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An Assessment of Publicized Insurance Sanctions as a DWI Countermeasure

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16. Abstract The objective of this study was to evaluate the effect of publicized insurance sanctions on DWI. New Hanover County, North Carolina was chosen as a test site in part because this state mandates that offenders convicted of DWI have their premiums raised by 400 percent. Insurance sanctions were publicized in a seven month campaign of public service advertising and other publicity. Messages in the publicity campaign emphasized that convicted DWI offenders would face substantial insurance increases. To measure the effects of the program, the North Carolina Division of Motor Vehicles surveyed drivers coming to its offices prior to, during, and after the program began. Seven months of an intense public information and education program, relying heavily on public service advertising on TV did reach at least four percent of the drivers, and possibly an additional four percent. About half of those who indicated seeing the message reported the insurance sanction as one of the consequences of a DWI arrest. Regarding potential impact, many drivers who became aware of the insurance sanctions program reported that after drinking they drove less often.		13. Type of Report and Period Covered Final Report	
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SECTION 1

INTRODUCTION

This is a report of a study to assess the effects of publicized insurance sanctions on the general deterrence of Driving While Intoxicated (DWI). The project was conducted in the State of North Carolina. The study was conducted by Mid-America Research Institute for the U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA) under contract number DTNH22-89-R-07007. Mid-America Research, which was responsible for project administration and analysis, was supported by the University of North Carolina Highway Safety Research Center (HSRC). HSRC provided support in designing the project's publicity campaign and was responsible for creating publicity materials.

GOAL OF THE INVESTIGATION

NHTSA has evaluated a variety of enforcement, sanction and other interventions designed to mitigate DWI. Among sanctions for DWI, the Agency has examined the imposition of jail, license actions, fines, community service, vehicle impoundment and other penalties. Increased insurance costs, resulting from a DWI conviction, are considered to be a sanction within the context of this research, since such costs represent a real and substantial penalty to most convicted drivers.

The major difference between insurance sanctions and other sanctions for DWI is the source of imposition. Insurance sanctions are imposed in most states by private auto insurance carriers rather than public licensing authorities or the courts.

Regardless of the source of imposition, the goal of NHTSA, in sponsoring this research, was to measure or assess the value in deterring DWI of publicized, severe insurance sanctions. It was recognized, from a practical standpoint, that insurance sanctions would never exist in a vacuum, but would be part of a system of deterrents typically being comprised of enforcement, several sanctions, some publicity and other measures. Accordingly, it was recognized that the deterrence value of insurance sanctions would have to be addressed in the presence of other deterrents to DWI.

A secondary goal of NHTSA, in the event that insurance sanctions proved to be a deterrent to DWI, was to communicate to the general public the nature of these sanctions and how they were imposed and publicized, so that other localities could consider insurance sanctions as a possible additional deterrent to DWI.

BACKGROUND ON GENERAL DETERRENCE

NHTSA, in past studies, has distinguished between general deterrence and specific deterrence measures. Specific deterrence is intended to prevent or reduce drunk driving among drivers who have been convicted of DWI. General deterrence, on the other hand, is intended to reduce drunk driving among drivers who have never been

convicted of DWI. General deterrence measures are intended to reduce drunk driving by communicating that drunk drivers will be detected, arrested, convicted and sanctioned. With perceived certainty of detection, arrest and conviction, and celerity and severity of sanctioning, it is anticipated that drunk driving activity will be diminished.

Because general deterrence is aimed at drivers who have never been convicted, its success depends on effective communications that are designed to inform drivers that if they drink and drive they will be detected, arrested, and sanctioned. Insurance sanctions are considered to be general deterrence measures in this study. Specific deterrent effects of insurance sanctions on repeat offenders are believed to be below the level of practical detection and are not included in the scope of this study.

OBJECTIVES OF THE SPONSOR

The objectives of NHTSA, in support of its goal to examine the value of publicized insurance sanctions in deterring DWI, were to:

- Implement an effective public information and education (PI&E) campaign designed to increase awareness of the existence of severe insurance sanctions.
- Test the effectiveness of the PI&E campaign by measuring public awareness of severe insurance sanctions before, during and after the campaign, as well as by enumerating all PI&E campaign exposure activities accomplished during the life of the project.
- Measure the effectiveness of the publicized insurance sanctions program by reporting changes (if any) in reported drinking/driving behavior and changes in alcohol-related crashes.
- Communicate major findings and successful elements of the program to the public.

This report addresses the sponsor's goal and each objective providing information on the extent to which each objective was accomplished.

OBJECTIVES OF THE PARTICIPATING COMMUNITY

New Hanover County, North Carolina was selected for participation in this project. The reasons why New Hanover County was selected are reported in the next section of this report. The objectives of New Hanover County in participating in the project were to:

- Supplement its current, on-going DWI reduction campaign.
- Increase public awareness of drinking-driving problems in New Hanover County.

- Reduce DWI and maintain high levels of compliance with strict North Carolina laws regulating drinking and driving.

PROJECT SUMMARY

The project was initiated in March of 1989. The initial task was to develop a project plan for evaluating the deterrence value of well publicized insurance sanctions. Like similar previous NHTSA studies of general deterrence efforts, the study design called for a controlled test. Insurance sanctions for DWI were to be well publicized in a location that had such sanctions. Program effectiveness would be assessed according to increases in awareness of the insurance sanctions and to measured reductions in DWI as indicated by changes in reported drinking/driving behavior. Such changes would be measured at the mid-point and conclusion of the program against pre-implementation benchmarks. Similar data would be tracked contemporaneously in a comparison location to control for seasonal, external or other unanticipated effects on drinking and driving activity.

The second project task was to identify and recruit test and comparison locations for the study. A set of screening and selection criteria, detailed in Section 2, were identified. These criteria were applied to all 50 states to ensure that the best possible sites would be identified.

Four states were identified as meeting the selection criteria: Texas, Colorado, South Carolina and North Carolina. Visits were made to each of these states to ensure that the criteria were met and to assess the interest and ability of local personnel to implement the project. Since no project funds were available to fund local positions, this involved active recruitment of localities within the states that had the talent and resources to implement local PI&E activities.

Colorado was the first choice, among the four states, and Colorado Springs was selected as the test site. After initial PI&E planning and development activities had been started, local insurers decided not to participate in the project. Colorado had been targeted as a potential state for an insurance rate rollback initiative, and they felt that drawing attention to insurance rates at that time would be problematic and asked that the project not be implemented in Colorado.

Site selection and recruitment activities were re-initiated and after further consideration, North Carolina was selected as the test site. Meetings were held with local officials, and New Hanover County was selected as the test site.

Buncombe County, North Carolina, which is similar in most important respects to New Hanover, and well separated from New Hanover County geographically, was selected as a comparison site.

The New Hanover County Sheriff's Department was identified as the lead agency in cooperation with the State of North Carolina Department of Insurance. Following planning meetings with state and local officials, the PI&E program was developed and materials were created. The PI&E campaign was launched at a press conference

given on November 29, 1990, by the Sheriff and the Insurance Commissioner. This news conference was covered by local print and broadcast media. It was followed by a PI&E campaign consisting of television public service advertisements (PSAs), radio PSAs and posters. Surveys of public awareness and reported drinking/driving behavior were administered by the State Department of Motor Vehicles in New Hanover and Buncombe Counties before the campaign started, at the campaign's mid-point, and at the conclusion of the campaign.

SECTION 2

SITE SELECTION AND RECRUITMENT

This Section describes the detailed procedures that were employed to ensure that the best possible site was selected and recruited for participation in the project.

SITE SELECTION CRITERIA

The contract called for selecting one site for the implementation and testing of a heavily publicized insurance sanctions program. The proposed study design also called for the selection of a site to be used for comparison purposes. It was recommended that this comparison site be located in the same state as the test site so that licensing procedures, DWI laws and insurance sanctions would be comparable.

During the initial stage of the contract, a set of prerequisites were established pertaining to the nature of the insurance sanctions, necessary levels of cooperation, local conditions and availability of data. These prerequisites, which were all required to be met for a site to be considered for the project, gave rise to more specific site selection criteria. These criteria were applied first at the state level to determine whether entire states and all locations within such states should be eliminated from further consideration. States that qualified according to these criteria were subject to further scrutiny, and selected locations within the qualified states were considered. Additional selection criteria were applied to these localities.

Site selection procedures called for making initial contacts with NHTSA Regional personnel, state highway officials and state insurance commissions in each state. General information was collected about state insurance regulations and practices. Site visits were made to a limited number of promising states where additional information was obtained about from state and local sources. Final recommendations were provided by the contractor, and the government made the site selection according to the specified criteria. A discussion of each site selection criterion follows.

Nature of the Insurance Sanctions

Consistent with the general deterrence model, insurance sanctions must be severe, swift and sure to be effective. These criteria pertain to the severity of the sanctions, how the sanctions are administered, whether the sanctions are mandated by the state, and the presence of controversy related to auto insurance issues. All such criteria were applied at the state level, and many states were eliminated as a result.

Severity of Insurance Penalties The study concentrated on locations with insurers that at least double the annual insurance premiums of convicted drunk drivers for a period of three years.

Administration of Insurance Penalties The site selection process favored locations where insurers were informed of DWI convictions, where insurers were consistent in their administration of sanctions, and where loop-holes were minimized by requiring convicted drunk drivers to provide proof of insurance prior to license reinstatement.

Absence of Controversy About Auto Insurance During the course of the study, several states were experiencing controversy about high auto insurance rates or rates increases, and some were involved in auto insurance rate roll back initiatives. In the presence of controversy, we found most auto insurers wanting to avoid all publicity. The study avoided states in the throes of such controversy.

High Levels of Cooperation

This study depended on high levels of cooperation from local media, insurers, law enforcement, local volunteers, and state motor vehicle departments. With the exception of the latter, all of these were applied to localities within states.

Cooperation from Local Media Outlets This is a study of the deterrence value of insurance sanctions that are publicized through local initiative using local media. Accordingly, only sites with a full complement of local media including daily and weekly newspapers, television and radio would suffice. Just as important, local media outlets must support the project and be willing to provide significant media coverage.

Cooperation of Law Enforcement Contacts were made with local law enforcement to assess the extent of command emphasis on DWI enforcement. The study focussed on locations with law enforcement leaders who place real emphasis on DWI enforcement.

Cooperation of Insurers We began the project with the hope that insurers would join as partners in communicating to the public about insurance sanctions for DWI. We found that some insurers were opposed to the project in areas where insurance sanctions were not state mandated because they anticipated that they would be perceived as the sanctioners. Insurers were not opposed in some areas with state-mandated sanctions, although they were not generally willing to be active participants. Our criterion was to consider locations where insurers supported the concept of the project.

Cooperation of State Motor Vehicle Department One measure of program success was a change in knowledge, awareness and attitudes toward insurance sanctions for DWI. Since attitudinal surveys were not in the scope of this study, it was necessary to identify states interested in collecting such data, ideally through driver licensing facilities.

Cooperation of Local Lead Agency and Site Coordinator One criterion was the presence of a local agency with a general interest in DWI reduction and a specific interest and expertise that could be mobilized to publicize insurance sanctions.

We sought out localities with a strong lead agency willing to commit a portion of a qualified employee's time to serve as site coordinator for the project.

Ideal Local Conditions

A variety of local conditions were considered to be essential for candidate sites. These criteria were applied to potential locations in candidate states. States that had no localities meeting these criteria were eliminated.

Priority Enforcement of DWI According to the general deterrence model, drunk driving cannot be deterred by tough sanctions alone. Drunk drivers will not be deterred if they don't believe they will be arrested. Accordingly, rigorous enforcement is also essential.

Low Current Awareness of Insurance Sanctions For the sites considered as candidates for participation in the project, we examined news-clips and interviewed local personnel to assess current levels of awareness of insurance sanctions. Our objective was to avoid locations where awareness levels were already high making it difficult for a PI&E program to create additional increments of awareness.

Availability of Comparison Site Since a comparison study design was proposed, it was necessary to identify a site. It was determined that the comparison site should be similar to the test site in size, socio-economic factors, extent of DWI and enforcement practices. The comparison and test sites should be located in the same state so that the same laws related to DWI would prevail in both locations. To avoid contamination of the study design, it was necessary to restrict the selection to comparable sites in distinct, non-overlapping media markets.

Presence of Previous DWI Reduction Program(s) As evidence of commitment to drunk driving reduction, we looked for sites that had previous experience with local DWI programs. This kind of local activity also provided an indication of the ability of local personnel to conduct and sustain locally sponsored PI&E campaigns.

Absence of Current or Planned DWI Reduction Program(s) The objective of the study is to determine the deterrence value of insurance sanctions, in particular, among other deterrents that might be present. While it was recognized that a variety of on-going DWI reduction programs might be in place at any given site, we avoided sites that had either recently initiated a widely publicized DWI reduction program or were about to do so. Avoiding such sites would increase the chance that the effects of the project's insurance sanction PI&E campaign could be detected.

Presence of High Quality Crash Data If analysis of public awareness data indicates sufficient changes in public awareness such that an effect on crashes might be discernable, it was important that good crash data be available for an impact analysis.

Optimum Size of Test Site Attention was given to sites large enough to support a full complement of media including, as a minimum:

- A daily and weekly newspaper
- Major network television stations
- A range of commercial radio stations

At the same time, we avoided very large sites where competition would make it difficult to attract hard news and place public service advertisements. In general, we sought medium size cities that would be representative of the largest possible number of localities in the U.S.

Separate and Individual Media Market Favor was given to sites that had their own discrete media market as opposed to localities served by a larger metropolitan market. This enhanced access to the media and minimized the interference of confounding messages coming from adjacent or nearby localities.

