deterrent effects of the OWI law were examined by performing interrupted time-series analyses on surrogate measures of alcohol related crashes during the months prior to May 1, 1982 and the months since that date for which data were available. As just noted, accident data analyses were also conducted for Milwaukee covering the periods before and after the May 1, 1982, change in the law and before and after the 1985 media program. A complete description of the methods and results for these analyses is presented in Section V.

D. Specific Deterrence

While general deterrence refers to stopping drinking and driving in the general population, specific deterrence refers to stopping the repeat occurrence of drinking and driving among those who have been convicted of the offense. Specific deterrence was examined statewide in Wisconsin for the period prior to the May, 1982 new law as compared to the period after the law.

The State of Wisconsin, Department of Transportation maintains a comprehensive, computer-based driver record system containing the details of violation convictions, accidents, license actions and related matters for individual motorists during the most recent five year period. For the specific deterrence analysis, arrangements were made to obtain data from the driver record system for all motorists in the State covering the period 1979 to 1984.

1. Analysis Issues

As the Wisconsin OWI statute which mandates short-term license suspension became effective on May 1, 1982 and because experimental manipulation of current sanctioning practices was not possible, the topic of specific deterrence was approached employing a pre-post analysis. That is, the following questions were addressed:

o   Was the OWI reconviction rate of persons charged under the present law different from the reconviction rate of persons charged under the prior law?

o   Was the post-conviction injury accident experience of these two groups different?

o   What was the "during suspension" injury accident and violation experience of persons convicted under the present law. How did

these rates compare with the accident and violation experience during the first 90 days following conviction under the old law?

2. Analysis Approach

Four driver groups were created from the driver record system data noted above. These were:

o   Drivers charged under the new OWI law and convicted between May 1, 1982 and April 30, 1983.

o   Drivers charged under the old OWI law and convicted between May 1, 1980 and April 30, 1981.

o   A random sample from the total driver file to determine statewide accident, OWI and other violations experience during the May 1, 1980 to April 30, 1981 period.

o   A second random sample to generate comparable data for the May 1, 1982 to April 30, 1983 period.

Analytic measures (e.g., subsequent injury accidents) were developed for the two OWI groups using a 12-month exposure period. That is, the accident experience of a motorist convicted on, say, September 27, 1982 was tallied through the 12-month period ending September 26, 1984.

The primary threat to the validity of a pre-post comparison of this type is that there were time dependent changes in OWI enforcement and/or in accident levels. The two noted random samples were used to assess these possible effects. A complete description of methods and results for this analysis is presented in Section VI.

III. OWI ARREST AND ADJUDICATION PROCESS EVALUATION

The field work conducted in this study focused on Milwaukee and the effects of a media campaign designed to inform all Milwaukee drivers that a first conviction for OWI (Operating While Intoxicated) would lead to guaranteed loss of license under a new, and tougher, OWI law in Wisconsin. This law was passed by the Wisconsin Legislature during the summer of 1981 and became law on May 1, 1982. Several of the analyses shown elsewhere in this report cover the statewide effects of this law on OWI recidivism and on alcohol related accidents while the remaining analyses cover the effects of the media campaign in Milwaukee.

The present section of this report discusses the implementation of the new law statewide beginning in May of 1982. Results are shown with respect to arrests, convictions, license suspensions and the granting of Occupational Licenses (i.e. restricted licenses). Then, this section describes arrest and adjudication of OWI offenses in Milwaukee during the period of time when the media program in that city was being conducted. Both of these discussions can be thought of as process evaluations. Statewide, the issue is how the law was implemented and what was the practical effect of the law as compared with the legislative intention. For the City, the issue is whether or not the media program had any impact on the arrest and adjudication process even though the program was not specifically designed to influence this process other than through a possible reduction in overall drinking and driving.

A. Statewide

The new OWI law represented a general overhaul of the adjudication and processing of OWI cases. Virtually all aspects of Wisconsin's handling of drinking drivers were affected by the 15 pages of legal text in "Chapter 20" of Assembly Bill 66. Major changes included: a $150 surcharge was added to the fine; "assessment" (i.e. mental health evaluation of drinking problem) was strenghened and made mandatory; penalties for driving under license suspension or revocation were increased; the implied consent provisions were strengthened; and plea bargaining to a lesser charge was severely curtailed. However, for the purposes of the present study, the most important provision in Chapter 20 covered mandatory license suspension for a first OWI conviction. License suspension was discretionary prior to May 1, 1982. A suspension of 3-6 months was mandatory after this date. To implement mandatory suspension, the State's Bureau of Driver Licensing was required to carry out suspension if this was not done by the adjudicating court.

This new law was supported by a state-conducted public information campaign during 1982. The theme of the campaign was "Wisconsin's new drunk driving law: Loaded with sobering consequences." The campaign focused on "assessment" and treatment as well as the increased penalties for first and second offenders. Anecdotal evidence and press reports suggest that this campaign was well received and that there was general awareness that there was a new law. Specific knowledge of the sanctions specified by the law was, as reported earlier, probably much lower.

In 1984, the Bureau of Driver Licensing prepared statistical reports documenting the impact of the new law on OWI arrest and adjudication. Data from this report bear directly on the analyses conducted in the current study and therefore the major findings from this report will be summarized here.

Table 1 shows the number of OWI arrests in Wisconsin per year for the period 1978 through 1983. Also shown are the number of licensed drivers and arrests as a percentage of the license population. The last full year before the new law was 1981 with 37,125 arrests. The first full year after the law was 1983 with only 31,188 arrests. Thus, the number of arrests decreased following the adoption of the new law. However, as also shown in Table 1, the number of OWI convictions varied less than the number of arrests from before to after the law. This likely occurred because the law severely curtailed bargaining, dropping or amending the OWI charge and as such the conviction rate on the OWI charges increased substantially. Table 2 shows the statewide dispositions for OWI charges during the first four months of 1982 as compared with a post-law period from May, 1982 through July, 1984. The results show a 78% conviction rate before the law as compared with an 87% rate after the law. A higher conviction rate was clearly accomplished as intended by the Chapter 20 provisions.

Regarding the mandatory license suspension provision of the new law, Table 3 shows the number of suspensions and revocations per year as a function of the total number of drivers convicted during the period 1978 to 1983. As shown in the Table, 45% of the OWI convicted drivers lost their licenses during 1981, which was the last full year prior to the new law while in 1983, 100% of the convicted drivers had their licenses suspended or revoked. Clearly, the new law accomplished its intended objective of mandatory loss of license.

One possible result of mandatory license suspension would be an increase in the number of drivers who seek Occupational Licenses. An Occupational License, often referred to as a "restricted" license in other states, allows a driver limited driving privileges such as travel between his or her home and work, church, school or a medical facility. In Wisconsin, these licenses are highly restricted because they specify not only the destination but the route and time of travel. Theoretically, they may be obtained at the time of conviction but typically require several days or weeks to complete the necessary paperwork and approvals. Relatively few of these licenses were issued prior to May, 1982. Many more were issued after the implementation of the new law. Figure 2 compares the number of OWI convictions per year with the number of Occupational Licenses issued for the period 1978 through 1983. The Occupational Licenses shown in Figure 2 could have been issued as a result of a license suspension or revocation following an OWI conviction or a suspension or revocation for some other reason. In any event, the number of these licenses issued rose from 10% or less of the OWI convictions prior to 1982 to 32% of the OWI convictions in 1983.

It should also be noted that the number of implied consent refusals in Wisconsin remained relatively constant as a percentage of arrests for the years 1981, 1982 and 1983. These refusals numbered 15% among those arrested in each of the three years. There was no particular expectation as to what these figures would show since the consequences of a refusal were made tougher by the law as were the consequences of a conviction.

Table 1.

COMPARISON OF LICENSED DRIVERS, OWI ARRESTS, AND OWI CONVICTIONS

	Total Licensed Drivers	OWI Arrests	Percent of Licensed Drivers Arrested	OWI Convictions
1978	2,927,546	31,553	1.07%	24,236
1979	2,964,404	36,420	1.22%	26,483
1980	3,014,715	37,480	1.24%	30,914
1981	3,059,428	37,125	1.21%	32,506
1982	3,070,956	30,966	1.00%	29,301
1983	3,123,649	31,188	0.99%	29,382

Data provided by:

Division of Motor Vehicles
Bureau of Driver Licensing
Wisconsin Department of Transportation

Table 2.

Disposition of OWI Cases

ALL VIOLATIONS

OWI Citations Received and Processed Jan. '82 thru July '84

	Pre-May 1, 1982 violations		May 1, 1982 & later violations	
Guilty	15137	77.95%	58723	87.46%
Not Guilty	160	.82%	419	.62%
Amended	2343	12.07%	2897	4.31%
Dismissed	1605	8.27%	3597	5.36%
Withdrawn	128	.66%	1073	1.60%
Case Denied	45	.23%	436	.65%
	19418		67145	

Data provided by:

Division of Motor Vehicles
Bureau of Driver Licensing
Wisconsin Department of Transportation

Table 3.

O W I   R E V O C A T I O N S   A N D   S U S P E N S I O N S

YEAR	Revocations & Suspensions	Referrals in lieu of Revocations	Total Court Dispositions Processed
1978	11,006	14,864	25,870
1979	12,236	16,475	28,711
1980	15,049	18,773	33,822
1981	16,033	19,247	35,280
1982	21,905	9,655	31,560
1983	30,687	0	30,687

Data provided by:

Division of Motor Vehicles
Bureau of Driver Licensing
Wisconsin Department of Motor Vehicles

Figure 2.

COMPARISON OF OCCUPATIONAL LICENSES ISSUED
AND OWI CONVICTIONS
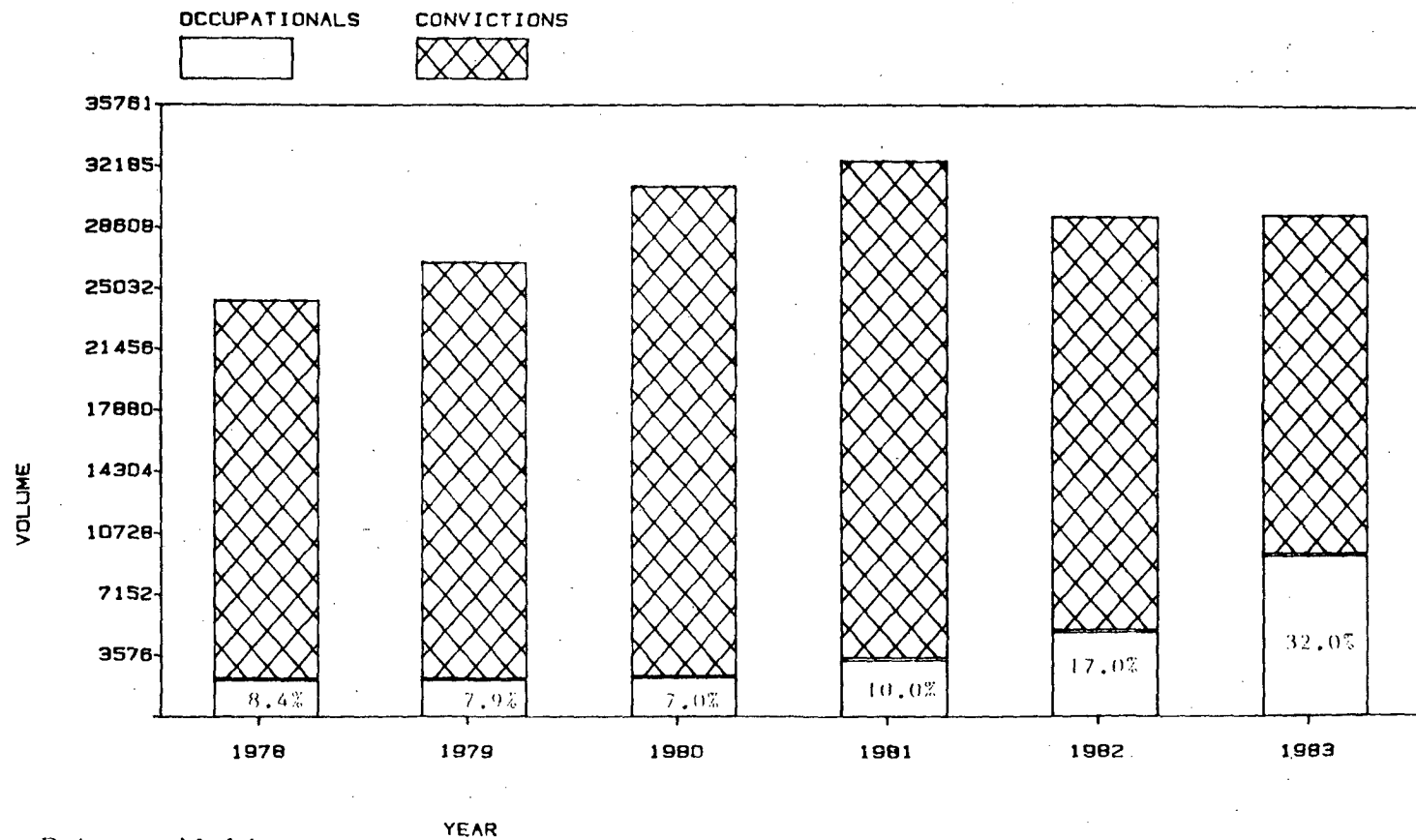
OCCUPATIONALS   CONVICTIONS

Data provided by:

Division of Motor Vehicles
Bureau of Driver Licensing
Wisconsin Department of Transportation

The present results, as tabulated by the Wisconsin Bureau of Driver Licensing, indicate that with the adoption of the new law, the number of OWI arrests statewide decreased. However, the conviction rate for these OWI charges increased. More importantly for the present effort, the intended mandatory license suspension occurred for 100% of the convicted drivers as compared to less than half of the drivers before the new law. Lastly, with the increase in the number of suspensions and revocations, there was an increase in the number of Occupational Licenses issued.

B.   Milwaukee

The statewide discussion above was concerned with the overall effects of the new law in Wisconsin. Such effects are relevant to the recidivism analysis and the statewide examination of accidents shown elsewhere in this report. In Milwaukee, the objectives of this study and thus the focus of this process evaluation were quite different. Namely, in Milwaukee, the 1982 law had been in effect for several years yet most Milwaukee drivers were not aware that a first conviction for OWI meant certain loss of license. The primary Milwaukee objective was to inform every driver of this consequence of an OWI conviction. It was conceivable that this new knowledge and the general anti-drunk driving push of the campaign could have had an effect on arrests and adjudication of drunk driving offenses in that city. Further, it is possible that any adjudication or enforcement effects could have been counterproductive. For example, improved knowledge of the certainty of license suspension could have led to a higher rate of requests for a jury trial in the hope of obtaining an acquittal. Therefore, the focus of the process evaluation in Milwaukee was on arrests and adjudication for the period January, 1985 to June, 1985 when the campaign was operating.

The media program in Milwaukee primarily covered the first six months of 1985. Table 4 contains monthly OWI arrest levels by the Milwaukee City Police for the period from January 1982 through June 1985, along with totals for the first six months of each year. The figures show that arrests in the first half of the year declined in 1983 compared to 1982, rose again in 1984 and declined during the 1985 media effort.

Table 4.   Drinking and Driving Arrests

City of Milwaukee

						Month							Total Jan.-June
	J	F	M	A	M	J	J	A	S	O	N	D	Only
Year													
1985	195	144	268	146	206	135							1,094
1984	189	220	191	275	212	164	151	160	177	216	185	207	1,251
1983	179	110	159	154	170	150	115	135	164	167	131	137	922
1982	140	139	199	177	180	296	231	297	311	145	114	252	1,131

The entire series of monthly arrest data (42 months) was analyzed by time series intervention analysis and no statistically significant intervention effect was found. Thus, it is reasonable to conclude that during the media campaign emphasizing the fact of mandatory license actions in OWI convictions, no enforcement "crackdown" nor diminution of enforcement activities took place. From the point of view of the project's objectives, this was a desirable outcome as it avoided confounding efforts to increase awareness of license sanctions with other changes in the criminal-justice environment surrounding OWI.

In Milwaukee, the first step in the adjudication process requires the Police to determine whether the defendant is a first time offender or whether conviction on the present charge would represent a repeat offense. Cases involving multiple (approximately 15-20 percent of those arrested) offenders are sent to Circuit Court and are not adjudicated within the City system. First time offenders are referred to the City Attorney for prosecution in Municipal Court. The City Attorney reviews the case and decides whether or not to prosecute. Approximately 2% of the cases are nolled or otherwise not prosecuted by the City Attorney; the remaining cases are filed with the Municipal Court.

Once at Municipal Court, the defendant enters a plea, and if the plea is not guilty, the defendant has the additional option of requesting a jury trial. Jury trials are requested in about 10%-20% of the cases; these are also referred to Circuit Court and may require as much as two years before they are adjudicated. At Municipal Court, approximately 80% of the original arrested population are eventually found guilty and approximately 5% are dismissed, stayed, found not guilty, appealed, etc. Data regarding dispositions at Circuit Court could not be obtained because of the generally long elapsed times from arrest to adjudication.

The Municipal Court, on the other hand, runs monthly status tabulations cumulatively for the cases filed in a given calendar year. In February, for example, it is possible to determine the status of all cases filed in January while in March it is possible to determine the status of all cases filed in both January and February. This procedure has been in effect for several years and the monthly printouts are retained by the Court. Therefore, in July of 1985, it was possible to check the status of all cases filed to date in 1985. It was also possible to review data as of each previous July of all cases filed in the first six months of 1984, 1983 and 1982.

The relevant figures are as follows:

	1982	1983	1984	1985
Cases Filed (Jan.-June)	590	651	879	840
Guilty	381	369	484	493

Presumably, if the media program operating in Milwaukee was to have had a counterproductive effect on the adjudication process, this effect would be seen in a reduction in the number of guilty findings at Municipal Court. Drivers can avoid a guilty finding, at least temporarily, by requesting a trial since trial dates are set six months to two years in the future depending on whether or not a jury is requested. In 1985, guilty findings as of July accounted for 59% (493 of 840 filings) of the cases filed in that year. This

compares with 55% in 1984 and 57% in 1983. The 1982 figure was 65%, but this figure is probably not comparable to the 1983-1985 data since four of the first six months in 1982 were prior to the implementation of the new tougher OWI law. Thus, the present data provide no evidence that the media program had an adverse impact on the adjudication of first offender OWI cases.

In addition to examining available arrest and adjudication data, interviews were conducted with representatives of the police, the court and the Safety Commission following completion of the media campaign. No negative effects of the campaign were related by these representatives.

In summary, a media program was implemented in Milwaukee to inform all Milwaukee drivers that one of the consequences of a first OWI conviction was mandatory loss of license. This program operated from January to June of 1985. The present results suggest that the number of OWI arrests may possibly have decreased very slightly but clearly did not increase during the period of the program. Also, there was no apparent negative impact of the program on the adjudication of first offenders at the Milwaukee Municipal Court.

IV. GENERAL DETERRENCE ANALYSIS

A. Approach

The general deterrence part of the present study was primarily a public service educational program in support of the new tougher Wisconsin OWI (Operating While Intoxicated) Law. The primary media objective was to inform every driver in Milwaukee County that loss of license was absolutely guaranteed upon first conviction for OWI. The primary project objective was to increase driver knowledge of loss of license and to assess the effects of this new knowledge.

These objectives were measured by locally conducted surveys of drivers asking them directly about the media program and the effects of the law on their own attitudes and behavior. The survey covered the following topics:

o Recall of campaign materials and themes

o Knowledge of certain loss of license following first OWI conviction

o Attitudes about drinking and driving and perceived risk of apprehension

o Influence of law on behavior

The Milwaukee Safety Commission, in cooperation with the State of Wisconsin and the Milwaukee Chapter of the Mother's Against Drunk Driving (MADD), conducted the surveys.

The Safety Commission survey was designed as a one page paper and pencil instrument to be administered at the photo-licensing stations of the Wisconsin Department of Transportation. Such surveys have been routinely conducted by the State of Wisconsin since drivers coming to the stations within any time period represent a random sample of all Wisconsin drivers, and these individuals must wait at the station for a few minutes while their photos are being developed and their licenses are being prepared. Milwaukee County has five such photo-licensing stations all of which participated in the survey effort. Also participating, as a comparison location, was Green Bay since this was an urban area sufficiently distant from Milwaukee such that Green Bay drivers would not likely have contact with Milwaukee media. Green Bay has one photo-licensing station. Thus a total of six stations participated.

Surveys were conducted for one week per month over an eight month period. All drivers visiting any one of the six photo-licensing stations for the purpose of obtaining a license during each of the eight survey weeks were asked to complete a survey form. All surveys were completed anonymously and were not a condition for obtaining a license. While it was not possible to calculate a refusal rate, it is felt that nearly all drivers asked to complete a survey form complied with the request.

Surveys were delivered to each of the Milwaukee stations by MADD volunteers, typically on the Friday before the survey week. MADD volunteers returned to each station, typically on the Monday following the survey week, to

collect the completed and the unused forms. An overnight delivery service was used to deliver and return survey forms for the Green Bay Station. All survey forms were returned to the project for processing and tabulation. Delivery, pick-up and survey administration procedures were pretested during the period November 7-9, 1984.

The survey weeks typically began on the second Monday of the month from November, 1984 through June, 1985. The actual starting dates for each of the eight survey weeks were: November 12; December 10 (1984); January 14; February 11; March 11; April 8; May 13; and June 10 (1985). The November, 1984 survey week may be considered as a baseline or pre measure. The December week was largely a baseline measure as well although some media materials were being broadcast by one of the television and one of the radio stations in Milwaukee. The January measure coincided with the main kickoff for the campaign. Most of the media materials were not yet in place but there was substantial press coverage for the effort. The February survey week was the first week when all or nearly all of the media materials were in place. The March, April and May measures coincided with the main campaign activities. By June, most of the billboards had been taken down and the broadcast materials were not being aired as frequently.

As mentioned above, each survey was contained on one page since a multi-page survey would have been too long for the photo-licensing survey administration. However, the one page format was not sufficient to accommodate all of the survey questions needed to satisfy the measurement objectives. Therefore, five separate forms of the survey were developed. Each form contained a set of "core" questions common to all the survey forms as well as unique questions covered by only one of the forms. The forms were collated such that the first driver at the station would receive Form A, the second driver Form B etc., and the sixth driver would again get Form A.

The "core" questions covered driver sex, zip code, age, reason for visiting the photo-licensing station, perceived "unpleasantness" of the consequences of an OWI conviction, and perceived "influence" on personal drinking and driving decisions of certain loss of license following OWI conviction. Also, four of the five forms asked "What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses?" This question was not asked on the survey form that contained an open-ended or unaided question about the penalties for first OWI conviction in Wisconsin since it was felt that this question could bias the open-ended responses.

The five survey forms employed are shown in Appendix A. The first survey form (exposure, see page A-1) was designed to measure how many people had seen the media materials. It asked specific questions concerning exposure to the television, radio and print materials. The second form (aided knowledge, see page A-2) listed several possible penalties for first OWI conviction and asked the driver to indicate which would and which would not apply in Wisconsin. The third form (unaided knowledge, see page A-3) simply asked what are the required penalties in Wisconsin for first OWI conviction without providing any cues or possible responses. This form also asked about personal violation of the OWI law and how often the driver would seek alternate transportation if he or she had been drinking. The fourth form (attitudes, see page A-4) asked drivers to agree or disagree with six highway safety related

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statements. The fifth form (page A-5) was devoted to "Occupational Licenses". Data from this form was primarily of interest to the State of Wisconsin and is not covered in this report. In general, the results showed that Milwaukee and Green Bay drivers favored the granting of "Occupational Licenses" but only after the convicted OWI driver had spent some time with no driving privileges whatsoever.

Across the eight survey weeks, a total of 9,844 Milwaukee drivers and 3,372 Green Bay drivers completed the survey. In Milwaukee, the number of responding drivers was greatest in the first survey week (1,690 in November) and dropped steadily to the last survey week (879 in June). Much of this drop was accounted for by one of the five stations where the number of respondents declined from 578 in November and 608 in December to 113 in June. In Green Bay, there were 587 respondents in November, declining to a low of 208 respondents during the winter months and recovering to 610 respondents in June.

The results shown in this report cover data from all five Milwaukee Stations. Nevertheless, it was possible that the precipitious drop in sample size at one of the five Milwaukee Stations could have had a biasing or influencing effect on any of the conclusions drawn from the data. Therefore, each of the major analyses performed on the data was repeated using only the four remaining Milwaukee Stations. None of the primary conclusions were altered when examining only those four Stations with relatively stable sample sizes.

An analysis of zip codes showed that drivers living in the City of Milwaukee accounted for 53% of the Milwaukee sample; 84% resided in Milwaukee County; and 99% resided in the Milwaukee Standard Metropolitan Statistical Area (SMSA). Similarly, 98% of the Green Bay respondents resided in the Green Bay SMSA. The median age of the Milwaukee drivers was 36.0 years as compared with 32.8 years in Green Bay. Males accounted for 52% of the Milwaukee sample and 51% of the Green Bay sample.

B. Survey Results

The survey of Milwaukee and Green Bay drivers had several different measurement objectives. The first of these objectives was to determine if the media messages concerning guaranteed loss of license following an OWI conviction were being seen by Milwaukee drivers. The second objective was to determine if the messages were leading to increased knowledge on the part of drivers concerning guaranteed loss of license. The remaining objectives dealt with the effect of this increased knowledge on attitudes and behavior.

Obviously, each succeeding objective was dependent on the previous objective. That is, if drivers reported that they never saw the messages, it would be highly unlikely that any knowledge gain could have occurred. Similarly, a positive knowledge gain would appear to be a necessary precondition for any attitudinal or behavioral change.

The present section presents results with respect to exposure to the media materials, knowledge gain, attitudes, perceived risk and self-reported behavior. Appendix B shows complete results by survey month for each survey question.

1. Exposure

        The media campaign consisted of television spots, radio spots and
printed materials, including the billboards, posters and press releases. Survey
respondents were asked three separate "Yes-No" questions; one for each of the
three media forms. Each question asked about recall of the campaign theme
within the specified media. The first question was:

        "Have you seen any TV commercials in the last month which talked
        about: Convicted drunk drivers guaranteed to lose their licenses?"

The results for this question across all eight survey months for both Milwaukee
and for Green Bay are shown in Table 5. These results indicate that 32% of
the Milwaukee drivers and 28% of the Green Bay drivers responded affirmatively
to this question during the November, 1984 baseline or "pre" survey week.
While these numbers may appear quite high given that the campaign had not
started at this time, it is felt that drivers were simply responding to the fact
that it is common to see drunk driving messages of all kinds as part of public
service television advertising. During subsequent months in Green Bay, the
numbers varied from a low of 25% affirmative responses to a high of 41% and
ended with 29% in June of 1985. There seemed to be no particular pattern to
the Green Bay results other than statistical variation.

        The results for Milwaukee, however, showed a substantial increase in
affirmative responses to the TV exposure question consistent with the course of
the campaign. From a low of 32% at baseline, the percentage of affirmative
responses rose to 39% in December when only one of the Milwaukee stations was
airing the spots and 48% in January when news coverage for the program was
beginning. In February, when all of the Milwaukee stations had been asked to
air public service spots, the percentage of affirmative responses rose to 64%.
From February to June, the percentage of affirmative responses ranged from a
low of 59% in March to a high of 72% in May. Clearly, Milwaukee drivers had
been exposed to the TV materials and were able to recall the campaign theme.

        The question concerning radio exposure was identical to the one
dealing with television except that "saw TV" was replaced with "heard radio."
The results for this question are also shown in Table 5. In general, they
parallel the results for television exposure though at a somewhat lower level.
In the November baseline, 24% of the Milwaukee drivers and 25% of the Green
Bay drivers responded affirmatively. Across the next eight months, the
percentage of affirmative responses in Green Bay varied from a low of 21% to a
high of 39% with no particular pattern to the responses. In Milwaukee,
however, there was an increase to 32% in December when only one radio station
was airing the materials, and an increase in January to 41% coincident with the
beginning of the full campaign. Over the next five months, the percentage of
affirmative responses varied from a low of 46% in March to a high of 57% in
May. These results indicate that Milwaukee drivers were exposed to the radio
materials and were able to recall that exposure.

        The last exposure question dealt with the print materials. While
respondents may have seen the poster, or read an article in the newspaper, it

Table 5.

Exposure to Media Materials
November '84 – June '85

	Percentage of Respondents Who Recalled Guaranteed Loss of License Message						Number of Respondents	
	T.V.		Radio		Print			
	Milw.*	G.B.	Milw.	G.B.	Milw.	G.B.	Milw.	G.B.
November (baseline)	32%	28%	24%	25%	37%	39%	339	117
December	39%	31%	32%	31%	38%	30%	272	91
January	48%	43%	41%	39%	44%	48%	273	95
February	64%	31%	49%	35%	58%	40%	295	55
March	59%	41%	46%	27%	59%	46%	206	41
April	67%	25%	52%	21%	65%	34%	218	80
May	72%	35%	57%	28%	65%	50%	191	78
June	67%	29%	47%	23%	65%	33%	172	123

*Milw.= Milwaukee; G.B. = Green Bay

is felt that the primary print medium were the billboards. The print exposure question read as follows:

"Have you read any printed materials (posters, pamphlets, newspaper ads, etc.) in the last month which talked about: Convicted drunk drivers guaranteed to lose their licenses?"

In November, 37% of the Milwaukee drivers and 39% of the Green Bay drivers responded affirmatively to this question. As shown in Table 5, the percentage of affirmative responses in Green Bay across all of the surveys varied from a low of 30% to a high of 50% with no particular pattern. In Milwaukee, the percentage of affirmative responses was 38% in December which is consistent with the fact that no billboards or posters had yet been printed. By January, when the first few billboards were unveiled, the affirmative percentage was 44%. Between February and June, when the billboards were in place and the posters were being distributed, the percentage of affirmative responses varied between 58% and 65%. These results indicate that Milwaukee drivers were exposed to the print materials and were able to recall that exposure.

As shown in Appendix A, each of the three exposure questions reported above was in the form of a lead statement ("Have you read, seen or heard anything") followed by four possible campaign themes only one of which was the present theme concerning guaranteed loss of license. The other three themes were included largely as "distractors" but nonetheless the results for these three themes are of some interest. The first distractor theme concerned the general notion of "Death and injuries on the highway due to drunk driving." The results showed an increase in the percentage of affirmative responses to this theme across the eight survey months in both Milwaukee and in Green Bay. The second theme concerned "The legal drinking age." The results with respect to this theme showed no particular pattern in either Milwaukee or in Green Bay across the eight survey months. The last theme concerned "Enforcement of drunk driving laws." Here, there was no consistent pattern of change across the eight months in Green Bay. In Milwaukee, however, there was a consistent pattern with more drivers reporting that they saw, heard or read this theme as the guaranteed loss of license campaign was implemented. With respect to the TV exposure question, 61% of the Milwaukee drivers reported that they saw the enforcement theme in November as compared with a peak response of 80% in April, 75% in May and 71% in June. For the radio question, the November figure was 47% as compared with a peak response of 61% in April. For the print question, the November figure was 54% as compared with 69% in April, 73% in May and 66% in June. It appears that while the campaign was actually devoted to OWI sanctions, many drivers may have interpreted the campaign materials to mean both OWI sanctions and OWI enforcement. Complete results can be found on pages B13-B36 of Appendix B.

2. Knowledge

Milwaukee drivers clearly remembered seeing, hearing and reading the campaign materials and thus it can be concluded that they were exposed to the campaign and that these exposures were memorable. The next step was to determine if these exposures led to a knowledge gain. The primary knowledge objective was to convince drivers that anyone convicted of OWI would lose their license. Loss of license occurs under Wisconsin law even for a first OWI conviction.

Increasing the knowledge of loss of license among Milwaukee drivers was a critical component of this project and was the primary objective of the media campaign. Therefore, three of the survey questions were devoted to measuring this objective. The first question, asked on four of the five survey forms, read as follows:

"What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses?"

Respondents were asked to guess if they were not sure and response categories ranging from 0% to 100% were provided. The results showed substantial and statistically significant differences (p<.001 by chi-square test) in the responses of Milwaukee drivers to this question across the eight survey months. The overall pattern of these results, as the media campaign progressed, was for drivers to report more often that a higher percentage of convicted drivers lost their licenses. The correct, or "exact knowledge", answer to this question was that 100% of first time OWl convicted drivers lost their license. The results for the 100% response are shown in Table 6.

As can be seen in Table 6 for the November or baseline survey, only 10% of the Milwaukee respondents felt that 100% of first time convicted drinking drivers lost their license. This figure increased steadily across the months of the campaign peaking at 31% in June. For Green Bay, the results varied between 14% and 20% with no particular pattern of change.

This "exact knowledge" question appeared on four of the five survey forms. The only form on which it did not appear was the one containing the "unaided knowledge" question. For this reason, the sample sizes for this question were substantially larger than the sample sizes for the other two knowledge questions, and it was possible to examine the Milwaukee findings in greater detail. This examination showed that knowledge of loss of license was greatest among male drivers and among younger drivers. In Milwaukee, 14% of the males and 7% of the females responded 100% during the November survey. The responses from both sexes of drivers increased steadily as the media program progressed with males peaking at 40% correct in June and females peaking at 25% correct in May. Concerning driver age, 16-19 year olds went from 10% correct in November to 39% in April; 20-29 year olds went from 12% in November to 32% in April; 30-49 year olds went from 10% in November to 33% in June; and 50-64 year olds went from 10% in November to 30% in June. This compares with a gain of from 5% in November to 24% in March for those drivers who were 65 years of age or older.

The second question designed to measure knowledge of loss of license can be thought of as unaided recall. It read as follows:

"What penalties, if any, does Wisconsin require for everyone convicted of drunk driving for the first time?"

Respondents were to write in their answer to this question without any additional prompts of any kind. The results, also shown in Table 6, indicate that 48% of Milwaukee drivers responded lose license or license suspension or license revocation in November. This figure increased steadily across the campaign peaking at 75% in May (p<.001 by chi-square test). For Green Bay, the results varied between 34% and 57% with no particular pattern of change.

Table 6.

Knowledge of Loss of License

| | | Exact Knowledge | | Unaided Recall | | Aided Recall | |
| | | Responded 100% to: What percent lose license on first OWI conviction | | Responded lose license to: What penalties are required upon first OWI conviction | | Checked lose license in list of possible penalties for first OWI Conviction | |
		Milw.*	G.B.	Milw.	G.B.	Milw.	G.B.
November	%	10%	14%	48%	49%	58%	50%
(baseline)	N	1358	468	332	119	301	110
December	%	11%	15%	57%	46%	66%	64%
	N	1081	362	274	89	270	92
January	%	18%	20%	60%	57%	69%	60%
	N	1112	372	272	95	238	95
February	%	22%	14%	70%	49%	73%	77%
	N	1176	217	289	55	293	56
March	%	26%	15%	73%	47%	76%	60%
	N	821	165	195	43	205	40
April	%	30%	17%	69%	50%	82%	66%
	N	880	320	216	80	219	79
May	%	30%	14%	75%	34%	82%	66%
	N	776	303	183	74	198	77
June	%	31%	17%	69%	41%	81%	62%
	N	711	487	168	123	181	120

*Milw. = Milwaukee; G.B. = Green Bay

The third question designed to measure knowledge of loss of license can be thought of as aided recall. It read as follows:

"What penalties does Wisconsin law require for a first drunk driving conviction? (Please check all that you think apply)"

This question was followed by seven possible penalties one of which was "Lose license." This form of the question is referred to as aided recall since the correct answer(s) is provided and the respondent's task is to identify this answer from among the several possible choices. It is considered to be a generally easier form of the question than unaided recall. The results, also shown in Table 6, indicate that 58% of Milwaukee drivers checked loss of license as a required penalty in November. This figure increased as the campaign progressed peaking at 82% in both April and May (p<.001 by chi-square test). For Green Bay drivers, the comparable figures varied between 50% and 77%. While the Green Bay responses to this question appear to increase for the first few months, then decrease, it must be remembered that the Green Bay results are based on substantially lower sample sizes and are thus subject to more statistical variation. The distribution of Green Bay responses across the eight survey months was not statistically significant at the p=.05 level using the chi-square test.

The present results, whether in terms of "exact knowledge", unaided recall or aided recall, indicate that Milwaukee drivers were more aware of loss of license as the campaign progressed than they were before the campaign began. While the campaign certainly did not reach all drivers, the extent of the knowledge gain was substantial. Measured in terms of "exact knowledge", the figures show a knowledge gain of from 10% in November to 30% in May and 31% in June. In terms of unaided recall, the gain was from 48% in November to 75% in May and in terms of aided recall the gain was from 58% in November to 82% in May. It should also be noted that different samples of drivers responded to the aided and unaided recall questions as these were on different forms of the survey.

3. Attitudes

Milwaukee drivers were exposed to the media materials and their knowledge of loss of license following a first OWI conviction improved. The next step was to determine if that knowledge increase led to any changes in attitudes or perceptions of drinking and driving. Five of the survey questions were devoted to measuring attitudes.

Two of the attitude questions were "core" questions and thus appeared on every form of the survey. The first of these read as follows:

"If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?"

Five possible scaled responses were provided ranging from "extremely unpleasant" to "not at all unpleasant." Averaged across all survey months, only 1% of the Milwaukee drivers responded "not at all unpleasant" and only 2% responded "not very unpleasant". Fully 88% of the Milwaukee drivers thought that the consequences would be "extremely" or "very" unpleasant with little variation across the eight survey months. Similar results were obtained in

Green Bay. Obviously, even before knowledge of the new law was transmitted, people knew or imagined that OWI sanctions would be unpleasant.

The second "core" attitude question read:

"How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?"

Four possible scaled response categories were provided ranging from "very much" to "not at all." As with the first attitude question reported above, the results were heavily weighted toward the high end of the scale. Fully 72% of the respondents in Milwaukee reported that the influence is "very much", and only 5% reported "not at all" with little variation across the eight survey months. Similar results were obtained in Green Bay.

The remaining three attitude questions were contained on only one of the survey forms. All three were statements about drinking and driving and, using a five point Likert scale, the respondent could agree or disagree with the statement. As above, the results showed little variation across the eight survey months and were heavily weighted toward the high end of the scale. The three statements and the percentage of Milwaukee drivers agreeing or strongly agreeing with each were:

"The penalties for drunk driving should be more severe" (82%)

"People are less likely to drive when drunk than they were a year ago." (68%)

"Drunk drivers should lose their licenses for at least 90 days." (84%)

Similar results were obtained in Green Bay. Thus, the present results provide no evidence that attitudes about drinking and driving were affected by the media program. Milwaukee drivers held strong attitudes against drinking and driving both before the media program began and while the program was operating.

4. Perceived Risk

While attitudes may have remained stable during the program, the perception of Milwaukee drivers concerning the risk of apprehension and the certainty of conviction did not. Such a result was not unexpected since, as reported earlier, drivers felt that the present campaign dealing with license sanctions was also concerned with enforcement.

The question dealing with the perceived risk of apprehension read as follows:

"On a typical night, what percent of the people who drive in violation of the OWI (drunk driving) law are arrested?" (If you are not sure, please mark your best guess)

Respondents were provided with seven possible response categories ranging from 0% to 100%. Table 7 shows the percentage of these respondents who felt that 40% or more of the drunk drivers on any given night are arrested. In

Table 7.

Perceived Probability of Arrest and Conviction

| | Arrest | | Conviction | | | |
| | Responded 40% or more to: What percent of drunk drivers are arrested | | Responded 60% or more to: What percent of arrested drunk drivers are convicted | | Number of Respondents | |
	Milw.*	G.B.	Milw.	G.B.	Milw.	G.B.
November (baseline)	8%	12%	23%	29%	301	110
December	13%	17%	24%	34%	270	92
January	12%	12%	24%	26%	238	95
February	18%	12%	33%	39%	293	56
March	22%	12%	33%	25%	205	40
April	20%	15%	40%	30%	219	79
May	19%	16%	41%	35%	198	77
June	17%	10%	36%	27%	181	120

*Milw. = Milwaukee; G.B. = Green Bay

November, before the media program began, 8% of Milwaukee drivers and 12% of the Green Bay drivers felt that 40% or more of the drunk drivers are arrested. The Green Bay figures varied between 10% and 17% across the remaining survey months with no particular pattern of change. In Milwaukee, however, the figures increased substantially as the media program developed (p<.001 by chi-square test) peaking at 22% in March followed by 20% and 19% in April and May.

The question dealing with the perceived probability of conviction following an arrest read as follows:

"What percent of drivers who are arrested for violating the OWI law are actually convicted?" (If you are not sure, please mark your best guess)

Respondents were provided with seven possible response categories ranging from 0% to 100%. Table 7 also shows the percentage of these respondents who felt that 60% or more of the arrested drivers are actually convicted. In November, before the media program began, 23% of the Milwaukee drivers and 29% of the Green Bay drivers felt that 60% or more of the arrests led to convictions. The Green Bay figures varied between 27% and 39% across the remaining survey months with no particular pattern of change. In Milwaukee, however, the figures increased substantially as the media program progressed (p<.001 by chi-square test) peaking at 40% and 41% respectfully for April and May.

The present media program focused on the certainty of license suspension after arrest and conviction. Also, as noted in the process evaluation, actual enforcement levels did not increase during the period of the media campaign. The campaign was not designed to increase the perceived risk of apprehension among drivers nor was it designed to increase the perceived certainty of conviction. Nevertheless, the program did attempt to convey the concern of local officials, including police and judges, for the drinking and driving problem. Presumably, even though this concern was expressed as a statement about loss of license, drivers concluded from these messages that the police were focusing on OWI enforcement and that prosecutors were pushing harder for convictions. In one sense, this may be considered as a positive and somewhat serendipitous result. However, this result also makes the interpretation of the remaining findings somewhat more difficult since the issue of the general deterrence value of loss of license was confounded by an increase in the perceived risk of apprehension and conviction.

5. Behavior

It is difficult to obtain valid survey research data on self-reported behavior even under the most favorable of circumstances. These difficulties were exacerbated by the fact that drivers were being asked to self-report violations of the OWI law while they were waiting for their driver's license to be processed. Even though anonymity was promised, it was felt that many drivers would not be completely honest in this area and thus only two survey questions were devoted to measuring self-reported behavior. Neither of these questions was a "core" question and both appeared on the same survey form.

The first question dealing with self-reported drinking and driving behavior read as follows:

"In the past month, how often do you think you may have driven after you had been drinking enough to violate the Operating While Intoxicated (OWI) law? (Please check one)"

Drivers were provided with six possible response categories ranging from "Daily" to "Never." The results for this question across all survey months are shown in Table 8. These results sum the first five of the six response categories ranging from daily to once a month. They exclude only the last category which was "Never." The results show that about 20% of the drivers reported any violations and this percentage did not vary in any particular pattern across the survey months. Similarly, about 30% of the Green Bay drivers reported violations without any particular pattern of variation across the survey months.

The second question dealing with self-reported drinking and driving behavior read as follows:

"If you had been drinking and needed to get home, how often would you: Drive yourself?"

Drivers were provided with five possible response categories ranging from "Always" to "Never." The results for this question, summed for the response categories "Always" and "Usually", are also shown in Table 8. Only about 10% to 15% of the Milwaukee drivers provided the always or usually responses and these figures did not vary in any particular pattern across the eight survey months. In Green Bay, about 15% to 20% of the drivers provided the always or usually response with again no particular pattern of change across the eight survey months.

Overall, the results for self-reported behavior do not show evidence for an effect of the media program. These results may be interpreted to mean that the program did not change the drinking and driving behavior of Milwaukee respondents. Alternatively, these results may simply be a reflection of the difficulties in obtaining valid survey data on personal drinking and driving behavior particularly when that survey is being administered within a Department of Transportation Licensing Station.

Table 8.

Self-Reported Violations of DWI Law

	Responded once a month or more to: How often drive in violation of DWI law		Responded always or usually to: How often drive self home after drinking		Number of Respondents	
	Milw.*	G.B.	Milw.	G.B.	Milw.	G.B.
November (baseline)	20%	30%	10%	19%	332	119
December	20%	29%	12%	16%	274	89
January	18%	32%	11%	21%	272	95
February	18%	33%	13%	20%	289	55
March	24%	37%	15%	12%	195	43
April	21%	35%	12%	20%	216	80
May	20%	20%	9%	12%	183	74
June	28%	33%	17%	15%	168	123

*Milw. = Milwaukee; G.B. = Green Bay

V. ACCIDENT DATA ANALYSIS

The ultimate objective of the 1982 Wisconsin drinking and driving legislation and of the January to June of 1985 media program in Milwaukee was to reduce death and injury resulting from alcohol related accidents. Often, it is impossible to document actual accident reductions in response to drinking and driving legislation or in response to drinking and driving programs. The data may be unavailable. Even when data are available the size of any reduction may be insufficient to document in the midst of all of the other factors that influence the number of crashes that actually occur. Nevertheless, the nature of the changes specified in the 1982 law and the effects of the Milwaukee media program warranted an examination of crash effects.

A. Approach

Accident data for the State of Wisconsin are archived on computer tape on a year by year basis. These tapes were made available to the project by the Wisconsin Department of Transportation for the years 1977 through 1985. Each tape received was processed to develop a single record for each reported crash regardless of the number of vehicles involved in the crash. Crashes for which the time of the crash was unknown (typically 12% of the total) were excluded from the data analysis. The processed data were then tabulated on a monthly basis (108 months from 1977 to 1985) to develop the various data series used in the analyses. As discussed below, accidents which were presumed to be a reasonable surrogate measure for alcohol related crashes were extracted and used as the dependent series. Covariate series consisting of those accidents presumed to have a low probability of alcohol involvement were also used.

The primary analysis technique chosen was time series analysis using the Box-Jenkins (see for example, McCleary and Hay, 1980) technique. The time series approach was selected because of its ability to examine the potential effects of a countermeasure while accounting for such potentially confounding factors as seasonal cycles and underlying trends. The first step in applying time series in this context is to develop a univariate time series model for the series being examined. The general form of this model is as follows:

$$\triangle \phi p(B)(Y_t - u) = \theta_o + \theta_q(B)A_t,$$

where
Y_t = the discrete time series,

u = the mean of the stationary series,

$\triangle$ = the differencing factor(s)

ϕp = the autoregressive factor(s),

θ_o = the deterministic trend,

θ_q = the moving average factor(s),

A_t = the noise series,

and B = the backshift operator.

Time series analysis also permits the use of covariate series to control for possible related effects on the series being examined. Thus, for example, in the context of the present effort, it was possible to use measures of overall

accident experience as a covariate for the series presumed to be alcohol related. The analyses could then conclude directly if there were any effects found in the dependent alcohol series which could not be explained by the variation in the covariate series of all accidents. The general form of a time series model with transfer functions is as follows:

$$Y_t = f1(X1_t) + f2(X2_t) + \ldots fN(XN_t) + fA(A_t),$$

where

Y_t	=	the dependent output series,
$X1_t$	=	independent input series #1 (covariate series),
$X2_t$	=	independent input series #2 (coveriate series),
XN_t	=	independent input series #N (coveriate series),
A_t	=	the noise series,
f1	=	the transfer function between series Y and series X1,
f2	=	the transfer function between series Y and series X2,
fN	=	the transfer function between series Y and series XN,
fA	=	the noise model.

Each developed time series model must satisfy three basic diagnostic checks before the model building process is complete and the final model is accepted. First, each identified model parameter must be statistically significant. Second, it must be invertible. And third, the residuals from the model should be white noise (i.e., the residuals should not display any time dependencies).

The Box-Jenkins technique can generally be applied in two ways in the context of a monthly accident series. The first is to model the entire series, including the time periods before and after the countermeasure program was instituted. An intervention series can be postulated for the effects of the program. This series is typically in the form of a zero for each month in which the countermeasure is not assumed to be operative and a one for each month in which it is assumed the countermeasure is operating. Alternatively, it is possible to search for interventions heuristically and then attempt to interpret any statistically significant ones found.

The second basic way to apply the Box-Jenkins technique is by modeling only the series prior to the application of the countermeasure. This model of the "before" series is used to forecast values for the periods after the application of the countermeasure. The actual and forecast values can then be compared to see if they are different statistically. Either approach is a valid application of the Box-Jenkins technique in the current context. Both were utilized as work progressed. In fact, many models of both types were identified using micro-computer software ("AutoBox," Automatic Forecasting Systems, 1986). This software is designed to identify automatically a time series model with or without an intervention series and to develop automatically any transfer functions for covariate series. It iterates through parameters until the model satisfies the three basic diagnostic checks discussed above.

The major focus of the accident analyses was on accidents involving alcohol as a primary causative factor. The hypotheses being tested were that alcohol involved accidents statewide in Wisconsin declined as a result of the passage of

the new law, and that alcohol involved accidents in Milwaukee showed an additional decline coincident with the general deterrence media program. Since a quantitative measure of the blood alcohol content of crash-involved drivers was not routinely available for all crashes, it was necessary to utilize a surrogate measure of alcohol involvement. In addition, it was decided to limit the surrogate alcohol measure to injury and fatal accidents. Property damage only accidents were excluded because they are the most susceptible to reporting biases and, by definition, of lower societal cost than accidents which result in an injury or fatality.

There is no universally accepted surrogate measure for alcohol involvement in injury and fatal highway crashes. However, the majority of studies which have examined this subject, usually only with respect to fatal accidents, have concluded that alcohol involvement is correlated with injury and fatal crashes; single vehicle crashes; crashes which occur late at night; crashes involving male drivers; and crashes which occur on Thursday, Friday and Saturday nights. For the present study, it was decided to use the most conservative measure possible by combining each of these characteristics into a single measure. Thus, the "Alcohol" accident series were defined as single vehicle injury and fatal accidents involving male drivers which occurred between 10 p.m. and 4:59 a.m. on Thursday, Friday or Saturday nights. Although this restrictive definition somewhat limited the number of accidents per month in the series, the total remaining was still considered more than sufficient to yield a stable estimator.

Once the "Alcohol" series was defined, it was necessary to develop a covariate series of "Non-Alcohol" accidents. The purpose of this series was to control for any overall accident reporting changes or global accident trends which might account for any observed changes in the alcohol series. Since the alcohol series was defined as one in which the probability of alcohol involvement was high, the "Non-alcohol" series was defined as the opposite, i.e., those accidents with a low probability of alcohol involvement. This was accomplished by excluding single vehicle injury and fatal accidents whose time of occurrence was between 10 p.m. and 4:59 a.m. from the series composed of all Wisconsin crashes. Crashes for which time of occurrence was unknown were also excluded. The result is presumed to be an accident series with a presumed low number of alcohol involved incidents since all late night single vehicle injury and fatal crashes are excluded while daylight property damage (only) crashes are the largest single category.

The definitional process led to five different monthly accident series for use in the analyses. Three of these series were the "Alcohol" series for all Wisconsin, Milwaukee (Milwaukee County) and Green Bay (Brown County, the study's comparison community), respectively. The remaining two series were covariate series and covered "Non-alcohol" crashes for Wisconsin and Milwaukee (County). As mentioned above, the "Alcohol" series were intended as the tightest possible surrogate measure of drinking and driving crashes while the "Non-alcohol" series were intended as measures of the general traffic environment exclusive of alcohol.

B. Statewide Results

As already noted, the 1982 Wisconsin law was adopted by the legislature during the summer of 1981 and implemented on May 1, 1982. The adoption of

the law was associated with a state-sponsored wave of publicity concerning the law and the alcohol crash problem. Therefore, any effect on accidents of this law and/or its attendant publicity could have been realized at any time from the public debate of the measure through its adoption to its implementation and beyond.

Table 9 shows the "Alcohol" series for Wisconsin. It is depicted graphically in Figure 3. As shown in the Table, there were 3,696 of these crashes with a high probability of being alcohol related in 1977 increasing to more than 4,000 crashes in 1980 and 1981. In 1982, the number dropped to 2,990 and remained at approximately this level through 1985. Clearly, the raw data suggest a drop in alcohol related crashes during the 1981-82 period. This series was examined using the automatic intervention detection approach. That is, many different intervention points were examined heuristically to determine if any statistically significant interventions could be identified. The results showed a statistically significant "step intervention" beginning in January of 1982 and lasting until the end of the series (December, 1985). That is, crashes "stepped down" by a significant amount at the start of the intervention and remained at the new, lower mean level for the duration. The estimated crash reduction associated with this intervention was 117.0 crashes per month (t = -5.71). Table 10 presents the details of this model. Although the start of the intervention is prior to the May 1, 1982 date on which the law became totally effective, it is well after adoption of the law and the peak of the publicity surrounding the law's debate. Some provisions of the law, although not the license suspension portion, were also already in effect.

Table 9 also shows the "Non-alcohol" series data for Wisconsin while Figure 4 shows this series graphically. This series was considered to be a measure of the total traffic environment in Wisconsin, exclusive of the major effects of alcohol, including any changes in accident reporting practice or requirements. This series, along with the step intervention identified above, were used as covariates in a second time series analysis of the Wisconsin "Alcohol" series. The results showed that the step intervention in the alcohol series was again statistically significant with an estimated crash reduction of 108.1 crashes per month (t = -9.89). These results suggest that the 1982 law achieved its primary objective of reducing alcohol related crashes. Simply, any variation or reduction in the "Non-alcohol" series was not sufficient to account for the observed step down in the "Alcohol" series. Table 10 also shows the model details for this second model utilizing the intervention and covariate series.

C. Milwaukee Results

Table 11 and Figure 5 show the "Alcohol" series for Milwaukee County. As shown in the Table, the annual number of these crashes remained relatively stable (in the mid 400's) for the years 1977 to 1981 and then dropped (to the mid 300's) thereafter. This suggests that the statewide effect of the 1982 law was equally present in Milwaukee. It can also be seen in the Table that the fewest number of these crashes occurred in 1985 and that the numbers for the first half of 1985, coincident with the media program, are particularly low. However, the 1985 media effect is not at all as pronounced as the 1982 effect of the law.

The Milwaukee "Alcohol" series was examined using the automatic intervention detection approach. The results showed a significant step

Table 9. Wisconsin Accident Distributions

Alcohol Series

	J	F	M	A	M	J	J	A	S	O	N	D	Total
1977	249	207	259	335	380	325	385	286	360	415	297	198	3,696
1978	131	157	239	344	332	401	399	335	428	410	295	283	3,754
1979	108	139	221	309	379	371	379	391	441	450	377	428	3,993
1980	238	268	299	312	422	425	394	483	337	379	371	336	4,264
1981	288	267	299	318	437	338	411	394	314	408	318	276	4,068
1982	111	147	203	246	276	260	317	278	301	373	232	246	2,990
1983	249	127	197	250	290	290	338	307	292	352	222	203	3,117
1984	119	179	218	201	252	294	272	272	301	285	258	259	2,910
1985	109	124	182	220	271	283	234	293	261	253	203	127	2,560

All Accident Series

Non-Alcohol Series

	J	F	M	A	M	J	J	A	S	O	N	D	Total
1977	18,429	10,793	11,207	10,942	11,711	11,767	11,682	12,484	12,730	14,092	17,148	18,648	161,633
1978	17,103	14,436	11,599	10,715	12,758	13,418	13,506	12,672	12,817	14,165	17,650	20,236	171,075
1979	27,979	19,716	14,876	11,880	12,457	13,279	12,503	12,862	12,297	14,800	16,389	14,249	183,287
1980	12,505	10,656	10,778	9,166	9,939	9,998	10,288	10,696	10,090	11,161	12,042	15,283	132,602
1981	9,930	11,678	7,840	8,844	10,187	10,521	10,212	10,023	9,279	11,323	11,075	12,607	123,519
1982	15,539	10,104	8,443	8,824	8,359	8,482	8,494	8,126	8,335	9,747	11,785	10,536	116,564
1983	9,888	8,446	9,315	7,422	9,248	9,438	9,048	9,031	9,793	10,982	12,399	15,884	120,894
1984	10,497	7,547	10,225	8,527	9,810	10,647	9,926	9,507	10,035	12,057	12,764	15,436	126,978
1985	14,220	11,459	9,116	8,827	9,926	9,945	10,394	10,073	9,932	12,483	16,389	16,601	139,365

Table 10. Models for Wisconsin Alcohol Series

Model -- Alcohol Series Intervention Detection
(transform = ÷ 100)

Parameter #	Description	Factor	Lag	Coefficient	T ratio
1	Mean			3.76	
2	Autoregressive	1	1	.38	3.64
3	Autoregressive	1	3	.30	2.74
4	Autoregressive	1	4	- .29	- 2.89
5	Autoregressive	2	12	.82	15.93
6	Moving Average	1	12	.50	4.04
7	Step Intervention (0 to month 60, 1 thereafter)	1	0	-1.17	- 5.71

(program also identified "pulse" interventions at months 44 and 73)

Model -- Alcohol Series with Covariates for Step Intervention and Wisconsin Non-Alcohol Series
(data transform = ÷ 100)

Parameter #	Description	Factor	Lag	Coefficient	T ratio
1	Mean			3.39	
2	Autoregressive	1	4	- .34	- 3.48
3	Autoregressive	2	1	.22	2.18
4	Step Intervention (0 to month 60, 1 thereafter)	1	0	-1.08	- 9.89
	Non-Alcohol Series (÷ 1,000)				
5	Output Lag	1	1	1.66	27.41
6	Output Lag	1	2	- .80	-13.93
7	Input Lag	1	0	- .46	- 7.28
8	Input Lag	1	2	- .36	- 5.16

FIGURE 3
"ALCOHOL" MONTHLY ACCIDENT SERIES*
STATEWIDE IN WISCONSIN

*Single vehicle accidents, male driver, 10 pm — 4:59 am Thurs/Fri/Sat
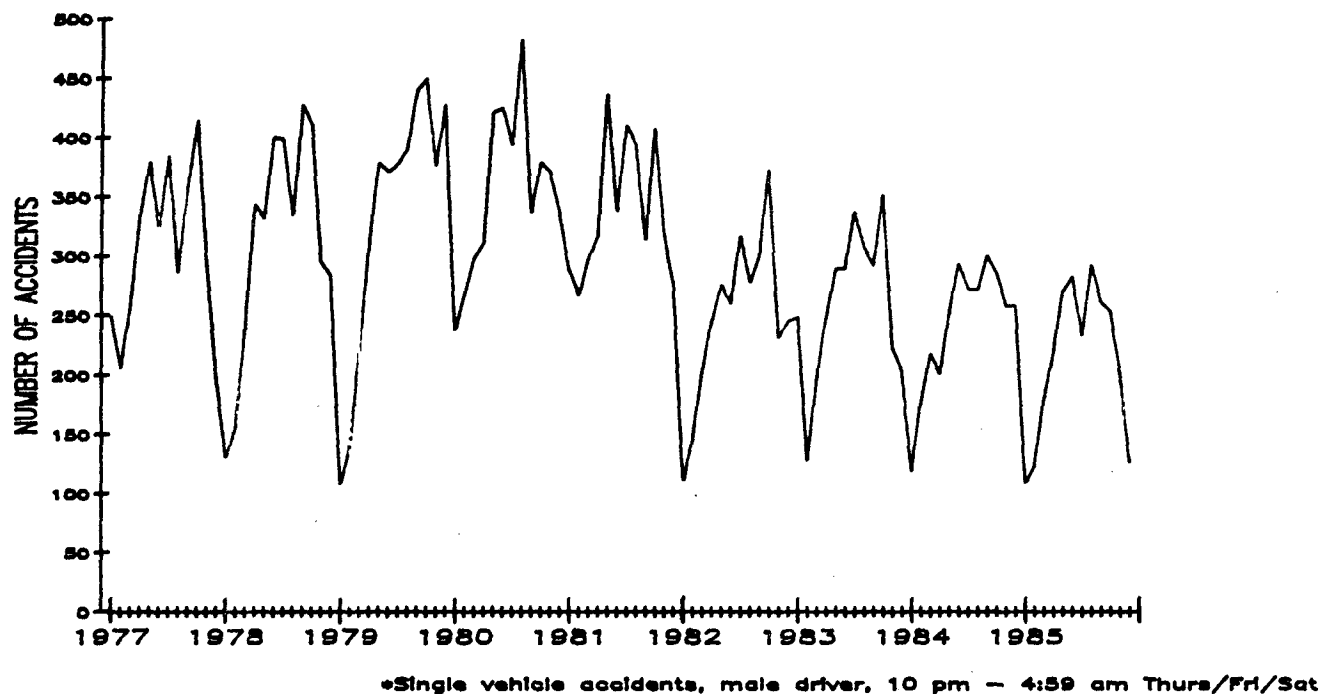
FIGURE 4
"NON—ALCOHOL" MONTHLY ACCIDENT SERIES*
STATEWIDE IN WISCONSIN

*Excludes time unknown and single vehicle injury or fatal 10 pm— 4:59 am

-42-
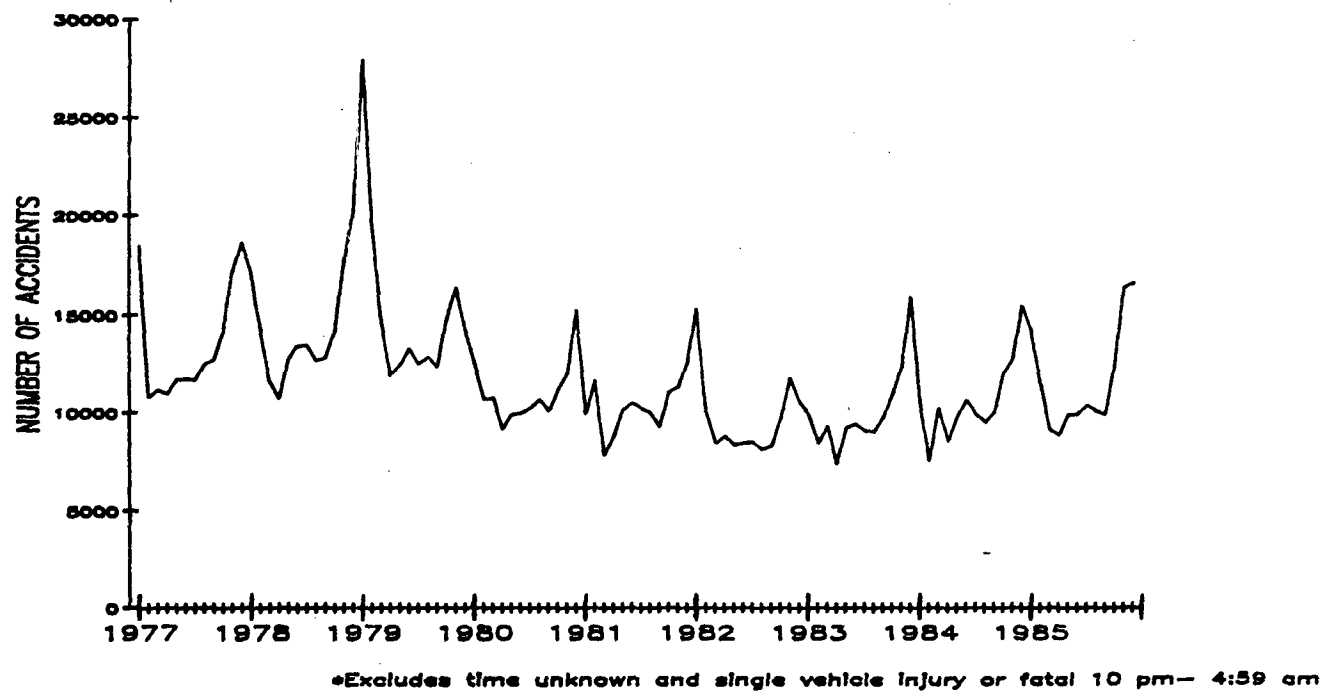
Table 11. Milwaukee Accident Distributions

Alcohol Series

	J	F	M	A	M	J	J	A	S	O	N	D	Total
1977	41	36	39	42	36	29	40	31	37	49	30	34	444
1978	18	28	39	43	39	44	37	26	52	51	41	61	479
1979	17	28	43	39	36	26	43	38	37	50	57	44	458
1980	35	39	42	40	39	47	40	53	33	36	20	43	467
1981	44	40	36	41	46	43	46	27	29	33	32	48	465
1982	17	30	25	21	27	30	28	33	39	35	34	28	347
1983	38	24	28	25	32	31	31	33	33	38	29	37	379
1984	16	35	37	17	39	33	23	29	33	41	27	37	367
1985	13	26	23	25	39	24	32	26	36	41	29	19	333

All Accident Series

Non-Alcohol Series

	J	F	M	A	M	J	J	A	S	O	N	D	Total
1977	4,862	3,009	3,035	2,865	2,916	3,104	2,903	3,136	3,191	3,271	3,762	4,445	40,499
1978	4,379	4,114	3,078	2,705	3,347	3,385	3,123	2,996	3,096	3,369	3,808	4,964	42,364
1979	8,201	5,697	3,888	3,053	3,144	3,277	3,116	3,363	2,909	3,547	3,486	3,419	47,100
1980	3,366	3,100	2,971	2,684	2,698	2,662	2,702	2,871	2,725	2,747	2,727	3,930	35,183
1981	2,779	3,108	2,169	2,479	2,726	2,795	2,621	2,761	2,660	2,853	2,473	3,135	32,559
1982	4,763	3,439	2,518	2,538	2,344	2,319	2,194	2,266	2,376	2,480	2,655	2,721	32,613
1983	2,298	2,419	2,850	2,098	2,620	2,514	2,415	2,539	2,735	2,867	2,607	4,188	32,150
1984	2,833	2,154	2,969	2,567	2,722	2,872	2,501	2,538	2,616	3,185	2,637	4,078	33,672
1985	4,252	3,724	2,579	2,547	2,684	2,639	2,854	2,683	2,710	3,255	3,303	4,109	37,339