SELECTION OF CANDIDATE SITES

Since most of the criteria represent gradations of quality, states and localities were identified as candidates based on the extent to which they satisfied all the criteria. The largest number of states were eliminated because localities lacked the two most critical criteria, namely strong insurance sanctions that included assurances that all or most offenders would receive the sanctions. Because of the need to avoid situations where insurers might be perceived as the sanctioners, a number of other states were eliminated that did not mandate insurance sanctions for DWI. A few other states were eliminated that did not meet media market requirements or did not have an adequate comparison site.

Four states were identified as having the most favorable conditions in place for this project: Texas, Colorado, South Carolina and North Carolina.

The places that were given the most consideration as test sites were localities that had local organizations with an interest in the project, a proven ability to operate a PI&E campaign, and a qualified individual willing to serve as a local site coordinator.

TEXAS

While Texas provided outstanding opportunities for the project relative to most criteria, the probability that most DWI offenders, though convicted, do not receive the insurance sanction made the state less desirable for the project.

COLORADO

Colorado met all of the site selection criteria. Although Colorado was ranked 27th nationally in rates paid for auto insurance, the State was targeted by an outside lobbying organization to reduce rates by up to 20 percent. Concerns were expressed about generating any publicity regarding auto insurance in the presence of a rate roll-

back initiative. For this reason, the decision was made not to conduct the project in Colorado.

SOUTH CAROLINA

South Carolina also met all of the site selection criteria. However, South Carolina was in the midst of an award winning, state-wide anti-DWI public information program and, after further consideration, decided that they wished to concentrate their resources and potential public service air time on that specific campaign.

SELECTION OF NORTH CAROLINA

Severity of Insurance Sanction

In North Carolina, notification to the insurance company of a DWI conviction can be accomplished in several ways. Insurers are required to purchase a motor vehicle report on all of their insured at least annually. Thus, once a DWI conviction is entered onto the record, the insurance company will find out about it within one year at a maximum. Additionally, there is an SR-22 requirement for license reinstatement and the insurance company will find out about the DWI when the insured attempts to obtain that document. Insurance companies are also required to notify the DMV when insurance lapses.

The insurance sanction for DWI in North Carolina is a 400 percent surcharge on the premium for three years. The sanction is triggered by the insurance company becoming aware of a DWI conviction. In North Carolina, the conviction rate for DWI cases where the BAC is .10 or above is consistently in the area of 90 percent.

Favorable Insurance Industry Environment

Contact was made with and support for the project was obtained from the top nine auto insurance writers in the state (contacts confirmed by the North Carolina Department of Insurance). Attempts were made to contact 27 additional auto insurance companies active in North Carolina. Twenty-two of these insurers were reached without any company raising any objections to the project. In all cases, high-level contacts were made with senior officials of the insurance companies.

Assurances of support from North Carolina insurance companies were reinforced by the support we heard from insurance industry associations and regulatory agencies. The North Carolina Rate Bureau and the North Carolina Association of Independent Insurers supported the project. Of special interest was the active support pledged by the North Carolina Department of Insurance. This support included direct assistance to the project by the Public Information Officer, and an offer by the Commissioner to participate in the project kick-off and TV PSAs.

Favorable Project Test Site

In addition to a favorable insurance environment, we identified a test site that met project evaluation requirements. New Hanover County has a full complement of mass media and a sufficiently large population of 118,000. Over 3,800 crashes a year occur in the county and over 1,700 DWI arrests are made. The jurisdiction appeared to be large enough to evaluate potential impacts on DWI accidents and certainly on public awareness and reported drinking driving behavior. Buncombe County, with similar demographics, DWI enforcement activity and data availability, was identified as the comparison site. Buncombe County has a population of 175,000 and over 2,200 DWI arrests per year.

Local Personnel and Commitment

Of greatest interest was the commitment and support of local personnel. The sheriff offered to serve as spokesman, to apportion a significant amount of staff time to the project, and to provide funding for production of materials and other program publicity. A budget of \$12,000 was approved by the sheriff for the production of TV PSAs, posters, billboards, brochures and other promotions.

At least \$10,000 of these costs were to be defrayed by the Sheriff's budget and he indicated a willingness to commit further funds. The proposed site coordinator had excellent media contacts and had been successful in placing significant public service advertising campaigns as well as fund raising with local industries.

Available data

We determined that all necessary data were available in a form that could be used by the project and that we could rely on attitudinal surveys to be conducted by Division of Motor Vehicle personnel in New Hanover and Buncombe County.

Previous DWI Reduction Activity--A Potential Drawback

Perhaps the greatest drawback of North Carolina was that as a result of their Safe Roads Act, they had experienced a 40 percent reduction in the proportion of crashes that were alcohol-related making it potentially difficult to demonstrate a further reduction as a result of publicizing the insurance sanction.

Based on all the site selection criteria, however, North Carolina was chosen particularly because it has a tough insurance sanction mandated by the state, a thorough and consistent notification system that provided assurance that the insurance sanction was applied to DWI offenders, strong support and approval from the Insurance Commissioner and insurance industry, and an excellent potential test site.

SECTION 3

INSURANCE SANCTION PROGRAM DESCRIPTION

DESCRIPTION OF THE INSURANCE SANCTION

State Mandated vs. Non-regulated Insurance Sanctions

In a program of this nature, where a specific sanction for DWI offenders is to be publicized in an effort to achieve general deterrence, it is important that the sanction be consistently applied. That is because the public information materials, of necessity, must speak to the sanction as it is applied and if some persons do not receive the sanction or receive a less severe sanction than that publicized, the public information campaign could be discredited and would be unlikely to achieve its objectives.

In general, the automobile insurance rate structure in the United States is regulated on the state level. However, the extent of control over the rate structure exercised by state insurance commissioners varies greatly. In particular, in many states, though the DWI offense generally has serious insurance cost or availability consequences, it is the decision of the insurance company how to handle a DWI conviction for a particular policyholder. In other words, some policyholders, who are long term customers and have other policies with the company may have no insurance cost consequences for a first DWI conviction while others, whose business is less important to the company, may find their premiums raised precipitously or that the company refuses to insure them on the next renewal. There are states, however, where the insurance commissioner approves an overall rate structure where the insurance cost consequences of a DWI conviction are clearly spelled out and consistently applied by all carriers. This often takes the form of a point system where each category of violation has a certain number of points attached to it and the number of points a driver has accumulated within the previous three years is used to calculate a multiplier that is applied to the cost of coverage. This approach offers the opportunity to quantify and publicize a consistently applied insurance sanction for DWI offenders.

Details of the Insurance Sanction in North Carolina

In North Carolina, the basic system for determining the premium consequences for a DWI conviction is relatively simple. A single DWI conviction carries 12 insurance points which results in a base premium surcharge of 400 percent.

To determine the actual dollar amounts of the premium increases used in the public information materials, the year, make and model of the vehicle depicted was obtained as well as the age of the individual depicted. The North Carolina Insurance Rate Bureau was provided that information and they then calculated a typical premium for that type of vehicle and driver assuming a clean driving record and then assuming a single conviction for DWI. Since the vehicles depicted were all relatively new, collision coverage was also assumed.

DESCRIPTION OF THE PROJECT SITE

Demographics, Location, Economy and Environment

New Hanover County, North Carolina was selected and recruited as the project test site. Buncombe County, North Carolina was selected as the comparison site. New Hanover County is located in Southeastern North Carolina on the Atlantic Ocean. The major city in New Hanover County is Wilmington. A major component in the local economy is shipping in that Wilmington is the second largest seaport in North Carolina and also has a manufacturing base. Tourism is also a major component of the local economy with both the historic aspects of the city and local beach communities drawing visitors, particularly during the spring and summer months. Another major tourist attraction is the battleship North Carolina which is located there. New Hanover County's population is 118,983. The population of Wilmington is 55,106.

Buncombe County, North Carolina, selected as the comparison jurisdiction, is somewhat larger than New Hanover County with a population of 175,580. Buncombe County is located in the extreme western part of the state, thus providing the project with separation of media markets and minimizing contamination while retaining the virtue of being in the same state as the test jurisdiction. The main population concentration is in the city of Asheville, population 63,433. A major component of the Buncombe County economy, besides manufacturing (textile and paper mills), is tourism. Asheville is adjacent to the Great Smokies National Park and the Blue Ridge Parkway and thus experiences significant tourism in the summer months.

Overview of DWI Law and Sanctions in North Carolina

With the passage of the Safe Roads Act in 1983, North Carolina adopted one of the nation's toughest and consistently applied DWI laws. With a *per se* level set at .10 for adults and zero for drivers under 18, the conviction rate for the DWI offense for drivers apprehended with a BAC in excess of legal levels is on the order of 90 percent. Sanctions include an administrative license suspension of ten days which is imposed at the time of arrest. That is, after determining that probable cause exists, the magistrate confiscates the license immediately with no temporary licenses provided. Sanctions imposed on first offenders upon conviction include a fine, license revocation with the possibility of a limited driving privilege for first offenders, either 24 hours in jail, 24 hours community service, or 30 days hard license suspension, and alcohol problem assessment and either compliance with recommended treatment or attendance at an Alcohol and Drug Traffic Education School if recommended instead of more intensive treatment. For multiple offenders, the sanctions are more severe, including mandatory jail terms of seven days.

Besides the high conviction rate and relatively severe sanction for DWI, another virtue of North Carolina as a host for this project is its tightly enforced mandatory insurance law. Insurance companies are required to notify the Division of Motor Vehicles when insurance coverage lapses and the Division moves promptly to revoke vehicle registrations when so notified. Consequently, North Carolina reputedly has

the lowest uninsured motorist rate in the nation. Another virtue is the near certainty that insurance carriers will become aware of any DWI convictions. North Carolina has in place a well established system that tracks the dispositions of all DWI arrests. Additionally, insurance companies are required to query the Division of Motor Vehicle driver records at least annually about the driving records of all of their policyholders and thus would become aware of DWI convictions.

Enforcement of DWI At the Project Site.

Both the experimental and comparison jurisdiction have high DWI enforcement rates. In 1990, 1,739 DWI arrests were made in New Hanover County and 2,238 in Buncombe County. Their arrest rates of about two percent of licensed drivers are both well above the national average of about one percent. The New Hanover County Sheriff's Department also has a special DWI enforcement squad. DWI enforcement levels remained relatively constant in New Hanover and Buncombe Counties during the life of the project.

Pre-project Awareness of Insurance Sanctions

Though a primary component of the study design was to take measures of public awareness of the insurance sanction through surveys conducted by the North Carolina Division of Motor Vehicles in driver license offices, an informal assessment of awareness on the specific insurance sanction for DWI was conducted by querying local law enforcement personnel in the test and comparison jurisdiction about recent media coverage of the issue and their perceptions of public awareness of the sanction. Without exception, both coverage and awareness were reported to be very low.

Media Resources At the Project Site

New Hanover County was an attractive prospective site from this perspective because it constitutes a self contained media market with television stations affiliated with each of the major networks located there, as well as housing the major daily newspaper for that region of the state. The local electronic media, including several radio stations, had consistently supported highway safety public service activity in the past and the local newspapers had similarly been responsive to requests for hard news coverage from the Sheriff's Department. The local coordinator in the Sheriff's Department already had a well established working relationship with the media.

DESCRIPTION OF THE PI&E PROGRAM

Identification of Lead Agency and Site Coordinator.

The New Hanover County Sheriff's Department was selected to be the lead agency in the conduct of the program in the Wilmington area. The sheriff's department was well suited to take the lead for several reasons:

- The department is not limited in responsibility to any city limits but instead has responsibility for the entire county;
- The department already had DWI enforcement as a priority. A unit within the sheriff's department, called the SAFE squad, was trained to detect drunk drivers and was equipped with tools such as portable breath testers to make accurate judgments as to the levels of impairment;
- The sheriff, Joseph McQueen, was well known and active and had been involved in several enforcement and public information programs;
- Within the department was a special programs coordinator who was quite capable of conducting this type of program and had many contacts and resources within the community.

Recruitment of State and Community Support.

The support of several agencies and organizations was needed both at the state and local levels. The Governor's Highway Safety Program and the North Carolina Department of Insurance were the first agencies to be recruited for the program. The insurance commissioner whole-heartedly supported the program and offered to be a spokesperson for the project. Through the North Carolina Insurance News Service, contact persons for the major insurers in the state were identified and they were briefed on the project. The North Carolina Association of Independent Insurance Agents and the North Carolina Rate Bureau also were contacted and gave their support to the program. The project also was supported by Mothers Against Drunk Driving (MADD), the very active anti-drunk driving activist group.

Several elements of community support were needed to implement the project. First, it was necessary to gain the support of the local insurance industry. The local coordinator contacted the New Hanover County area chapter of the North Carolina Association of Independent Insurers. She was invited to make a presentation to their membership and they were supportive of the program. The support of the media was crucial to the project's public awareness both from the hard news and public service programming standpoints. Since the coordinator had worked successfully with the media on other Sheriff Department projects, she was able to get this type of support from the print (newspapers) and electronic (TV and radio) media. In fact, it was the television exposure of the PSAs that became the backbone of the public awareness effort. Other support came in the form of explorer scouts distributing posters, local auto dealers supplying cars for shooting public service announcements (PSAs) and the willingness of area merchants to display posters. Funds for production and distribution of campaign materials were provided by the contract with additional support provided by the North Carolina Department of Insurance. No local funds were provided.

Campaign Planning

A six month program was planned to educate motorists that part of the high costs of a DWI conviction is the increased cost of automobile insurance -- that insurance rates automatically carry a 400 percent added cost and that this lasts for 3 years. The theme for this program *A DWI Sends Insurance Costs Sky High* was chosen to reflect this increase and was included on all materials and emphasized with the media. Individual TV PSAs and posters were target to selected demographic groups but the program, in its entirety, was intended to address the entire population.