FIGURE 5
"ALCOHOL" MONTHLY ACCIDENT SERIES*
IN MILWAUKEE

*Single vehicle accidents, male drivers, 10 pm — 4:59 am Thurs/Fri/Sat
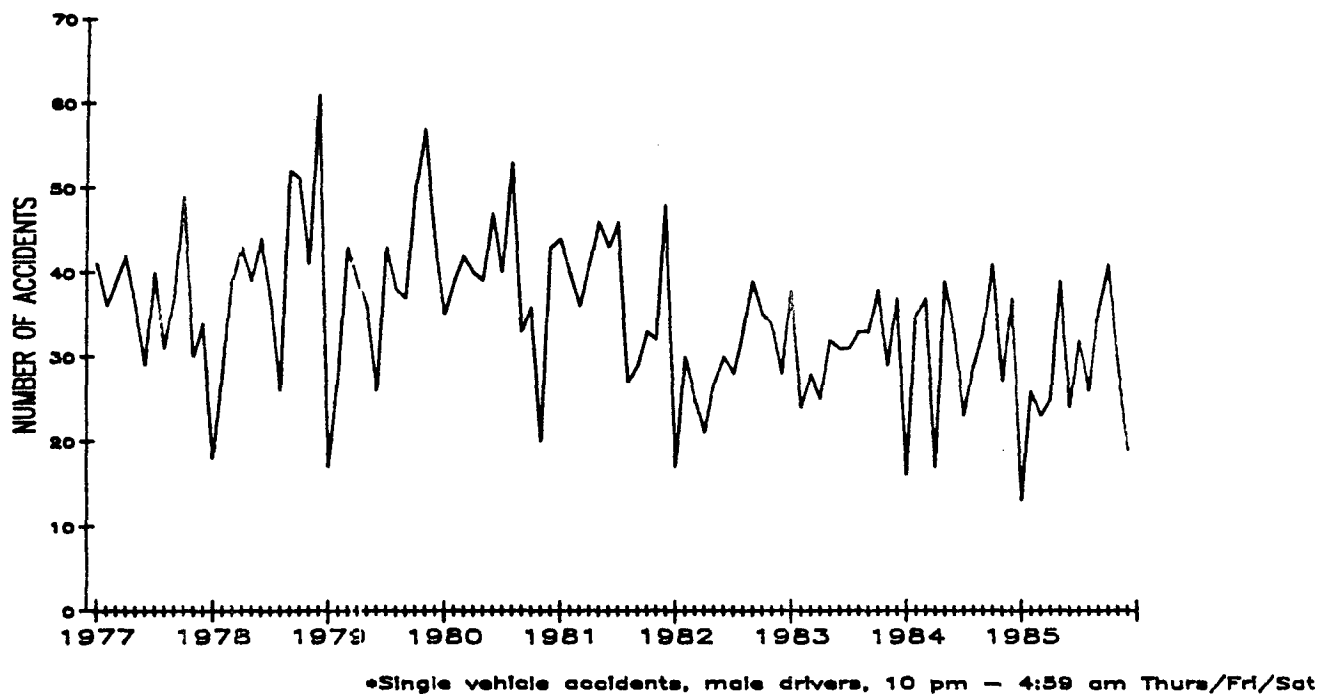
FIGURE 6
"NON—ALCOHOL" MONTHLY ACCIDENT SERIES*
IN MILWAUKEE

*Excludes time unknown and single vehicle injury or fatal 10 pm— 4:59 am
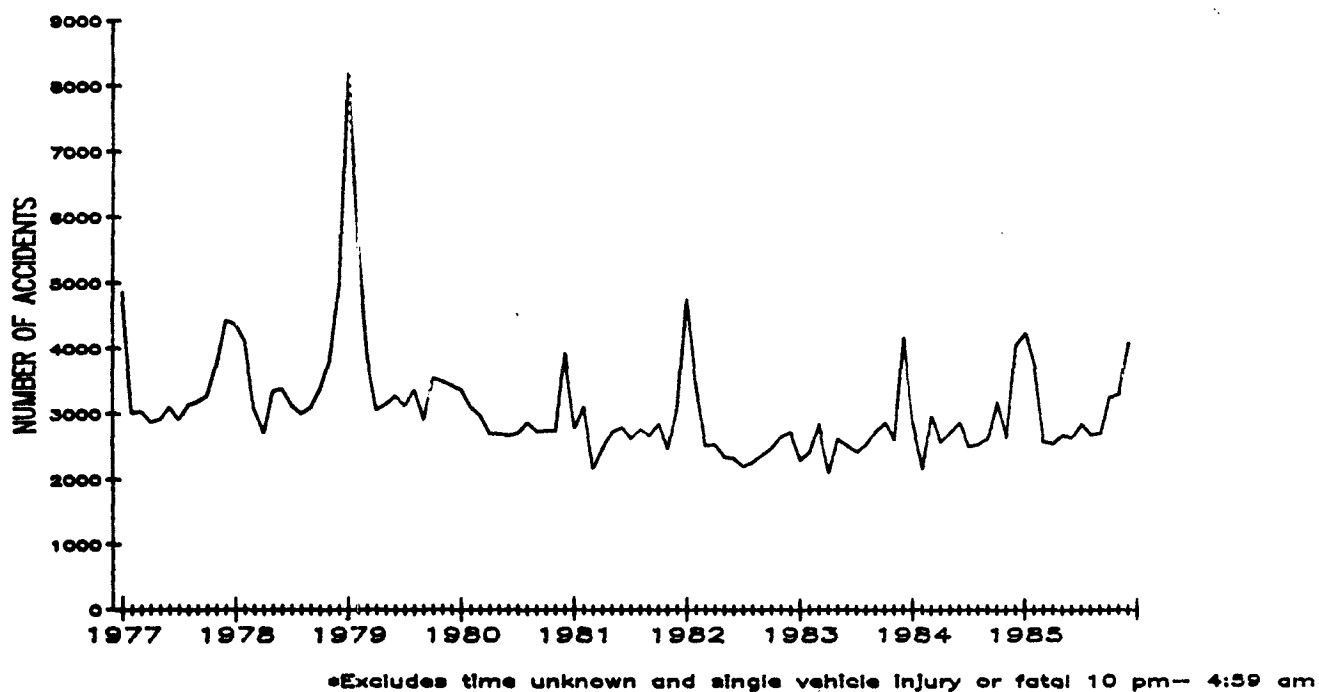
intervention beginning in August, 1981, coincident with legislative enactment of the law, and continuing until the end of the series (December, 1985). The estimated crash reduction associated with this intervention was 9.75 crashes per month (t = -6.41). Table 12 presents the details of this model.

As with the statewide data, a second analysis was run using the Milwaukee "Non-alcohol" series and the identified intervention as covariates for the "Alcohol" series as shown in Table 11 and Figure 6. The results again showed that the intervention was statistically significant. The estimated crash reduction was 10.75 crashes per month (t = -5.93). This model is also detailed in Table 12. The results lead to the conclusion, as with the statewide data, that overall accident or accident reporting changes could not account for the observed step down in the Milwaukee series.

Automatic intervention detection for the Milwaukee series showed the effect of the 1982 law but did not automatically find any effect that could be associated with the general deterrence media program. Other analyses using a manually generated covariate intervention series for the media program (series of all 0's except for six 1's corresponding to the January to June, 1985 program) also generally did not show a media program effect. The one exception to this was an analysis using the Green Bay "Alcohol" series and the media program intervention series as covariates for the Milwaukee "Alcohol" series. Here, the intervention was statistically significant (t = -2.11). Nevertheless, these analyses tended to indicate that the August, 1981 drop of about ten crashes in Milwaukee was overpowering any possible smaller effect of the media program and thus when the two interventions were contained in the same time series model, the media intervention was not significant.

A second set of time series analyses were conducted using only those months after the identified intervention effect of the 1982 law until the end of the media program. In other words, these analyses examined only those data points for August, 1981 through June, 1985 and needed no factors or model terms for the law change. The rationale for examining the data in this fashion was that the imposition of the new law had dramatically changed the accident series. Thus, when looking for a relatively smaller change due to the media program, it was best to assume a new start for the monthly accident series.

When the accident series was viewed with a new origin of August, 1981, the media program intervention series was a statistically significant covariate for the Milwaukee "Alcohol" series but the effect was small (t = -2.07). The estimated crash reduction was 4.67 crashes per month. The same analysis but with the inclusion of July, 1985 to December, 1985 also showed a significant effect for the January to June, 1985 media program (t = -1.92) with an estimated crash reduction of 5.74 crashes per month. However, when these analyses were repeated to include the Milwaukee "Non-alcohol" series as an additional covariate, the media intervention was no longer statistically significant. This suggests that any effect of the media program on alcohol accidents was not sufficiently large to reach significance in light of a small downward trend in all accidents.

A third set of analyses were conducted using forecasting as opposed to intervention analysis. Two time series models were constructed for the Milwaukee "Alcohol" data for the 96 months before the introduction of the media program (January, 1977 to December, 1984). Each of these models was then

Table 12. Models for Milwaukee Alcohol Series

Model -- Alcohol Series Intervention Detection
(data transform = ÷ 10 and take square root)

Parameter #	Description	Factor	Lag	Coefficient	T ratio
1	Mean			2.00	
2	Moving Average	1	12	- .22	- 2.00
3	Step Intervention (0 to month 55, 1 thereafter)	1	0	- .26	- 6.41

(program also identified a seasonal "pulse" beginning at month 13 and "pulses" at months 24, 47 and 73)

Model -- Alcohol Series with Covariates for Step Intervention and Milwaukee Non-Alcohol Series
(data transform = ÷ 10)

Parameter #	Description	Factor	Lag	Coefficient	T ratio
1	Mean			4.02	
2	Moving Average	1	6	.25	2.12
3	Step Intervention (0 to month 55, 1 thereafter)	1	0	- .11	- 5.93
	Non-Alcohol Series (÷ 1,000)				
4	Input	1	0	- .39	- 4.19
5	Input	1	9	- .26	- 2.69
6	Input	1	21	.34	2.86
7	Input	1	22	- .26	- 2.28

used to predict or forecast an expected number of accidents for the January to June, 1985 period of the media program. The first of these models used only a covariate series for the effect of the law change (all 0's until August, 1981, all 1's thereafter). It forecast a total of 184.7 crashes for the six month period of the media program. The actual number of crashes was 150 for an average reduction (actual versus forecast) of 5.78 crashes per month. The second model used the same covariate series for the effect of the intervention of the law plus the Milwaukee "Non-alcohol" and Green Bay "Alcohol" series as additional covariates. This model with three covariate series estimated 186.0 crashes for the six month media program period suggesting a reduction of 6.00 crashes per month based on the 150 crashes actually observed in the Milwaukee "Alcohol" series over that period.

Table 13 presents the details of the model using covariate series for the effect of the intervention of the law, Milwaukee "Non-alcohol" and Green Bay "Alcohol" crashes. The Table also presents the actual and forecast monthly values for January through June 1985. The average monthly forecast for the first six months of 1985 was approximately 31 crashes. The actual number of crashes was substantially lower for January to April of 1985 which correspond to the first four months of the primary media program. In fact, when looking at only these first four months, the difference from the forecast values is statistically significant ($t = -3.31$). The number of crashes was above the forecast value for May and below the forecast value for June. For the full six months of the program the difference between the actual and forecast values was not statistically significant ($t = -1.78$). The results for July to December, 1985 which correspond to the six months after the program, are not shown in Table 13. During this six month period, there was little difference between the actual (183) and forecast (189.2) values.

In summary, the Wisconsin and Milwaukee "Alcohol" data clearly show crash reductions associated with the 1982 change in the law. Statewide, this reduction was estimated at about 110 crashes per month in the very tightly defined "Alcohol" series. In Milwaukee, the reduction was estimated at about 10 crashes per month. Both of these reductions suggest a drop in alcohol related crashes of approximately 25%. In addition, the January to June, 1985 Milwaukee media program may have produced an additional reduction in alcohol related crashes of about 5 per month (approximately 15%). However, this additional reduction was not consistently demonstrated in the analyses conducted. It was apparently confined to the first four months of the media effort, and there is no evidence that the reduction continued beyond the life of the program.

Table 13. Forecast Model for Milwaukee Alcohol Series.

Model -- Alcohol Series to December 1984, with Covariates
(data transform = ÷ 10)

Parameter #	Description	Factor	Lag	Coefficient	T ratio
1	Mean			3.95	
2	Step Intervention (0 to month 55, 1 thereafter)	1	0	- .81	- 5.36
	Non-Alcohol Series (÷ 1,000 and difference)				
3	Input	1	0	.32	4.42
4	Input	1	2	- .19	- 2.59
	Green Bay Alcohol Series				
5	Input	1	0	.49	2.52

Forecast Values

	Lower 95% Limit	Forecast	Upper 95% Limit	Actual
Jan. '85	(18.3)	30.4	(42.6)	13
Feb. '85	(18.1)	30.3	(42.6)	26
Mar. '85	(18.6)	30.8	(43.1)	23
April '85	(20.6)	32.8	(45.1)	25
May '85	(17.8)	30.0	(42.3)	39
June '85	(19.3)	31.5	(43.8)	24
Total		186.0		150

VI. SPECIFIC DETERRENCE ANALYSIS

Another objective of the 1982 Wisconsin drinking and driving legislation was to provide sufficient deterrence and rehabilitation such that convicted drinking drivers would be less likely to repeat the offense. One of the key features of this legislation was the mandatory license suspension for first time offenders. The 1982 law also increased the fine for driving and driving; strengthened the "Assessment Program" which provides diagnosis, treatment and counseling for alcohol problems; and enabled the impounding of the vehicle of a drinking driver who was operating under suspension or revocation.

The paragraphs which follow describe an evaluation of the specific deterrence of the 1982 law. The purpose of this evaluation was to determine whether or not convicted drinking drivers did or did not drink and drive less often following the implementation of the 1982 law. Four separate groups of drivers were constructed using driver records supplied by the State of Wisconsin. The first group consisted of first time offenders convicted before the 1982 law and the second group consisted of first time offenders convicted after the law. The third and fourth groups were constructed for comparison purposes and consisted of individuals convicted of a non-alcohol moving violation before and after the 1982 law. Subsequent accidents and violations were tracked for each group for a period of 12 months following their respective convictions. The procedures utilized to construct these groups follow closely those reported by Salzberg and Paulsrude (1984) in their evaluation of the specific deterrence of jail sentences in Washington State.

A. Approach

The specific deterrence analysis was based on driver record data provided by the Wisconsin Department of Transportation. On January 9, 1985, a special computer run was made against the State's driver record system to produce a driver-by-driver file of accidents, motor vehicle code convictions and related data. Specifically, for each licensed driver in the state (and for unlicensed drivers and out-of-state motorists having a Wisconsin accident or conviction), the file contained:

o   Driver date-of-birth, sex and zip code of residence

o   For each of up to 20 accidents:

-    Accident date
-    County of accident
-    Accident severity (fatal, injury, property damage only)

o   For each of up to 45 motor vehicle code convictions:

-    The specific charge
-    Violation date
-    Conviction date
-    County of violation

In all, records were obtained for 3,791,457 drivers. The accident data for each driver covered reported accidents that occurred from January, 1980

through late 1984. Approximately 84 percent of the drivers had no recorded accidents, 14 percent had one accident, just under two percent had two accidents and less than one percent of the motorists had three or more accidents. The greatest number of accidents for a single driver was 14.

The violation records for each driver included convictions that occurred between January, 1979 and late 1984. (Different file purge cycles are employed by the State for accidents and violations, with this accounting for the different time periods covered for these events.) Sixty-seven percent of the drivers had no convictions on their records, 19 percent had a single conviction, seven percent had two convictions and seven percent had three or more convictions. The greatest conviction tally for a single driver was 37.

Four groups of drivers were then created from the master file for further analysis. These were:

1. All drivers arrested and convicted for Operating While Intoxicated during the period May 1, 1980 to April 30, 1981 who had no other OWI conviction in the previous 12 months. This group represents those convicted under the "old" Wisconsin OWI law.

2. All drivers arrested and convicted for OWI during the period May 1, 1982 to April 30, 1983 who had no other OWI conviction in the previous 12 months. This group represents those convicted under the "new" Wisconsin law.

3. A sample of drivers arrested and convicted for a moving traffic violation during the May 1, 1980-April 30, 1981 period who did not have an OWI conviction in the previous 12 months.

4. A sample of drivers arrested and convicted for a moving traffic violation during the May 1, 1982-April 30, 1983 period who did not have an OWI conviction in the previous 12 months.

Screening for entry into one of these groups was done alternately beginning with the old or new law time periods on every other record. Screening for entry into one of the OWI groups was done first. Screening for entry into groups 3 or 4 was done on every fifth driver record not assigned to one of the OWI groups but which did contain at least one violation conviction. In all, the number of drivers assigned to each group was as follows:

o   Group 1 Old-law OWI   19,719

o   Group 2 New-law OWI   19,126

o   Group 3 Moving Violations   44,718
    (Old-law period)

o   Group 4 Moving Violations   39,920
    (New-law period)

The following items of data were then determined for each driver entered into one of the groups:

o   Sex

o   Age on the date of conviction for the input event.

o   Number of arrests for moving violations in the 12 months prior to the arrest date of the input event.

o   Number of days from the input conviction date to various subsequent events which occurred within 12 months following the conviction. These subsequent events were fatal/injury accidents, property damage accidents, OWI arrests and moving violation arrests. When a driver had more than one subsequent event of the same type, the one nearest in time to the input conviction date was employed.

It should also be noted that the number of prior crashes for each group was not tabulated because the driving records for the "Old Law" group were not complete with respect to crashes due to the differing purge cycles mentioned above.

B.   Results

Table 14 shows the overall results from the driver record analysis. The top portion of the Table shows that the drinking drivers were 87% and 86% male in the two groups with a median age of 26.3 years. The comparison groups contained more females and were slightly older. Also shown are the number of non-alcohol moving violations for each group during the 12 months preceding their respective input events. The results indicate that both alcohol groups had substantially inferior records when compared to both moving violation groups. Also, both "Old Law" groups had slightly inferior prior records when compared to their respective "New Law" groups.

The bottom portion of Table 14 shows the percentage of drivers in each group who had at least one subsequent alcohol arrest and conviction, one injury or fatal crash, one crash of any kind and one arrest and conviction for some other moving violation. As just noted, each of these activity categories was tracked in the driver records for a period of one year from the conviction date of the input event. Also shown in the Table are the average number of days from the initial conviction to the first such subsequent crash or arrest for those drivers who had the indicated subsequent crash or arrest.

The results showed that 7.8% of the "Old Law" group were rearrested and convicted of drinking and driving during the subsequent twelve months as compared with only 5.4% of the "New Law" group. Further, this rearrest occurred, on average, 180 days following the first conviction for the "Old Law" group as compared with an average of 203 days for the "New Law" group. Thus, not only were more of the "Old Law" drivers rearrested, but they were arrested at an earlier time.

These results were analyzed using the PHGLM procedure of SAS (SAS Institute, 1982). This procedure fits the Cox Proportional Hazard Linear Model to a single dependent variable, which in this case was recidivism defined as days to rearrest. The dependent variables used in the analysis were driver age, sex and "Old Law" versus "New Law" group. The results showed that "group" was a statistically significant model term (chi-square = 86.56 with 1

Table 14.

Subsequent Convictions and Crashes of Old Law and New Law Groups

	First Conviction Drinking Drivers		Convicted of Other Moving Violations	
	Old Law '80-'81	New Law '82-'83	Old Law '80-'81	New Law '82-'83
N =	19,719	19,126	44,718	39,920
% male	87%	86%	73%	71%
Median age (years)	26.3	26.3	27.4	28.0
% with one or more non-alcohol violations in prior 12 months	26.6%	22.3%	13.8%	11.2%

Subsequent Driving
(12 months after conviction)

	Old Law '80-'81	New Law '82-'83	Old Law '80-'81	New Law '82-'83
DWI Recidivism	7.8%	5.4%	1.6%	1.3%
(avg.days to recidivism)	180	203	209	214
Injury & Fatal Crash	2.9%	2.1%	3.2%	3.0%
(avg.days to first crash)	185	211	182	180
Any Crash	7.9%	5.0%	9.5%	8.3%
(avg.days to first crash)	179	213	172	175
Other Moving Violation	12.7%	9.3%	21.9%	19.6%
(avg.days to first arrest)	176	206	161	165

d.f.). Thus, the "hazard" of OWI recidivism was significantly greater in the "Old Law" as opposed to the "New Law" group.

Table 14 also shows that the "Old Law" drivers were more likely to be involved in at least one injury or fatal crash, at least one crash of any kind and were also more likely to be arrested and convicted of at least one non-alcohol moving violation. In each case, those in the "Old Law" group who were involved in the subsequent activity experienced their event in a fewer number of days, on average, than those who were involved in the same type of event in the "New Law" group. The PHGLM procedure was used to test the differences between the "Old Law" and the "New Law" groups in the same manner as it was used to test the differences in OWI recidivism. The results showed that the "hazard" associated with the "Old Law" group was significantly greater than the "New Law" group with respect to: subsequent injury and fatal crashes (chi-square = 26.76 with 1 d.f.); subsequent crashes of any kind (chi-square = 136.83 with 1 d.f.) and subsequent arrest and conviction for a non-alcohol moving violation (chi-square = 123.55 with 1 d.f.).

The right side of Table 14 shows the results for the "Old Law" and "New Law" comparison groups. These groups consisted of drivers convicted of some other moving violation during the same time frame as their counterparts in the drinking driver groups. The purpose of these groups was to control for any changes that may have occurred in enforcement or crash likelihood between the old law and new law periods. The results indicate that some changes probably did occur since the "Old Law" comparison group had more subsequent activity than the "New Law" comparison group with respect to each event type. However, there is little difference in the average number of days required for each group to accumulate their activity and the magnitude of the differences are smaller than the differences observed in the drinking driver groups. Nevertheless, these differences between the "Old Law" and "New Law" comparison groups suggested the need for weighting the drinking driver group data to correct for changes in the traffic environment.

The comparison group data was used to weight the differences observed between the "Old Law" and "New Law" drinking driver groups. These weighted differences were then tested using the t-test. Weighting was accomplished by applying the ratio of the observed differences in the comparison group to the drinking driver group. Specifically, for subsequent OWI recidivism, the ratio in the comparison group was .791 (1.288% ÷ 1.628%). The "expected" result in the drinking driver groups, with no impact of the law, would be that the "New Law" group had 79.1% of the OWI convictions of the "Old Law" group. Therefore, the "Old Law" percent recidivism (7.759%) was multiplied by .791 to obtain a weighted figure (6.139%). As shown in Table 14, the observed difference with respect to OWI recidivism was 7.8% versus 5.4% before weighting. After weighting, the difference was 6.1% versus 5.4%. This weighted difference (6.1% vs 5.4%) was statistically significant (t = - 3.03). Similarly, the weighted difference for injury and fatal crashes was 2.7% versus 2.1% and was statistically significant (t = -3.98). The weighted difference for any crash was 6.9% versus 5.0% and was statistically significant (t = -7.90) and the weighted difference for non-alcohol moving violations was 11.4% versus 9.3% which was also significant (t = -8.37). Therefore, all of the observed differences between the "Old" and "New" drinking driver groups were still statistically significant after weighting the results for changes in enforcement or crash likelihood which were indicated by the comparison groups.

A key feature of the above results was that not only were fewer "New Law" drivers involved in subsequent crashes and convictions, but that their involvement took longer to occur. Figures 7 to 10 show the pattern of recidivism as a function of the number of days between the initial conviction and the recidivating event. The four Figures show OWI recidivism, subsequent injury or fatal crashes, subsequent crashes of any kind and subsequent arrests for non-alcohol moving violations. In each case, the "Old Law" group shows a relatively flat distribution for percent recidivism in the first three months following the initial conviction as compared to the second three months, the third three months and the fourth three months. The "New Law" group shows a very different pattern. Convictions and crashes were very low during the first three months, somewhat higher but still well below the "Old Law" drivers during the second three months and higher again during the third and fourth three months. Concerning OWI recidivism, only 8 per 1000 "New Law" drivers were rearrested during the first three months as compared to 20 per 1000 "Old Law" drivers. Only 3 per 1000 "New Law" drivers were involved in an injury or fatal accident as compared with 7 "Old Law" drivers during the first three months. Similarly, only 7 per 1000 were involved in any accident as compared with 20, and only 13 were arrested for a non-alcohol violation as compared with 33.

The present results provide a strong argument for the specific deterrent value of a three to six month license suspension for first time convicted drinking drivers. Drivers subjected to this suspension had fewer crashes and fewer alcohol and non-alcohol convictions than drivers convicted of drinking and driving before the Wisconsin mandatory suspension law was implemented. Much of the effect is seen during the first three to six months when the mandatory suspension is in effect.

Figure 7
Days to OWI Recidivism
Percent Rearrest for First Conviction OWI Offenders

Figure 8
Days to Injury or Fatal Crash
Percent of First Conviction OWI Offenders
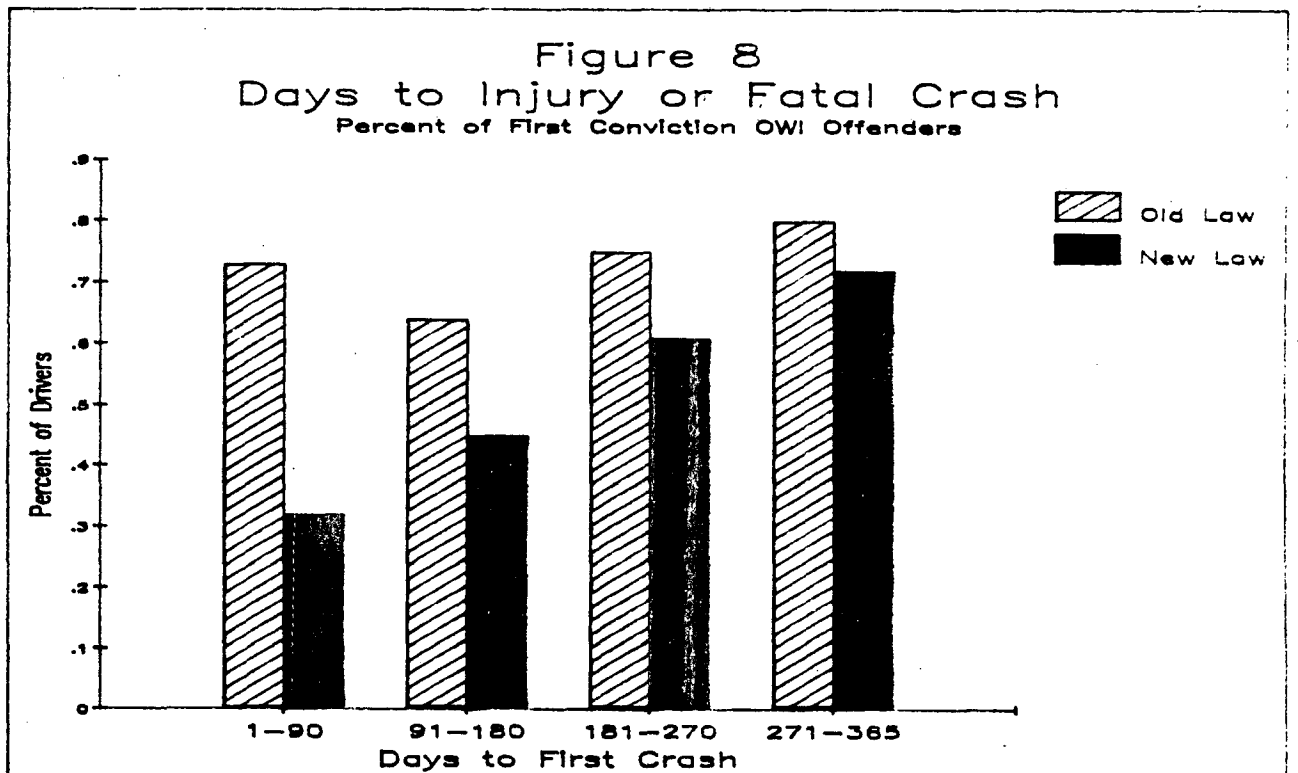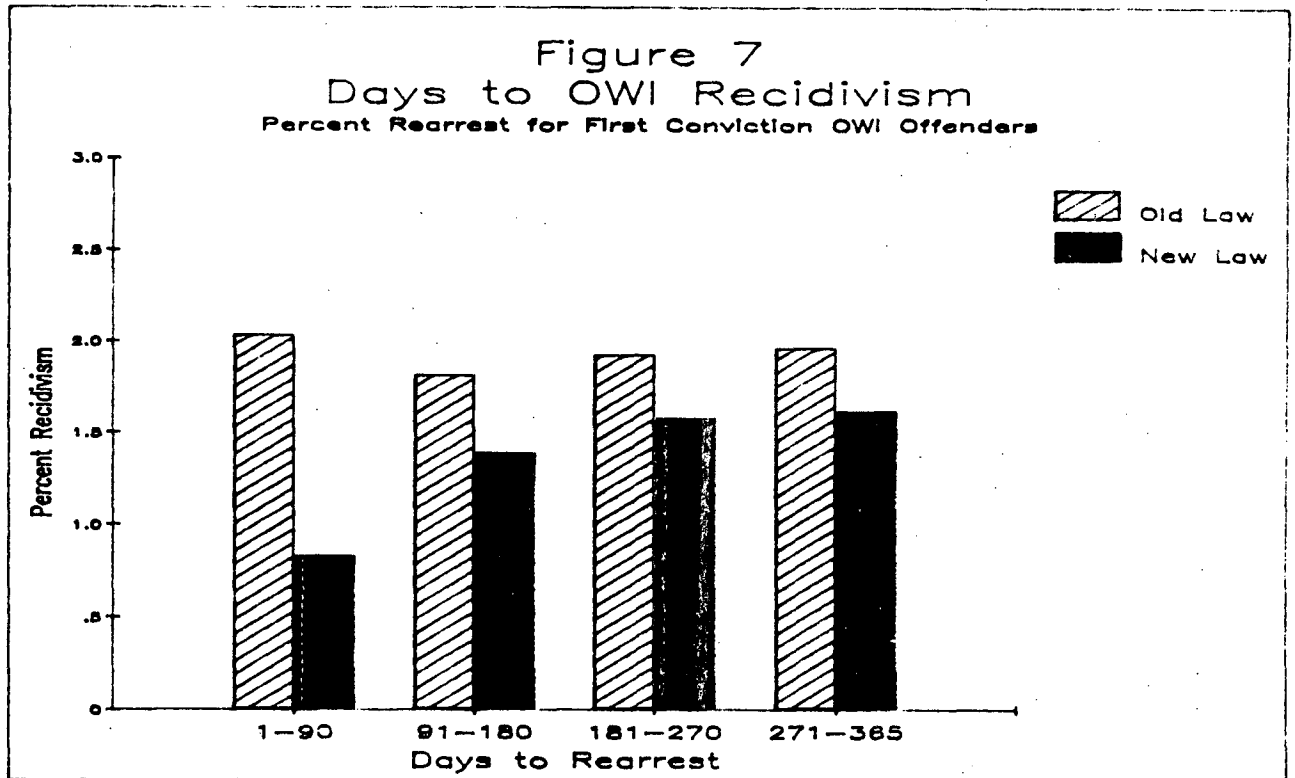
Figure 9
Days to Motor Vehicle Crash
Percent of First Conviction OWI Offenders
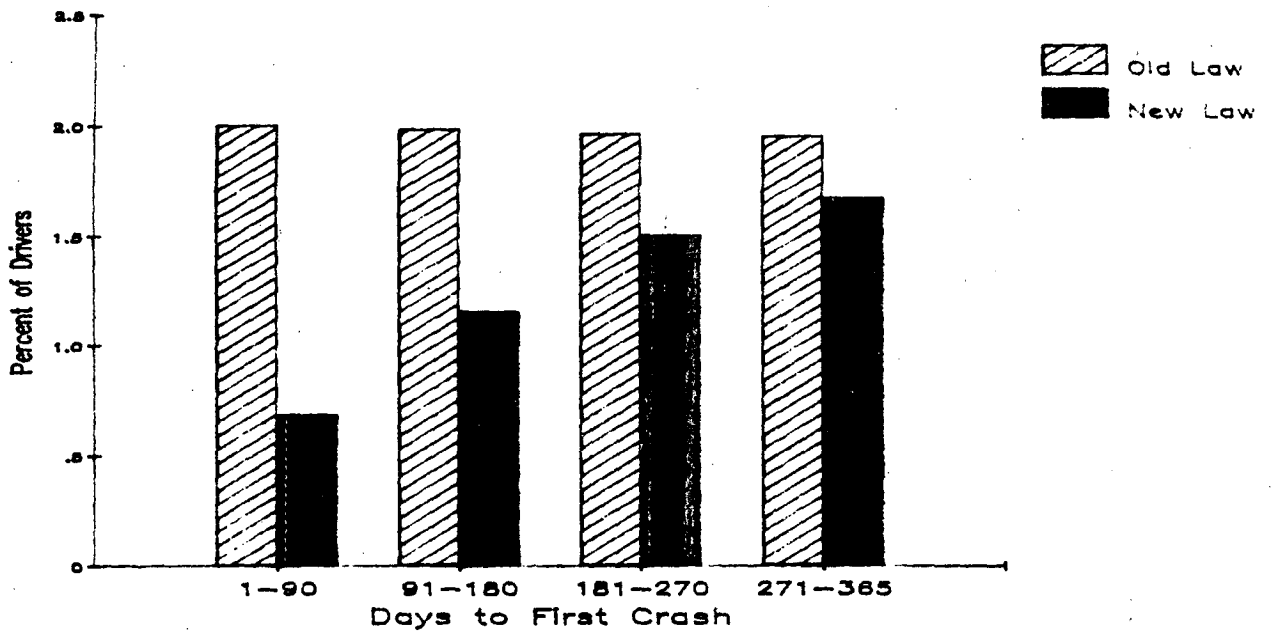
Figure 10
Days to Moving Violation
Percent of First Conviction OWI Offenders
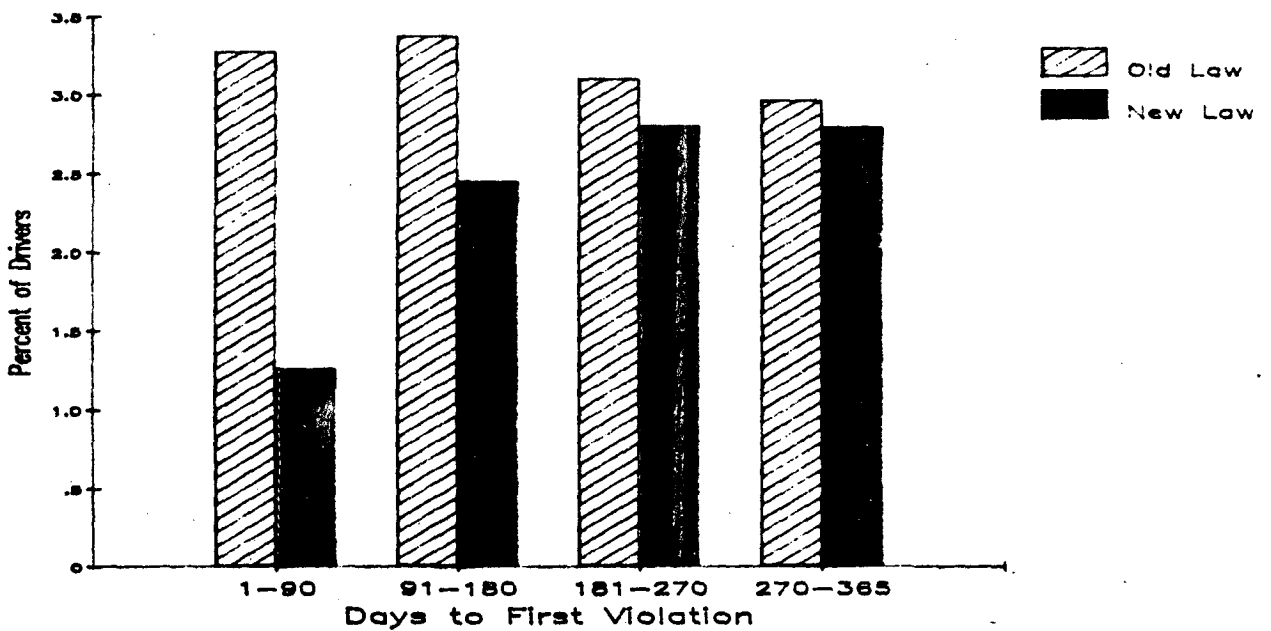
VII. DISCUSSION

Present concepts about the nature and role of deterrence in affecting anti-social behavior have arisen largely from the work of criminologists and others concerned with the criminal justice system. For example, Andenaes (1966) was one of those to highlight the distinction between the effects of punishment on the person being punished (specific deterrence) and the effects of punishment upon members of society (general deterrence). Regarding the mechanism of deterrence he noted,

> "By means of the criminal law, and by means of specific applications of this law, 'messages' are sent to members of society. The criminal law lists those actions which are liable to prosecution, and it specifies the penalties involved. The decisions of the courts and actions by police...transmit knowledge about the law, underlining the fact that criminal laws are not mere empty threats, and providing detailed information as to what kind of penalty might be expected for violations of specific laws." (p. 949)

Andenaes (1966), Chambliss (1967), and Crampton (1969) among others have discussed the necessary conditions for general deterrents to operate. Here, there is a consensus that for legal sanctions to be effective deterrents, there must exist, 1) a perceived risk of detection, apprehension and conviction, and 2) a perception that the applicable sanctions are relatively severe and swiftly and surely applied.