The main public awareness components for the program were television and radio PSAs, hard news coverage through a kickoff news conference, and widespread distribution of posters that reiterated the messages on the TV PSAs. The spokespersons for the program were the Sheriff and the Insurance Commissioner. The combination of the two emphasized the joining of enforcement and insurance approaches for reducing drunk driving and provided the project a strong image. Both participated in the kickoff event and they were used alternatively at the closing of the TV PSAs.

Campaign Kick-off and Hard News Coverage

The program began with a news conference conducted by the Sheriff and the Insurance Commissioner. Both emphasized the drunk driving problem in New Hanover County and the need for strong enforcement of drunk driving laws and insurance sanctions for those convicted of DWI. At the news conference, the series of TV PSAs prepared for the project were previewed and the companion posters were displayed. Media kits were distributed that contained a news release, a fact sheet on local DWI statistics and a set of the posters. In order to emphasize the enforcement capabilities of the sheriff's department, the media were invited to observe DWI enforcement by participating in a nighttime ride-along with the SAFE unit that night.

The news conference was well attended by the media. All three local TV stations (WJKA, WWAY, WECT) covered the event as did the main newspaper for the area, *The Wilmington Morning Star*, and several smaller papers. Copies of hard news related to the project are shown in the Appendix. Area radio stations also sent representatives. The sheriff and the commissioner were interviewed by one of the television stations during a live noon news show.

Media Campaign

A major thrust of the public information and education plan was the involvement of the media through public service programming and the use of posters to augment the media messages. The public service awareness effort consisted of the following elements.

TV PSAs Six TV PSAs were produced. Storyboards of each PSA are shown in the Appendix. One PSA emphasized the enforcement capabilities of the sheriff's

department. The project team felt that for the PSAs that depict the consequences of a DWI conviction to have any real impact, it was necessary to first establish the credibility of the likelihood of being detected and convicted for DWI.

The remaining five PSAs tried to drive home the reality of the steep increase in insurance costs after a DWI conviction by showing different people with their cars and the typical insurance costs before and after a DWI conviction. The dollar figures for each situation were provided by the North Carolina Rate Bureau. Each PSA was aimed at a specific target group. All of the PSAs ended with a message from either the Sheriff or the Insurance Commissioner. The Sheriff's message was that the Department takes impaired driving seriously and the results are costly. The Insurance Commissioner's message was that State regulations require those convicted of DWI to pay for the increased insurance costs that result from drinking and driving. The following is a summary of the PSA messages and the intended audience:

- **30 Second PSA *DWI Enforcement*.** This PSA showed a deputy administering field sobriety tests and a preliminary breath test to a suspected drunk driver. The voice-over explained that when you drink and drive, you put a lot on the line. After all the court costs, lawyer fees and fines comes the high costs of insurance. A DWI conviction makes your insurance costs at least four times higher for three years.
- **30 Second PSA *High School Student*.** This PSA depicted a teenage male washing the family car with his father. The message was *One DWI Can Ground Your Whole Family* with numbers showing the insurance costs on a 1985 family car increasing from \$1,225 to \$3,562. Since most teenagers are still living under their parents rules and finances, this message tried to bring out the fact that the entire family would suffer.
- **30 Second PSA *21 Year Old Male*.** This PSA showed a young male pulling his car over to the side of the road, locking it, then walking off. The message accompanying this visual was *Think of a DWI Conviction as a \$200 a Month Car Payment, Car not Included*. An average priced 1991 car was shown with insurance rates climbing from \$591 to \$2,939 after the DWI conviction. This PSA was shot using both a white and black model to try to reach both target groups. The cost of insurance is likened to that of a car payment to give the audience a realistic frame of reference.
- **30 Second PSA *Businessman*.** This PSA, directed towards older experienced drivers, shows a businessman walking past a new expensive car and getting on a moped and driving off. The message is *One DWI Conviction can Change Your Lifestyle*. The average insurance costs roll up from \$846 to \$4,162. Since the cost of insurance is linked to the value of the vehicle insured, this PSA provided the opportunity to show how expensive the insurance on a luxury car can be after a DWI conviction.

- **30 Second PSA *Woman*.** This PSA was developed to target women, a group who has shown an increase in drinking driving behavior in recent years. The PSA shows a late-model car in front of an average house, then cuts to a nighttime scene of a woman receiving a BAC test from a deputy. The PSA then shifts back to the car and shows insurance costs increasing from \$555 to \$2,763.
- **30 Second PSA *Truck Driver*.** This PSA, aimed at people who drive pickup trucks, showed an adult male leaning up against a new truck. Insurance costs before a DWI conviction was \$669 compared to \$3,313 after a conviction. The message stated, *One DWI Could Make You Kiss that Truck Good-bye*. At that point, the truck pulls off the screen, leaving the man still standing there.

Posters A companion poster was prepared for each of the TV PSAs, except the enforcement and woman themes. These posters are shown in the Appendix. A visual of each person with the car from the TV PSAs was shown in the posters with the cost of insurance both before and after a DWI conviction. The TV PSAs and the photography for the posters were shot at the same time to ensure that the two mediums used identical images. These posters were distributed to local insurance agencies and merchants and industry in the area.

Radio PSAs Scripts for live announcer radio PSAs were provided to all the area radio stations. These scripts contained both general program messages and messages similar to the themes of the TV PSAs and posters. Copies of these scripts are shown in the Appendix.

The use of direct mail, targeting messages through insurance company mailings, was considered. Auto policy insurers were cooperative but there were logistical problems in mailing project information to a small subgroup of their policyholders, i.e., insured drivers operating vehicles in New Hanover County. This meant that the promotional program had to be delivered to all drivers.

As mentioned earlier, the TV PSAs formed the backbone of the program publicity. All the PSAs were distributed at one time to the stations, with a request that the stations show two PSAs at a time for a two month period, then start showing the next two in the series.

Decision Not to Augment Campaign

A few months into the campaign, the local coordinator accepted a new position and left the Sheriff's Department. Her position was not filled, rather her duties were transferred to another position that already had a substantial workload. As a result of this reduction of local manpower available, the project had to rely more heavily on the media public service programming and less on personal presentations. After the initial program elements had run their course, it was decided not to try to continue the efforts. This decision was based primarily on two factors:

- 1) the manpower available at the sheriff's department, which was not going to improve in the near future, was not enough to generate a surge of activities;
- 2) it was not reasonable to expect the television media to continue to give such excellent coverage to the PSAs. Other community interests also were vying for exposure.

Since neither the local coordinator nor the media were in positions to continue the program with an effort that approached that of the initial campaign, it was decided that very little increased awareness could be achieved by extending the program at that time.

SECTION 4

RESEARCH METHOD AND FINDINGS

STUDY DESIGN

Since one of the objectives of this project was to raise public awareness of the increased insurance costs resulting from conviction for DWI, the evaluation examined measures of public awareness of the insurance sanction and its consequences. The additional objective, to measure changes in alcohol-related crashes, was not achieved because the actual number of such crashes, before and after the campaign, were too small to discern any significant changes.

The analysis was based on surveys conducted by the North Carolina Division of Motor Vehicles. These surveys were conducted simultaneously in the study and the comparison jurisdiction in the Fall of 1990, before the program was announced, during the Spring of 1991, in the midst of the public information program, and again in the Fall of 1991, after the active public information activities had ceased. Individuals surveyed were people coming for license transactions to the offices of the Division of Motor Vehicles.

The license examiners were instructed to hand a one page questionnaire to persons who had completed their license application process and were waiting for their picture license to develop. This was done to avoid the possibility that persons might attempt to answer the questions "correctly" to please the examiner. Two versions of the questionnaire were used. One (the "long" form; two thirds of the total) asked questions about some basic demographics, drinking, driving, messages heard or seen about sanctions for drunk driving, and about sanctions for drunk driving. Included were questions asking what happens to the auto insurance of drivers who are convicted of drunk driving. The other instrument (the "short" form) asked the same basic questions, but did not ask general questions about sanctions for drunk driving. Insurance was not mentioned at all in order not to prompt responses mentioning insurance sanctions. Most questions allowed respondents to check an answer, but the questions about messages and sanctions provided space for open ended responses. Copies of the questionnaires appear in the appendix.

A generalized linear model procedure was employed to statistically control for differences in the demographic composition of respondents and other factors between waves (e.g., age, sex, drinking frequency, etc.). Chi-square tests were used where sample sizes were sufficiently large to report probabilities. Otherwise, Fisher's Exact Tests were used.

STUDY FINDINGS

The findings in the following sections address the research objectives and are presented as a comparison between survey waves as well as between the test and comparison locations. Findings that are not directly related to the research objectives, or show no relationships of interest between waves or locations, are generally omitted.

Message and Awareness

All respondents were asked "What messages about penalties for drunken-driving have you heard, seen, or read in the last three months (on TV, radio, in the newspaper, posters, etc)? Please write in." Three lines were provided for answers. The answers were classified into 17 groups, one of which was increase of insurance premiums. Table 1 shows the frequencies with which this was mentioned.

Table 1
Messages About Insurance Sanction

Heard Message	Short Form			Long Form		
	Wave	Wave	Wave	Wave	Wave	Wave
frequency col pct	1	2	3	1	2	3
Yes	3 0.3	45 4.3	19 3.3	3 0.6	47 9.0	17 6.2
No	942 99.7	992 95.7	552 96.7	460 99.4	473 91.0	258 93.8
Total	945	1037	571	463	520	275

There is a striking pattern: in each wave, the percentage of respondents who mentioned the insurance message is about twice as high for the long form as for the short form. A plausible explanation is that respondents glanced over the entire form before answering individual questions. The question "What happens to drivers' car insurance when they are caught and convicted of drunk driving?" on the long form could have reminded them of a message they had heard or seen, but forgotten. However, the question also suggests to an attentive reader that insurance premiums will probably increase after a conviction for drunk driving. We can not determine whether, or to which extent the first, or the second explanation applies.

Of interest for the evaluation is that before the start of the project, fewer than one percent of the respondents had heard or seen a message about insurance sanctions. At the height of the campaign, and even after its conclusion, that percentage had statistically significantly (far beyond the tabulated probabilities) increased.

At the height of the campaign, an additional four percent of the respondents with the short form had heard the message, eight percent with the long form. We interpret this so that four percent recalled the message so strongly as to mention it without prompting; we are also speculating that up to another four percent might have heard

the message, but recalled it only when insurance was mentioned. We can not make a stronger statement, because we can not know how many of these additional four percent simply guessed.

After the campaign, the percentage mentioning the insurance sanction dropped by about one third. This decline is not statistically significant for the short form ($p=0.2$), and marginally significant ($p=0.10$) for the long form. However, it suggests strongly that the effect of the campaign declines over time. How fast and how far the decline will be, we can not know.

Table 2 separates respondents who own a motor vehicle from those who do not own one. As one would expect, in all waves owners mentioned insurance sanctions much more often than non-owners, roughly twice as often. For the second wave the difference is statistically significant ($p=0.09$), for the third not ($p=0.15$), but the hypothesis that it is the same as in the second wave could not be rejected.

Table 2 Messages About Insurance Sanction

Heard Message	Owns Vehicle			Does Not Own Vehicle		
	Wave	Wave	Wave	Wave	Wave	Wave
frequency col pct	1	2	3	1	2	3
Yes	3 0.4	39 4.9	17 3.8	0 0.0	6 2.6	2 1.6
No	689 99.6	765 95.1	425 96.2	253 100.0	224 97.04	127 98.4
Total	692	804	442	253	230	129

Table 3 shows the distribution of messages about insurance sanctions by age and wave. For those who did not mention an insurance sanction message, the age distributions for the three waves are very similar. There is no clear pattern for those who heard an insurance message. During the second wave, those aged 25-29 mentioned the insurance message most often. Also, none, or very few in the youngest, and in the oldest age group mentioned the message. This appears to suggest that the message reached primarily the middle age group.

Table 3 Age By Message

Age Frequency Row Pct Col Pct	Wave 1		2		3	
	Message		Message		Message	
	N	Y	N	Y	N	Y
Under 18	144	0	74	0	52	0
	100.00	0.00	100.00	0.00	100.00	0.00
	15.34	0.00	7.52	0.00	9.45	0.00
18-20	75	0	80	2	48	2
	100.00	0.00	97.56	2.44	96.00	4.00
	7.99	0.00	8.13	4.44	8.73	10.53
21-24	80	0	117	6	61	1
	100.00	0.00	95.12	4.88	98.39	1.61
	8.52	0.00	11.89	13.33	11.09	5.26
25-29	98	0	114	13	65	1
	100.00	0.00	89.76	10.24	98.48	1.52
	10.44	0.00	11.59	28.89	11.82	5.26
30-49	356	2	382	17	204	13
	99.44	0.56	95.74	4.26	94.01	5.99
	37.91	66.67	38.82	37.78	37.09	68.42
50-65	131	1	147	6	74	2
	99.24	0.76	96.08	3.92	97.37	2.63
	13.95	33.33	14.94	13.33	13.45	10.53
over 65	55	0	70	1	46	0
	100.00	0.00	98.59	1.41	100.00	0.00
	5.86	0.00	7.11	2.22	8.36	0.00
Total	939	3	984	45	550	19

Table 4 shows the corresponding information by sex. In the second as well as in the third wave, men mention the insurance message more frequently than women. The differences, however, are not statistically significant, not even if one combines the two waves.

Table 4 Sex By Message

Sex Frequency Row Pct Col Pct	Wave 1		2		3	
	Message		Message		Message	
	N	Y	N	Y	N	Y
M	467	1	507	26	293	12
	99.79	0.21	95.12	4.88	96.07	3.93
	49.68	33.33	51.47	57.78	53.08	63.16
F	473	2	478	19	259	7
	99.58	0.42	96.18	3.82	97.37	2.63
	50.32	66.67	48.53	42.22	46.92	36.84
Total	940	3	985	45	552	19

Table 5 shows the medium by which the respondent heard the insurance message. Of the few who saw a message before the campaign, the vast majority had seen it in a newspaper. During and after the campaign, TV was the most important medium. Newspapers were a far second, and other media played only a minor role.

Table 5 Medium Of Insurance Message

Medium Frequency Col Pct	Wave		
	1	2	3
Radio	0 0.0	5 6	0 0.0
TV	1 20.0	71 85	21 70.0
Newspaper	4 80.0	6 7	3 10.0
Poster	0 0.0	1 1	2 6.7
Other Person	0 0.0	1 1	2 6.7
Other	0 0.0	0 0	2 6.7
Total	5	84	30

Table 6 shows the distribution of media during the second and third wave, during and after the campaign, for the insurance sanction messages, and other messages about drinking and driving. The obvious difference is the greater role played by TV for the insurance sanction message ($p=0.01$). Also statistically significant is the difference for billboards which were not used in the campaign to publicize insurance sanctions ($p=0.001$), and the residual category "other" ($p=0.02$). The other differences are not statistically significant.

Table 6 Medium By Insurance Sanction Message And Other Messages

MEDIUM	MESSAGE		Total
	Insanct	Other	
Frequency Row Pct Col Pct			
Missing	14 4.42 10.94	303 95.58 12.07	317
Billboard	0 0.00 0.00	130 100.00 5.18	130
Radio	5 3.94 3.91	122 96.06 4.86	127
TV	92 5.72 71.87	1517 94.28 60.41	1609
Bumper Sticker	0 0.00 0.00	38 100.00 1.51	38
Newspaper	9 6.77 7.03	124 93.23 4.94	133
Other Person	3 11.54 2.34	23 88.46 0.92	26
Poster	3 2.68 2.34	109 97.32 4.34	112
Other	2 1.4 1.5	145 98.6 5.8	147
Total	128	2511	2639

On the short form, the question was asked "What do you think can happen to a person convicted of drunk driving? For each of these possibilities, give the percentage of the convicted drivers you think it happens to". Respondents had three lines for responses. Each line had two parts, one "What can happen", the other "Percent of drivers (times out of 100)". Responses in the first part were categorized into 20 classes. One of them was "insurance increase". When a respondent gave this response on one of the three lines, he was classified as being aware of the insurance sanction. Respondents obviously interpreted the second part of the question in differing ways; therefore, it could not be analyzed.

Table 7 shows awareness of the insurance sanction. Initially, nearly four percent of the respondents were aware of insurance sanctions, at the peak of the campaign another three percent became aware of it. This increase by 75 percent is statistically significant ($p=0.003$). After the campaign, awareness dropped somewhat, though not statistically significantly. At the comparison site, initial awareness was the same as at the program site, 3.9 percent. Then it dropped statistically significantly ($p=0.07$) to 1.5 percent and increased again slightly. Nevertheless, the data do suggest that the

changes at the program site reflect the effects of a general trend related to the local campaign.

Table 7 Awareness of Insurance Sanction

Aware	Program Site			Matched Site		
	Wave 1	2	3	Wave 1	2	3
Yes	37 3.9	71 6.8	34 6.0	8 3.9	5 1.5	3 1.9
No	908 96.1	966 93.2	537 94.0	199 96.1	336 98.5	151 98.1
Total	945	1037	571	207	341	154

Table 8 provides some insight how the campaign contributed to awareness. Among those who had not heard the project message, awareness remained fairly constant around four percent. Among those who had heard a project insurance message, about 50 percent became aware of the insurance sanctions.

Table 8 Awareness By Message

MESSAGE	AWARE					
	Wave 1		Wave 2		Wave 3	
Frequency ROW Pct	N	Y	N	Y	N	Y
N	905 96.07	37 3.93	945 95.26	47 4.74	527 95.47	25 4.53
Y	3 100.00	0 0.00	21 46.67	24 53.33	10 52.63	9 47.37
Total	908	37	966	71	537	34

Awareness and Drinking Habits

Question 8 (short form) asked: "How often do you drink beer, wine, or liquor? (CIRCLE ONE)" and allowed the responses:

- A. Every day
- B. Several times a week
- C. Once a week
- D. Once a month
- E. Less than once a month
- F. Never

Because of very few responses in some categories, we aggregated them into three classes: "regular" drinkers (a, b), "occasional" drinkers (c, d, e), and non-drinkers. Table 9 shows awareness by drinking habits. For regular drinkers, awareness appears to increase from 8.2 percent to 11.7 percent. However, this increase is not statistically significant ($p=0.21$), and awareness drops during the third wave below the level of the first. Therefore, it appears reasonable to conclude that awareness among regular drinkers was not increased.

Table 9 Awareness of Sanctions By Drinking Habit

DRINKING HABITS	AWARE					
	Wave 1		Wave 2		Wave 3	
	Frequency		Frequency		Frequency	
ROW Pct	N	Y	N	Y	N	Y
Regular	89	8	104	15	48	4
	91.8	8.2	88.3	11.7	92.3	7.7
Occas.	409	14	430	37	242	21
	96.7	3.3	92.1	7.9	92.0	8.0
Never	404	15	416	19	240	9
	96.4	3.6	95.6	4.4	96.4	3.6
Total	902	37	950	71	530	34

For occasional drinkers, awareness more than doubled (statistically very significantly at $p=0.002$) and remained high after the campaign. For non-drinkers, there was a statistically non-significant ($p=0.34$) increase in awareness during the campaign, and afterwards a return to the original level. The obvious conclusion is that the campaign increased awareness among occasional drinkers, but not among regular drinkers, nor among non-drinkers. It is plausible that non-drinkers have no direct interest in sanctions for drunk driving. It is less clear why there should be no effect on regular drinkers, but one may speculate that those regular drinkers who are amenable to rational arguments were already aware of the sanctions.

This analysis assumed that the campaign did not affect drinking habits, since it was directed against drunk driving. There might, however, be individual situations where reducing drinking and driving requires reduction in drinking. Table 10 addresses this question. It contains the same data as Table 9, but shows the percentages of regular, occasional, and non-drinkers, by wave and awareness. If awareness had an effect on drinking, there would be a shift from regular to occasional, and perhaps also from occasional to never drinking in the second, and possibly also third wave. For those not aware, the Table shows practically no difference between the three waves.

Table 10 Drinking Habits By Awareness

DRINKING HABITS	AWARE					
	Wave 1		Wave 2		Wave 3	
	Frequency		Frequency		Frequency	
ROW Pct	N	Y	N	Y	N	Y
Regular	89	8	104	15	48	4
	9.9	21.6	10.9	21.1	9.1	11.8
Occas.	409	14	430	37	242	21
	45.3	37.8	45.3	52.1	45.7	61.8
Never	404	15	416	19	240	9
	44.8	40.5	43.7	26.8	45.3	16.3
Total	902	37	950	71	530	34

For those who were aware of the sanctions, the table does not show the expected pattern: the percentage of non-drinkers decreases with time, and the percentage of regular drinkers remains unchanged from the first to the second wave. However,

because of the small numbers, these differences are not significant. Thus, there is no indication that awareness of insurance sanctions has an effect on drinking habits per se.

Drinking and Driving

Question 9 (short form) is "How often do you drink alcoholic beverages and then drive within a couple of hours (CIRCLE ONE)", and it allows the same six responses as question 8. Table 11 shows the responses for the three waves at the treatment site.

Table 11 Self Reported Frequency Of Driving After Drinking

DRIVING AFTER DRINKING	WAVE		
	Wave 1	Wave 2	Wave 3
Frequency Col Pct			
Every Day	1 0.11	0 0.00	0 0.00
Several Times A Week	8 0.85	7 0.68	1 0.18
Once A Week	23 2.45	40 3.91	9 1.58
Once A Month	29 3.09	35 3.42	14 2.46
Less Than Once A Month	112 11.93	120 11.72	80 14.08
Never	766 81.58	822 80.27	464 81.69
Total	939	1024	568

The proportion of drivers who never drive after drinking actually decreases very slightly during the second wave, and rebounds to the original level in the third wave. However, one may not expect that a deterrence eliminates the prohibited behavior completely; even a reduction in frequency would be a success of the program. If one combines the three categories of most frequent drinking/driving, A,B,C, their percentage changes from 3.4 to 4.6, to 1.8 over the waves. If one combines A,B,C, and D, the corresponding percentages are 6.5, 8.0, and 4.2. Thus, there is no suggestion that the program had an effect on driving after drinking, based on self-reported information.

One might better be able to recognize an effect if one separates those who were aware of the sanctions from those who were not. The following tables show this.

Table 12 Reported Frequency Of Driving After Drinking By Awareness

DRIVING AFTER DRINKING Frequency Col Pct	WAVE 1		WAVE 2		WAVE 3	
	Aware		Aware		Aware	
	N	Y	N	Y	N	Y
Every Day	0 0.0	1 2.7	0 0.0	0 0.0	0 0.0	0 0.0
Several Times A Week	7 0.8	1 2.7	6 0.6	1 1.4	1 0.2	0 0.0
Once A Week	21 2.3	2 5.4	33 3.5	7 9.9	9 1.7	0 0.0
Once A Month	25 2.8	4 10.8	31 3.2	4 5.6	14 2.6	0 0.0
Less Than Once A Month	106 11.8	6 16.2	108 11.3	12 16.9	74 13.9	6 17.6
Never	743 82.4	23 62.2	775 83.3	47 66.2	436 81.6	28 82.4
Total	902	37	953	71	534	34

In the first two waves, the percentage of those who never drink and drive is lower among those who are aware than among those who are not. This contradicts the hypothesis that awareness of the sanctions is a deterrence to driving after drinking.

It is possible that people do not reduce their driving after drinking - some of which may be below the legal BAC level - but only driving after drinking too much. Question 10 (short form) addresses this aspect: "Within the last three months, how often do you think you have driven after drinking too much? (CIRCLE ONE)". Again, the same six categories of answers are provided.

Table 13 Reported Frequency Of Driving After Drinking Too Much

Driving After Drinking Too Much Frequency Col Pct	WAVE		
	Wave 1	Wave 2	Wave 3
Every Day	0 0.00	0 0.00	1 0.18
Several Times A Week	2 0.21	1 0.10	0 0.00
Once A Week	3 0.32	3 0.29	2 0.35
Once A Month	12 1.28	11 1.07	5 0.88
Less Than Once A Month	38 4.07	50 4.86	30 5.26
Never	879 94.11	964 93.68	532 93.33
Total	934	1029	570

The percentage of those who never drive after drinking declines over time, which argues against a strong effect of the sanction. However, the percentage of those who drive after drinking too much at least once a month declines from 1.8 percent to 1.5 percent to 1.4 percent. This would be an impressive reduction of driving after drinking by 25 percent, but the actual counts are so small that the difference between 1.8 percent and 1.4 percent does not even approach significance ($p=0.35$).

Question 11a (short form) addresses driving after drinking in a comparative way: "Compared with three months ago, are you driving after drinking: (CIRCLE ONE)"

- A. More often?
- B. Less often?
- C. About the same?
- D. Do not drive after drinking.

Table 14 Reported Change In Driving After Drinking Too Much

Change	Wave		
	Wave 1	Wave 2	Wave 3
Frequency			
Col Pct			
More Often	3 0.37	0 0.00	0 0.00
Less Often	46 5.68	64 6.74	31 6.28
About The Same	63 7.78	80 8.42	35 7.09
Do Not Dr/dr	697 86.05	805 84.74	428 86.64
Total	809	949	494

The percentage of those who do not drive after drinking is practically unchanged ($p=0.58$); the small change during wave 2 is not even in the expected direction. This suggests that the campaign did not completely deter anybody from driving after drinking too much. The percentage of those who report to drive less often after drinking too much increased from 5.7 to 6.7 percent, which is far from significant ($p=0.36$). This is at least compatible with the hypothesis that the campaign induced some drivers to drive less often after drinking too much.

Table 15 separates those who are aware of the sanctions from those who are not.

Table 15 Reported Change In Driving After Drinking Too Much

Change	Wave 1		2		3	
	Frequency Col Pct	Aware N Y	N	Aware Y	N	Aware Y
More Often	3 0.4	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0
Less Often	43 5.5	3 10.3	53 6.0	11 16.4	28 6.1	3 9.4
About The Same	58 7.4	5 17.2	74 8.4	6 9.0	33 7.1	2 6.2
Do Not Dr/dr	676 86.6	21 72.4	755 85.5	50 74.6	401 86.8	27 84.4
Total	780	29	882	67	462	32

Again, with the exception of the last wave, those who never drink and drive are much rarer among those who are aware of the sanctions. Among those who were not aware of the sanctions, the percentages of those who never drink and drive remained essentially constant. The percentage of those who drove less after drinking increased slightly. Among those who were aware of the sanctions, the percentage of those who report never to drive after drinking increased from the second to the third wave, but the change is not statistically significant ($p=0.20$). The percentage of those who did drive less often after drinking increased from 10 to 16 percent, again far from being statistically significant ($p=0.37$), and then dropped back to essentially the initial level. One may speculate that the campaign had the effect of initially to induce some drivers to drive less often after drinking, and finally to never drive after drinking, but even the combined change of never driving after drinking, and driving less often after drinking is not statistically significant ($p=0.33$).

Tables 15A and 15B examine subsets of Table 15, namely persons who admit to some driving after drinking. Waves two and three are combined to create one set of observations after the PI&E program was initiated to compare with the pre-program observations. Additionally, those who report driving after drinking more often or about the same are grouped and compared with those who report driving less often after drinking. Thus, two two-by-two tables are created. One deals with persons who were not aware of the sanction and the other with persons who were aware of the insurance sanctions.

Table 15A presents these data for persons who were not aware of the insurance sanction and there is virtually no difference in reports of changes in drinking driving behavior before and after implementation of the PI&E program ($p=.993$). However, in Table 15B, which presents data on persons who were aware of the insurance sanction, marked changes are apparent in the form of a much larger proportion of the respondents reporting driving less often after drinking too much. The percentage reporting so changed from 35.5 percent prior to the program, to 63.6 percent after program initiation. One cannot draw strong conclusions from this because the numbers are small and statistical significance was not reached ($p=.195$).