In the alcohol-highway safety area, there is a growing body of evidence indicating that well publicized enforcement campaigns can produce at least a temporary general deterrent effect. The classic outcome in this regard is found in the British Road Safety Act of 1967 which outlawed motor vehicle operation with Blood Alcohol Concentrations (BAC) of .08 percent or more, and authorized the police to stop and screen motorists suspected of having alcohol in their blood. As reported by Codling and Samson (1974), alcohol related crashes declined sharply when the act was introduced but returned to former levels several years later. Other positive results of "crackdowns" have been reported in New Zealand (Hurst and Wright, 1980), Canada (Mercer, 1985), and the U. S. (Levy et al., 1978).

As noted by Ross (1985), it is common for DWI enforcement campaigns to follow the pattern of the British experience, i.e., an initial decline in measures of alcohol-related crashes followed by a return to pre-campaign levels. Possible explanations of this outcome include changes over time among potential drinking drivers in the perceived risk of apprehension and/or a growing perception that possible sanctions are not necessarily applied or are not especially severe. In the case of the British Road Safety Act, for example, it was found that the police rarely made use of their new enforcement powers and the impact on accidents has been attributed more to the publicity surrounding the adoption of the act than to changes in the enforcement environment. The short-term effects of other "crackdowns" have also been attributed to the ending of the special enforcement efforts and to waning publicity about them (c.f., Ennis, 1977, Mercer, 1985).

From the general deterrence model, it is believed to be clear that enforcement, sanctioning and public awareness are closely intertwined.

However, while the effects of well publicized enforcement efforts have been demonstrated, considerably less is known about the role of various types and levels of sanctions in deterring drunk driving.

As noted at the outset, the present study was a part of an NHTSA research program examining the general and specific deterrence value of traditional and innovative sanctions in DWI cases. Short term license suspension was selected as the specific traditional sanction of interest as it is widely available in states' laws, is relatively simple and inexpensive to apply, and has "face validity" in that it removes the offender's driving privilege. Also, studies of license actions in DWI cases have shown specific deterrent effects (Hagen, 1978, Williams et al., 1984a, Preusser et al., 1976).

When the present effort began, it was anticipated that several states would soon be adopting mandatory short term license suspension legislation and that one of these would be found that would be willing to participate as the locale for the intended study. That is, it was hoped that the study could be conducted during the period of transition to mandatory license suspension so that "before and after" measures of public attitudes and awareness could be obtained and the possible effects of the legal change on the criminal justice system could be observed at first hand. However, as these events did not transpire, it was necessary to employ an alternative design involving the use of a community with mandatory short-tern suspension in effect but with low public awareness that the sanction was actually imposed. The primary project "manipulation" therefore became stimulating the target community to conduct a public information campaign focusing on the mandatory license suspension action in DWI cases, with this activity intended to enchance the general deterrence value of the sanction.

Analyses of surrogate measures of alcohol related motor vehicle accidents statewide and in the project community (Milwaukee) showed a significant downward "step" during the period of transition to the new State law, with this effect remaining through the end of the examined accident series (1982-1985). It is likely, therefore, that the legislation enacted in 1982 contributed to the general deterrence of DWI at least among a portion of the potentially at-risk population. A major component of the legal change was the adoption of the mandatory suspension provision, with state records indicating that the requirement was fulfilled by the courts/driver licensing agency. Although DWI enforcement levels did not increase following the law change, it is not possible to disentangle the effect of the mandatory suspension action from other changes in the law (e.g., increased fines) nor from a global public perception that a "crackdown" was in process. Indeed, the September, 1984 survey by the Milwaukee Safety Commission and the baseline survey conducted shortly thereafter on behalf of the project, showed generally low public awareness that short-term license suspensions were being imposed in all DWI convictions.

The public information campaign conducted in Milwaukee during late 1984 through June, 1985 was of the type that could be readily employed at the community level without large expenditures. That is, media time and space were donated, as were production facilities. Local figures were featured in the broadcast materials and distribution of items was carried out by local groups and agencies. Also, the surveys of drivers done for the project were low-cost efforts with the main cost coming from the data analysis stage.

The survey results clearly showed public exposure to the media materials and a large increase in awareness of the fact of mandatory license suspension. However, changes were also detected in the perception of risk of apprehension, despite the fact that this was not a campaign theme nor did the enforcement environment in Milwaukee change during the public information effort. Such "spillover" effects are not uncommon in public information efforts and do not mitigate against the conclusion that the primary media objective was achieved. However, the increase in awareness of the certainty of the license sanction cannot be isolated from other possible changes in perception.

Analyses of accidents in Milwaukee through the period of the media effort showed a possible, small general deterrent effect coincident with the campaign. However, the evidence for this was not strong and it is not possible to conclude that the increased knowledge of the certainty of short-term license suspension translated into behavioral changes as measured by alcohol related crashes. On the other hand, the specific deterrence analysis showed that drivers convicted under the mandatory license suspension provision had significantly better subsequent driving records than did persons convicted during the period when less than half of offenders were subjected to a license action. This outcome is similar to that reported by Hagen (1978) for multiple DWI offenders subjected to license withdrawals of 12 months to three years duration. Williams, et al. (1984b) indicate that the majority of suspended or revoked DWI offenders reported driving during the period of their license withdrawal. However, the nature of the driving was said to have changed and its extent was reduced. Also, a sizeable minority of their DWI group reported no driving during the suspension/revocation period. Similarly, the Wisconsin drivers examined in the present study were not entirely accident or violation free during their suspension period, indicating that driving was taking place. However, their driving record as a group was better than among pre-law DWI offenders wherein more than one-half were free to drive immediately after conviction.

Williams et al., (1984a) report that the better driving records of the suspended/revoked group originally studied by Hagen (1978), extended well beyond the period of the term of the license action itself, with this suggesting a specific deterrent effect continuing after the return of driving privileges. The present data regarding specific deterrence also have shown that a significant highway safety benefit was obtained during the short term license suspension period and that this effect may have continued after the suspension period. However, the time frame of the study did not permit an examination of driving records for an extended period during which post-conviction driving was legal.

The 1982 DWI law enacted in Wisconsin contained numerous provisions regarding the offense (e.g., the adoption of illegal per se) and its processing. The mandatory short-term license provision in the law was guaranteed by requiring the State's driver licensing agency to carry out the suspension if one was not specifically imposed by the adjudicating court and, indeed, State records indicate that all drivers convicted since the legal changes have had their licenses suspended.

The present study found that a significant drop in alcohol related crashes took place coincident with the adoption of the law, with this effect lasting at least until the end of 1985.

Also, the specific deterrence value of the sanction was clearly shown, at least during the suspension period and possibly thereafter. The study has also shown that it is entirely feasible to relatively inexpensively conduct and measure a public information effort at the local level intended to increase the general deterrence value of the license sanction. Greatly increased awareness of the sanction was shown and the evidence, though not conclusive, suggests that such an activity can contribute to general deterrence.

Mandatory, short-term license suspension in DWI cases is obviously less severe than longer term license actions and may be considered less severe than some other penalties such as incarceration. However, the sanction was part of a legislative package in Wisconsin that generated a general and specific deterrent effect. Also, no evidence was found to indicate that the sanction caused disruptions to the adjudication process, an undesirable outcome often reported in locales adopting "severe" penalties. While the perceived severity of short term suspension cannot be precisely established, the certainty of its application can be legislatively adopted without dire consequences and the public can be made aware of this fact.

The interrelationship of enforcement activities, sanctioning practices and public perceptions make it impossible to isolate the "pure" effect of mandatory license suspensions in DWI cases. Nevertheless, the results of the present study and other research are believed to offer a compelling argument to public policy makers that short term license actions should be made mandatory sanctions as part of the overall effort to combat the toll of alcohol related motor vehicle accidents.

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APPENDIX A

Survey Forms

THE MILWAUKEE SAFETY COMMISSION in cooperation with the STATE OF WISCONSIN requests your help in providing information about traffic safety. Your answers to the following questions will be strictly **anonymous** and will be used only for statistical purposes to help plan future safety programs.

■ Your sex?　(1) Male_____　　(2) Female_____

■ Your Zip Code? _____ _____ _____ _____ _____

■ Your age?　(1) 16-19_____　　　　(2) 20-29_____　　　　(3) 30-49_____　　　　(4) 50-64_____　　　　(5) 65 or over_____

■ Why did you come to the Motor Vehicle Division Office today?

　　(1) Renew driver's license_____　　(2) Get first license_____

　　(3) Transfer from another state_____　(4) Other reason (please specify) _____

■ What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses? (If you are not sure, please mark your best guess.

　　(1) 0%_____　　(2) 1-19%_____　　(3) 20-39%_____　　(4) 40-59%_____　　(5) 60-79%_____　　(6) 80-99%_____　　(7) 100%_____

■ Have you seen any TV commercials in the last month which talked about:

Death and injuries due to drunk driving?	(1) Yes_____	(2) No_____
The legal drinking age?	(1) Yes_____	(2) No_____
Convicted drunk drivers guaranteed to lose their licenses?	(1) Yes_____	(2) No_____
Enforcement of drunk driving laws?	(1) Yes_____	(2) No_____

■ Have you heard any radio commercials in the last month which talked about:

Deaths and injuries due to drunk driving?	(1) Yes_____	(2) No_____
The legal drinking age?	(1) Yes_____	(2) No_____
Convicted drunk drivers guaranteed to lose their licenses?	(1) Yes_____	(2) No_____
Enforcement of drunk driving laws?	(1) Yes_____	(2) No_____

■ Have you read any printed materials (posters, pamphlets, newspaper ads, etc.) in the last month which talked about:

Deaths and injuries due to drunk driving?	(1) Yes_____	(2) No_____
The legal drinking age?	(1) Yes_____	(2) No_____
Convicted drunk drivers guaranteed to lose their licenses?	(1) Yes_____	(2) No_____
Enforcement of drunk driving laws?	(1) Yes_____	(2) No_____

■ If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?

　　(1) *Extremely* unpleasant_____　　　　(2) *Very* unpleasant_____　　　　(3) *Somewhat* unpleasant_____

　　(4) *Not very* unpleasant_____　　　　(5) *Not at all* unpleasant_____

How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?

　　(1) Very much_____　　　　(2) Somewhat_____　　　　(3) Very little_____　　　　(4) Not at all_____

A-1

THE MILWAUKEE SAFETY COMMISSION in cooperation with the STATE OF WISCONSIN requests your help in providing information about traffic safety. Your answers to the following questions will be strictly **anonymous** and will be used only for statistical purposes to help plan future safety programs.

■ Your sex? (1) Male_____ (2) Female_____

■ Your Zip Code? _____ _____ _____ _____ _____

■ Your age? (1) 16-19_____   (2) 20-29_____   (3) 30-49_____   (4) 50-64_____   (5) 65 or over_____

■ Why did you come to the Motor Vehicle Division Office today?

    (1) Renew driver's license_____   (2) Get first license_____

    (3) Transfer from another state   (4) Other reason (please specify) _____

■ What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses? (If you are not sure, please mark your best guess)

    (1) 0%_____   (2) 1-19%_____   (3) 20-39%_____   (4) 40-59%_____   (5) 60-79%_____   (6) 80-99%_____   (7) 100%_____

■ What penalties does Wisconsin law require for a first drunk driving conviction?
(Please check all that you think apply)

Fine _____	About how much?	$_____
Lose license _____	About how long?	_____months
Extra insurance _____	About how much?	$_____
Vehicle impounded _____	About how long?	_____months
Community service _____	About how long?	_____days
Counseling/treatment _____	About how long?	_____days
Jail _____	About how long?	_____days

■ If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?

    (1) **Extremely** unpleasant_____   (2) **Very** unpleasant_____   (3) **Somewhat** unpleasant_____

    (4) **Not very** unpleasant_____   (5) **Not at all** unpleasant_____

How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?

    (1) Very much_____   (2) Somewhat_____   (3) Very little_____   (4) Not at all_____

■ On a typical night, what percent of the people who drive in violation of the OWI (drunk driving) law are arrested?
(If you are not sure, please mark your best guess)

    (1) 0%_____   (2) 1-19%_____   (3) 20-39%_____   (4) 40-59%_____   (5) 60-79%_____   (6) 80-99%_____   (7) 100%_____

■ What percent of drivers who are arrested for violating the OWI law are actually convicted?
(If you are not sure, please mark your best guess)

    (1) 0%_____   (2) 1-19%_____   (3) 20-39%_____   (4) 40-59%_____   (5) 60-79%_____   (6) 80-99%_____   (7) 100%_____

THE MILWAUKEE SAFETY COMMISSION in cooperation with the STATE OF WISCONSIN requests your help in providing information about traffic safety. Your answers to the following questions will be strictly **anonymous** and will be used only for statistical purposes to help plan future safety programs.

■ Your sex?   (1) Male ____   (2) Female

■ Your Zip Code? _____

■ Your age?   (1) 16-19____   (2) 20-29 ___   (3) 30-49____   (4) 50-64____   (5) 65 or over ____

■ Your weight? _____ lbs.

■ Why did you come to the Motor Vehicle Division Office today?

    (1) Renew driver's license____   (2) Get first license____

    (3) Transfer from another state____   (4) Other reason (please specify) _____

■ What penalties, if any, does Wisconsin law require for everyone convicted of drunk driving for the first time?

    _____

    _____

■ In the past month, how often do you think you may have driven after you had been drinking enough to violate the Operating While Intoxicated (OWI) law? (Please check one)

    (1) Daily____   (2) 2-6 times per week ___   (3) Once a week____

    (4) Once every 2 weeks____   (5) Once a month____   (6) Never____

■ How many bottles of beer, glasses of wine or drinks of liquor do you think you would have to drink in a two hour period to be in violation of the OWI (drunk driving) law?

    1 ____   2 ____   3 ____   4 ____   5 ____   6 ____   7 ____   8 or more ____

■ If you had been drinking and needed to get home, how often would you: (Please give one answer in each row)

	(1) Always	(2) Usually	(3) Sometimes	(4) Rarely	(5) Never
Call a taxi?	____	____	____	____	____
Take a bus?	____	____	____	____	____
Ride with someone?	____	____	____	____	____
Drive yourself?	____	____	____	____	____
Walk?	____	____	____	____	____

■ If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?

    (1) *Extremely* unpleasant____   (2) *Very* unpleasant____   (3) *Somewhat* unpleasant____

    (4) *Not very* unpleasant____   (5) *Not at all* unpleasant____

How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?

    (1) Very much ___   (2) Somewhat____   (3) Very little____   (4) Not at all ___

A-3

THE MILWAUKEE SAFETY COMMISSION in cooperation with the STATE OF WISCONSIN requests your help in providing information about traffic safety. Your answers to the following questions will be strictly **anonymous** and will be used only for statistical purposes to help plan future safety programs.

■ Your sex?   (1) Male_____   (2) Female_____.

■ Your Zip Code? _____ _____ _____ _____ _____

■ Your age? (1) 16-19_____   (2) 20-29_____.   (3) 30-49_____   (4) 50-64_____   (5) 65 or over_____

■ Why did you come to the Motor Vehicle Division Office today?

    (1) Renew driver's license_____   (2) Get first license_____

    (3) Transfer from another state_____   (4) Other reason (please specify) _____

■ What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses? (If you are not sure, please mark your best guess)

    (1) 0%_____   (2) 1-19%_____   (3) 20-39%_____   (4) 40-59%_____   (5) 60-79%_____   (6) 80-99%_____   (7) 100%_____

■ Please circle the number in each row which best describes your feelings about each of the following statements:

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
The penalties for drunk driving should be more severe	1	2	3	4	5
There should be a law requiring the use of seatbelts	1	2	3	4	5
People are less likely to drive when drunk than they were a year ago	1	2	3	4	5
Pedestrian safety is taught well in Milwaukee's schools	1	2	3	4	5
Drunk drivers should lose their licenses for at least 90 days	1	2	3	4	5
Most adults act safely as pedestrians in Milwaukee	1	2	3	4	5

■ If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?

    (1) **Extremely** unpleasant_____   (2) **Very** unpleasant_____   (3) **Somewhat** unpleasant_____

    (4) **Not very** unpleasant_____   (5) **Not at all** unpleasant_____

How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?

    (1) Very much_____   (2) Somewhat_____   (3) Very little_____   (4) Not at all_____

■ If it were certain that you would lose your license if you were convicted of OWI, how much would this influence your decision to drive while in violation of the OWI law?

    (1) Very much_____   (2) A lot_____   (3) Somewhat_____

    (4) Very little_____   (5) Not at all_____

THE MILWAUKEE SAFETY COMMISSION in cooperation with the STATE OF WISCONSIN requests your help in providing information about traffic safety. Your answers to the following questions will be strictly **anonymous** and will be used only for statistical purposes to help plan future safety programs.

■ Your sex? (1) Male____ (2) Female____

■ Your Zip Code? ____ ____ ____ ____ ____

■ Your age? (1) 16-19____ (2) 20-29____ (3) 30-49____ (4) 50-64____ (5) 65 or over____

■ Why did you come to the Motor Vehicle Division Office today?

(1) Renew driver's license____ (2) Get first license____

(3) Transfer from another state____ (4) Other reason (please specify) _____

■ What percent of drivers convicted of drunk driving for the first time in Wisconsin actually lose their licenses? (If you are not sure, please mark your best guess)

(1) 0%____ (2) 1-19%____ (3) 20-39%____ (4) 40-59%____ (5) 60-79%____ (6) 80-99%____ (7) 100%____

■ What do you think the State of Wisconsin **should** do to the driver's license of someone convicted of drunk driving?

(1) Take it away for a year of more____

(2) Take it away for 3 months to a year____

(3) Take it away for 3 months or less____

(4) Let the driver keep it____

■ If Wisconsin takes away the license of a convicted drunk driver, should the driver still be permitted to drive to and from work or school?

(1) Yes____ (2) No____

■ If Wisconsin allows convicted drunk drivers to drive to and from work or school, should there be a minimum waiting period before this restricted driving is allowed?

(1) Yes____ (2) No____

If yes, how long should this waiting period be?

(1) 1 month____ (2) 2 months____ (3) 3 months____ (4) More than 3 months____

■ If you were convicted of a drunk driving first offense, how unpleasant would the consequences be?

(1) *Extremely* unpleasant____ (2) *Very* unpleasant____ (3) *Somewhat* unpleasant____

(4) *Not very* unpleasant____ (5) *Not at all* unpleasant____

How much do these consequences influence whether or not you drive while in violation of the OWI (drunk driving) law?

(1) Very much____ (2) Somewhat____ (3) Very little____ (4) Not at all____

A-5

APPENDIX B

Survey Data

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

SEX (ALL) BY SURVEY CYCLE (ALL)

		MALE	FEMALE	UNKNOWN	SUM	
1	I	820I	869I	1I	1690I	# RESP
	I	48.5I	51.4I	0.1I	100.0I	% OF CYCLE
2	I	702I	652I	1I	1355I	# RESP
	I	51.8I	48.1I	0.1I	100.0I	% OF CYCLE
3	I	718I	664I	2I	1384I	# RESP
	I	51.9I	48.0I	0.1I	100.0I	% OF CYCLE
4	I	771I	693I	1I	1465I	# RESP
	I	52.6I	47.3I	0.1I	100.0I	% OF CYCLE
5	I	556I	460I	I	1016I	# RESP
	I	54.7I	45.3I	I	100.0I	% OF CYCLE
6	I	564I	529I	3I	1096I	# RESP
	I	51.5I	48.3I	0.3I	100.0I	% OF CYCLE
7	I	500I	459I	I	959I	# RESP
	I	52.1I	47.9I	I	100.0I	% OF CYCLE
8	I	460I	417I	2I	879I	# RESP
	I	52.3I	47.4I	0.2I	100.0I	% OF CYCLE
SUM	I	5091I	4743I	10I	9844I	# RESP
	I	51.7I	48.2I	0.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .112858 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .338572 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

SEX (ALL) BY SURVEY CYCLE (ALL)

	MALE	FEMALE	UNKNOWN	SUM	
1	293I	292I	2I	587I	# RESP
	49.9I	49.7I	0.3I	100.0I	% OF CYCLE
2	219I	232I	I	451I	# RESP
	48.6I	51.4I	I	100.0I	% OF CYCLE
3	230I	237I	I	467I	# RESP
	49.3I	50.7I	I	100.0I	% OF CYCLE
4	150I	122I	I	272I	# RESP
	55.1I	44.9I	I	100.0I	% OF CYCLE
5	107I	101I	I	208I	# RESP
	51.4I	48.6I	I	100.0I	% OF CYCLE
6	220I	180I	I	400I	# RESP
	55.0I	45.0I	I	100.0I	% OF CYCLE
7	197I	180I	I	377I	# RESP
	52.3I	47.7I	I	100.0I	% OF CYCLE
8	308I	300I	2I	610I	# RESP
	50.5I	49.2I	0.3I	100.0I	% OF CYCLE
SUMI	1724I	1644I	4I	3372I	# RESP
	51.1I	48.8I	0.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .651206 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .439292 E -01

B-2

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

AGE (ALL) BY SURVEY CYCLE (ALL)

	16 TO 19	20 TO 29	30 TO 49	50 TO 64	65 OR OVER	NO ANSWER	SUM	
1	150I	449I	662I	297I	129I	3I	1690I	# RESP
	8.9I	26.6I	39.2I	17.6I	7.6I	0.2I	100.0I	% OF CYCLE
2	145I	348I	515I	240I	107I	I	1355I	# RESP
	10.7I	25.7I	38.0I	17.7I	7.9I	I	100.0I	% OF CYCLE
3	99I	395I	561I	235I	93I	1I	1384I	# RESP
	7.2I	28.5I	40.5I	17.0I	6.7I	0.1I	100.0I	% OF CYCLE
4	105I	407I	561I	262I	128I	2I	1465I	# RESP
	7.2I	27.8I	38.3I	17.9I	8.7I	0.1I	100.0I	% OF CYCLE
5	118I	306I	349I	177I	66I	I	1016I	# RESP
	11.6I	30.1I	34.4I	17.4I	6.5I	I	100.0I	% OF CYCLE
6	80I	284I	432I	205I	93I	2I	1096I	# RESP
	7.3I	25.9I	39.4I	18.7I	8.5I	0.2I	100.0I	% OF CYCLE
7	91I	331I	364I	133I	40I	I	959I	# RESP
	9.5I	34.5I	38.0I	13.9I	4.2I	I	100.0I	% OF CYCLE
8	110I	270I	318I	123I	58I	I	879I	# RESP
	12.5I	30.7I	36.2I	14.0I	6.6I	I	100.0I	% OF CYCLE
SUMI	898I	2790I	3762I	1672I	714I	8I	9844I	# RESP
	9.1I	28.3I	38.2I	17.0I	7.3I	0.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .105031 E 03   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 28

CONT COEF = .102788

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

AGE (ALL) BY SURVEY CYCLE (ALL)

	16 TO 19	20 TO 29	30 TO 49	50 TO 64	65 OR OVER	NO ANSWER	SUM	
1	77I	170I	227I	68I	44I	1I	587I	# RESP
	13.1I	29.0I	38.7I	11.6I	7.5I	0.2I	100.0I	% OF CYCLE
2	64I	132I	167I	59I	29I	I	451I	# RESP
	14.2I	29.3I	37.0I	13.1I	6.4I	I	100.0I	% OF CYCLE
3	64I	128I	168I	74I	32I	1I	467I	# RESP
	13.7I	27.4I	36.0I	15.8I	6.9I	0.2I	100.0I	% OF CYCLE
4	14I	80I	108I	55I	15I	I	272I	# RESP
	5.1I	29.4I	39.7I	20.2I	5.5I	I	100.0I	% OF CYCLE
5	24I	62I	72I	40I	10I	I	208I	# RESP
	11.5I	29.8I	34.6I	19.2I	4.8I	I	100.0I	% OF CYCLE
6	50I	141I	139I	51I	19I	I	400I	# RESP
	12.5I	35.2I	34.7I	12.7I	4.7I	I	100.0I	% OF CYCLE
7	62I	132I	126I	42I	14I	1I	377I	# RESP
	16.4I	35.0I	33.4I	11.1I	3.7I	0.3I	100.0I	% OF CYCLE
8	88I	190I	228I	68I	34I	2I	610I	# RESP
	14.4I	31.1I	37.4I	11.1I	5.6I	0.3I	100.0I	% OF CYCLE
SUMI	443I	1035I	1235I	457I	197I	5I	3372I	# RESP
	13.1I	30.7I	36.6I	13.6I	5.8I	0.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .590101 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 28

CONT COEF = .131241

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

REASON FOR VISITING MOTOR VEHICLE OFFICE (ALL) BY SURVEY CYCLE (ALL)

	RENEW LICENSE	GET FIRST LICENSE	TRANS FROM OTHER STATE	OTHER REASON	NO ANSWER	SUM	
1	1299	108	43	232	8	1690	# RESP
	76.9	6.4	2.5	13.7	0.5	100.0	% OF CYCLE
2	1045	134	30	141	5	1355	# RESP
	77.1	9.9	2.2	10.4	0.4	100.0	% OF CYCLE
3	1133	34	56	156	5	1384	# RESP
	81.9	2.5	4.0	11.3	0.4	100.0	% OF CYCLE
4	1233	45	48	135	4	1465	# RESP
	84.2	3.1	3.3	9.2	0.3	100.0	% OF CYCLE
5	841	39	27	102	7	1016	# RESP
	82.8	3.8	2.7	10.0	0.7	100.0	% OF CYCLE
6	886	41	43	122	4	1096	# RESP
	80.8	3.7	3.9	11.1	0.4	100.0	% OF CYCLE
7	722	52	29	151	5	959	# RESP
	75.3	5.4	3.0	15.7	0.5	100.0	% OF CYCLE
8	643	77	20	135	4	879	# RESP
	73.2	8.8	2.3	15.4	0.5	100.0	% OF CYCLE
SUM	7802	530	296	1174	42	9844	# RESP
	79.3	5.4	3.0	11.9	0.4	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .193341 E 03   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 28

CONT COEF = .138788

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

REASON FOR VISITING MOTOR VEHICLE OFFICE (ALL) BY SURVEY CYCLE (ALL)

	RENEW LICENSE	GET FIRST LICENSE	TRANS FROM OTHER STATE	OTHER REASON	NO ANSWER	SUM	
1 I	459I	5I	17I	60I	I	587I	# RESP
I	78.2I	8.7I	2.9I	10.2I	I	100.0I	% OF CYCLE
2 I	361I	30I	2I	56I	2I	451I	# RESP
I	80.0I	6.7I	0.4I	12.4I	0.4I	100.0I	% OF CYCLE
3 I	386I	20I	7I	53I	1I	467I	# RESP
I	82.7I	4.3I	1.5I	11.3I	0.2I	100.0I	% OF CYCLE
4 I	239I	4I	7I	21I	1I	272I	# RESP
I	87.9I	1.5I	2.6I	7.7I	0.4I	100.0I	% OF CYCLE
5 I	164I	10I	7I	26I	1I	208I	# RESP
I	78.8I	4.8I	3.4I	12.5I	0.5I	100.0I	% OF CYCLE
6 I	292I	14I	10I	80I	4I	400I	# RESP
I	73.0I	3.5I	2.5I	20.0I	1.0I	100.0I	% OF CYCLE
7 I	287I	23I	7I	59I	1I	377I	# RESP
I	76.1I	6.1I	1.9I	15.6I	0.3I	100.0I	% OF CYCLE
8 I	431I	36I	24I	116I	3I	610I	# RESP
I	70.7I	5.9I	3.9I	19.0I	0.5I	100.0I	% OF CYCLE
SUMI	2619I	188I	81I	471I	13I	3372I	# RESP
I	77.7I	5.6I	2.4I	14.0I	0.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .978139 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 28