Table 15A Reported Change In Driving After Drinking Too Much - Respondents Not Aware of Sanction

	Pre- Implementation	Post Implementation
Drive After Drinking Less Often	43 (41.3 %)	81 (43.1 %)
Drive After Drinking More Often or About the Same	61 (58.7 %)	107 (56.9 %)
	104	188

Table 15B Reported Change In Driving After Drinking Too Much - Respondents Aware of Sanction

	Pre- Implementation	Post Implementation
Drive After Drinking Less Often	3 (37.5 %)	14 (63.6 %)
Drive After Drinking More Often or About the Same	5 (62.5 %)	8 (36.4 %)
	8	22

Another way of looking at the effect of this well publicized insurance sanction program is to compare the behavior of "aware" and "not-aware" drivers after implementation of the publicity program. Table 15C shows that many more drivers aware of the insurance sanction program indicated desirable changes in drinking driving behavior than drivers not aware of the program ($p=.067$)

Table 15C Reported Change in Driving After Drinking (Post Implementation)

	Not Aware of Sanction	Aware of Sanction
Drive After Drinking Less Often	81 (43.1 %)	14 (63.6 %)
Drive After Drinking More Often or About the Same	107 (56.9 %)	8 (36.4 %)
	188	22

Deterrence Value of Insurance Sanctions

Question 6 (short form) asked "Which of these possibilities would you fear most", referring to a previous question "What do you think can happen to a person convicted of drunk driving." Respondents had one line to write their answer down. Many respondents gave answers which were not consequences of a conviction, but consequences of accidents resulting from drunk driving, e.g. "kill someone".

Table 16 shows the frequency of these responses. Jail is feared most, by about 55 percent of the respondents. License sanctions are next with about 30 percent. The next is fear of death, seven percent declining to three percent (this surprising decline

is significant at two percent). It is closely followed by the fear of killing someone with three to four percent. Insurance sanctions, with about one percent are even farther down, in the same neighborhood as fear of an accident, or fear of injury. This shows that insurance sanctions are taken seriously, but that other sanctions are feared much more.

Table 16 Most Feared Consequences Of A DWI Conviction

Frequency Col Pct	Wave 1	Wave 2	Wave 3
Accident	12 1.83	7 0.96	4 1.06
Insurance sanction	6 0.91	9 1.24	5 1.33
Jail	360 54.88	378 52.07	207 55.05
Killing someone	24 3.66	22 3.03	16 4.26
License actions	178 27.13	226 31.13	116 30.85
Death	43 6.55	40 5.51	13 3.46
Injury	5 0.76	7 0.96	6 1.60
Total	628	689	367

This summary tabulation, however, reflects the views of the entire population, including those not aware of the sanctions who, presumably, can not fear them. Table 17 is restricted to those who are aware of the insurance sanctions.

Table 17 Most Feared Consequences Of A DWI Conviction
Among Those Aware Of Insurance Sanctions

Frequency Col Pct	Wave 1	Wave 2	Wave 3	total
Insurance sanctions	5 20.83	9 18.00	5 27.78	19 21.8
Jail	4 16.67	13 26.00	8 44.44	25 28.7
License sanctions	13 54.16	25 50.00	5 27.78	43 49.4
Totals	22	47	18	87

Due to the low case numbers, this table shows large fluctuations and no consistent or plausible time pattern. Overall, jail is no longer the most feared sanction, with less than 30 percent, compared with more than 50 percent for all drivers. License sanctions with nearly 50 percent take the first position, compared with 30 percent for all drivers. Insurance sanctions have moved up to third position, from about one percent to 20 percent.

At first glance, this seems to indicate that a fairly high percentage of people who are aware of insurance sanctions fear them most. However, an alternative explanation is also plausible: people who fear insurance sanctions very much will be more likely to mention them spontaneously as a sanction, whereas people who do not consider them serious may forget to mention them (or rank them lower than the first three sanctions they can write down in the space provided).

Insurance Premiums

On the long form, respondents were asked (question 11): "How much is the insurance for the car you drive most often? Dollars _____ per: a. half year b. year c. quarter d. month (CIRCLE ONE) Don't know _____". Dollar amounts were translated into annual amounts; where the necessary information was missing, they were treated as "don't know". Table 18 relates knowledge and amount of the premium (question 11) to car ownership (question 4). An obvious and not surprising feature of the table is that among the owners, only 27 percent did not know the premium for their car, but 73 percent of the non-owners. There is also an indication that if the premium for the most often used car is very high, more non-owners are aware of it; if the premium is less than \$800, between 0 and nine percent of the drivers do not know it, if the premium is higher, then 11-15 percent know it. However, knowledge does not increase with the amount of the premium for the lower premiums.

Table 18 Knowledge and Amount Of Insurance Premium By Car Ownership

PREMIUM Frequency Row Pct Col Pct	OWNERSHIP		Total	Percent of those knowing premium
	N	Y		
Missing	248 42.54 73.37	335 57.46 26.55	583 36.4	
<200	0 0.00 0.00	23 100.00 1.82	23 1.4	2.3
200-399	22 9.44 6.51	211 90.56 16.72	233 14.6	22.9
300-599	16 5.33 4.73	284 94.67 22.50	300 18.8	29.5
600-799	16 8.38 4.73	175 91.62 13.87	191 11.9	18.8
800-999	12 11.21 3.55	95 88.79 7.53	107 6.7	10.5
1000+	24 14.72 7.10	139 85.28 11.01	163 10.2	16.0
Total	338	1262	1600 21.1	78.9

Table 19 relates the write-in responses to question 10 (long form) "What happens to driver's car insurance when they are caught and convicted of drunk driving?", to question 5 (long form) "What messages about penalties for drunken driving have you heard, seen, or read in the last three months (on TV, radio, in the newspaper, posters, etc)?", distinguishing only messages on insurance sanctions, and other messages.

Table 19 "What Happens To Car Insurance" By Insurance Message Heard Or Not

What happens to car insurance Frequency Col Pct	MESSAGE HEARD	
	N	Y
Becomes Unaffordable	4 0.29	2 2.99
Doubles	45 3.32	4 5.97
Goes Way Up	232 17.11	20 29.85
Increases 500-550%	18 1.33	2 2.99
Increases	734 54.13	34 50.75
Cancelled	240 17.70	0 0.00
Other	83 6.12	5 7.46
Total	1356	67

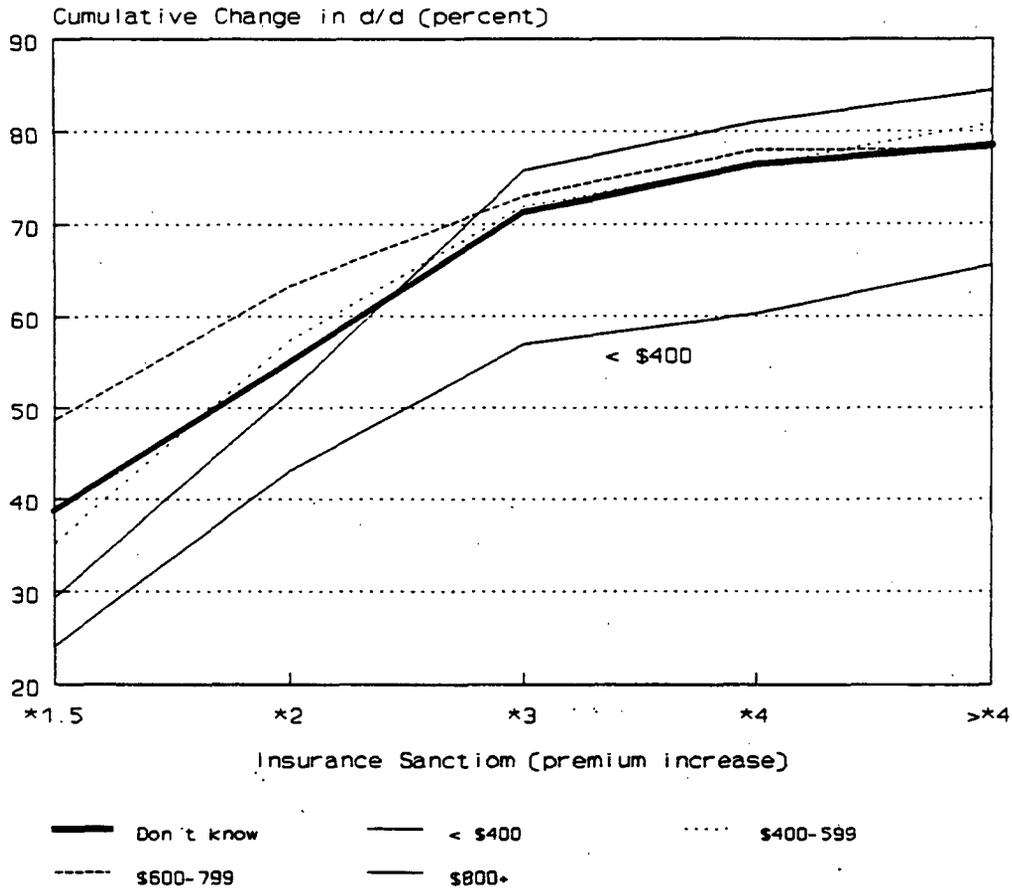
Generally, those who heard the message had a more realistic idea of the magnitude of the insurance premium increases. The frequency of the vague response "increases" declined, though not statistically significantly. The response "cancelled" completely disappeared. The quantitatively wrong response "doubles" increased in frequency, though not statistically significantly. The quantitatively about right response "500-550 percent" increased, but not significantly ($p=.24$). However, the qualitatively correct responses "goes way up", and "becomes unaffordable" increased significantly ($p=4.7$ percent, and 2.9 percent, respectively). In sum, those who had heard an insurance message had a more correct perception of the insurance sanctions than those who had not heard it.

Question 12 (long form) asked "How much would your insurance premium have to increase before you would change your drinking and driving? (CIRCLE ONE)" and allowed the following answers:

- a. Go up by half
- b. Double
- c. Triple
- d. Go up fourfold
- e. Go up more than fourfold
- f. Never drink and drive
- g. Would not change drinking and driving

Figure 1

Cumulative Percentage of Drivers
Changing Drinking and Driving by Insu-
rance Sanction and Annual Premium



All respondents were considered except those who claimed they never drink and drive. Figure 1 shows which percentage of the respondents would change their driving after drinking, by premium increase, and by the premium they actually pay. The x-axis shows the hypothetical increases in premiums presented to the respondents, the y-axis the percentage of respondents deterred by such an increase (e.g., tripling the premium would deter not only those drivers who had indicated "triple", but also those who had indicated "go up by half", or "double"). The pattern of deterrence is consistent among the premium classes. Going from a 50 percent premium increase to a 100 percent premium increase increases the deterrent considerably, and a change from a 100 percent premium increase to a 200 percent

premium increase increases the deterrence by about the same percentage. Going from tripling the premium to quadrupling it, however, increases the deterrence much less, and further increasing it beyond quadrupling adds similarly little to the deterrent. Even at the highest level, a considerable percentage of the respondents would not be deterred.

There are some differences between the premium classes. Fewer drivers with premiums under \$400 would change their drinking and driving for any given percentage increase of the premium compared with drivers who pay higher premiums, or don't know them. This may not be surprising, since a certain percentage premium increase is a lower actual dollar amount for them than for drivers with higher premiums. On the other hand, one can expect that many of those who pay the lowest premiums are less affluent and buy only the minimum coverage legally required; for them, even a lower dollar amount could be a greater burden. There are also great differences between the premium classes, which follow no obvious pattern, when premiums are increased by 50 percent to 100 percent. However, when tripling or higher increase of the premiums are considered, the responses of all but the under \$400 classes are practically the same.

A very simplified summary of the Figure is the following: increasing the premium by 50 percent will deter between 25 percent and 50 percent of the drivers. Doubling will increase the deterrence to about 45-65 percent. Tripling will increase it to 57 percent for drivers with premiums under \$400, but to nearly 80 percent for drivers with higher premiums. Further increase will increase deterrence only a little; nearly one third of the drivers with premiums under \$400 will remain undeterred, and about 20 percent of the drivers with higher premiums. It must be emphasized that this discussion is based on answers to a hypothetical question. We do not know how the respondents actually behave.

Question 13 (long form) asks "How would you change your drinking and driving? (Circle those that apply)" and provides for the following answers:

- a. Drink less before driving
- b. Drive less after drinking
- c. Not drive after drinking
- d. Wait until effects of drinking wear off
- e. Never drink and drive
- f. Would not change drinking and driving.

Only those who do not never drink and drive were considered in the analysis.

Table 20 How Respondents Would Change Drinking And Driving

Change frequency col pct	Wave		
	1	2	3
drink less before driving	10 6.7	13 8.3	6 8.5
drive less after drinking	4 2.7	8 5.1	0 0
not drive after drinking	80 54.1	83 53.2	40 56.3
wait until effects of drinking wear off	34 23.0	33 21.2	17 23.9
not change drinking and driving	20 13.5	19 12.2	8 11.3
total	148	156	71

It is remarkable that so few respondents chose to "drink less before driving", presumably to stay below the legal limit. The vast majority of respondents would not drive after drinking, or wait until the effects of drinking wear off. The percentage of those who would not change drinking and driving (who, however, could well be people who already make sure to stay below the legal limit) was about 12 percent.

SECTION 5

PROGRAM IMPLEMENTATION AND EFFECTIVENESS

CHANGES ATTRIBUTED TO THE PROGRAM

Approximately 45 percent of all people responding to the survey in the test site reported that they do not drink alcoholic beverages. We expected this large percentage of people to be largely unaffected by project messages since penalties for DWI would not concern them. In fact, significant differences were discerned between drinkers and non-drinkers in the retention of project messages.

More than 80 percent of all people responding to the survey in the test site reported that they never drink and drive. Again, we expected this large percentage of people to be largely unaffected by project messages since penalties for DWI would not concern them. The potential for the project to affect behavioral change was among about 20 percent of the driving population who reported that they drink and drive.

The following changes, detailed in Section 4, may be attributed to the project PI&E program in that they were observed in the experimental jurisdiction but not in the comparison:

- There was a small increase in the number of people who heard messages about insurance sanctions during the life of the project.
- Among those who reported hearing project-related messages, about one-third learned about insurance sanctions for DWI.
- There was a small increase in the number of people who are aware of insurance sanctions for DWI.
- Awareness of insurance sanctions increased most among occasional drinkers.
- There was a significant increase in the percentage of people who were aware of insurance sanctions, reporting that they never drive after drinking.
- Similarly, there was a significant decrease in the percentage of people who were aware of the insurance sanctions, reporting that they drink and drive.
- Insurance sanctions are far less feared than jail or license actions by all drivers. Among drivers who learned about insurance sanctions, however, insurance sanctions are feared about the same as jail and license actions.

The practical utility of these changes, however, must be viewed with caution because the baseline levels of awareness of the insurance sanctions were very low.

VOLUME OF PI&E DELIVERED BY THE PROJECT

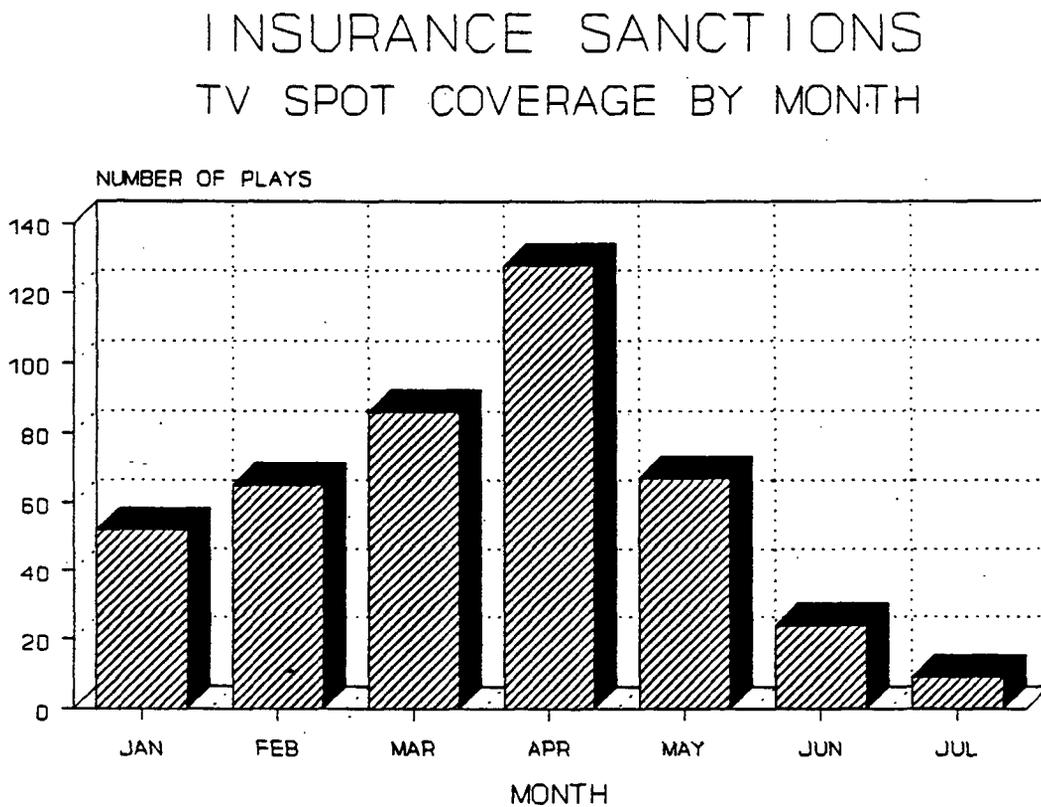
The publicity campaign was initiated with a news conference on November 29. The details of this event are described in Section 3 of this report. The news conference was reported in the *Wilmington Morning Star* the following morning. Coverage was provided by all three local network TV news programs on the day of the conference and the following day. Additional coverage was provided by local radio stations.

Although hard news coverage of the project was favorable, insurance sanction messages were not considered to be appropriate hard news features and emphasis was placed on public service advertising. The public service advertising campaign was launched in January at a time following the holiday season, when a large number of favorable placements could be obtained.

TV Public Service Advertising

The six TV PSAs produced were collectively played 431 times between January and July by the three local commercial TV stations. Figure 2 shows the monthly variation in coverage.

Figure 2



TV stations began playing the PSAs in January and coverage increased through April before declining. In our past experience, the most coverage has been provided at the beginning of the project followed by a steady decline. The pattern of the current project was very different. No attempt was made to place TV PSAs in December because of the holiday commercial competition. The project lobbied the TV stations in January to provide as much coverage as possible. Although the January through March numbers are favorable compared to other NHTSA projects, we think there could have been more coverage. This was the period when maximum attention was being paid to hard news coverage of the Gulf War.

More time slots became available in April, because of diminishing war coverage, and a campaign was launched to encourage the stations to provide more coverage. The largest concentration of coverage was in April.

Figure 2 shows the monthly variation in coverage by title. All six PSAs were delivered to the stations at the beginning of the project with requests made to phase in the PSAs two at a time at intervals of two months. Our experience has been that most local stations will play TV PSAs for about two months and that this schedule would provide continuous, high-level coverage during the implementation period.

Although this project attracted a very satisfactory level of overall coverage, the stations did not launch the PSAs, or play the spots on the schedule that we planned. The following PSAs were launched in January and continued through February:

- Enforcement
- High School Student
- Truck driver
- Businessman

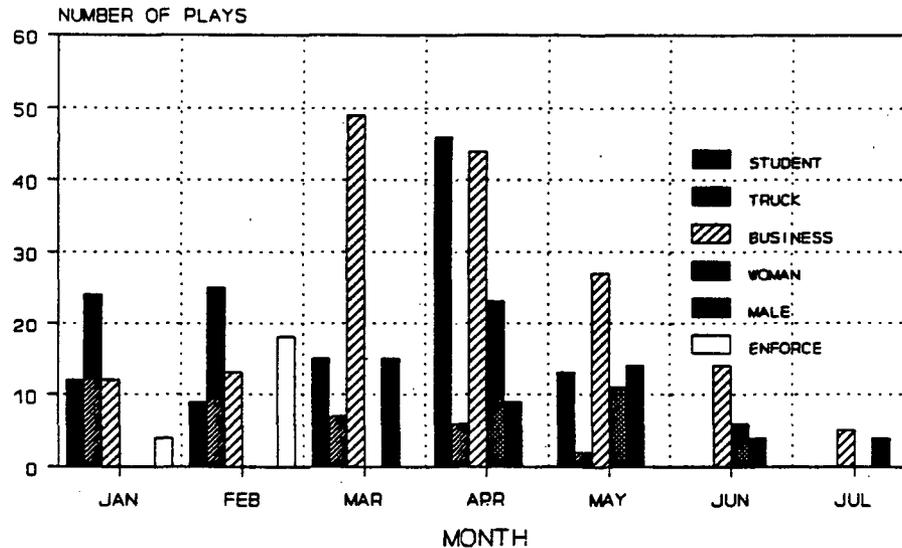
In March, the "Enforcement" spot was discontinued and the "Young Male" spot was initiated. With the addition of the "Woman" spot, this set continued through May. In June the "High School Student" and "Truck Driver" spots were discontinued and the "Woman" spot was dropped in July. The "Businessman" spot was the only PSA to be carried for the life of the project. Other durations of coverage were as follows:

- | | |
|-----------------------|----------|
| ■ High School Student | 5 months |
| ■ Truck Driver | 5 months |
| ■ Young Male | 5 months |
| ■ Woman | 3 months |
| ■ Enforcement | 2 months |

Figure 3 shows the overall extent of coverage by theme. No particular encouragement was provided to the stations to favor one theme over another. The "Businessman" theme was, far and away, the most attractive to the stations.

Figure 3

INSURANCE SANCTIONS TV SPOTS BY TITLE AND MONTH



This was followed by the "High School Student" theme which, in turn was followed by the "Truck Driver" theme. The "Businessman" and "High School Student" themes together accounted for about two thirds of the coverage. These plus the "Truck Driver" theme accounted for about three quarters of all coverage. It is important to note that this three quarters represents a diversified demographic spectrum.

The quality of coverage, reflected by the time of day in which the spots were played, is shown in Figure 4. TV stations were encouraged to air the spots, as much as possible, during times coinciding with the largest number of viewers.

Four periods of high coverage can be discerned: 1) the period between 11:00 PM and 2:00 AM; 2) the period between 6:00 AM and 9:00 AM; 3) the period between 10:00 AM and 1:00 PM; and the period between 5:00 PM and 8:00 PM. In general, the project received TV PSA coverage during the most favorable times of day in terms of viewership.

Figure 5 shows the proportion of TV PSA coverage provided by each of the participating stations. The wide variation in coverage was due to several factors including available time slots not occupied by commercial advertising, and the degree of cooperation received from station personnel and station policies about whether local PSAs should receive priority.

Figure 4 TV COVERAGE BY THEME

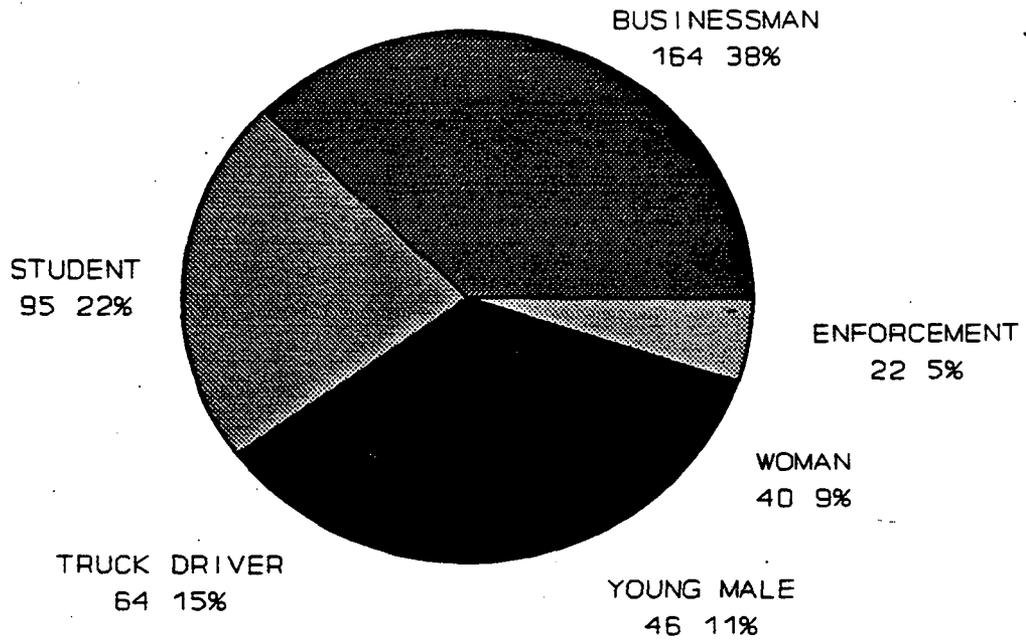
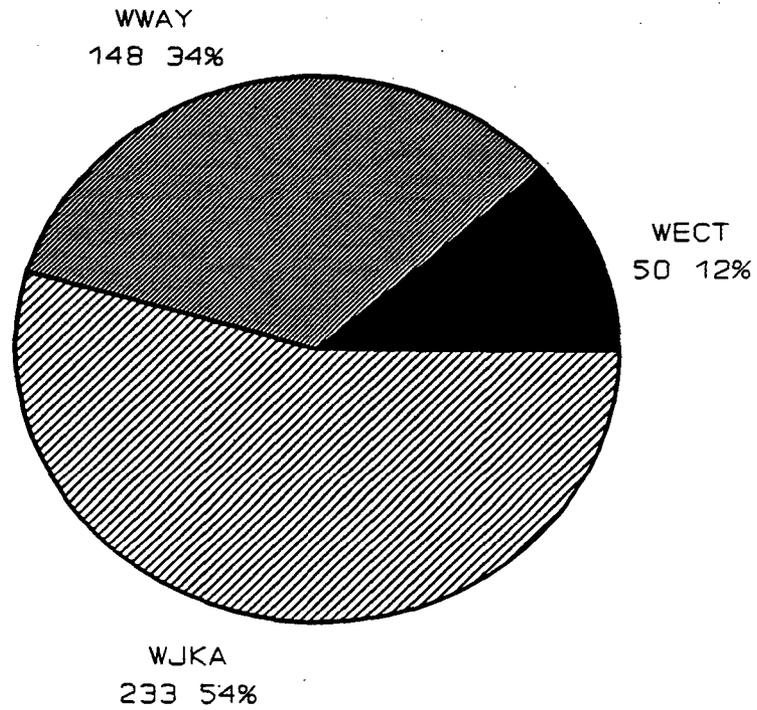


Figure 5 TV COVERAGE BY STATION



Other Coverage - Radio and Poster

The radio PSAs, described in Section 3, were distributed to nine local radio stations. None of these stations maintain records of PSA airings so we are unable to quantify the extent of radio coverage provided. We were advised by the stations that they were airing the spots as much as possible and this was corroborated by local personnel who recalled hearing the spots often.

Five posters, matching the five insurance sanction themes, were produced as described in Section 3. A total of 150 copies were produced and distributed to local public gathering places.