CONT COEF = .167899

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

% DRIVERS LOSING LICENSE ON FIRST DWI CONVICTION (ALL) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1	103	448	319	172	85	63	140	28	1358	# RESP
	7.6	33.0	23.5	12.7	6.3	4.6	10.3	2.1	100.0	% OF CYCLE
2	81	347	248	140	56	72	119	18	1081	# RESP
	7.5	32.1	22.9	13.0	5.2	6.7	11.0	1.7	100.0	% OF CYCLE
3	52	352	206	138	73	65	204	22	1112	# RESP
	4.7	31.7	18.5	12.4	6.6	5.8	18.3	2.0	100.0	% OF CYCLE
4	53	307	216	163	68	85	262	22	1176	# RESP
	4.5	26.1	18.4	13.9	5.8	7.2	22.3	1.9	100.0	% OF CYCLE
5	30	191	160	107	53	53	212	15	821	# RESP
	3.7	23.3	19.5	13.0	6.5	6.5	25.8	1.8	100.0	% OF CYCLE
6	19	199	148	109	70	62	262	11	880	# RESP
	2.2	22.6	16.8	12.4	8.0	7.0	29.8	1.2	100.0	% OF CYCLE
7	27	141	146	97	54	58	236	17	776	# RESP
	3.5	18.2	18.8	12.5	7.0	7.5	30.4	2.2	100.0	% OF CYCLE
8	26	121	141	85	44	65	217	12	711	# RESP
	3.7	17.0	19.8	12.0	6.2	9.1	30.5	1.7	100.0	% OF CYCLE
SUM	391	2106	1584	1011	503	523	1652	145	7915	# RESP
	4.9	26.6	20.0	12.8	6.4	6.6	20.9	1.8	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .437615 E 03
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = .431651 E 02   (SIGNIFICANT AT .001 LEVEL)

CONT COEF = .230907

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

% DRIVERS LOSING LICENSE ON FIRST DWI CONVICTION (ALL) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1	30I	145I	109I	60I	21I	27I	65I	11I	468I	# RESP
	6.4I	31.0I	23.3I	12.8I	4.5I	5.8I	13.9I	2.4I	100.0I	% OF CYCLE
2	18I	118I	86I	34I	16I	30I	56I	4I	362I	# RESP
	5.0I	32.6I	23.8I	9.4I	4.4I	8.3I	15.5I	1.1I	100.0I	% OF CYCLE
3	16I	100I	72I	51I	23I	25I	73I	12I	372I	# RESP
	4.3I	26.9I	19.4I	13.7I	6.2I	6.7I	19.6I	3.2I	100.0I	% OF CYCLE
4	10I	72I	36I	37I	9I	21I	30I	2I	217I	# RESP
	4.6I	33.2I	16.6I	17.1I	4.1I	9.7I	13.8I	0.9I	100.0I	% OF CYCLE
5	8I	37I	40I	28I	8I	18I	25I	1I	165I	# RESP
	4.8I	22.4I	24.2I	17.0I	4.8I	10.9I	15.2I	0.6I	100.0I	% OF CYCLE
6	13I	84I	71I	47I	21I	23I	53I	8I	320I	# RESP
	4.1I	26.2I	22.2I	14.7I	6.6I	7.2I	16.6I	2.5I	100.0I	% OF CYCLE
7	9I	81I	65I	52I	23I	28I	41I	4I	303I	# RESP
	3.0I	26.7I	21.5I	17.2I	7.6I	9.2I	13.5I	1.3I	100.0I	% OF CYCLE
8	23I	140I	131I	41I	30I	36I	81I	5I	487I	# RESP
	4.7I	28.7I	26.9I	8.4I	6.2I	7.4I	16.6I	1.0I	100.0I	% OF CYCLE
SUMI	127I	777I	610I	350I	151I	208I	424I	47I	2694I	# RESP
	4.7I	28.8I	22.6I	13.0I	5.6I	7.7I	15.7I	1.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .637617 E 02
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = .237440 E 01   (SIGNIFICANT AT .01 LEVEL)

CONT COEF = .153368

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

UNPLEASANTNESS OF CONSEQ. OF 1ST DRUNK DRIVING CONVICT (ALL) BY SURVEY CYCLE (ALL)

		EXTREMELY UNPLEASANT	VERY UNPLEASANT	SOMEWHAT UNPLEASANT	NOT VERY UNPLEASANT	NOT AT ALL UNPLEASANT	NO ANSWER	SUM	
1	I	1191I	308I	81I	37I	13I	60I	1690I	# RESP
	I	70.5I	18.2I	4.8I	2.2I	0.8I	3.6I	100.0I	% OF CYCLE
2	I	960I	225I	63I	27I	12I	68I	1355I	# RESP
	I	70.8I	16.6I	4.6I	2.0I	0.9I	5.0I	100.0I	% OF CYCLE
3	I	1002I	217I	73I	19I	12I	61I	1384I	# RESP
	I	72.4I	15.7I	5.3I	1.4I	0.9I	4.4I	100.0I	% OF CYCLE
4	I	1074I	210I	63I	30I	13I	75I	1465I	# RESP
	I	73.3I	14.3I	4.3I	2.0I	0.9I	5.1I	100.0I	% OF CYCLE
5	I	749I	158I	33I	15I	9I	52I	1016I	# RESP
	I	73.7I	15.6I	3.2I	1.5I	0.9I	5.1I	100.0I	% OF CYCLE
6	I	801I	170I	47I	18I	5I	55I	1096I	# RESP
	I	73.1I	15.5I	4.3I	1.6I	0.5I	5.0I	100.0I	% OF CYCLE
7	I	662I	175I	32I	14I	15I	61I	959I	# RESP
	I	69.0I	18.2I	3.3I	1.5I	1.6I	6.4I	100.0I	% OF CYCLE
8	I	650I	136I	42I	18I	2I	31I	879I	# RESP
	I	73.9I	15.5I	4.8I	2.0I	0.2I	3.5I	100.0I	% OF CYCLE
SUMI		7089I	1599I	434I	178I	81I	463I	9844I	# RESP
	I	72.0I	16.2I	4.4I	1.8I	0.8I	4.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .404668 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .655375 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

UNPLEASANTNESS OF CONSEQ. OF 1ST DRUNK DRIVING CONVICT (ALL) BY SURVEY CYCLE (ALL)

	EXTREMELY UNPLEASANT	VERY UNPLEASANT	SOMEWHAT UNPLEASANT	NOT VERY UNPLEASANT	NOT AT ALL UNPLEASANT	NO ANSWER	SUM	
1	398	112	28	17	3	29	587	# RESP
	67.8	19.1	4.8	2.9	0.5	4.9	100.0	% OF CYCLE
2	315	72	28	9	3	24	451	# RESP
	69.8	16.0	6.2	2.0	0.7	5.3	100.0	% OF CYCLE
3	313	99	12	10	2	31	467	# RESP
	67.0	21.2	2.6	2.1	0.4	6.6	100.0	% OF CYCLE
4	198	46	14	6	1	7	272	# RESP
	72.8	16.9	5.1	2.2	0.4	2.6	100.0	% OF CYCLE
5	149	32	7	3	2	15	208	# RESP
	71.6	15.4	3.4	1.4	1.0	7.2	100.0	% OF CYCLE
6	287	74	13	8	3	15	400	# RESP
	71.7	18.5	3.2	2.0	0.7	3.7	100.0	% OF CYCLE
7	251	79	12	9	3	23	377	# RESP
	66.6	21.0	3.2	2.4	0.8	6.1	100.0	% OF CYCLE
8	417	120	34	9	6	24	610	# RESP
	68.4	19.7	5.6	1.5	1.0	3.9	100.0	% OF CYCLE
SUM	2328	634	148	71	23	168	3372	# RESP
	69.0	18.8	4.4	2.1	0.7	5.0	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .260159 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .897463 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

INFLUENCE OF CONSEQUENCE OF DRUNK DRIVING LAW ON SELF (ALL) BY SURVEY CYCLE (ALL)

	VERY MUCH	SOMEWHAT	VERY LITTLE	NOT AT ALL	NO ANSWER	SUM	
1	1248I	225I	52I	70I	95I	1690I	# RESP
	73.8I	13.3I	3.1I	4.1I	5.6I	100.0I	% OF CYCLE
2	977I	168I	49I	58I	103I	1355I	# RESP
	72.1I	12.4I	3.6I	4.3I	7.6I	100.0I	% OF CYCLE
3	997I	189I	43I	81I	74I	1384I	# RESP
	72.0I	13.7I	3.1I	5.9I	5.3I	100.0I	% OF CYCLE
4	1057I	184I	50I	59I	115I	1465I	# RESP
	72.2I	12.6I	3.4I	4.0I	7.8I	100.0I	% OF CYCLE
5	712I	159I	41I	51I	53I	1016I	# RESP
	70.1I	15.6I	4.0I	5.0I	5.2I	100.0I	% OF CYCLE
6	811I	134I	30I	50I	71I	1096I	# RESP
	74.0I	12.2I	2.7I	4.6I	6.5I	100.0I	% OF CYCLE
7	666I	127I	34I	53I	79I	959I	# RESP
	69.4I	13.2I	3.5I	5.5I	8.2I	100.0I	% OF CYCLE
8	637I	117I	45I	33I	47I	879I	# RESP
	72.5I	13.3I	5.1I	3.8I	5.3I	100.0I	% OF CYCLE
SUMI	7105I	1303I	344I	455I	637I	9844I	# RESP
	72.2I	13.2I	3.5I	4.6I	6.5I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .290743 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .561062 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

INFLUENCE OF CONSEQUENCE OF DRUNK DRIVING LAW ON SELF (ALL) BY SURVEY CYCLE (ALL)

	VERY MUCH	SOMEWHAT	VERY LITTLE	NOT AT ALL	NO ANSWER	SUM	
1	384I	112I	18I	29I	44I	587I	# RESP
	65.4I	19.1I	3.1I	4.9I	7.5I	100.0I	% OF CYCLE
2	309I	74I	18I	18I	32I	451I	# RESP
	68.5I	16.4I	4.0I	4.0I	7.1I	100.0I	% OF CYCLE
3	325I	72I	10I	15I	45I	467I	# RESP
	69.6I	15.4I	2.1I	3.2I	9.6I	100.0I	% OF CYCLE
4	188I	46I	8I	15I	15I	272I	# RESP
	69.1I	16.9I	2.9I	5.5I	5.5I	100.0I	% OF CYCLE
5	143I	31I	4I	8I	22I	208I	# RESP
	68.7I	14.9I	1.9I	3.8I	10.6I	100.0I	% OF CYCLE
6	288I	68I	13I	13I	18I	400I	# RESP
	72.0I	17.0I	3.2I	3.2I	4.5I	100.0I	% OF CYCLE
7	252I	76I	10I	11I	28I	377I	# RESP
	66.8I	20.2I	2.7I	2.9I	7.4I	100.0I	% OF CYCLE
8	424I	112I	18I	16I	40I	610I	# RESP
	69.5I	18.4I	3.0I	2.6I	6.6I	100.0I	% OF CYCLE
SUMI	2313I	591I	99I	125I	244I	3372I	# RESP
	68.6I	17.5I	2.9I	3.7I	7.2I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .176336 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .748715 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

SEEN TV COMMERCIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	275	58	6	339	# RESP
	81.1	17.1	1.8	100.0	% OF CYCLE
2	242	24	6	272	# RESP
	89.0	8.8	2.2	100.0	% OF CYCLE
3	245	25	3	273	# RESP
	89.7	9.2	1.1	100.0	% OF CYCLE
4	264	25	6	295	# RESP
	89.5	8.5	2.0	100.0	% OF CYCLE
5	177	23	6	206	# RESP
	85.9	11.2	2.9	100.0	% OF CYCLE
6	196	20	2	218	# RESP
	89.9	9.2	0.9	100.0	% OF CYCLE
7	162	23	6	191	# RESP
	84.8	12.0	3.1	100.0	% OF CYCLE
8	155	14	3	172	# RESP
	90.1	8.1	1.7	100.0	% OF CYCLE
SUM	1716	212	38	1966	# RESP
	87.3	10.8	1.9	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .199231 E O2   (SIGNIFICANT AT .O1 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .101133

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

SEEN TV COMMERCIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	95I	18I	4I	117I	# RESP
	I	81.2I	15.4I	3.4I	100.0I	% OF CYCLE
2	I	82I	5I	4I	91I	# RESP
	I	90.1I	5.5I	4.4I	100.0I	% OF CYCLE
3	I	87I	7I	1I	95I	# RESP
	I	91.6I	7.4I	1.1I	100.0I	% OF CYCLE
4	I	50I	5I	I	55I	# RESP
	I	90.9I	9.1I	I	100.0I	% OF CYCLE
5	I	38I	2I	1I	41I	# RESP
	I	92.7I	4.9I	2.4I	100.0I	% OF CYCLE
6	I	67I	11I	2I	80I	# RESP
	I	83.7I	13.7I	2.5I	100.0I	% OF CYCLE
7	I	73I	4I	1I	78I	# RESP
	I	93.6I	5.1I	1.3I	100.0I	% OF CYCLE
8	I	119I	4I	I	123I	# RESP
	I	96.7I	3.3I	I	100.0I	% OF CYCLE
SUM	I	611I	56I	13I	680I	# RESP
	I	89.9I	8.2I	1.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .184366 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .164005

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

SEEN TV COMMERCIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	183I	127I	29I	339I	# RESP
	54.0I	37.5I	8.6I	100.0I	% OF CYCLE
2	148I	100I	24I	272I	# RESP
	54.4I	36.8I	8.8I	100.0I	% OF CYCLE
3	156I	103I	14I	273I	# RESP
	57.1I	37.7I	5.1I	100.0I	% OF CYCLE
4	167I	98I	30I	295I	# RESP
	56.6I	33.2I	10.2I	100.0I	% OF CYCLE
5	108I	84I	14I	206I	# RESP
	52.4I	40.8I	6.8I	100.0I	% OF CYCLE
6	98I	97I	23I	218I	# RESP
	45.0I	44.5I	10.6I	100.0I	% OF CYCLE
7	101I	76I	14I	191I	# RESP
	52.9I	39.8I	7.3I	100.0I	% OF CYCLE
8	84I	73I	15I	172I	# RESP
	48.8I	42.4I	8.7I	100.0I	% OF CYCLE
SUM	1045I	758I	163I	1966I	# RESP
	53.2I	38.6I	8.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE =   .100963 E 02
DEGREES OF FREEDOM = 7

CONT COEF =   .746227 E -01

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

SEEN TV COMMERCIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	68I	40I	9I	117I	# RESP
	58.1I	34.2I	7.7I	100.0I	% OF CYCLE
2	43I	39I	9I	91I	# RESP
	47.3I	42.9I	9.9I	100.0I	% OF CYCLE
3	50I	38I	7I	95I	# RESP
	52.6I	40.0I	7.4I	100.0I	% OF CYCLE
4	30I	23I	2I	55I	# RESP
	54.5I	41.8I	3.6I	100.0I	% OF CYCLE
5	23I	15I	3I	41I	# RESP
	56.1I	36.6I	7.3I	100.0I	% OF CYCLE
6	30I	44I	6I	80I	# RESP
	37.5I	55.0I	7.5I	100.0I	% OF CYCLE
7	37I	33I	8I	78I	# RESP
	47.4I	42.3I	10.3I	100.0I	% OF CYCLE
8	58I	55I	10I	123I	# RESP
	47.2I	44.7I	8.1I	100.0I	% OF CYCLE
SUMI	339I	287I	54I	680I	# RESP
	49.9I	42.2I	7.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .104087 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .127888

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

SEEN TV COMMERCIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	110I	193I	36I	339I	# RESP
	32.4I	56.9I	10.6I	100.0I	% OF CYCLE
2	106I	142I	24I	272I	# RESP
	39.0I	52.2I	8.8I	100.0I	% OF CYCLE
3	130I	125I	18I	273I	# RESP
	47.6I	45.8I	6.6I	100.0I	% OF CYCLE
4	189I	80I	26I	295I	# RESP
	64.1I	27.1I	8.8I	100.0I	% OF CYCLE
5	122I	73I	11I	206I	# RESP
	59.2I	35.4I	5.3I	100.0I	% OF CYCLE
6	146I	59I	13I	218I	# RESP
	67.0I	27.1I	6.0I	100.0I	% OF CYCLE
7	137I	45I	9I	191I	# RESP
	71.7I	23.6I	4.7I	100.0I	% OF CYCLE
8	116I	48I	8I	172I	# RESP
	67.4I	27.9I	4.7I	100.0I	% OF CYCLE
SUMI	1056I	765I	145I	1966I	# RESP
	53.7I	38.9I	7.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .153582 E 03   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .278890

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

SEEN TV COMMERCIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	33I	75I	9I	117I	# RESP
	28.2I	64.1I	7.7I	100.0I	% OF CYCLE
2	28I	54I	9I	91I	# RESP
	30.8I	59.3I	9.9I	100.0I	% OF CYCLE
3	41I	48I	6I	95I	# RESP
	43.2I	50.5I	6.3I	100.0I	% OF CYCLE
4	17I	35I	3I	55I	# RESP
	30.9I	63.6I	5.5I	100.0I	% OF CYCLE
5	17I	20I	4I	41I	# RESP
	41.5I	48.8I	9.8I	100.0I	% OF CYCLE
6	20I	53I	7I	80I	# RESP
	25.0I	66.2I	8.7I	100.0I	% OF CYCLE
7	27I	44I	7I	78I	# RESP
	34.6I	56.4I	9.0I	100.0I	% OF CYCLE
8	36I	75I	12I	123I	# RESP
	29.3I	61.0I	9.8I	100.0I	% OF CYCLE
SUMI	219I	404I	57I	680I	# RESP
	32.2I	59.4I	8.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .102618 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .127298

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

SEEN TV COMMERCIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	208I	106I	25I	339I	# RESP
	61.4I	31.3I	7.4I	100.0I	% OF CYCLE
2	190I	68I	14I	272I	# RESP
	69.9I	25.0I	5.1I	100.0I	% OF CYCLE
3	197I	67I	9I	273I	# RESP
	72.2I	24.5I	3.3I	100.0I	% OF CYCLE
4	228I	49I	18I	295I	# RESP
	77.3I	16.6I	6.1I	100.0I	% OF CYCLE
5	147I	46I	13I	206I	# RESP
	71.4I	22.3I	6.3I	100.0I	% OF CYCLE
6	174I	37I	7I	218I	# RESP
	79.8I	17.0I	3.2I	100.0I	% OF CYCLE
7	144I	39I	8I	191I	# RESP
	75.4I	20.4I	4.2I	100.0I	% OF CYCLE
8	122I	40I	10I	172I	# RESP
	70.9I	23.3I	5.8I	100.0I	% OF CYCLE
SUMI	1410I	452I	104I	1966I	# RESP
	71.7I	23.0I	5.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .288028 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .123423

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

SEEN TV COMMERCIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	73I	37I	7I	117I	# RESP
	62.4I	31.6I	6.0I	100.0I	% OF CYCLE
2	70I	18I	3I	91I	# RESP
	76.9I	19.8I	3.3I	100.0I	% OF CYCLE
3	76I	16I	3I	95I	# RESP
	80.0I	16.8I	3.2I	100.0I	% OF CYCLE
4	45I	10I	I	55I	# RESP
	81.8I	18.2I	I	100.0I	% OF CYCLE
5	31I	8I	2I	41I	# RESP
	75.6I	19.5I	4.9I	100.0I	% OF CYCLE
6	52I	24I	4I	80I	# RESP
	65.0I	30.0I	5.0I	100.0I	% OF CYCLE
7	57I	14I	7I	78I	# RESP
	73.1I	17.9I	9.0I	100.0I	% OF CYCLE
8	91I	27I	5I	123I	# RESP
	74.0I	22.0I	4.1I	100.0I	% OF CYCLE
SUMI	495I	154I	31I	680I	# RESP
	72.8I	22.6I	4.6I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .129526 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .139883

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

HEARD RADIO COMMERCIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	190I	137I	12I	339I	# RESP
	I	56.0I	40.4I	3.5I	100.0I	% OF CYCLE
2	I	169I	88I	15I	272I	# RESP
	I	62.1I	32.4I	5.5I	100.0I	% OF CYCLE
3	I	193I	74I	6I	273I	# RESP
	I	70.7I	27.1I	2.2I	100.0I	% OF CYCLE
4	I	188I	86I	21I	295I	# RESP
	I	63.7I	29.2I	7.1I	100.0I	% OF CYCLE
5	I	137I	56I	13I	206I	# RESP
	I	66.5I	27.2I	6.3I	100.0I	% OF CYCLE
6	I	135I	74I	9I	218I	# RESP
	I	61.9I	33.9I	4.1I	100.0I	% OF CYCLE
7	I	130I	53I	8I	191I	# RESP
	I	68.1I	27.7I	4.2I	100.0I	% OF CYCLE
8	I	107I	57I	8I	172I	# RESP
	I	62.2I	33.1I	4.7I	100.0I	% OF CYCLE
SUM	I	1249I	625I	92I	1966I	# RESP
	I	63.5I	31.8I	4.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .188849 E 02   (SIGNIFICANT AT .01 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .998838 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

HEARD RADIO COMMERCIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	69I	39I	9I	117I	# RESP
	I	59.0I	33.3I	7.7I	100.0I	% OF CYCLE
2	I	66I	21I	4I	91I	# RESP
	I	72.5I	23.1I	4.4I	100.0I	% OF CYCLE
3	I	74I	16I	5I	95I	# RESP
	I	77.9I	16.8I	5.3I	100.0I	% OF CYCLE
4	I	45I	9I	1I	55I	# RESP
	I	81.8I	16.4I	1.8I	100.0I	% OF CYCLE
5	I	29I	10I	2I	41I	# RESP
	I	70.7I	24.4I	4.9I	100.0I	% OF CYCLE
6	I	52I	26I	2I	80I	# RESP
	I	65.0I	32.5I	2.5I	100.0I	% OF CYCLE
7	I	60I	17I	1I	78I	# RESP
	I	76.9I	21.8I	1.3I	100.0I	% OF CYCLE
8	I	91I	30I	2I	123I	# RESP
	I	74.0I	24.4I	1.6I	100.0I	% OF CYCLE
SUM	I	486I	168I	26I	680I	# RESP
	I	71.5I	24.7I	3.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .144731 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .147143

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

HEARD RADIO COMMERCIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	158I	157I	24I	339I	# RESP
	I	46.6I	46.3I	7.1I	100.0I	% OF CYCLE
2	I	125I	123I	24I	272I	# RESP
	I	46.0I	45.2I	8.8I	100.0I	% OF CYCLE
3	I	132I	128I	13I	273I	# RESP
	I	48.4I	46.9I	4.8I	100.0I	% OF CYCLE
4	I	139I	127I	29I	295I	# RESP
	I	47.1I	43.1I	9.8I	100.0I	% OF CYCLE
5	I	96I	92I	18I	206I	# RESP
	I	46.6I	44.7I	8.7I	100.0I	% OF CYCLE
6	I	91I	104I	23I	218I	# RESP
	I	41.7I	47.7I	10.6I	100.0I	% OF CYCLE
7	I	91I	89I	11I	191I	# RESP
	I	47.6I	46.6I	5.8I	100.0I	% OF CYCLE
8	I	69I	87I	16I	172I	# RESP
	I	40.1I	50.6I	9.3I	100.0I	% OF CYCLE
SUMI		901I	907I	158I	1966I	# RESP
	I	45.8I	46.1I	8.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .365324 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .449057 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

HEARD RADIO COMMERCIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	62I	45I	10I	117I	# RESP
	53.0I	38.5I	8.5I	100.0I	% OF CYCLE
2	48I	36I	7I	91I	# RESP
	52.7I	39.6I	7.7I	100.0I	% OF CYCLE
3	52I	35I	8I	95I	# RESP
	54.7I	36.8I	8.4I	100.0I	% OF CYCLE
4	37I	16I	2I	55I	# RESP
	67.3I	29.1I	3.6I	100.0I	% OF CYCLE
5	19I	17I	5I	41I	# RESP
	46.3I	41.5I	12.2I	100.0I	% OF CYCLE
6	33I	43I	4I	80I	# RESP
	41.2I	53.7I	5.0I	100.0I	% OF CYCLE
7	39I	33I	6I	78I	# RESP
	50.0I	42.3I	7.7I	100.0I	% OF CYCLE
8	51I	64I	8I	123I	# RESP
	41.5I	52.0I	6.5I	100.0I	% OF CYCLE
SUMI	341I	289I	50I	680I	# RESP
	50.1I	42.5I	7.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .152662 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .153814

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

HEARD RADIO COMMERCIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	82I	223I	34I	339I	# RESP
	I	24.2I	65.8I	10.0I	100.0I	% OF CYCLE
2	I	86I	158I	28I	272I	# RESP
	I	31.6I	58.1I	10.3I	100.0I	% OF CYCLE
3	I	111I	146I	16I	273I	# RESP
	I	40.7I	53.5I	5.9I	100.0I	% OF CYCLE
4	I	145I	119I	31I	295I	# RESP
	I	49.2I	40.3I	10.5I	100.0I	% OF CYCLE
5	I	94I	93I	19I	206I	# RESP
	I	45.6I	45.1I	9.2I	100.0I	% OF CYCLE
6	I	113I	90I	15I	218I	# RESP
	I	51.8I	41.3I	6.9I	100.0I	% OF CYCLE
7	I	109I	74I	8I	191I	# RESP
	I	57.1I	38.7I	4.2I	100.0I	% OF CYCLE
8	I	81I	75I	16I	172I	# RESP
	I	47.1I	43.6I	9.3I	100.0I	% OF CYCLE
SUM	I	821I	978I	167I	1966I	# RESP
	I	41.8I	49.7I	8.5I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .902787 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .218597

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

HEARD RADIO COMMERCIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	29I	71I	17I	117I	# RESP
	I	24.8I	60.7I	14.5I	100.0I	% OF CYCLE
2	I	28I	52I	11I	91I	# RESP
	I	30.8I	57.1I	12.1I	100.0I	% OF CYCLE
3	I	37I	48I	10I	95I	# RESP
	I	38.9I	50.5I	10.5I	100.0I	% OF CYCLE
4	I	19I	34I	2I	55I	# RESP
	I	34.5I	61.8I	3.6I	100.0I	% OF CYCLE
5	I	11I	25I	5I	41I	# RESP
	I	26.8I	61.0I	12.2I	100.0I	% OF CYCLE
6	I	17I	57I	6I	80I	# RESP
	I	21.2I	71.2I	7.5I	100.0I	% OF CYCLE
7	I	22I	45I	11I	78I	# RESP
	I	28.2I	57.7I	14.1I	100.0I	% OF CYCLE
8	I	28I	83I	12I	123I	# RESP
	I	22.8I	67.5I	9.8I	100.0I	% OF CYCLE
SUM	I	191I	415I	74I	680I	# RESP
	I	28.1I	61.0I	10.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .114945 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .136436

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

HEARD RADIO COMMERCIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	159I	153I	27I	339I	# RESP
	46.9I	45.1I	8.0I	100.0I	% OF CYCLE
2	136I	115I	21I	272I	# RESP
	50.0I	42.3I	7.7I	100.0I	% OF CYCLE
3	159I	104I	10I	273I	# RESP
	58.2I	38.1I	3.7I	100.0I	% OF CYCLE
4	180I	86I	29I	295I	# RESP
	61.0I	29.2I	9.8I	100.0I	% OF CYCLE
5	122I	66I	18I	206I	# RESP
	59.2I	32.0I	8.7I	100.0I	% OF CYCLE
6	132I	73I	13I	218I	# RESP
	60.6I	33.5I	6.0I	100.0I	% OF CYCLE
7	117I	64I	10I	191I	# RESP
	61.3I	33.5I	5.2I	100.0I	% OF CYCLE
8	92I	66I	14I	172I	# RESP
	53.5I	38.4I	8.1I	100.0I	% OF CYCLE
SUMI	1097I	727I	142I	1966I	# RESP
	55.8I	37.0I	7.2I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .260693 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .118706

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

HEARD RADIO COMMERCIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	60I	43I	14I	117I	# RESP
	I	51.3I	36.8I	12.0I	100.0I	% OF CYCLE
2	I	52I	31I	8I	91I	# RESP
	I	57.1I	34.1I	8.8I	100.0I	% OF CYCLE
3	I	59I	29I	7I	95I	# RESP
	I	62.1I	30.5I	7.4I	100.0I	% OF CYCLE
4	I	38I	16I	1I	55I	# RESP
	I	69.1I	29.1I	1.8I	100.0I	% OF CYCLE
5	I	22I	15I	4I	41I	# RESP
	I	53.7I	36.6I	9.8I	100.0I	% OF CYCLE
6	I	48I	31I	1I	80I	# RESP
	I	60.0I	38.7I	1.2I	100.0I	% OF CYCLE
7	I	45I	25I	8I	78I	# RESP
	I	57.7I	32.1I	10.3I	100.0I	% OF CYCLE
8	I	71I	43I	9I	123I	# RESP
	I	57.7I	35.0I	7.3I	100.0I	% OF CYCLE
SUMI		395I	233I	52I	680I	# RESP
	I	58.1I	34.3I	7.6I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .331407 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .724532 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

READ ANY PRINTED MATERIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	230	98	11	339	# RESP
	67.8	28.9	3.2	100.0	% OF CYCLE
2	188	69	15	272	# RESP
	69.1	25.4	5.5	100.0	% OF CYCLE
3	186	82	5	273	# RESP
	68.1	30.0	1.8	100.0	% OF CYCLE
4	223	56	16	295	# RESP
	75.6	19.0	5.4	100.0	% OF CYCLE
5	154	43	9	206	# RESP
	74.8	20.9	4.4	100.0	% OF CYCLE
6	159	47	12	218	# RESP
	72.9	21.6	5.5	100.0	% OF CYCLE
7	142	38	11	191	# RESP
	74.3	19.9	5.8	100.0	% OF CYCLE
8	131	33	8	172	# RESP
	76.2	19.2	4.7	100.0	% OF CYCLE
SUM	1413	466	87	1966	# RESP
	71.9	23.7	4.4	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .178932 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .971230 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

READ ANY PRINTED MATERIALS REGARDING (E): DEATH AND INJURIES DUE TO DRUNK DRIVING BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	78I	34I	5I	117I	# RESP
	66.7I	29.1I	4.3I	100.0I	% OF CYCLE
2	57I	29I	5I	91I	# RESP
	62.6I	31.9I	5.5I	100.0I	% OF CYCLE
3	76I	17I	2I	95I	# RESP
	80.0I	17.9I	2.1I	100.0I	% OF CYCLE
4	41I	13I	1I	55I	# RESP
	74.5I	23.6I	1.8I	100.0I	% OF CYCLE
5	29I	9I	3I	41I	# RESP
	70.7I	22.0I	7.3I	100.0I	% OF CYCLE
6	50I	26I	4I	80I	# RESP
	62.5I	32.5I	5.0I	100.0I	% OF CYCLE
7	62I	13I	3I	78I	# RESP
	79.5I	16.7I	3.8I	100.0I	% OF CYCLE
8	89I	29I	5I	123I	# RESP
	72.4I	23.6I	4.1I	100.0I	% OF CYCLE
SUMI	482I	170I	28I	680I	# RESP
	70.9I	25.0I	4.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .125511 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .137429

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

READ ANY PRINTED MATERIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	194I	121I	24I	339I	# RESP
	I	57.2I	35.7I	7.1I	100.0I	% OF CYCLE
2	I	149I	97I	26I	272I	# RESP
	I	54.8I	35.7I	9.6I	100.0I	% OF CYCLE
3	I	146I	110I	17I	273I	# RESP
	I	53.5I	40.3I	6.2I	100.0I	% OF CYCLE
4	I	174I	98I	23I	295I	# RESP
	I	59.0I	33.2I	7.8I	100.0I	% OF CYCLE
5	I	113I	77I	16I	206I	# RESP
	I	54.9I	37.4I	7.8I	100.0I	% OF CYCLE
6	I	114I	81I	23I	218I	# RESP
	I	52.3I	37.2I	10.6I	100.0I	% OF CYCLE
7	I	118I	60I	13I	191I	# RESP
	I	61.8I	31.4I	6.8I	100.0I	% OF CYCLE
8	I	98I	59I	15I	172I	# RESP
	I	57.0I	34.3I	8.7I	100.0I	% OF CYCLE
SUMI		1106I	703I	157I	1966I	# RESP
	I	56.3I	35.8I	8.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .570433 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .560659 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

READ ANY PRINTED MATERIALS REGARDING (E): THE LEGAL DRINKING AGE BY SURVEY CYCLE (ALL)

		YES	NO	NO. ANSWER	SUM	
1	I	77I	33I	7I	117I	# RESP
	I	65.8I	28.2I	6.0I	100.0I	% OF CYCLE
2	I	53I	32I	6I	91I	# RESP
	I	58.2I	35.2I	6.6I	100.0I	% OF CYCLE
3	I	65I	24I	6I	95I	# RESP
	I	68.4I	25.3I	6.3I	100.0I	% OF CYCLE
4	I	33I	20I	2I	55I	# RESP
	I	60.0I	36.4I	3.6I	100.0I	% OF CYCLE
5	I	30I	8I	3I	41I	# RESP
	I	73.2I	19.5I	7.3I	100.0I	% OF CYCLE
6	I	39I	37I	4I	80I	# RESP
	I	48.7I	46.2I	5.0I	100.0I	% OF CYCLE
7	I	49I	22I	7I	78I	# RESP
	I	62.8I	28.2I	9.0I	100.0I	% OF CYCLE
8	I	67I	45I	11I	123I	# RESP
	I	54.5I	36.6I	8.9I	100.0I	% OF CYCLE
SUM	I	413I	221I	46I	680I	# RESP
	I	60.7I	32.5I	6.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .1552.14 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .154586

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MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

READ ANY PRINTED MATERIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	124I	179I	36I	339I	# RESP
	I	36.6I	52.8I	10.6I	100.0I	% OF CYCLE
2	I	103I	139I	30I	272I	# RESP
	I	37.9I	51.1I	11.0I	100.0I	% OF CYCLE
3	I	120I	137I	16I	273I	# RESP
	I	44.0I	50.2I	5.9I	100.0I	% OF CYCLE
4	I	172I	97I	26I	295I	# RESP
	I	58.3I	32.9I	8.8I	100.0I	% OF CYCLE
5	I	122I	68I	16I	206I	# RESP
	I	59.2I	33.0I	7.8I	100.0I	% OF CYCLE
6	I	141I	61I	16I	218I	# RESP
	I	64.7I	28.0I	7.3I	100.0I	% OF CYCLE
7	I	124I	55I	12I	191I	# RESP
	I	64.9I	28.8I	6.3I	100.0I	% OF CYCLE
8	I	112I	48I	12I	172I	# RESP
	I	65.1I	27.9I	7.0I	100.0I	% OF CYCLE
SUM	I	1018I	784I	164I	1966I	# RESP
	I	51.8I	39.9I	8.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .108038 E 03   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .237830

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

READ ANY PRINTED MATERIALS REGARDING (E): CONVICTED DRUNK DRIVERS GUARANTEED TO LOSE THEIR LICENSES BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	46I	62I	9I	117I	# RESP
	I	39.3I	53.0I	7.7I	100.0I	% OF CYCLE
2	I	27I	54I	10I	91I	# RESP
	I	29.7I	59.3I	11.0I	100.0I	% OF CYCLE
3	I	46I	45I	4I	95I	# RESP
	I	48.4I	47.4I	4.2I	100.0I	% OF CYCLE
4	I	22I	31I	2I	55I	# RESP
	I	40.0I	56.4I	3.6I	100.0I	% OF CYCLE
5	I	19I	18I	4I	41I	# RESP
	I	46.3I	43.9I	9.8I	100.0I	% OF CYCLE
6	I	27I	45I	8I	80I	# RESP
	I	33.7I	56.2I	10.0I	100.0I	% OF CYCLE
7	I	39I	31I	8I	78I	# RESP
	I	50.0I	39.7I	10.3I	100.0I	% OF CYCLE
8	I	40I	68I	15I	123I	# RESP
	I	32.5I	55.3I	12.2I	100.0I	% OF CYCLE
SUM	I	266I	354I	60I	680I	# RESP
	I	39.1I	52.1I	8.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .133896 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .145395

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

READ ANY PRINTED MATERIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	182I	130I	27I	339I	# RESP
	53.7I	38.3I	8.0I	100.0I	% OF CYCLE
2	162I	85I	25I	272I	# RESP
	59.6I	31.2I	9.2I	100.0I	% OF CYCLE
3	170I	95I	8I	273I	# RESP
	62.3I	34.8I	2.9I	100.0I	% OF CYCLE
4	202I	72I	21I	295I	# RESP
	68.5I	24.4I	7.1I	100.0I	% OF CYCLE
5	137I	57I	12I	206I	# RESP
	66.5I	27.7I	5.8I	100.0I	% OF CYCLE
6	150I	50I	18I	218I	# RESP
	68.8I	22.9I	8.3I	100.0I	% OF CYCLE
7	140I	40I	11I	191I	# RESP
	73.3I	20.9I	5.8I	100.0I	% OF CYCLE
8	113I	44I	15I	172I	# RESP
	65.7I	25.6I	8.7I	100.0I	% OF CYCLE
SUMI	1256I	573I	137I	1966I	# RESP
	63.9I	29.1I	7.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .341579 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .135401

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

READ ANY PRINTED MATERIALS REGARDING (E): ENFORCEMENT OF DRUNK DRIVING LAWS BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	73	38	6	117	# RESP
	62.4	32.5	5.1	100.0	% OF CYCLE
2	47	38	6	91	# RESP
	51.6	41.8	6.6	100.0	% OF CYCLE
3	70	20	5	95	# RESP
	73.7	21.1	5.3	100.0	% OF CYCLE
4	37	16	2	55	# RESP
	67.3	29.1	3.6	100.0	% OF CYCLE
5	26	11	4	41	# RESP
	63.4	26.8	9.8	100.0	% OF CYCLE
6	46	29	5	80	# RESP
	57.5	36.2	6.2	100.0	% OF CYCLE
7	57	13	8	78	# RESP
	73.1	16.7	10.3	100.0	% OF CYCLE
8	74	39	10	123	# RESP
	60.2	31.7	8.1	100.0	% OF CYCLE
SUM	430	204	46	680	# RESP
	63.2	30.0	6.8	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .182812 E 02   (SIGNIFICANT AT .05 LEVEL)
DEGREES OF FREEDOM = 7