COOPERATION OF THE LEAD AGENCIES

The Sheriff's Department provided a project spokesperson for the news conference and the TV PSAs. The Department was unable to retain the initial Site Coordinator who had the time, the interest and the media contacts for the duration of the project. The Department was also unable to provide the funding it had offered at the project's outset for development and reproduction of PI&E materials. The project would have had a more diversified and extensive PI&E program if this agency had maintained its level of support.

The North Carolina Department of Insurance provided a project spokesman and funding. They furnished information on insurance surcharges and other practices, assisted in the development of the PI&E program, and was cooperative during the life of the project.

COOPERATION OF THE INSURANCE INDUSTRY

Our initial expectation that insurers would be active participants in the PI&E program was not fulfilled. We learned that this expectation was unrealistic because of constraints that local insurers must abide by as well as an overall desire on the part of most insurers to avoid publicity. The project in North Carolina was not opposed by any insurance company or organization.

COOPERATION OF LOCAL MEDIA

The extensive media coverage, documented above, is substantial evidence that the local media was very cooperative. Assistance was provided at the local level in producing the TV PSAs and posters. After we had promoted the importance of the project to local media, we received commitments of support which were fulfilled during the life of the project.

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

An insurance sanction program appears to be difficult to implement and effectively publicize. However, if more effective ways could be identified for publicizing information about this sanction, the results from this study indicate that it might prove to be an effective deterrent.

The feasibility of publicizing insurance sanctions as a convincing deterrent for drunk driving appears to be limited to relatively few states where insurance sanctions are state-mandated. In most states, where insurance sanctions are not mandated, insurance premiums depend on a variety of factors, including the driver's accident and conviction record, which includes convictions for drunk driving and other alcohol related offenses as well as other factors such as length of time as a customer of the insurer. Insurance rate structures vary widely among states. In many states, the factors determining the premiums can vary among companies, and the premiums for the same vehicle/driver combination can differ widely among companies. Differing underwriting standards which determine whether a company will accept a certain driver/vehicle combination add another complication. In general, one can only state with certainty that a conviction for drunk driving is likely to increase the premium for a driver's car. Even under these circumstances, the insurance premium is not increased unless the insurers find out or are informed of the DWI conviction. Accordingly, it is possible to publicize clear and specific messages about insurance sanctions for DWI only under rare circumstances. Only in states with a very strong regulation of insurance rates by the states and a consistent and thorough reporting of DWI convictions to the insurance companies will it be possible to develop clear and realistic messages about the magnitude of insurance sanctions.

An additional problem with using publicity about insurance sanctions is that in several states, high automobile insurance premiums have become a major political issue, involving legislatures, state insurance commissioners, insurance trade associations, and individual insurance companies. Publicizing the magnitude of premiums, even for drunk drivers, may not be acceptable.

During and immediately after the campaign, about four percent of the drivers mentioned a message about insurance sanctions; with some implicit prompting, an additional four percent also mentioned such a message. Among those who owned a vehicle, more than four percent mentioned an insurance message; among those who did not, only two percent. Men mentioned such a message more often than women, but the difference was statistically not significant. By far the vast majority (over 70 percent) had seen the message on TV, followed afar by newspapers (seven percent) and radio (four percent); posters contributed only two percent. Other messages about drunk driving had a differing distribution of media: TV accounted for only 60 percent, followed by billboards, radio and newspapers, each with 5 percent, and posters with four percent. The difference reflects the heavy reliance of the campaign on TV.

Before the campaign, four percent of drivers were aware of the insurance sanction. During the campaign, awareness increased by 75 percent to seven percent. At the comparison site, initial awareness was also four percent, but decreased later. This suggests that the increase is due to the campaign. This conclusion is further supported by the observation that among those who did not mention the insurance sanction message, the percentage aware of the insurance sanction remained constant at four percent during and after the campaign; among those who mentioned the message, 50 percent were aware of the insurance sanction.

Awareness of the insurance sanction did not change among those drivers who reported that they drink at least several times a week. Neither did it change among those who reported they never drink. Among those who drunk once a week or less often, awareness increased from three percent to eight percent.

Drivers were also asked how often they drove within a couple of hours after drinking alcoholic beverages. About 20 percent of the respondents reported to do so. There was no indication that the frequency of driving after drinking declined during or after the campaign. This may not be surprising, because the question includes also driving with BAC well below the legal limit.

Another question asked how often drivers drove after drinking too much. About six percent reported doing so. There is a small, but statistically insignificant reduction in the frequency of those who reported driving after drinking too much at least once a month.

If asked whether, compared to three months ago, drivers drove more often, less often, or about the same after drinking too much, slightly more drivers reported driving less often after drinking too much. The difference, however, was not statistically significant.

In sum, the self-reported data on driving after drinking too much are compatible with a small reduction of drunk driving, but the changes are not statistically significant.

As a consequence of a drunk driving conviction, 55 percent of the drivers fear jail most, followed by license sanction with about 30 percent, fear of death, and fear of killing someone. Insurance sanctions, with about 1 percent are comparable with the fear of an accident, or the fear of injury. The pattern differs dramatically for drivers who are aware of insurance sanctions: of them, about 50 percent fear license sanctions most, followed by jail with about 30 percent, and insurance sanctions with about 20 percent.

Some drivers were asked what would happen to insurance premiums as a result of a conviction for drunk driving. Among those who had heard the message, more responded with an indication of a qualitatively large increase than among those who had not heard the message.

Some drivers were also asked how much insurance premiums would have to be increased to affect their driving after drinking. Among those who sometimes drive after drinking, the percentage who would change their driving after drinking increased steadily up to a 200 percent premium increase. Increasing premiums more than 200 percent would affect the self reported behavior much less, and even increases of more than 300 percent would not change the behavior of about 20 percent of the drivers. For drivers whose annual premiums are under \$400, the deterrent effect is weaker than for drivers with higher premiums.

To summarize: seven months of an intense public information and education program, relying heavily on public service advertising on TV did reach at least four percent of the drivers, and possibly an additional four percent. About half of those who indicated seeing the message reported the insurance sanction as one of the consequences of a DWI arrest. Regarding potential impact, many drivers who became aware of the insurance sanctions program reported that after drinking they drove less often.

APPENDIX

North Carolina Division of Motor Vehicles - Driver License Section
Survey on Highway Safety Issues

The North Carolina Division of Motor Vehicles requests your help in providing information about highway safety issues. Your answers will be used for statistical purposes only. Please do not write your name on this form.

1. Why are you at the driver's license office? (CIRCLE ONE)

a. To get first license	c. To have license reinstated
b. To renew currently valid license	d. To get an L.D. only
	e. other

2. Your sex? (CIRCLE ONE)

a. Male	b. Female
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3. Your age? (CIRCLE ONE)

a. under 18	c. 21-24	e. 30-49	g. Over 65
b. 18-20	d. 25-29	f. 50-65	

4. Do you own your own motor vehicle? Yes No

5. What messages about penalties for drunken-driving have you heard, seen, or read in the last three months (on TV, radio, in the newspaper, posters, etc.)? Please, write in.

The message	Where seen, heard, or read
_____	_____
_____	_____

6. How often do you drink beer, wine or liquor? (CIRCLE ONE)

a. Every day	c. Once a week	e. Less than once a month
b. Several times a week	d. Once a month	f. Never

7. How often do you drink alcoholic beverages and then drive within a couple of hours? (CIRCLE ONE)

a. Every day	c. Once a week	e. Less than once a month
b. Several times a week	d. Once a month	f. Never

8. Within the last three months, how often do you think you may have driven after drinking too much? (CIRCLE ONE)

a. Every day	c. Once a week	e. Less than once a month
b. Several times a week	d. Once a month	f. Never

9. A. Compared with three months ago, are you driving after drinking: (CIRCLE ONE)

a. More often?	b. Less often?	c. About the same?	d. Do not drive after drinking
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B. If it changed, please say why:

10. What happens to drivers' car insurance when they are caught and convicted of drunk driving?

11. How much is the insurance for the car you drive most often?

Dollars _____ per: a. half year b. year c. quarter d. month (CIRCLE ONE)

Don't know _____

12. How much would your insurance premium have to increase before you would change your drinking and driving? (CIRCLE ONE)

a. Go up by half	c. Triple	e. Go up more than fourfold
b. Double	d. Go up fourfold	f. Never drink and drive
		g. Would not change drinking and driving

13. How would you change your drinking and driving? (CIRCLE THOSE THAT APPLY)

a. Drink less before driving	d. Wait until effects of drinking wear off
b. Drive less after drinking	e. Never drink and drive
c. Not drive after drinking	f. Would not change drinking and driving

TV PSA Storyboards

NEW HANOVER

High cost of driving drunk gets driven home to public

By **ROSS CHANDLER**

Staff Writer

A new program will tell New Hanover County's drivers how expensive a drunken-driving conviction is, Sheriff Joseph McQueen Jr. and N.C. Insurance Commissioner Jim Long said Thursday.

If the program is successful, it will be implemented statewide and may be used nationwide, Mr. Long said.

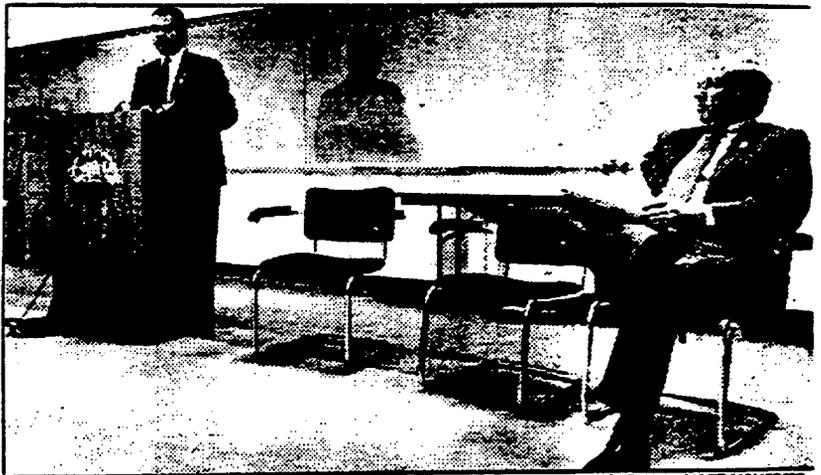
The program emphasizes increased insurance rates that typically accompany a drunken-driving conviction. If drivers know that insurance costs go up after a drunken-driving conviction they will not drink and drive, he said.

"The theme of this program is drinking and driving's costs are sky-high," said Mr. Long. Insurance costs go up 400 percent after conviction, he said.

If the county's drunken-driving rate is cut by half, the program will be successful, said Sheriff McQueen.

Department records show deputies have made 327 drunken-driving arrests so far this year. In 1989, they made 413, up from 279 in 1988.

If it succeeds in New Hanover County, the program will be implemented statewide, Mr. Long said, and the National Highway Traffic Safety Council may use it nationwide.



Staff photo / JAMIE MONCRIEF

Sheriff Joe McQueen (left) introduces Insurance Commissioner Jim Long during a press conference Thursday.

At a press conference, the men gave out the five newspaper advertisements and showed the four television public-service advertisements the campaign uses.

One of the newspaper ads shows a man wheeling a moped away from a luxury car. The headline says: "A DWI conviction can change your lifestyle." The ad says the average insurance cost for an experienced driver using the car is \$846 per year, but the same person will pay \$4,162 after a drunken-driving conviction, a 391 percent increase.

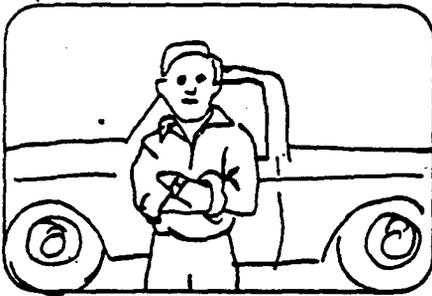
"We hope the price of insurance going up will get the message to them," the sheriff said.

The television ads are similar,

with a concluding message by Sheriff McQueen.

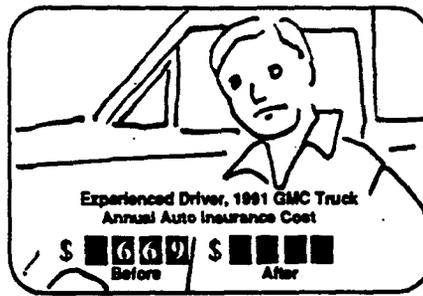
New Hanover County and another community will test the program. The other community, which Commissioner Long declined to name, will not have the ads. The drunken-driving arrest rates will be compared to see whether the ads in New Hanover County were effective.

The insurance commissioner said New Hanover County was chosen as one of the tests sites because it has done a good job enforcing drunken-driving laws. New Hanover County has about 200 more drunken-driving arrests per year than other counties, he said.



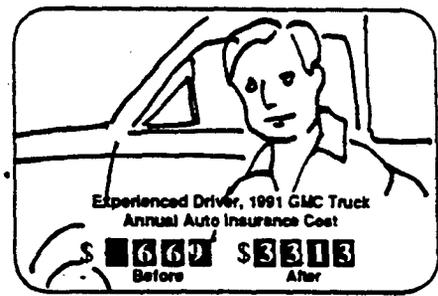
1. (MS OF MID-40'S MALE STANDING IN FRONT OF LATE MODEL PICKUP TRUCK.)

ANNCR VO: Nice truck.



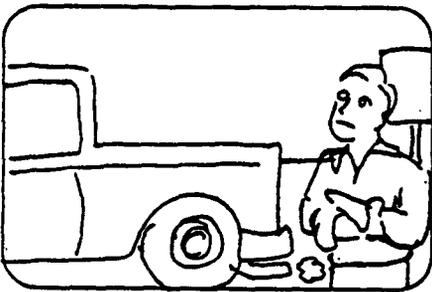
2. (MCU OF MAN IN FRONT OF TRUCK. GRAPHIC OF INSURANCE RATES APPEARS.)