CONT COEF = .167411

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): FINE (A) BY SURVEY CYCLE (ALL)

```
                YES           NO        ALL BLANK       SUM
     I------------I------------I------------I------------I
 1   I       265I         31I          5I         301I # RESP
     I      88.0I       10.3I        1.7I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 2   I       241I         25I          4I         270I # RESP
     I      89.3I        9.3I        1.5I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 3   I       207I         27I          4I         238I # RESP
     I      87.0I       11.3I        1.7I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 4   I       253I         35I          5I         293I # RESP
     I      86.3I       11.9I        1.7I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 5   I       178I         26I          1I         205I # RESP
     I      86.8I       12.7I        0.5I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 6   I       182I         29I          8I         219I # RESP
     I      83.1I       13.2I        3.7I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 7   I       162I         31I          5I         198I # RESP
     I      81.8I       15.7I        2.5I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
 8   I       154I         25I          2I         181I # RESP
     I      85.1I       13.8I        1.1I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
SUMI      1642I        229I         34I        1905I # RESP
     I      86.2I       12.0I        1.8I      100.0I % OF CYCLE
     I------------I------------I------------I------------I
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STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .141839 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .859684 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): FINE (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	100	5	3	2	110	# RESP
	90.9	4.5	2.7	1.8	100.0	% OF CYCLE
2	85	5	2		92	# RESP
	92.4	5.4	2.2		100.0	% OF CYCLE
3	87	5	3		95	# RESP
	91.6	5.3	3.2		100.0	% OF CYCLE
4	53	2	1		56	# RESP
	94.6	3.6	1.8		100.0	% OF CYCLE
5	34	5	1		40	# RESP
	85.0	12.5	2.5		100.0	% OF CYCLE
6	73	1	5		79	# RESP
	92.4	1.3	6.3		100.0	% OF CYCLE
7	68	6	3		77	# RESP
	88.3	7.8	3.9		100.0	% OF CYCLE
8	109	6	5		120	# RESP
	90.8	5.0	4.2		100.0	% OF CYCLE
SUM	609	35	23	2	669	# RESP
	91.0	5.2	3.4	0.3	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .216090 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .176889

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): LOSS OF LICENSE (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	SUM	
1	176	120	5	301	# RESP
	58.5	39.9	1.7	100.0	% OF CYCLE
2	177	89	4	270	# RESP
	65.6	33.0	1.5	100.0	% OF CYCLE
3	164	70	4	238	# RESP
	68.9	29.4	1.7	100.0	% OF CYCLE
4	215	73	5	293	# RESP
	73.4	24.9	1.7	100.0	% OF CYCLE
5	156	48	1	205	# RESP
	76.1	23.4	0.5	100.0	% OF CYCLE
6	180	31	8	219	# RESP
	82.2	14.2	3.7	100.0	% OF CYCLE
7	163	30	5	198	# RESP
	82.3	15.2	2.5	100.0	% OF CYCLE
8	147	32	2	181	# RESP
	81.2	17.7	1.1	100.0	% OF CYCLE
SUM	1378	493	34	1905	# RESP
	72.3	25.9	1.8	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .805368 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 14

CONT COEF = .201399

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): LOSS OF LICENSE (A) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	55I	50I	3I	2I	110I	# RESP
	I	50.0I	45.5I	2.7I	1.8I	100.0I	% OF CYCLE
2	I	59I	31I	2I	I	92I	# RESP
	I	64.1I	33.7I	2.2I	I	100.0I	% OF CYCLE
3	I	57I	35I	3I	I	95I	# RESP
	I	60.0I	36.8I	3.2I	I	100.0I	% OF CYCLE
4	I	43I	12I	1I	I	56I	# RESP
	I	76.8I	21.4I	1.8I	I	100.0I	% OF CYCLE
5	I	24I	15I	1I	I	40I	# RESP
	I	60.0I	37.5I	2.5I	I	100.0I	% OF CYCLE
6	I	52I	22I	5I	I	79I	# RESP
	I	65.8I	27.8I	6.3I	I	100.0I	% OF CYCLE
7	I	51I	23I	3I	I	77I	# RESP
	I	66.2I	29.9I	3.9I	I	100.0I	% OF CYCLE
8	I	74I	41I	5I	I	120I	# RESP
	I	61.7I	34.2I	4.2I	I	100.0I	% OF CYCLE
SUM	I	415I	229I	23I	2I	669I	# RESP
	I	62.0I	34.2I	3.4I	0.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE =   .269861 E 02
DEGREES OF FREEDOM = 21

CONT COEF =   .196911

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): EXTRA INSURANCE COSTS (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	SUM	
1	80I	216I	5I	301I	# RESP
	26.6I	71.8I	1.7I	100.0I	% OF CYCLE
2	77I	189I	4I	270I	# RESP
	28.5I	70.0I	1.5I	100.0I	% OF CYCLE
3	62I	172I	4I	238I	# RESP
	26.1I	72.3I	1.7I	100.0I	% OF CYCLE
4	94I	194I	5I	293I	# RESP
	32.1I	66.2I	1.7I	100.0I	% OF CYCLE
5	68I	136I	1I	205I	# RESP
	33.2I	66.3I	0.5I	100.0I	% OF CYCLE
6	62I	149I	8I	219I	# RESP
	28.3I	68.0I	3.7I	100.0I	% OF CYCLE
7	57I	136I	5I	198I	# RESP
	28.8I	68.7I	2.5I	100.0I	% OF CYCLE
8	59I	120I	2I	181I	# RESP
	32.6I	66.3I	1.1I	100.0I	% OF CYCLE
SUMI	559I	1312I	34I	1905I	# RESP
	29.3I	68.9I	1.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .132354 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .830648 E -01

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): EXTRA INSURANCE COSTS (A) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	33I	72I	3I	2I	110I	# RESP
	I	30.0I	65.5I	2.7I	1.8I	100.0I	% OF CYCLE
2	I	32I	58I	2I	I	92I	# RESP
	I	34.8I	63.0I	2.2I	I	100.0I	% OF CYCLE
3	I	30I	62I	3I	I	95I	# RESP
	I	31.6I	65.3I	3.2I	I	100.0I	% OF CYCLE
4	I	27I	28I	1I	I	56I	# RESP
	I	48.2I	50.0I	1.8I	I	100.0I	% OF CYCLE
5	I	14I	25I	1I	I	40I	# RESP
	I	35.0I	62.5I	2.5I	I	100.0I	% OF CYCLE
6	I	30I	44I	5I	I	79I	# RESP
	I	38.0I	55.7I	6.3I	I	100.0I	% OF CYCLE
7	I	31I	43I	3I	I	77I	# RESP
	I	40.3I	55.8I	3.9I	I	100.0I	% OF CYCLE
8	I	35I	80I	5I	I	120I	# RESP
	I	29.2I	66.7I	4.2I	I	100.0I	% OF CYCLE
SUM	I	232I	412I	23I	2I	669I	# RESP
	I	34.7I	61.6I	3.4I	0.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .224765 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .180292

B-42

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): VEHICLE IMPOUNDED (A) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	SUM	
1	I	12I	284I	5I	301I	# RESP
	I	4.0I	94.4I	1.7I	100.0I	% OF CYCLE
2	I	13I	253I	4I	270I	# RESP
	I	4.8I	93.7I	1.5I	100.0I	% OF CYCLE
3	I	25I	209I	4I	238I	# RESP
	I	10.5I	87.8I	1.7I	100.0I	% OF CYCLE
4	I	28I	260I	5I	293I	# RESP
	I	9.6I	88.7I	1.7I	100.0I	% OF CYCLE
5	I	13I	191I	1I	205I	# RESP
	I	6.3I	93.2I	0.5I	100.0I	% OF CYCLE
6	I	11I	200I	8I	219I	# RESP
	I	5.0I	91.3I	3.7I	100.0I	% OF CYCLE
7	I	13I	180I	5I	198I	# RESP
	I	6.6I	90.9I	2.5I	100.0I	% OF CYCLE
8	I	12I	167I	2I	181I	# RESP
	I	6.6I	92.3I	1.1I	100.0I	% OF CYCLE
SUM	I	127I	1744I	34I	1905I	# RESP
	I	6.7I	91.5I	1.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .230534 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .109347

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): VEHICLE IMPOUNDED (A) BY SURVEY CYCLE (ALL)

<div style="margin-left:2em;">

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	6I	99I	3I	2I	110I	# RESP
	I	5.5I	90.0I	2.7I	1.8I	100.0I	% OF CYCLE
2	I	4I	86I	2I	I	92I	# RESP
	I	4.3I	93.5I	2.2I	I	100.0I	% OF CYCLE
3	I	6I	86I	3I	I	95I	# RESP
	I	6.3I	90.5I	3.2I	I	100.0I	% OF CYCLE
4	I	11I	44I	1I	I	56I	# RESP
	I	19.6I	78.6I	1.8I	I	100.0I	% OF CYCLE
5	I	3I	36I	1I	I	40I	# RESP
	I	7.5I	90.0I	2.5I	I	100.0I	% OF CYCLE
6	I	10I	64I	5I	I	79I	# RESP
	I	12.7I	81.0I	6.3I	I	100.0I	% OF CYCLE
7	I	7I	67I	3I	I	77I	# RESP
	I	9.1I	87.0I	3.9I	I	100.0I	% OF CYCLE
8	I	7I	108I	5I	I	120I	# RESP
	I	5.8I	90.0I	4.2I	I	100.0I	% OF CYCLE
SUM	I	54I	590I	23I	2I	669I	# RESP
	I	8.1I	88.2I	3.4I	0.3I	100.0I	% OF CYCLE

</div>

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .300714 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .207404

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): COMMUNITY SERVICE (A) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	SUM	
1	I	24I	272I	5I	301I	# RESP
	I	8.0I	90.4I	1.7I	100.0I	% OF CYCLE
2	I	26I	240I	4I	270I	# RESP
	I	9.6I	88.9I	1.5I	100.0I	% OF CYCLE
3	I	23I	211I	4I	238I	# RESP
	I	9.7I	88.7I	1.7I	100.0I	% OF CYCLE
4	I	30I	258I	5I	293I	# RESP
	I	10.2I	88.1I	1.7I	100.0I	% OF CYCLE
5	I	29I	175I	1I	205I	# RESP
	I	14.1I	85.4I	0.5I	100.0I	% OF CYCLE
6	I	19I	192I	8I	219I	# RESP
	I	8.7I	87.7I	3.7I	100.0I	% OF CYCLE
7	I	16I	177I	5I	198I	# RESP
	I	8.1I	89.4I	2.5I	100.0I	% OF CYCLE
8	I	22I	157I	2I	181I	# RESP
	I	12.2I	86.7I	1.1I	100.0I	% OF CYCLE
SUM	I	189I	1682I	34I	1905I	# RESP
	I	9.9I	88.3I	1.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .147658 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .877009 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): COMMUNITY SERVICE (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	9	96	3	2	110	# RESP
	8.2	87.3	2.7	1.8	100.0	% OF CYCLE
2	8	82	2		92	# RESP
	8.7	89.1	2.2		100.0	% OF CYCLE
3	6	86	3		95	# RESP
	6.3	90.5	3.2		100.0	% OF CYCLE
4	7	48	1		56	# RESP
	12.5	85.7	1.8		100.0	% OF CYCLE
5	4	35	1		40	# RESP
	10.0	87.5	2.5		100.0	% OF CYCLE
6	14	60	5		79	# RESP
	17.7	75.9	6.3		100.0	% OF CYCLE
7	10	64	3		77	# RESP
	13.0	83.1	3.9		100.0	% OF CYCLE
8	8	107	5		120	# RESP
	6.7	89.2	4.2		100.0	% OF CYCLE
SUM	66	578	23	2	669	# RESP
	9.9	86.4	3.4	0.3	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .239596 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .185946

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): COUNSELING/TREATMENT (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	SUM	
1 I	89I	207I	5I	301I	# RESP
I	29.6I	68.8I	1.7I	100.0I	% OF CYCLE
2 I	84I	182I	4I	270I	# RESP
I	31.1I	67.4I	1.5I	100.0I	% OF CYCLE
3 I	82I	152I	4I	238I	# RESP
I	34.5I	63.9I	1.7I	100.0I	% OF CYCLE
4 I	109I	179I	5I	293I	# RESP
I	37.2I	61.1I	1.7I	100.0I	% OF CYCLE
5 I	71I	133I	1I	205I	# RESP
I	34.6I	64.9I	0.5I	100.0I	% OF CYCLE
6 I	75I	136I	8I	219I	# RESP
I	34.2I	62.1I	3.7I	100.0I	% OF CYCLE
7 I	65I	128I	5I	198I	# RESP
I	32.8I	64.6I	2.5I	100.0I	% OF CYCLE
8 I	75I	104I	2I	181I	# RESP
I	41.4I	57.5I	1.1I	100.0I	% OF CYCLE
SUMI	650I	1221I	34I	1905I	# RESP
I	34.1I	64.1I	1.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .171135 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .943582 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): COUNSELING/TREATMENT (A) B) SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	47I	58I	3I	2I	110I	# RESP
	I	42.7I	52.7I	2.7I	1.8I	100.0I	% OF CYCLE
2	I	50I	40I	2I	I	92I	# RESP
	I	54.3I	43.5I	2.2I	I	100.0I	% OF CYCLE
3	I	38I	54I	3I	I	95I	# RESP
	I	40.0I	56.8I	3.2I	I	100.0I	% OF CYCLE
4	I	30I	25I	1I	I	56I	# RESP
	I	53.6I	44.6I	1.8I	I	100.0I	% OF CYCLE
5	I	16I	23I	1I	I	40I	# RESP
	I	40.0I	57.5I	2.5I	I	100.0I	% OF CYCLE
6	I	31I	43I	5I	I	79I	# RESP
	I	39.2I	54.4I	6.3I	I	100.0I	% OF CYCLE
7	I	37I	37I	3I	I	77I	# RESP
	I	48.1I	48.1I	3.9I	I	100.0I	% OF CYCLE
8	I	48I	67I	5I	I	120I	# RESP
	I	40.0I	55.8I	4.2I	I	100.0I	% OF CYCLE
SUMI		297I	347I	23I	2I	669I	# RESP
	I	44.4I	51.9I	3.4I	0.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .216782 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .177163

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (AIDED RECALL): JAIL (A) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	SUM	
1	I	53I	243I	5I	301I	# RESP
	I	17.6I	80.7I	1.7I	100.0I	% OF CYCLE
2	I	55I	211I	4I	270I	# RESP
	I	20.4I	78.1I	1.5I	100.0I	% OF CYCLE
3	I	66I	168I	4I	238I	# RESP
	I	27.7I	70.6I	1.7I	100.0I	% OF CYCLE
4	I	70I	218I	5I	293I	# RESP
	I	23.9I	74.4I	1.7I	100.0I	% OF CYCLE
5	I	49I	155I	1I	205I	# RESP
	I	23.9I	75.6I	0.5I	100.0I	% OF CYCLE
6	I	49I	162I	8I	219I	# RESP
	I	22.4I	74.0I	3.7I	100.0I	% OF CYCLE
7	I	40I	153I	5I	198I	# RESP
	I	20.2I	77.3I	2.5I	100.0I	% OF CYCLE
8	I	49I	130I	2I	181I	# RESP
	I	27.1I	71.8I	1.1I	100.0I	% OF CYCLE
SUM	I	431I	1440I	34I	1905I	# RESP
	I	22.6I	75.6I	1.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .192544 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .100031

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (AIDED RECALL): JAIL (A) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	17I	88I	3I	2I	110I	# RESP
	15.5I	80.0I	2.7I	1.8I	100.0I	% OF CYCLE
2	14I	76I	2I	I	92I	# RESP
	15.2I	82.6I	2.2I	I	100.0I	% OF CYCLE
3	14I	78I	3I	I	95I	# RESP
	14.7I	82.1I	3.2I	I	100.0I	% OF CYCLE
4	14I	41I	1I	I	56I	# RESP
	25.0I	73.2I	1.8I	I	100.0I	% OF CYCLE
5	6I	33I	1I	I	40I	# RESP
	15.0I	82.5I	2.5I	I	100.0I	% OF CYCLE
6	19I	55I	5I	I	79I	# RESP
	24.1I	69.6I	6.3I	I	100.0I	% OF CYCLE
7	18I	56I	3I	I	77I	# RESP
	23.4I	72.7I	3.9I	I	100.0I	% OF CYCLE
8	22I	93I	5I	I	120I	# RESP
	18.3I	77.5I	4.2I	I	100.0I	% OF CYCLE
SUMI	124I	520I	23I	2I	669I	# RESP
	18.5I	77.7I	3.4I	0.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .208988 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .174048

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

PERCENT OF DRUNK DRIVERS ARRESTED IN TYPICAL NIGHT (A) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1	2	193	70	19	3	1	2	11	301	# RESP
	0.7	64.1	23.3	6.3	1.0	0.3	0.7	3.7	100.0	% OF CYCLE
2	3	158	69	25	5	3	3	4	270	# RESP
	1.1	58.5	25.6	9.3	1.9	1.1	1.1	1.5	100.0	% OF CYCLE
3	2	139	62	22	2	1	3	7	238	# RESP
	0.8	58.4	26.1	9.2	0.8	0.4	1.3	2.9	100.0	% OF CYCLE
4	5	149	74	33	11	1	7	13	293	# RESP
	1.7	50.9	25.3	11.3	3.8	0.3	2.4	4.4	100.0	% OF CYCLE
5	1	109	48	26	10	3	6	2	205	# RESP
	0.5	53.2	23.4	12.7	4.9	1.5	2.9	1.0	100.0	% OF CYCLE
6	1	115	53	23	10	3	8	6	219	# RESP
	0.5	52.5	24.2	10.5	4.6	1.4	3.7	2.7	100.0	% OF CYCLE
7	1	105	47	21	9	4	3	8	198	# RESP
	0.5	53.0	23.7	10.6	4.5	2.0	1.5	4.0	100.0	% OF CYCLE
8	1	92	53	20	4	2	4	5	181	# RESP
	0.6	50.8	29.3	11.0	2.2	1.1	2.2	2.8	100.0	% OF CYCLE
SUM	16	1060	476	189	54	18	36	56	1905	# RESP
	0.8	55.6	25.0	9.9	2.8	0.9	1.9	2.9	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .523552 E 02
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = .112985 E 01

CONT COEF = .165939

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

PERCENT OF DRUNK DRIVERS ARRESTED IN TYPICAL NIGHT (A) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1		69	19	8	3	2		9	110	# RESP
		62.7	17.3	7.3	2.7	1.8		8.2	100.0	% OF CYCLE
2	1	49	22	13			3	4	92	# RESP
	1.1	53.3	23.9	14.1			3.3	4.3	100.0	% OF CYCLE
3	1	66	12	7	4			5	95	# RESP
	1.1	69.5	12.6	7.4	4.2			5.3	100.0	% OF CYCLE
4		39	8	6		1		2	56	# RESP
		69.6	14.3	10.7		1.8		3.6	100.0	% OF CYCLE
5		23	9	4	1			3	40	# RESP
		57.5	22.5	10.0	2.5			7.5	100.0	% OF CYCLE
6		48	18	9	3			1	79	# RESP
		60.8	22.8	11.4	3.8			1.3	100.0	% OF CYCLE
7	2	43	16	6	4	1	1	4	77	# RESP
	2.6	55.8	20.8	7.8	5.2	1.3	1.3	5.2	100.0	% OF CYCLE
8		66	33	5	4	1	2	9	120	# RESP
		55.0	27.5	4.2	3.3	0.8	1.7	7.5	100.0	% OF CYCLE
SUM	4	403	137	58	19	5	6	37	669	# RESP
	0.6	60.2	20.5	8.7	2.8	0.7	0.9	5.5	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .492235 E 02
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = .788148

CONT COEF = .268807

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

PERCENT OF ARRESTED DRUNK DRIVERS CONVICTED (A) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1		120	64	36	24	41	4	12	301	# RESP
		39.9	21.3	12.0	8.0	13.6	1.3	4.0	100.0	% OF CYCLE
2	3	90	68	41	24	32	8	4	270	# RESP
	1.1	33.3	25.2	15.2	8.9	11.9	3.0	1.5	100.0	% OF CYCLE
3	3	73	61	36	22	25	11	7	239	# RESP
	1.3	30.7	25.6	15.1	9.2	10.5	4.6	2.9	100.0	% OF CYCLE
4	5	85	46	44	40	41	17	15	293	# RESP
	1.7	29.0	15.7	15.0	13.7	14.0	5.8	5.1	100.0	% OF CYCLE
5	1	38	52	44	19	30	18	3	205	# RESP
	0.5	18.5	25.4	21.5	9.3	14.6	8.8	1.5	100.0	% OF CYCLE
6	1	60	35	30	34	34	19	6	219	# RESP
	0.5	27.4	16.0	13.7	15.5	15.5	8.7	2.7	100.0	% OF CYCLE
7	3	46	32	27	33	31	18	8	198	# RESP
	1.5	23.2	16.2	13.6	16.7	15.7	9.1	4.0	100.0	% OF CYCLE
8	1	45	31	34	19	32	15	4	181	# RESP
	0.6	24.9	17.1	18.8	10.5	17.7	8.3	2.2	100.0	% OF CYCLE
SUM	17	557	389	292	215	266	110	59	1905	# RESP
	0.9	29.2	20.4	15.3	11.3	14.0	5.8	3.1	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .106713 E 03
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = .706075 E 01   (SIGNIFICANT AT .001 LEVEL)

CONT COEF = .233770

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

PERCENT OF ARRESTED DRUNK DRIVERS CONVICTED (A) BY SURVEY CYCLE (ALL)

	0%	01% TO 19%	20% TO 39%	40% TO 59%	60% TO 79%	80% TO 99%	100%	NO ANSWER	SUM	
1		30	23	16	15	7	10	9	110	# RESP
		27.3	20.9	14.5	13.6	6.4	9.1	8.2	100.0	% OF CYCLE
2		27	16	14	13	13	5	4	92	# RESP
		29.3	17.4	15.2	14.1	14.1	5.4	4.3	100.0	% OF CYCLE
3	2	32	17	13	9	13	3	6	95	# RESP
	2.1	33.7	17.9	13.7	9.5	13.7	3.2	6.3	100.0	% OF CYCLE
4		10	7	14	7	12	3	3	56	# RESP
		17.9	12.5	25.0	12.5	21.4	5.4	5.4	100.0	% OF CYCLE
5		10	11	6	7	2	1	3	40	# RESP
		25.0	27.5	15.0	17.5	5.0	2.5	7.5	100.0	% OF CYCLE
6	1	21	14	16	10	12	2	3	79	# RESP
	1.3	26.6	17.7	20.3	12.7	15.2	2.5	3.8	100.0	% OF CYCLE
7		21	13	12	11	12	4	4	77	# RESP
		27.3	16.9	15.6	14.3	15.6	5.2	5.2	100.0	% OF CYCLE
8	1	35	25	17	11	16	5	10	120	# RESP
	0.8	29.2	20.8	14.2	9.2	13.3	4.2	8.3	100.0	% OF CYCLE
SUM	4	186	126	108	83	87	33	42	669	# RESP
	0.6	27.8	18.8	16.1	12.4	13.0	4.9	6.3	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .368154 E 02
DEGREES OF FREEDOM = 42
STANDARDIZED CHI SQUARE = -.565686

CONT COEF = .235500

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): FINE (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	138	100	79	15	332	# RESP
	41.6	30.1	23.8	4.5	100.0	% OF CYCLE
2	126	97	43	8	274	# RESP
	46.0	35.4	15.7	2.9	100.0	% OF CYCLE
3	123	103	33	13	272	# RESP
	45.2	37.9	12.1	4.8	100.0	% OF CYCLE
4	99	138	44	8	289	# RESP
	34.3	47.8	15.2	2.8	100.0	% OF CYCLE
5	59	104	26	6	195	# RESP
	30.3	53.3	13.3	3.1	100.0	% OF CYCLE
6	77	108	26	5	216	# RESP
	35.6	50.0	12.0	2.3	100.0	% OF CYCLE
7	60	95	20	8	183	# RESP
	32.8	51.9	10.9	4.4	100.0	% OF CYCLE
8	59	84	17	8	168	# RESP
	35.1	50.0	10.1	4.8	100.0	% OF CYCLE
SUM	741	829	288	71	1929	# RESP
	38.4	43.0	14.9	3.7	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .774120 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .196424

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): FINE (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1 I	62I	29I	21I	7I	119I	# RESP
I	52.1I	24.4I	17.6I	5.9I	100.0I	% OF CYCLE
2 I	41I	25I	17I	6I	89I	# RESP
I	46.1I	28.1I	19.1I	6.7I	100.0I	% OF CYCLE
3 I	59I	17I	11I	8I	95I	# RESP
I	62.1I	17.9I	11.6I	8.4I	100.0I	% OF CYCLE
4 I	26I	18I	9I	2I	55I	# RESP
I	47.3I	32.7I	16.4I	3.6I	100.0I	% OF CYCLE
5 I	26I	9I	6I	2I	43I	# RESP
I	60.5I	20.9I	14.0I	4.7I	100.0I	% OF CYCLE
6 I	50I	17I	8I	5I	80I	# RESP
I	62.5I	21.2I	10.0I	6.2I	100.0I	% OF CYCLE
7 I	38I	10I	20I	6I	74I	# RESP
I	51.4I	13.5I	27.0I	8.1I	100.0I	% OF CYCLE
8 I	60I	35I	23I	5I	123I	# RESP
I	48.8I	28.5I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI	362I	160I	115I	41I	678I	# RESP
I	53.4I	23.6I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .256544 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .190942

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): LOSS OF LICENSE (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	158I	80I	79I	15I	332I	# RESP
	47.6I	24.1I	23.8I	4.5I	100.0I	% OF CYCLE
2	155I	68I	43I	8I	274I	# RESP
	56.6I	24.8I	15.7I	2.9I	100.0I	% OF CYCLE
3	162I	64I	33I	13I	272I	# RESP
	59.6I	23.5I	12.1I	4.8I	100.0I	% OF CYCLE
4	202I	35I	44I	8I	289I	# RESP
	69.9I	12.1I	15.2I	2.8I	100.0I	% OF CYCLE
5	142I	21I	26I	6I	195I	# RESP
	72.8I	10.8I	13.3I	3.1I	100.0I	% OF CYCLE
6	150I	35I	26I	5I	216I	# RESP
	69.4I	16.2I	12.0I	2.3I	100.0I	% OF CYCLE
7	137I	18I	20I	8I	183I	# RESP
	74.9I	9.8I	10.9I	4.4I	100.0I	% OF CYCLE
8	115I	28I	17I	8I	168I	# RESP
	68.5I	16.7I	10.1I	4.8I	100.0I	% OF CYCLE
SUMI	1221I	349I	288I	71I	1929I	# RESP
	63.3I	18.1I	14.9I	3.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .928634 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .214312

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY. = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): LOSS OF LICENSE (C) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	58I	33I	21I	7I	119I	# RESP
	I	48.7I	27.7I	17.6I	5.9I	100.0I	% OF CYCLE
2	I	41I	25I	17I	6I	89I	# RESP
	I	46.1I	28.1I	19.1I	6.7I	100.0I	% OF CYCLE
3	I	54I	22I	11I	8I	95I	# RESP
	I	56.8I	23.2I	11.6I	8.4I	100.0I	% OF CYCLE
4	I	27I	17I	9I	2I	55I	# RESP
	I	49.1I	30.9I	16.4I	3.6I	100.0I	% OF CYCLE
5	I	20I	15I	6I	2I	43I	# RESP
	I	46.5I	34.9I	14.0I	4.7I	100.0I	% OF CYCLE
6	I	40I	27I	8I	5I	80I	# RESP
	I	50.0I	33.7I	10.0I	6.2I	100.0I	% OF CYCLE
7	I	25I	23I	20I	6I	74I	# RESP
	I	33.8I	31.1I	27.0I	8.1I	100.0I	% OF CYCLE
8	I	51I	44I	23I	5I	123I	# RESP
	I	41.5I	35.8I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI		316I	206I	115I	41I	678I	# RESP
	I	46.6I	30.4I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .216907 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .176070

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): EXTRA INSURANCE COSTS (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	1I	237I	79I	15I	332I	# RESP
	0.3I	71.4I	23.8I	4.5I	100.0I	% OF CYCLE
2	I	223I	43I	8I	274I	# RESP
	I	81.4I	15.7I	2.9I	100.0I	% OF CYCLE
3	1I	225I	33I	13I	272I	# RESP
	0.4I	82.7I	12.1I	4.8I	100.0I	% OF CYCLE
4	I	237I	44I	8I	289I	# RESP
	I	82.0I	15.2I	2.8I	100.0I	% OF CYCLE
5	I	163I	26I	6I	195I	# RESP
	I	83.6I	13.3I	3.1I	100.0I	% OF CYCLE
6	I	185I	26I	5I	216I	# RESP
	I	85.6I	12.0I	2.3I	100.0I	% OF CYCLE
7	I	155I	20I	8I	183I	# RESP
	I	84.7I	10.9I	4.4I	100.0I	% OF CYCLE
8	I	143I	17I	8I	168I	# RESP
	I	85.1I	10.1I	4.8I	100.0I	% OF CYCLE
SUM	2I	1568I	288I	71I	1929I	# RESP
	0.1I	81.3I	14.9I	3.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .395461 E 02   (SIGNIFICANT AT .01 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .141736

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MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): EXTRA INSURANCE COSTS (C) BY SURVEY CYCLE (ALL)

	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	91I	21I	7I	119I	# RESP
	76.5I	17.6I	5.9I	100.0I	% OF CYCLE
2	66I	17I	6I	89I	# RESP
	74.2I	19.1I	6.7I	100.0I	% OF CYCLE
3	76I	11I	8I	95I	# RESP
	80.0I	11.6I	8.4I	100.0I	% OF CYCLE
4	44I	9I	2I	55I	# RESP
	80.0I	16.4I	3.6I	100.0I	% OF CYCLE
5	35I	6I	2I	43I	# RESP
	81.4I	14.0I	4.7I	100.0I	% OF CYCLE
6	67I	8I	5I	80I	# RESP
	83.7I	10.0I	6.2I	100.0I	% OF CYCLE
7	48I	20I	6I	74I	# RESP
	64.9I	27.0I	8.1I	100.0I	% OF CYCLE
8	95I	23I	5I	123I	# RESP
	77.2I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI	522I	115I	41I	678I	# RESP
	77.0I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .142855 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .143650

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): VEHICLE IMPOUNDED (C) BY SURVEY CYCLE (ALL)

	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	238I	79I	15I	332I	# RESP
	71.7I	23.8I	4.5I	100.0I	% OF CYCLE
2	223I	43I	8I	274I	# RESP
	81.4I	15.7I	2.9I	100.0I	% OF CYCLE
3	226I	33I	13I	272I	# RESP
	83.1I	12.1I	4.8I	100.0I	% OF CYCLE
4	237I	44I	8I	289I	# RESP
	82.0I	15.2I	2.8I	100.0I	% OF CYCLE
5	163I	26I	6I	195I	# RESP
	83.6I	13.3I	3.1I	100.0I	% OF CYCLE
6	185I	26I	5I	216I	# RESP
	85.6I	12.0I	2.3I	100.0I	% OF CYCLE
7	155I	20I	8I	183I	# RESP
	84.7I	10.9I	4.4I	100.0I	% OF CYCLE
8	143I	17I	8I	168I	# RESP
	85.1I	10.1I	4.8I	100.0I	% OF CYCLE
SUMI	1570I	288I	71I	1929I	# RESP
	81.4I	14.9I	3.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .348859 E 02   (SIGNIFICANT AT .01 LEVEL)
DEGREES OF FREEDOM = 14

CONT COEF = .133281

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): VEHICLE IMPOUNDED (C) BY SURVEY CYCLE (ALL)

	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	91I 76.5I	21I 17.6I	7I 5.9I	119I 100.0I	# RESP % OF CYCLE
2	66I 74.2I	17I 19.1I	6I 6.7I	89I 100.0I	# RESP % OF CYCLE
3	76I 80.0I	11I 11.6I	8I 8.4I	95I 100.0I	# RESP % OF CYCLE
4	44I 80.0I	9I 16.4I	2I 3.6I	55I 100.0I	# RESP % OF CYCLE
5	35I 81.4I	6I 14.0I	2I 4.7I	43I 100.0I	# RESP % OF CYCLE
6	67I 83.7I	8I 10.0I	5I 6.2I	80I 100.0I	# RESP % OF CYCLE
7	48I 64.9I	20I 27.0I	6I 8.1I	74I 100.0I	# RESP % OF CYCLE
8	95I 77.2I	23I 18.7I	5I 4.1I	123I 100.0I	# RESP % OF CYCLE
SUM	522I 77.0I	115I 17.0I	41I 6.0I	678I 100.0I	# RESP % OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .142855 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .143650

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): COMMUNITY SERVICE (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	2	236	79	15	332	# RESP
	0.6	71.1	23.8	4.5	100.0	% OF CYCLE
2		223	43	8	274	# RESP
		81.4	15.7	2.9	100.0	% OF CYCLE
3	1	225	33	13	272	# RESP
	0.4	82.7	12.1	4.8	100.0	% OF CYCLE
4		237	44	8	289	# RESP
		82.0	15.2	2.8	100.0	% OF CYCLE
5		163	26	6	195	# RESP
		83.6	13.3	3.1	100.0	% OF CYCLE
6	1	184	26	5	216	# RESP
	0.5	85.2	12.0	2.3	100.0	% OF CYCLE
7		155	20	8	183	# RESP
		84.7	10.9	4.4	100.0	% OF CYCLE
8		143	17	8	168	# RESP
		85.1	10.1	4.8	100.0	% OF CYCLE
SUM	4	1566	288	71	1929	# RESP
	0.2	81.2	14.9	3.7	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .410609 E 02   (SIGNIFICANT AT .01 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .144369

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): COMMUNITY SERVICE (C) BY SURVEY CYCLE (ALL)

	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1 I	91I	21I	7I	119I	# RESP
I	76.5I	17.6I	5.9I	100.0I	% OF CYCLE
2 I	66I	17I	6I	89I	# RESP
I	74.2I	19.1I	6.7I	100.0I	% OF CYCLE
3 I	76I	11I	8I	95I	# RESP
I	80.0I	11.6I	8.4I	100.0I	% OF CYCLE
4 I	44I	9I	2I	55I	# RESP
I	80.0I	16.4I	3.6I	100.0I	% OF CYCLE
5 I	35I	6I	2I	43I	# RESP
I	81.4I	14.0I	4.7I	100.0I	% OF CYCLE
6 I	67I	8I	5I	80I	# RESP
I	83.7I	10.0I	6.2I	100.0I	% OF CYCLE
7 I	48I	20I	6I	74I	# RESP
I	64.9I	27.0I	8.1I	100.0I	% OF CYCLE
8 I	95I	23I	5I	123I	# RESP
I	77.2I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI	522I	115I	41I	678I	# RESP
I	77.0I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .142855 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .143650

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): COUNSELING/TREATMENT (C) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	27I	211I	79I	15I	332I	# RESP
	I	8.1I	63.6I	23.8I	4.5I	100.0I	% OF CYCLE
2	I	20I	203I	43I	8I	274I	# RESP
	I	7.3I	74.1I	15.7I	2.9I	100.0I	% OF CYCLE
3	I	12I	214I	33I	13I	272I	# RESP
	I	4.4I	78.7I	12.1I	4.8I	100.0I	% OF CYCLE
4	I	14I	223I	44I	8I	289I	# RESP
	I	4.8I	77.2I	15.2I	2.8I	100.0I	% OF CYCLE
5	I	6I	157I	26I	6I	195I	# RESP
	I	3.1I	80.5I	13.3I	3.1I	100.0I	% OF CYCLE
6	I	14I	171I	26I	5I	216I	# RESP
	I	6.5I	79.2I	12.0I	2.3I	100.0I	% OF CYCLE
7	I	4I	151I	20I	8I	183I	# RESP
	I	2.2I	82.5I	10.9I	4.4I	100.0I	% OF CYCLE
8	I	7I	136I	17I	8I	168I	# RESP
	I	4.2I	81.0I	10.1I	4.8I	100.0I	% OF CYCLE
SUMI		104I	1466I	288I	71I	1929I	# RESP
	I	5.4I	76.0I	14.9I	3.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .528731 E 02   (SIGNIFICANT AT .001 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .163335

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): COUNSELING/TREATMENT (C) BY SURVEY CYCLE (ALL)

		YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1	I	16I	75I	21I	7I	119I	# RESP
	I	13.4I	63.0I	17.6I	5.9I	100.0I	% OF CYCLE
2	I	18I	48I	17I	6I	89I	# RESP
	I	20.2I	53.9I	19.1I	6.7I	100.0I	% OF CYCLE
3	I	12I	64I	11I	8I	95I	# RESP
	I	12.6I	67.4I	11.6I	8.4I	100.0I	% OF CYCLE
4	I	11I	33I	9I	2I	55I	# RESP
	I	20.0I	60.0I	16.4I	3.6I	100.0I	% OF CYCLE
5	I	2I	33I	6I	2I	43I	# RESP
	I	4.7I	76.7I	14.0I	4.7I	100.0I	% OF CYCLE
6	I	8I	59I	8I	5I	80I	# RESP
	I	10.0I	73.7I	10.0I	6.2I	100.0I	% OF CYCLE
7	I	9I	39I	20I	6I	74I	# RESP
	I	12.2I	52.7I	27.0I	8.1I	100.0I	% OF CYCLE
8	I	8I	87I	23I	5I	123I	# RESP
	I	6.5I	70.7I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI		84I	438I	115I	41I	678I	# RESP
	I	12.4I	64.6I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .312585 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .209934

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FIRST CONVICTION PENALTIES (UNAIDED): JAIL (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1 I	36I	202I	79I	15I	332I	# RESP
I	10.8I	60.8I	23.8I	4.5I	100.0I	% OF CYCLE
2 I	35I	188I	43I	8I	274I	# RESP
I	12.8I	68.6I	15.7I	2.9I	100.0I	% OF CYCLE
3 I	43I	183I	33I	13I	272I	# RESP
I	15.8I	67.3I	12.1I	4.8I	100.0I	% OF CYCLE
4 I	34I	203I	44I	8I	289I	# RESP
I	11.8I	70.2I	15.2I	2.8I	100.0I	% OF CYCLE
5 I	22I	141I	26I	6I	195I	# RESP
I	11.3I	72.3I	13.3I	3.1I	100.0I	% OF CYCLE
6 I	18I	167I	26I	5I	216I	# RESP
I	8.3I	77.3I	12.0I	2.3I	100.0I	% OF CYCLE
7 I	16I	139I	20I	8I	183I	# RESP
I	8.7I	76.0I	10.9I	4.4I	100.0I	% OF CYCLE
8 I	21I	122I	17I	8I	168I	# RESP
I	12.5I	72.6I	10.1I	4.8I	100.0I	% OF CYCLE
SUMI	225I	1345I	288I	71I	1929I	# RESP
I	11.7I	69.7I	14.9I	3.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .450535 E 02   (SIGNIFICANT AT .01 LEVEL)
DEGREES OF FREEDOM = 21

CONT COEF = .151072

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FIRST CONVICTION PENALTIES (UNAIDED): JAIL (C) BY SURVEY CYCLE (ALL)

	YES	NO	ALL BLANK	ALL DO NOT KNOW	SUM	
1 I	12I	79I	21I	7I	119I	# RESP
I	10.1I	66.4I	17.6I	5.9I	100.0I	% OF CYCLE
2 I	6I	60I	17I	6I	89I	# RESP
I	6.7I	67.4I	19.1I	6.7I	100.0I	% OF CYCLE
3 I	6I	70I	11I	8I	95I	# RESP
I	6.3I	73.7I	11.6I	8.4I	100.0I	% OF CYCLE
4 I	2I	42I	9I	2I	55I	# RESP
I	3.6I	76.4I	16.4I	3.6I	100.0I	% OF CYCLE
5 I	3I	32I	6I	2I	43I	# RESP
I	7.0I	74.4I	14.0I	4.7I	100.0I	% OF CYCLE
6 I	9I	58I	8I	5I	80I	# RESP
I	11.2I	72.5I	10.0I	6.2I	100.0I	% OF CYCLE
7 I	14I	34I	20I	6I	74I	# RESP
I	18.9I	45.9I	27.0I	8.1I	100.0I	% OF CYCLE
8 I	17I	78I	23I	5I	123I	# RESP
I	13.8I	63.4I	18.7I	4.1I	100.0I	% OF CYCLE
SUMI	69I	453I	115I	41I	678I	# RESP
I	10.2I	66.8I	17.0I	6.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .316617 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .211223

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FREQUENCY OF VIOLATING OWI LAW IN PAST MONTH (C) BY SURVEY CYCLE (ALL)

	DAILY	2-6 TIMES PER WEEK	ONCE PER WEEK	ONCE IN TWO WEEKS	ONCE PER MONTH	NEVER	NO ANSWER	SUM	
1	1	1	9	12	44	258	7	332	# RESP
	0.3	0.3	2.7	3.6	13.3	77.7	2 1	100.0	% OF CYCLE
2	2	4	5	4	41	215	3	274	# RESP
	0.7	1.5	1.8	1.5	15.0	78.5	1.1	100.0	% OF CYCLE
3	1	4	10	12	22	218	5	272	# RESP
	0.4	1.5	3.7	4.4	8.1	80.1	1.8	100.0	% OF CYCLE
4		4	9	7	31	224	14	289	# RESP
		1.4	3.1	2.4	10.7	77.5	4.8	100.0	% OF CYCLE
5	2	3	9	7	25	145	4	195	# RESP
	1.0	1.5	4.6	3.6	12.8	74.4	2.1	100.0	% OF CYCLE
6		2	3	12	29	162	8	216	# RESP
		0.9	1.4	5.6	13.4	75.0	3.7	100.0	% OF CYCLE
7	2	3	4	7	21	142	4	183	# RESP
	1.1	1.6	2.2	3.8	11.5	77.6	2.2	100.0	% OF CYCLE
8	1	2	10	7	27	120	1	168	# RESP
	0.6	1.2	6.0	4.2	16.1	71.4	0.6	100.0	% OF CYCLE
SUM	9	23	59	68	240	1484	46	1929	# RESP
	0.5	1.2	3.1	3.5	12.4	76.9	2.4	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .367901 E 02
DEGREES OF FREEDOM = 35
STANDARDIZED CHI SQUARE = .213958

CONT COEF = .138433

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FREQUENCY OF VIOLATING OWI LAW IN PAST MONTH (C) BY SURVEY CYCLE (ALL)

	DAILY	2-6 TIMES PER WEEK	ONCE PER WEEK	ONCE IN TWO WEEKS	ONCE PER MONTH	NEVER	NO ANSWER	SUM	
1	1	1	6	4	24	81	2	119	# RESP
	0.8	0.8	5.0	3.4	20.2	68.1	1.7	100.0	% OF CYCLE
2		2	4	5	15	57	6	89	# RESP
		2.2	4.5	5.6	16.9	64.0	6.7	100.0	% OF CYCLE
3		2	6	4	18	62	3	95	# RESP
		2.1	6.3	4.2	18.9	65.3	3.2	100.0	% OF CYCLE
4		2	2	3	11	37		55	# RESP
		3.6	3.6	5.5	20.0	67.3		100.0	% OF CYCLE
5	1		3	2	10	26	1	43	# RESP
	2.3		7.0	4.7	23.3	60.5	2.3	100.0	% OF CYCLE
6		2	3	6	17	52		80	# RESP
		2.5	3.7	7.5	21.2	65.0		100.0	% OF CYCLE
7			5	4	6	54	5	74	# RESP
			6.8	5.4	8.1	73.0	6.8	100.0	% OF CYCLE
8		4	9	7	21	78	4	123	# RESP
		3.3	7.3	5.7	17.1	63.4	3.3	100.0	% OF CYCLE
SUM	2	13	38	35	122	447	21	678	# RESP
	0.3	1.9	5.6	5.2	18.0	65.9	3.1	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .244398 E 02
DEGREES OF FREEDOM = 35
STANDARDIZED CHI SQUARE = -.126218 E 01

CONT COEF = .189381

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

GET HOME AFTER DRINKING (C):   TAXI BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	44	23	43	52	79	91	332	# RESP
	13.3	6.9	13.0	15.7	23.8	27.4	100.0	% OF CYCLE
2	38	16	37	61	63	59	274	# RESP
	13.9	5.8	13.5	22.3	23.0	21.5	100.0	% OF CYCLE
3	41	17	37	52	77	48	272	# RESP
	15.1	6.2	13.6	19.1	28.3	17.6	100.0	% OF CYCLE
4	52	16	29	54	70	68	289	# RESP
	18.0	5.5	10.0	18.7	24.2	23.5	100.0	% OF CYCLE
5	33	7	16	41	51	47	195	# RESP
	16.9	3.6	8.2	21.0	26.2	24.1	100.0	% OF CYCLE
6	28	11	24	41	57	55	216	# RESP
	13.0	5.1	11.1	19.0	26.4	25.5	100.0	% OF CYCLE
7	22	8	25	38	56	34	183	# RESP
	12.0	4.4	13.7	20.8	30.6	18.6	100.0	% OF CYCLE
8	26	6	19	32	55	30	168	# RESP
	15.5	3.6	11.3	19.0	32.7	17.9	100.0	% OF CYCLE
SUM	284	104	230	371	508	432	1929	# RESP
	14.7	5.4	11.9	19.2	26.3	22.4	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .224808 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .121635

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

GET HOME AFTER DRINKING (C): TAXI BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	11I	9I	14I	14I	49I	22I	119I	# RESP
	9.2I	7.6I	11.8I	11.8I	41.2I	18.5I	100.0I	% OF CYCLE
2	15I	3I	10I	21I	25I	15I	89I	# RESP
	16.9I	3.4I	11.2I	23.6I	28.1I	16.9I	100.0I	% OF CYCLE
3	7I	I	18I	18I	30I	22I	95I	# RESP
	7.4I	I	18.9I	18.9I	31.6I	23.2I	100.0I	% OF CYCLE
4	7I	3I	3I	10I	24I	8I	55I	# RESP
	12.7I	5.5I	5.5I	18.2I	43.6I	14.5I	100.0I	% OF CYCLE
5	3I	3I	4I	10I	14I	9I	43I	# RESP
	7.0I	7.0I	9.3I	23.3I	32.6I	20.9I	100.0I	% OF CYCLE
6	12I	3I	10I	11I	36I	8I	80I	# RESP
	15.0I	3.7I	12.5I	13.7I	45.0I	10.0I	100.0I	% OF CYCLE
7	11I	3I	8I	18I	21I	13I	74I	# RESP
	14.9I	4.1I	10.8I	24.3I	28.4I	17.6I	100.0I	% OF CYCLE
8	18I	7I	20I	19I	35I	24I	123I	# RESP
	14.6I	5.7I	16.3I	15.4I	28.5I	19.5I	100.0I	% OF CYCLE
SUMI	84I	31I	87I	121I	234I	121I	678I	# RESP
	12.4I	4.6I	12.8I	17.8I	34.5I	17.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .378095 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .252122

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

GET HOME AFTER DRINKING (C): BUS BY SURVEY CYCLE (ALL)

		ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	I	22I	16I	42I	47I	96I	109I	332I	# RESP
	I	6.6I	4.8I	12.7I	14.2I	28.9I	32.8I	100.0I	% OF CYCLE
2	I	24I	14I	40I	43I	80I	73I	274I	# RESP
	I	8.8I	5.1I	14.6I	15.7I	29.2I	26.6I	100.0I	% OF CYCLE
3	I	18I	12I	39I	58I	83I	62I	272I	# RESP
	I	6.6I	4.4I	14.3I	21.3I	30.5I	22.8I	100.0I	% OF CYCLE
4	I	33I	18I	37I	48I	69I	84I	289I	# RESP
	I	11.4I	6.2I	12.8I	16.6I	23.9I	29.1I	100.0I	% OF CYCLE
5	I	15I	13I	35I	27I	47I	58I	195I	# RESP
	I	7.7I	6.7I	17.9I	13.8I	24.1I	29.7I	100.0I	% OF CYCLE
6	I	11I	8I	36I	37I	63I	61I	216I	# RESP
	I	5.1I	3.7I	16.7I	17.1I	29.2I	28.2I	100.0I	% OF CYCLE
7	I	16I	8I	26I	37I	62I	34I	183I	# RESP
	I	8.7I	4.4I	14.2I	20.2I	33.9I	18.6I	100.0I	% OF CYCLE
8	I	11I	8I	29I	31I	52I	37I	168I	# RESP
	I	6.5I	4.8I	17.3I	18.5I	31.0I	22.0I	100.0I	% OF CYCLE
SUM	I	150I	97I	284I	328I	552I	518I	1929I	# RESP
	I	7.8I	5.0I	14.7I	17.0I	28.6I	26.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .251079 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .132224

B-73

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

GET HOME AFTER DRINKING (C): BUS BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	2I	7I	11I	15I	56I	28I	119I	# RESP
	1.7I	5.9I	9.2I	12.6I	47.1I	23.5I	100.0I	% OF CYCLE
2	8I	2I	14I	8I	41I	16I	89I	# RESP
	9.0I	2.2I	15.7I	9.0I	46.1I	18.0I	100.0I	% OF CYCLE
3	3I	2I	16I	14I	36I	24I	95I	# RESP
	3.2I	2.1I	16.8I	14.7I	37.9I	25.3I	100.0I	% OF CYCLE
4	3I	2I	3I	6I	30I	11I	55I	# RESP
	5.5I	3.6I	5.5I	10.9I	54.5I	20.0I	100.0I	% OF CYCLE
5	3I	I	5I	11I	15I	9I	43I	# RESP
	7.0I	I	11.6I	25.6I	34.9I	20.9I	100.0I	% OF CYCLE
6	4I	4I	6I	8I	48I	10I	80I	# RESP
	5.0I	5.0I	7.5I	10.0I	60.0I	12.5I	100.0I	% OF CYCLE
7	4I	2I	11I	11I	30I	16I	74I	# RESP
	5.4I	2.7I	14.9I	14.9I	40.5I	21.6I	100.0I	% OF CYCLE
8	7I	6I	13I	18I	47I	32I	123I	# RESP
	5.7I	4.9I	10.6I	14.6I	38.2I	26.0I	100.0I	% OF CYCLE
SUM	34I	25I	79I	91I	303I	146I	678I	# RESP
	5.0I	3.7I	11.7I	13.4I	44.7I	21.5I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .340603 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .245298

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

GET HOME AFTER DRINKING (C): RIDE BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	134I	110I	36I	3I	5I	44I	332I	# RESP
	40.4I	33.1I	10.8I	0.9I	1.5I	13.3I	100.0I	% OF CYCLE
2	102I	92I	37I	2I	8I	33I	274I	# RESP
	37.2I	33.6I	13.5I	0.7I	2.9I	12.0I	100.0I	% OF CYCLE
3	116I	87I	27I	4I	8I	30I	272I	# RESP
	42.6I	32.0I	9.9I	1.5I	2.9I	11.0I	100.0I	% OF CYCLE
4	121I	79I	28I	3I	11I	47I	289I	# RESP
	41.9I	27.3I	9.7I	1.0I	3.8I	16.3I	100.0I	% OF CYCLE
5	66I	58I	29I	1I	5I	36I	195I	# RESP
	33.8I	29.7I	14.9I	0.5I	2.6I	18.5I	100.0I	% OF CYCLE
6	83I	60I	32I	3I	3I	35I	216I	# RESP
	38.4I	27.8I	14.8I	1.4I	1.4I	16.2I	100.0I	% OF CYCLE
7	65I	65I	21I	1I	8I	23I	183I	# RESP
	35.5I	35.5I	11.5I	0.5I	4.4I	12.6I	100.0I	% OF CYCLE
8	63I	51I	28I	1I	5I	20I	168I	# RESP
	37.5I	30.4I	16.7I	0.6I	3.0I	11.9I	100.0I	% OF CYCLE
SUMI	750I	602I	238I	18I	53I	268I	1929I	# RESP
	38.9I	31.2I	12.3I	0.9I	2.7I	13.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .244527 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .120450

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

GET HOME AFTER DRINKING (C):   RIDE BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	41	39	16	5	3	15	119	# RESP
	34.5	32.8	13.4	4.2	2.5	12.6	100.0	% OF CYCLE
2	28	36	14		1	10	89	# RESP
	31.5	40.4	15.7		1.1	11.2	100.0	% OF CYCLE
3	35	29	13		4	14	95	# RESP
	36.8	30.5	13.7		4.2	14.7	100.0	% OF CYCLE
4	23	18	4	3	1	6	55	# RESP
	41.8	32.7	7.3	5.5	1.8	10.9	100.0	% OF CYCLE
5	13	18	6	1	1	4	43	# RESP
	30.2	41.9	14.0	2.3	2.3	9.3	100.0	% OF CYCLE
6	31	28	10	3	5	3	80	# RESP
	38.7	35.0	12.5	3.7	6.2	3.7	100.0	% OF CYCLE
7	27	26	7	2	3	9	74	# RESP
	36.5	35.1	9.5	2.7	4.1	12.2	100.0	% OF CYCLE
8	48	39	17	2	2	15	123	# RESP
	39.0	31.7	13.8	1.6	1.6	12.2	100.0	% OF CYCLE
SUM	246	233	87	16	20	76	678	# RESP
	36.3	34.4	12.8	2.4	2.9	11.2	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .215793 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .186026

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

GET HOME AFTER DRINKING (C):   DRIVE BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	11I	22I	56I	53I	94I	96I	332I	# RESP
	3.3I	6.6I	16.9I	16.0I	28.3I	28.9I	100.0I	% OF CYCLE
2	7I	25I	45I	49I	86I	62I	274I	# RESP
	2.6I	9.1I	16.4I	17.9I	31.4I	22.6I	100.0I	% OF CYCLE
3	13I	18I	37I	72I	74I	58I	272I	# RESP
	4.8I	6.6I	13.6I	26.5I	27.2I	21.3I	100.0I	% OF CYCLE
4	10I	28I	28I	48I	95I	80I	289I	# RESP
	3.5I	9.7I	9.7I	16.6I	32.9I	27.7I	100.0I	% OF CYCLE
5	8I	21I	28I	31I	53I	54I	195I	# RESP
	4.1I	10.8I	14.4I	15.9I	27.2I	27.7I	100.0I	% OF CYCLE
6	4I	21I	34I	32I	63I	62I	216I	# RESP
	1.9I	9.7I	15.7I	14.8I	29.2I	28.7I	100.0I	% OF CYCLE
7	8I	9I	32I	45I	56I	33I	183I	# RESP
	4.4I	4.9I	17.5I	24.6I	30.6I	18.0I	100.0I	% OF CYCLE
8	5I	23I	23I	29I	50I	38I	168I	# RESP
	3.0I	13.7I	13.7I	17.3I	29.8I	22.6I	100.0I	% OF CYCLE
SUMI	66I	167I	283I	359I	571I	483I	1929I	# RESP
	3.4I	8.7I	14.7I	18.6I	29.6I	25.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .403983 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .164860

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

GET HOME AFTER DRINKING (C): DRIVE BY SURVEY CYCLE (ALL)

	ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	4	19	27	20	24	25	119	# RESP
	3.4	16.0	22.7	16.8	20.2	21.0	100.0	% OF CYCLE
2	1	13	15	20	23	17	89	# RESP
	1.1	14.6	16.9	22.5	25.8	19.1	100.0	% OF CYCLE
3	6	14	10	20	25	20	95	# RESP
	6.3	14.7	10.5	21.1	26.3	21.1	100.0	% OF CYCLE
4	1	10	5	12	15	12	55	# RESP
	1.8	18.2	9.1	21.8	27.3	21.8	100.0	% OF CYCLE
5		5	5	12	13	8	43	# RESP
		11.6	11.6	27.9	30.2	18.6	100.0	% OF CYCLE
6	6	10	14	17	26	7	80	# RESP
	7.5	12.5	17.5	21.2	32.5	8.7	100.0	% OF CYCLE
7	2	7	13	18	18	16	74	# RESP
	2.7	9.5	17.6	24.3	24.3	21.6	100.0	% OF CYCLE
8		19	20	25	28	31	123	# RESP
		15.4	16.3	20.3	22.8	25.2	100.0	% OF CYCLE
SUM	20	97	109	144	172	136	678	# RESP
	2.9	14.3	16.1	21.2	25.4	20.1	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .296078 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .227590

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

GET HOME AFTER DRINKING (C): WALK BY SURVEY CYCLE (ALL)

		ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	I	25I	30I	76I	43I	65I	93I	332I	# RESP
	I	7.5I	9.0I	22.9I	13.0I	19.6I	28.0I	100.0I	% OF CYCLE
2	I	22I	17I	74I	47I	55I	59I	274I	# RESP
	I	8.0I	6.2I	27.0I	17.2I	20.1I	21.5I	100.0I	% OF CYCLE
3	I	21I	20I	74I	41I	58I	58I	272I	# RESP
	I	7.7I	7.4I	27.2I	15.1I	21.3I	21.3I	100.0I	% OF CYCLE
4	I	31I	24I	58I	43I	56I	77I	289I	# RESP
	I	10.7I	8.3I	20.1I	14.9I	19.4I	26.6I	100.0I	% OF CYCLE
5	I	21I	9I	54I	28I	33I	50I	195I	# RESP
	I	10.8I	4.6I	27.7I	14.4I	16.9I	25.6I	100.0I	% OF CYCLE
6	I	14I	22I	49I	36I	39I	56I	216I	# RESP
	I	6.5I	10.2I	22.7I	16.7I	18.1I	25.9I	100.0I	% OF CYCLE
7	I	19I	15I	45I	32I	40I	32I	183I	# RESP
	I	10.4I	8.2I	24.6I	17.5I	21.9I	17.5I	100.0I	% OF CYCLE
8	I	12I	13I	54I	27I	27I	35I	168I	# RESP
	I	7.1I	7.7I	32.1I	16.1I	16.1I	20.8I	100.0I	% OF CYCLE
SUMI		165I	150I	484I	297I	373I	460I	1929I	# RESP
	I	8.6I	7.8I	25.1I	15.4I	19.3I	23.8I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .234057 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .125233

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

GET HOME AFTER DRINKING (C): WALK BY SURVEY CYCLE (ALL)

		ALWAYS	USUALLY	SOMETIMES	RARELY	NEVER	NO ANSWER	SUM	
1	I	2I	7I	36I	20I	27I	27I	119I	# RESP
	I	1.7I	5.9I	30.3I	16.8I	22.7I	22.7I	100.0I	% OF CYCLE
2	I	5I	4I	28I	16I	19I	17I	89I	# RESP
	I	5.6I	4.5I	31.5I	18.0I	21.3I	19.1I	100.0I	% OF CYCLE
3	I	7I	8I	27I	14I	18I	21I	95I	# RESP
	I	7.4I	8.4I	28.4I	14.7I	18.9I	22.1I	100.0I	% OF CYCLE
4	I	4I	2I	15I	10I	15I	9I	55I	# RESP
	I	7.3I	3.6I	27.3I	18.2I	27.3I	16.4I	100.0I	% OF CYCLE
5	I	3I	5I	9I	5I	12I	9I	43I	# RESP
	I	7.0I	11.6I	20.9I	11.6I	27.9I	20.9I	100.0I	% OF CYCLE
6	I	6I	5I	22I	14I	23I	10I	80I	# RESP
	I	7.5I	6.2I	27.5I	17.5I	28.7I	12.5I	100.0I	% OF CYCLE
7	I	2I	7I	24I	15I	10I	16I	74I	# RESP
	I	2.7I	9.5I	32.4I	20.3I	13.5I	21.6I	100.0I	% OF CYCLE
8	I	8I	12I	21I	24I	27I	31I	123I	# RESP
	I	6.5I	9.8I	17.1I	19.5I	22.0I	25.2I	100.0I	% OF CYCLE
SUM	I	37I	50I	182I	118I	151I	140I	678I	# RESP
	I	5.5I	7.4I	26.8I	17.4I	22.3I	20.6I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .251657 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .211391

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) PENALTIES FOR DRUNK DRIVING SHOULD BE MORE SEVERE BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1 I	160I	124I	33I	21I	3I	2I	343I	# RESP
I	46.6I	36.2I	9.6I	6.1I	0.9I	0.6I	100.0I	% OF CYCLE
2 I	143I	82I	25I	14I	5I	3I	272I	# RESP
I	52.6I	30.1I	9.2I	5.1I	1.8I	1.1I	100.0I	% OF CYCLE
3 I	138I	89I	23I	18I	4I	3I	275I	# RESP
I	50.2I	32.4I	8.4I	6.5I	1.5I	1.1I	100.0I	% OF CYCLE
4 I	150I	94I	20I	18I	7I	2I	291I	# RESP
I	51.5I	32.3I	6.9I	6.2I	2.4I	0.7I	100.0I	% OF CYCLE
5 I	87I	77I	18I	11I	4I	5I	202I	# RESP
I	43.1I	38.1I	8.9I	5.4I	2.0I	2.5I	100.0I	% OF CYCLE
6 I	105I	73I	17I	18I	5I	I	218I	# RESP
I	48.2I	33.5I	7.8I	8.3I	2.3I	I	100.0I	% OF CYCLE
7 I	90I	58I	14I	21I	7I	2I	192I	# RESP
I	46.9I	30.2I	7.3I	10.9I	3.6I	1.0I	100.0I	% OF CYCLE
8 I	96I	52I	13I	11I	3I	2I	177I	# RESP
I	54.2I	29.4I	7.3I	6.2I	1.7I	1.1I	100.0I	% OF CYCLE
SUMI	969I	649I	163I	132I	38I	19I	1970I	# RESP
I	49.2I	32.9I	8.3I	6.7I	1.9I	1.0I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .245283 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .111427

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) PENALTIES FOR DRUNK DRIVING SHOULD BE MORE SEVERE BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	50	38	13	15	1	1	118	# RESP
	42.4	32.2	11.0	12.7	0.8	0.8	100.0	% OF CYCLE
2	41	30	9	8	2		90	# RESP
	45.6	33.3	10.0	8.9	2.2		100.0	% OF CYCLE
3	26	35	9	13	2	3	88	# RESP
	29.5	39.8	10.2	14.8	2.3	3.4	100.0	% OF CYCLE
4	22	15	4	10	1		52	# RESP
	42.3	28.8	7.7	19.2	1.9		100.0	% OF CYCLE
5	16	18	3	5	1		43	# RESP
	37.2	41.9	7.0	11.6	2.3		100.0	% OF CYCLE
6	28	28	12	11	1	1	81	# RESP
	34.6	34.6	14.8	13.6	1.2	1.2	100.0	% OF CYCLE
7	20	29	11	13	1		74	# RESP
	27.0	39.2	14.9	17.6	1.4		100.0	% OF CYCLE
8	49	45	14	12	3		123	# RESP
	39.8	36.6	11.4	9.8	2.4		100.0	% OF CYCLE
SUM	252	238	75	87	12	5	669	# RESP
	37.7	35.6	11.2	13.0	1.8	0.7	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .187642 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .165779

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) SEATBELT USE SHOULD BE REQUIRED BY LAW BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	91	115	48	67	19	3	343	# RESP
	26.5	33.5	14.0	19.5	5.5	0.9	100.0	% OF CYCLE
2	60	89	40	49	29	5	272	# RESP
	22.1	32.7	14.7	18.0	10.7	1.8	100.0	% OF CYCLE
3	75	81	37	63	18	1	275	# RESP
	27.3	29.5	13.5	22.9	6.5	0.4	100.0	% OF CYCLE
4	74	86	43	54	30	4	291	# RESP
	25.4	29.6	14.8	18.6	10.3	1.4	100.0	% OF CYCLE
5	51	60	23	43	22	3	202	# RESP
	25.2	29.7	11.4	21.3	10.9	1.5	100.0	% OF CYCLE
6	64	52	28	48	25	1	218	# RESP
	29.4	23.9	12.8	22.0	11.5	0.5	100.0	% OF CYCLE
7	41	62	28	36	22	3	192	# RESP
	21.4	32.3	14.6	18.7	11.5	1.6	100.0	% OF CYCLE
8	43	55	19	39	17	4	177	# RESP
	24.3	31.1	10.7	22.0	9.6	2.3	100.0	% OF CYCLE
SUM	499	600	266	399	182	24	1970	# RESP
	25.3	30.5	13.5	20.3	9.2	1.2	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .260813 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .115001

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) SEATBELT USE SHOULD BE REQUIRED BY LAW BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	22I	40I	24I	23I	7I	2I	118I	# RESP
	18.6I	33.9I	20.3I	19.5I	5.9I	1.7I	100.0I	% OF CYCLE
2	16I	28I	19I	20I	5I	2I	90I	# RESP
	17.8I	31.1I	21.1I	22.2I	5.6I	2.2I	100.0I	% OF CYCLE
3	17I	26I	16I	20I	8I	1I	88I	# RESP
	19.3I	29.5I	18.2I	22.7I	9.1I	1.1I	100.0I	% OF CYCLE
4	9I	17I	8I	13I	5I	I	52I	# RESP
	17.3I	32.7I	15.4I	25.0I	9.6I	I	100.0I	% OF CYCLE
5	7I	8I	10I	12I	6I	I	43I	# RESP
	16.3I	18.6I	23.3I	27.9I	14.0I	I	100.0I	% OF CYCLE
6	16I	28I	8I	21I	8I	I	81I	# RESP
	19.8I	34.6I	9.9I	25.9I	9.9I	I	100.0I	% OF CYCLE
7	14I	24I	13I	18I	5I	I	74I	# RESP
	18.9I	32.4I	17.6I	24.3I	6.8I	I	100.0I	% OF CYCLE
8	20I	36I	19I	36I	12I	I	123I	# RESP
	16.3I	29.3I	15.4I	29.3I	9.8I	I	100.0I	% OF CYCLE
SUMI	121I	207I	117I	163I	56I	5I	669I	# RESP
	18.1I	30.9I	17.5I	24.4I	8.4I	0.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .158474 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .152677

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) LIKELIHOOD OF DRUNK DRIVING HAS DECREASED DURING LAST YEAR BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	55	182	27	62	14	3	343	# RESP
	16.0	53.1	7.9	18.1	4.1	0.9	100.0	% OF CYCLE
2	32	146	20	54	14	6	272	# RESP
	11.8	53.7	7.4	19.9	5.1	2.2	100.0	% OF CYCLE
3	36	141	25	58	15		275	# RESP
	13.1	51.3	9.1	21.1	5.5		100.0	% OF CYCLE
4	57	144	21	48	16	5	291	# RESP
	19.6	49.5	7.2	16.5	5.5	1.7	100.0	% OF CYCLE
5	40	100	14	33	11	4	202	# RESP
	19.8	49.5	6.9	16.3	5.4	2.0	100.0	% OF CYCLE
6	34	120	18	38	8		218	# RESP
	15.6	55.0	8.3	17.4	3.7		100.0	% OF CYCLE
7	41	92	18	29	9	3	192	# RESP
	21.4	47.9	9.4	15.1	4.7	1.6	100.0	% OF CYCLE
8	22	96	11	35	11	2	177	# RESP
	12.4	54.2	6.2	19.8	6.2	1.1	100.0	% OF CYCLE
SUM	317	1021	154	357	98	23	1970	# RESP
	16.1	51.8	7.8	18.1	5.0	1.2	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .237295 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .109731

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) LIKELIHOOD OF DRUNK DRIVING HAS DECREASED DURING LAST YEAR BY SURVEY CYCLE (ALL)

		STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	I	26I	62I	7I	14I	5I	4I	118I	# RESP
	I	22.0I	52.5I	5.9I	11.9I	4.2I	3.4I	100.0I	% OF CYCLE
2	I	22I	49I	4I	11I	3I	1I	90I	# RESP
	I	24.4I	54.4I	4.4I	12.2I	3.3I	1.1I	100.0I	% OF CYCLE
3	I	24I	50I	2I	7I	3I	2I	88I	# RESP
	I	27.3I	56.8I	2.3I	8.0I	3.4I	2.3I	100.0I	% OF CYCLE
4	I	12I	37I	1I	1I	1I	I	52I	# RESP
	I	23.1I	71.2I	1.9I	1.9I	1.9I	I	100.0I	% OF CYCLE
5	I	7I	30I	1I	5I	I	I	43I	# RESP
	I	16.3I	69.8I	2.3I	11.6I	I	I	100.0I	% OF CYCLE
6	I	10I	48I	3I	15I	4I	1I	81I	# RESP
	I	12.3I	59.3I	3.7I	18.5I	4.9I	1.2I	100.0I	% OF CYCLE
7	I	20I	40I	3I	7I	4I	I	74I	# RESP
	I	27.0I	54.1I	4.1I	9.5I	5.4I	I	100.0I	% OF CYCLE
8	I	29I	62I	12I	15I	4I	1I	123I	# RESP
	I	23.6I	50.4I	9.8I	12.2I	3.3I	0.8I	100.0I	% OF CYCLE
SUM	I	150I	378I	33I	75I	24I	9I	669I	# RESP
	I	22.4I	56.5I	4.9I	11.2I	3.6I	1.3I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .323341 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .216109

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) PEDESTRIAN SAFETY IS TAUGHT WELL IN MILWAUKEE SCHOOLS BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	14I	90I	152I	62I	17I	8I	343I	# RESP
	4.1I	26.2I	44.3I	18.1I	5.0I	2.3I	100.0I	% OF CYCLE
2	15I	69I	116I	51I	10I	11I	272I	# RESP
	5.5I	25.4I	42.6I	18.7I	3.7I	4.0I	100.0I	% OF CYCLE
3	21I	69I	111I	58I	15I	1I	275I	# RESP
	7.6I	25.1I	40.4I	21.1I	5.5I	0.4I	100.0I	% OF CYCLE
4	19I	72I	121I	55I	17I	7I	291I	# RESP
	6.5I	24.7I	41.6I	18.9I	5.8I	2.4I	100.0I	% OF CYCLE
5	14I	53I	84I	33I	12I	6I	202I	# RESP
	6.9I	26.2I	41.6I	16.3I	5.9I	3.0I	100.0I	% OF CYCLE
6	13I	58I	93I	36I	14I	4I	218I	# RESP
	6.0I	26.6I	42.7I	16.5I	6.4I	1.8I	100.0I	% OF CYCLE
7	20I	52I	73I	35I	7I	5I	192I	# RESP
	10.4I	27.1I	38.0I	18.2I	3.6I	2.6I	100.0I	% OF CYCLE
8	17I	44I	70I	34I	6I	6I	177I	# RESP
	9.6I	24.9I	39.5I	19.2I	3.4I	3.4I	100.0I	% OF CYCLE
SUMI	133I	507I	820I	364I	98I	48I	1970I	# RESP
	6.8I	25.7I	41.6I	18.5I	5.0I	2.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .190898 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .991693 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) PEDESTRIAN SAFETY IS TAUGHT WELL IN MILWAUKEE SCHOOLS BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	4I	7I	95I	1I	2I	9I	118I	# RESP
	3.4I	5.9I	80.5I	0.8I	1.7I	7.6I	100.0I	% OF CYCLE
2	2I	5I	75I	I	2I	6I	90I	# RESP
	2.2I	5.6I	83.3I	I	2.2I	6.7I	100.0I	% OF CYCLE
3	3I	9I	65I	1I	2I	8I	88I	# RESP
	3.4I	10.2I	73.9I	1.1I	2.3I	9.1I	100.0I	% OF CYCLE
4	1I	2I	42I	1I	I	6I	52I	# RESP
	1.9I	3.8I	80.8I	1.9I	I	11.5I	100.0I	% OF CYCLE
5	I	5I	36I	1I	I	1I	43I	# RESP
	I	11.6I	83.7I	2.3I	I	2.3I	100.0I	% OF CYCLE
6	I	5I	70I	2I	I	4I	81I	# RESP
	I	6.2I	86.4I	2.5I	I	4.9I	100.0I	% OF CYCLE
7	1I	I	67I	4I	I	2I	74I	# RESP
	1.4I	I	90.5I	5.4I	I	2.7I	100.0I	% OF CYCLE
8	1I	7I	98I	8I	1I	8I	123I	# RESP
	0.8I	5.7I	79.7I	6.5I	0.8I	6.5I	100.0I	% OF CYCLE
SUMI	12I	40I	548I	18I	7I	44I	669I	# RESP
	1.8I	6.0I	81.9I	2.7I	1.0I	6.6I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .360256 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .233452

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) DRUNK DRIVERS SHOULD LOSE THEIR LICENSES FOR AT LEAST 90 DAYS BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	161	131	21	18	10	2	343	# RESP
	46.9	38.2	6.1	5.2	2.9	0.6	100.0	% OF CYCLE
2	132	81	19	21	10	9	272	# RESP
	48.5	29.8	7.0	7.7	3.7	3.3	100.0	% OF CYCLE
3	147	85	17	19	7		275	# RESP
	53.5	30.9	6.2	6.9	2.5		100.0	% OF CYCLE
4	145	93	12	19	17	5	291	# RESP
	49.8	32.0	4.1	6.5	5.8	1.7	100.0	% OF CYCLE
5	105	65	13	7	7	5	202	# RESP
	52.0	32.2	6.4	3.5	3.5	2.5	100.0	% OF CYCLE
6	115	78	9	9	6	1	218	# RESP
	52.8	35.8	4.1	4.1	2.8	0.5	100.0	% OF CYCLE
7	106	55	9	7	10	5	192	# RESP
	55.2	28.6	4.7	3.6	5.2	2.6	100.0	% OF CYCLE
8	92	68	4	6	4	3	177	# RESP
	52.0	38.4	2.3	3.4	2.3	1.7	100.0	% OF CYCLE
SUM	1003	656	104	106	71	30	1970	# RESP
	50.9	33.3	5.3	5.4	3.6	1.5	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .342678 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .131747

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) DRUNK DRIVERS SHOULD LOSE THEIR LICENSES FOR AT LEAST 90 DAYS BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	51	36	17	10	2	2	118	# RESP
	43.2	30.5	14.4	8.5	1.7	1.7	100.0	% OF CYCLE
2	43	31	9	4	1	2	90	# RESP
	47.8	34.4	10.0	4.4	1.1	2.2	100.0	% OF CYCLE
3	34	36	7	8		3	88	# RESP
	38.6	40.9	8.0	9.1		3.4	100.0	% OF CYCLE
4	24	14	4	10			52	# RESP
	46.2	26.9	7.7	19.2			100.0	% OF CYCLE
5	16	16	4	6	1		43	# RESP
	37.2	37.2	9.3	14.0	2.3		100.0	% OF CYCLE
6	28	31	12	7	3		81	# RESP
	34.6	38.3	14.8	8.6	3.7		100.0	% OF CYCLE
7	26	26	10	10	2		74	# RESP
	35.1	35.1	13.5	13.5	2.7		100.0	% OF CYCLE
8	52	43	11	15	1	1	123	# RESP
	42.3	35.0	8.9	12.2	0.8	0.8	100.0	% OF CYCLE
SUM	274	233	74	70	10	8	669	# RESP
	41.0	34.8	11.1	10.5	1.5	1.2	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .260646 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .194772

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

FEELINGS (D) MOST ADULTS ACT SAFELY AS PEDESTRIANS IN MILWAUKEE BY SURVEY CYCLE (ALL)

	STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	20	143	52	98	28	2	343	# RESP
	5.8	41.7	15.2	28.6	8.2	0.6	100.0	% OF CYCLE
2	14	113	33	83	20	9	272	# RESP
	5.1	41.5	12.1	30.5	7.4	3.3	100.0	% OF CYCLE
3	19	115	39	82	17	3	275	# RESP
	6.9	41.8	14.2	29.8	6.2	1.1	100.0	% OF CYCLE
4	20	119	35	92	17	8	291	# RESP
	6.9	40.9	12.0	31.6	5.8	2.7	100.0	% OF CYCLE
5	13	70	33	65	16	5	202	# RESP
	6.4	34.7	16.3	32.2	7.9	2.5	100.0	% OF CYCLE
6	7	98	30	71	11	1	218	# RESP
	3.2	45.0	13.8	32.6	5.0	0.5	100.0	% OF CYCLE
7	19	76	23	49	21	4	192	# RESP
	9.9	39.6	12.0	25.5	10.9	2.1	100.0	% OF CYCLE
8	10	74	17	62	12	2	177	# RESP
	5.6	41.8	9.6	35.0	6.8	1.1	100.0	% OF CYCLE
SUM	122	808	262	602	142	34	1970	# RESP
	6.2	41.0	13.3	30.6	7.2	1.7	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .271923 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .117691

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

FEELINGS (D) MOST ADULTS ACT SAFELY AS PEDESTRIANS IN MILWAUKEE BY SURVEY CYCLE (ALL)

		STRONGLY AGREE	AGREE	NO OPINION	DISAGREE	STRONGLY DISAGREE	NO ANSWER	SUM	
1	I	2I	15I	83I	9I	3I	6I	118I	# RESP
	I	1.7I	12.7I	70.3I	7.6I	2 5I	5.1I	100.0I	% OF CYCLE
2	I	1I	10I	63I	9I	2I	5I	90I	# RESP
	I	1.1I	11.1I	70.0I	10.0I	2.2I	5.6I	100.0I	% OF CYCLE
3	I	4I	10I	61I	3I	3I	7I	88I	# RESP
	I	4.5I	11.4I	69.3I	3.4I	3.4I	8.0I	100.0I	% OF CYCLE
4	I	I	2I	42I	2I	I	6I	52I	# RESP
	I	I	3.8I	80.8I	3.8I	I	11.5I	100.0I	% OF CYCLE
5	I	2I	7I	27I	3I	2I	2I	43I	# RESP
	I	4.7I	16.3I	62.8I	7.0I	4.7I	4.7I	100.0I	% OF CYCLE
6	I	I	7I	65I	4I	2I	3I	81I	# RESP
	I	I	8.6I	80.2I	4.9I	2.5I	3.7I	100.0I	% OF CYCLE
7	I	I	4I	56I	11I	I	3I	74I	# RESP
	I	I	5.4I	75.7I	14.9I	I	4.1I	100.0I	% OF CYCLE
8	I	3I	8I	95I	11I	I	6I	123I	# RESP
	I	2.4I	6.5I	77.2I	8.9I	I	4.9I	100.0I	% OF CYCLE
SUM	I	12I	63I	492I	52I	12I	38I	669I	# RESP
	I	1.8I	9.4I	73.5I	7.8I	1.8I	5.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .384139 E 02
DEGREES OF FREEDOM = 28

CONT COEF = .239550

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

WHAT SHOULD WISCONSIN DO TO LICENSE OF DWI CONVICTEE? (B) BY SURVEY CYCLE (ALL)

	SUSPEND >=1 YEAR	SUSPEND 3 MONTHS TO 1 YEAR	SUSPEND <=3 MONTHS	LET DRIVER KEEP IT	NO ANSWER	SUM	
1	182I	152I	32I	5I	4I	375I	# RESP
	48.5I	40.5I	8.5I	1.3I	1.1I	100.0I	% OF CYCLE
2	129I	96I	32I	7I	3I	267I	# RESP
	48.3I	36.0I	12.0I	2.6I	1.1I	100.0I	% OF CYCLE
3	155I	125I	34I	10I	2I	326I	# RESP
	47.5I	38.3I	10.4I	3.1I	0.6I	100.0I	% OF CYCLE
4	125I	116I	45I	4I	7I	297I	# RESP
	42.1I	39.1I	15.2I	1.3I	2.4I	100.0I	% OF CYCLE
5	99I	75I	25I	6I	3I	208I	# RESP
	47.6I	36.1I	12.0I	2.9I	1.4I	100.0I	% OF CYCLE
6	113I	80I	23I	5I	4I	225I	# RESP
	50.2I	35.6I	10.2I	2.2I	1.8I	100.0I	% OF CYCLE
7	93I	67I	27I	4I	4I	195I	# RESP
	47.7I	34.4I	13.8I	2.1I	2.1I	100.0I	% OF CYCLE
8	84I	68I	22I	3I	4I	181I	# RESP
	46.4I	37.6I	12.2I	1.7I	2.2I	100.0I	% OF CYCLE
SUMI	980I	779I	240I	44I	31I	2074I	# RESP
	47.3I	37.6I	11.6I	2.1I	1.5I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .168807 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .905261 E -01

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MILWAUKEE VERSUS GREEN BAY = GREEN BAY

WHAT SHOULD WISCONSIN DO TO LICENSE OF DWI CONVICTEE? (B) BY SURVEY CYCLE (ALL)

	SUSPEND >=1 YEAR	SUSPEND 3 MONTHS IO 1 YEAR	SUSPEND <=3 MONTHS	LET DRIVER KEEP IT	NO ANSWER	SUM	
1 I	50I	51I	15I	6I	1I	123I	# RESP
I	40.7I	41.5I	12.2I	4.9I	0.8I	100.0I	% OF CYCLE
2 I	26I	36I	19I	7I	1I	89I	# RESP
I	29.2I	40.4I	21.3I	7.9I	1.1I	100.0I	% OF CYCLE
3 I	32I	40I	16I	4I	2I	94I	# RESP
I	34.0I	42.6I	17.0I	4.3I	2.1I	100.0I	% OF CYCLE
4 I	17I	23I	10I	4I	I	54I	# RESP
I	31.5I	42.6I	18.5I	7.4I	I	100.0I	% OF CYCLE
5 I	19I	13I	8I	1I	I	41I	# RESP
I	46.3I	31.7I	19.5I	2.4I	I	100.0I	% OF CYCLE
6 I	30I	26I	17I	7I	I	80I	# RESP
I	37.5I	32.5I	21.2I	8.7I	I	100.0I	% OF CYCLE
7 I	25I	33I	12I	3I	1I	74I	# RESP
I	33.8I	44.6I	16.2I	4.1I	1.4I	100.0I	% OF CYCLE
8 I	37I	58I	17I	8I	1I	121I	# RESP
I	30.6I	47.9I	14.0I	6.6I	0.8I	100.0I	% OF CYCLE
SUMI	236I	280I	114I	40I	6I	676I	# RESP
I	34.9I	41.4I	16.9I	5.9I	0.9I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .167286 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .156077

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

IF LICENSE SUSPENDED, DRIVING TO/FROM WORK/SCHOOL BE OK ? (B) BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	198	171	6	375	# RESP
	52.8	45.6	1.6	100.0	% OF CYCLE
2	160	105	2	267	# RESP
	59.9	39.3	0.7	100.0	% OF CYCLE
3	185	140	1	326	# RESP
	56.7	42.9	0.3	100.0	% OF CYCLE
4	181	109	7	297	# RESP
	60.9	36.7	2.4	100.0	% OF CYCLE
5	125	83		208	# RESP
	60.1	39.9		100.0	% OF CYCLE
6	120	101	4	225	# RESP
	53.3	44.9	1.8	100.0	% OF CYCLE
7	109	82	4	195	# RESP
	55.9	42.1	2.1	100.0	% OF CYCLE
8	95	85	1	181	# RESP
	52.5	47.0	0.6	100.0	% OF CYCLE
SUM	1173	876	25	2074	# RESP
	56.6	42.2	1.2	100.0	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .912585 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .665887 E -01

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

IF LICENSE SUSPENDED, DRIVING TO/FROM WORK/SCHOOL BE OK ? (8) BY SURVEY CYCLE (ALL)

	YES	NO	NO ANSWER	SUM	
1	82I	39I	2I	123I	# RESP
	66.7I	31.7I	1.6I	100.0I	% OF CYCLE
2	66I	23I	I	89I	# RESP
	74.2I	25.8I	I	100.0I	% OF CYCLE
3	67I	25I	2I	94I	# RESP
	71.3I	26.6I	2.1I	100.0I	% OF CYCLE
4	38I	16I	I	54I	# RESP
	70.4I	29.6I	I	100.0I	% OF CYCLE
5	23I	18I	I	41I	# RESP
	56.1I	43.9I	I	100.0I	% OF CYCLE
6	55I	25I	I	80I	# RESP
	68.7I	31.2I	I	100.0I	% OF CYCLE
7	51I	23I	I	74I	# RESP
	68.9I	31.1I	I	100.0I	% OF CYCLE
8	85I	35I	1I	121I	# RESP
	70.2I	28.9I	0.8I	100.0I	% OF CYCLE
SUMI	467I	204I	5I	676I	# RESP
	69.1I	30.2I	0.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .519554 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .876555 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

IF WORK/SCHOOL DRIVING OK, SHOULD THERE BE WAIT PERIOD? (B) BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	270I	97I	8I	375I	# RESP
	I	72.0I	25.9I	2.1I	100.0I	% OF CYCLE
2	I	178I	80I	9I	267I	# RESP
	I	66.7I	30.0I	3.4I	100.0I	% OF CYCLE
3	I	218I	101I	7I	326I	# RESP
	I	66.9I	31.0I	2.1I	100.0I	% OF CYCLE
4	I	189I	94I	14I	297I	# RESP
	I	63.6I	31.6I	4.7I	100.0I	% OF CYCLE
5	I	148I	52I	8I	208I	# RESP
	I	71.2I	25.0I	3.8I	100.0I	% OF CYCLE
6	I	142I	75I	8I	225I	# RESP
	I	63.1I	33.3I	3.6I	100.0I	% OF CYCLE
7	I	118I	64I	13I	195I	# RESP
	I	60.5I	32.8I	6.7I	100.0I	% OF CYCLE
8	I	130I	43I	8I	181I	# RESP
	I	71.8I	23.8I	4.4I	100.0I	% OF CYCLE
SUM	I	1393I	606I	75I	2074I	# RESP
	I	67.2I	29.2I	3.6I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .121639 E 02
DEGREES OF FREEDOM = 7

CONT COEF = .777701 E -01

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

IF WORK/SCHOOL DRIVING OK, SHOULD THERE BE WAIT PERIOD? (B) BY SURVEY CYCLE (ALL)

		YES	NO	NO ANSWER	SUM	
1	I	82I	41I	I	123I	# RESP
	I	66.7I	33.3I	I	100.0I	% OF CYCLE
2	I	49I	39I	1I	89I	# RESP
	I	55.1I	43.8I	1.1I	100.0I	% OF CYCLE
3	I	58I	34I	2I	94I	# RESP
	I	61.7I	36.2I	2.1I	100.0I	% OF CYCLE
4	I	35I	17I	2I	54I	# RESP
	I	64.8I	31.5I	3.7I	100.0I	% OF CYCLE
5	I	30I	11I	I	41I	# RESP
	I	73.2I	26.8I	I	100.0I	% OF CYCLE
6	I	49I	31I	I	80I	# RESP
	I	61.2I	38.7I	I	100.0I	% OF CYCLE
7	I	54I	20I	I	74I	# RESP
	I	73.0I	27.0I	I	100.0I	% OF CYCLE
8	I	72I	49I	I	121I	# RESP
	I	59.5I	40.5I	I	100.0I	% OF CYCLE
SUMI		429I	242I	5I	676I	# RESP
	I	63.5I	35.8I	0.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .870436 E 01
DEGREES OF FREEDOM = 7

CONT COEF = .113164

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

WORK/SCHOOL DRIVING OK AFTER WAITING PERIOD OF: (B) BY SURVEY CYCLE (ALL)

	1 MONTH	2 MONTHS	3 MONTHS	>3 MONTHS	NO ANSWER	SUM	
1 I	82I	32I	83I	71I	2I	270I	# RESP
I	30.4I	11.9I	30.7I	26.3I	0.7I	100.0I	% OF CYCLE
2 I	44I	22I	61I	49I	2I	178I	# RESP
I	24.7I	12.4I	34.3I	27.5I	1.1I	100.0I	% OF CYCLE
3 I	57I	21I	74I	64I	2I	218I	# RESP
I	26.1I	9.6I	33.9I	29.4I	0.9I	100.0I	% OF CYCLE
4 I	61I	22I	56I	49I	1I	189I	# RESP
I	32.3I	11.6I	29.6I	25.9I	0.5I	100.0I	% OF CYCLE
5 I	49I	17I	43I	35I	4I	148I	# RESP
I	33.1I	11.5I	29.1I	23.6I	2.7I	100.0I	% OF CYCLE
6 I	36I	12I	38I	55I	1I	142I	# RESP
I	25.4I	8.5I	26.8I	38.7I	0.7I	100.0I	% OF CYCLE
7 I	29I	13I	37I	37I	2I	118I	# RESP
I	24.6I	11.0I	31.4I	31.4I	1.7I	100.0I	% OF CYCLE
8 I	32I	15I	47I	34I	2I	130I	# RESP
I	24.6I	11.5I	36.2I	26.2I	1.5I	100.0I	% OF CYCLE
SUMI	390I	154I	439I	394I	16I	1393I	# RESP
I	28.0I	11.1I	31.5I	28.3I	1.1I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .186168 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .115497

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

WORK/SCHOOL DRIVING OK AFTER WAITING PERIOD OF: (B) BY SURVEY CYCLE (ALL)

	1 MONTH	2 MONTHS	3 MONTHS	>3 MONTHS	NO ANSWER	SUM	
1	34I	9I	19I	20I	I	82I	# RESP
	41.5I	11.0I	23.2I	24.4I	I	100.0I	% OF CYCLE
2	22I	6I	14I	7I	I	49I	# RESP
	44.9I	12.2I	28.6I	14.3I	I	100.0I	% OF CYCLE
3	26I	4I	17I	11I	I	58I	# RESP
	44.8I	6.9I	29.3I	19.0I	I	100.0I	% OF CYCLE
4	14I	5I	9I	7I	I	35I	# RESP
	40.0I	14.3I	25.7I	20.0I	I	100.0I	% OF CYCLE
5	6I	3I	15I	6I	I	30I	# RESP
	20.0I	10.0I	50.0I	20.0I	I	100.0I	% OF CYCLE
6	16I	4I	17I	11I	1I	49I	# RESP
	32.7I	8.2I	34.7I	22.4I	2.0I	100.0I	% OF CYCLE
7	17I	6I	21I	8I	2I	54I	# RESP
	31.5I	11.1I	38.9I	14.8I	3.7I	100.0I	% OF CYCLE
8	26I	4I	31I	11I	I	72I	# RESP
	36.1I	5.6I	43.1I	15.3I	I	100.0I	% OF CYCLE
SUMI	161I	41I	143I	81I	3I	429I	# RESP
	37.5I	9.6I	33.3I	18.9I	0.7I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .203998 E 02
DEGREES OF FREEDOM = 21

CONT COEF = .213772

MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = MILWAUKEE

AVAILABILITY OF OCCUPATIONAL LICENSE BY SURVEY CYCLE (ALL)

	IMMEDIATE OCCUPATIONAL	OCCUPATIONAL AFTER WAIT	NO OCCUPATIONAL	OTHER	SUM	
1	77I	123I	171I	4I	375I	# RESP
	20.5I	32.8I	45.6I	1.1I	100.0I	% OF CYCLE
2	65I	93I	105I	4I	267I	# RESP
	24.3I	34.8I	39.3I	1.5I	100.0I	% OF CYCLE
3	79I	106I	140I	1I	326I	# RESP
	24.2I	32.5I	42.9I	0.3I	100.0I	% OF CYCLE
4	72I	106I	109I	10I	297I	# RESP
	24.2I	35.7I	36.7I	3.4I	100.0I	% OF CYCLE
5	45I	78I	83I	2I	208I	# RESP
	21.6I	37.5I	39.9I	1.0I	100.0I	% OF CYCLE
6	63I	58I	101I	3I	225I	# RESP
	28.0I	25.8I	44.9I	1.3I	100.0I	% OF CYCLE
7	53I	55I	82I	5I	195I	# RESP
	27.2I	28.2I	42.1I	2.6I	100.0I	% OF CYCLE
8	37I	58I	85I	1I	181I	# RESP
	20.4I	32.0I	47.0I	0.6I	100.0I	% OF CYCLE
SUMI	491I	677I	876I	30I	2074I	# RESP
I	23.7I	32.6I	42.2I	1.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE = .180123 E 02
DEGREES OF FREEDOM = 14

CONT COEF = .934629 E -01

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MILWAUKEE DRINKING AND DRIVING SURVEY FINAL RESULTS

MILWAUKEE VERSUS GREEN BAY = GREEN BAY

AVAILABILITY OF OCCUPATIONAL LICENSE BY SURVEY CYCLE (ALL)

	IMMEDIATE OCCUPATIONAL	OCCUPATIONAL AFTER WAIT	NO OCCUPATIONAL	OTHER	SUM	
1	36I	47I	39I	1I	123I	# RESP
	29.3I	38.2I	31.7I	0.8I	100.0I	% OF CYCLE
2	36I	30I	23I	I	89I	# RESP
	40.4I	33.7I	25.8I	I	100.0I	% OF CYCLE
3	31I	37I	25I	1I	94I	# RESP
	33.0I	39.4I	26.6I	1.1I	100.0I	% OF CYCLE
4	14I	23I	16I	1I	54I	# RESP
	25.9I	42.6I	29.6I	1.9I	100.0I	% OF CYCLE
5	9I	14I	18I	I	41I	# RESP
	22.0I	34.1I	43.9I	I	100.0I	% OF CYCLE
6	28I	27I	25I	I	80I	# RESP
	35.0I	33.7I	31.2I	I	100.0I	% OF CYCLE
7	18I	33I	23I	I	74I	# RESP
	24.3I	44.6I	31.1I	I	100.0I	% OF CYCLE
8	44I	42I	35I	I	121I	# RESP
	36.4I	34.7I	28.9I	I	100.0I	% OF CYCLE
SUMI	216I	253I	204I	3I	676I	# RESP
	32.0I	37.4I	30.2I	0.4I	100.0I	% OF CYCLE

STATISTICS BASED ON RAW FREQUENCY

CHI SQUARE =   .126970 E 02
DEGREES OF FREEDOM = 14

CONT COEF =   .136077