VO: But in NC, people who have been caught driving drunk have a hard time keeping a truck like that.



3. (GRAPHIC CHANGES TO SHOW NUMBERS GOING UP.)

VO: Because, after all the court costs, lawyer fees, fines, and penalties, a DWI makes your auto insurance costs at least ...



4. (TRUCK STARTS UP AND DRIVES OFF WITHOUT A DRIVER. MAN LOOKS BACK AND THEN AT CAMERA.)

VO: ... four times higher, and that lasts for three years.



5. (MAN STANDING IN FRONT OF BUS STOP SIGN. GRAPHIC ON SCREEN.)

VO: When you drink and drive, you're putting a lot on the line.



6. (MCU: JIM LONG)

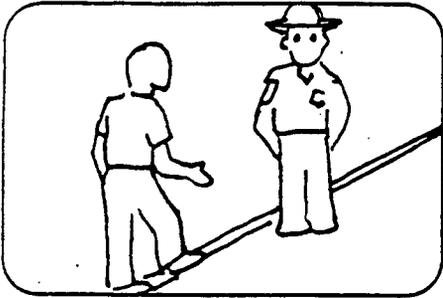
JIM LONG: State insurance regulations require that those convicted of DWI pay for the increased insurance costs that result from drinking and driving.



7. JIM LONG: The Department of Insurance is working with the New Hanover County Sheriff's Department to alert the public to the high costs of drinking and driving.

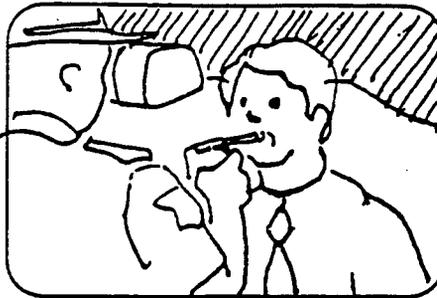


8. TV STATION TAG LINE



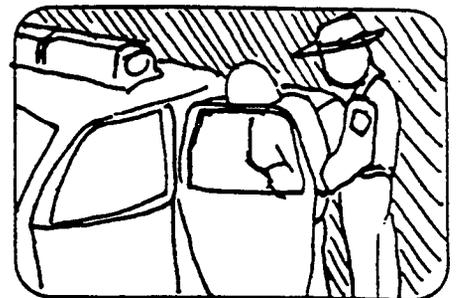
1. (NIGHTTIME DWI STOP. OFFICER GIVING WALK AND TURN SOBRIETY TEST.)

ANNCR VO: When you drink and drive, you put a lot on the line.



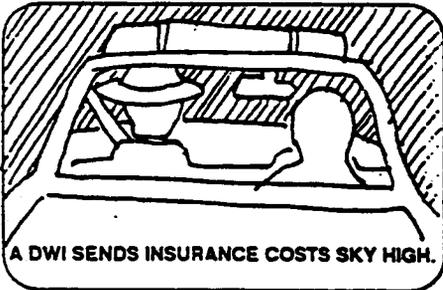
2. (VIEW OF OFFICER GIVING ALCOSENSOR TEST.)

ANNCR VO: Because after all the court costs, lawyer fees and fines for a DWI conviction. . .



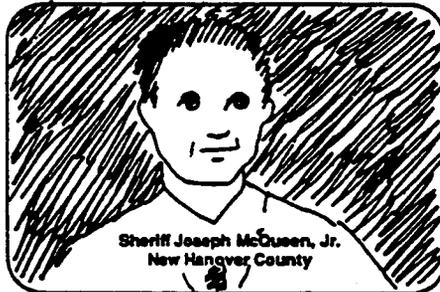
3. (OFFICER PUTTING PERSON IN PATROL CAR.)

VO: . . . comes the high cost of driving when you get your license back.



4. (PATROL CAR DRIVING OFF.)

VO: A DWI conviction makes your insurance costs at least four times higher for three years. (GRAPHIC COMES UP.)



5. (MCU OF SHERIFF)

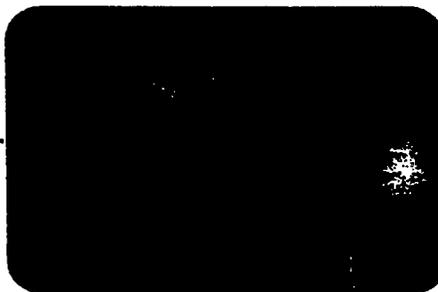
SHERIFF: In New Hanover County, deputies have been trained to spot drinking drivers in traffic.



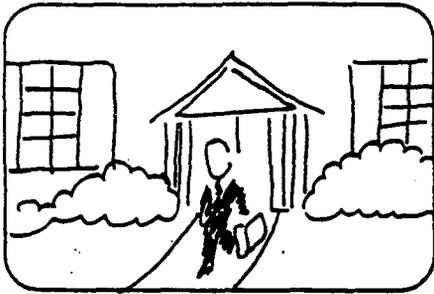
6. SHERIFF: And the results for these drivers are costly in many ways.



7. SHERIFF: Don't take chances. Put a sober driver behind the wheel.



8. TV STATION TAG LINE.



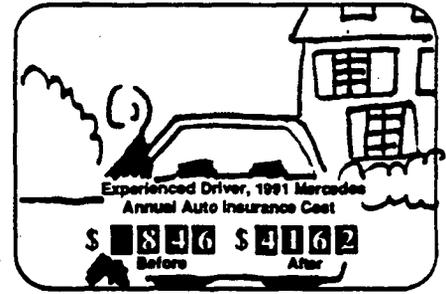
1. (MS OF 50 YEAR OLD BUSINESSMAN WALKING OUT OF NICE HOME)

ANNCR VO: Anyone convicted of drinking and driving in North Carolina faces a change in lifestyle.



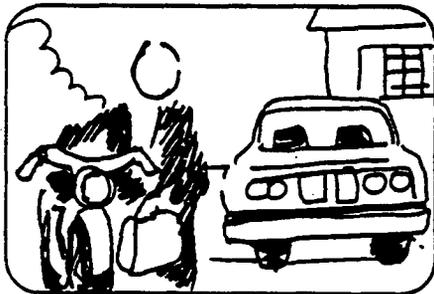
2. (MAN WALKING TO NICE CAR)

VO: Because, after all the court costs, lawyer fees, fines, and penalties . . .



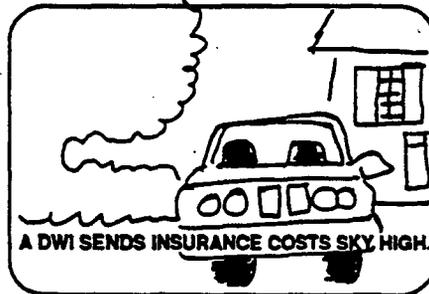
3. (GRAPHIC COMES UP CHANGES TO SHOW NUMBERS GOING UP.)

VO: . . . your auto insurance rate automatically is at least four times higher for a DWI conviction.



4. (MAN WALKS PAST CAR, GETS ON A MOPED. CAMERA STAYS WITH BACKGROUND SCENE.)

VO: We're trying to make a point.



5. (MAN CROSSES FRAME. CAR IS LEFT. GRAPHIC COMES UP.)

VO: When you drink and drive, you're putting a lot on the line.

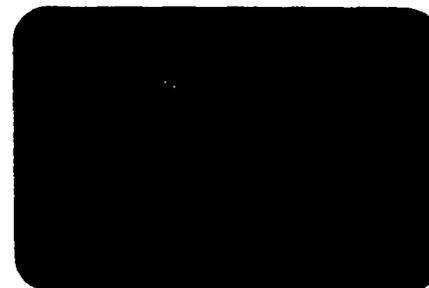


6. (MCU: JIM LONG)

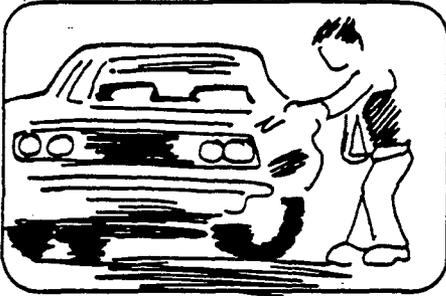
JIM LONG: State insurance regulations require that those convicted of DWI pay for the increased insurance costs that result from drinking and driving.



7. JIM LONG: The Department of Insurance is working with the New Hanover County Sheriff's Department to alert the public to the many high costs of drinking and driving.



8. TV STATION TAG LINE



1. (MS: CAR PULLS OFF ROAD, 19-YEAR-OLD MALE GETS OUT AND STARTS WALKING TOWARDS CAMERA.)

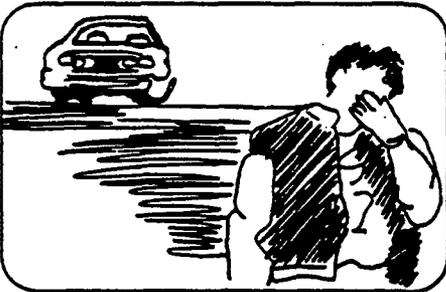


2. ANNCR VO: In North Carolina, the cost of car insurance is at least four times higher for anyone caught driving drunk.



3.(GRAPHIC SHOWS NUMBERS CHANGING.)

VO: In other words, a DWI conviction can be like adding a \$200.00 a month car payment to your monthly driving budget except . . .



4. (CU OF STUDENT FACING CAMERA, CAR IN BACKGROUND.)

VO: . . . that doesn't include the cost of the car.



5. (STUDENT WALKS OFF CAMERA, CAR LEFT IN BACKGROUND. GRAPHIC COMES UP.)

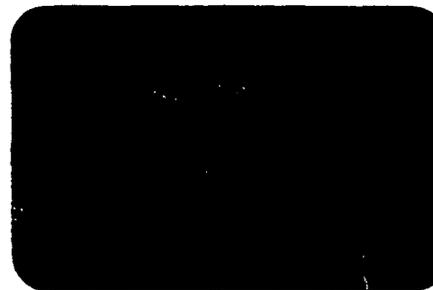


6. (MCU OF SHERIFF)

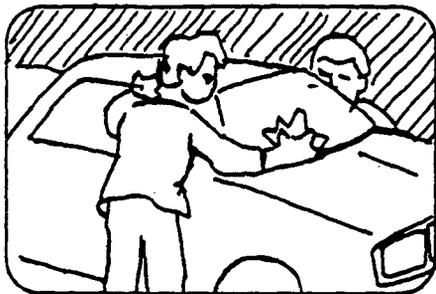
SHERIFF: We take impaired driving seriously. And the results for drinking drivers can be costly in many ways.



7. SHERIFF: Don't take chances. Make sure there's always a sober driver behind the wheel.

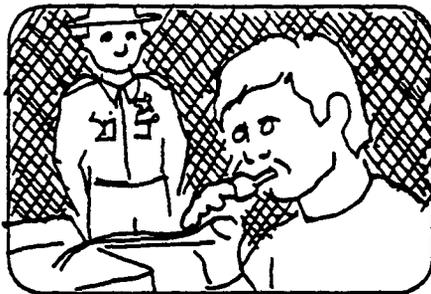


8. TV STATION TAG LINE.



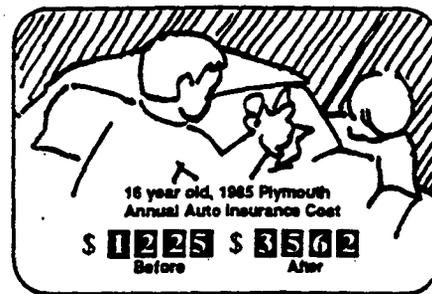
1. (TEENAGE MALE AND FATHER WASHING CAR IN DRIVEWAY.)

ANNCR VO: It's a nightmare - having to tell your parents that you've been arrested for driving drunk.



2. (SCENE QUICKLY FLASHES TO TEEN TAKING BAC TEST THEN BACK TO DRIVEWAY.)

VO: And it's also expensive. Because after they've paid the court costs, lawyer fees, fines and penalties . . .



3. (GRAPHIC SHOWS NUMBERS GOING UP.)

VO: . . . then you have to tell them that you've made their car insurance rate jump sky high for the next three years.



4. (TEEN LOOKS UP AT CAMERA.)

VO: In other words, the cost of your DWI conviction, could ground your whole family.



5. (TEEN THOUGHFULLY LEANS ON CAR, FATHER STERNLY STARES AT TEEN.)

VO: When you drink and drive, you're putting a lot on the line.



6. (MCU: JIM LONG)

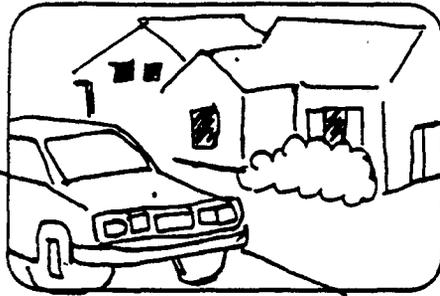
JIM LONG: State insurance regulations require that those convicted of DWI pay for the increased insurance costs that result from drinking and driving.



7. JIM LONG: The Department of Insurance is working with the New Hanover County Sheriff's Department to alert the public to the many high costs of drinking and driving.



8. TV STATION TAG LINE



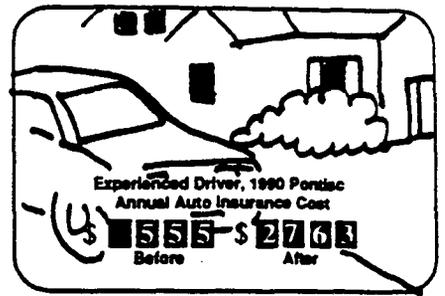
1. (NICE CAR IN FRONT OF AVERAGE HOUSE. SCENE FLASHES TO WOMAN IN CAR BEING STOPPED THEN BACK TO CAR AT HOUSE.)

ANNCR VO: When you drink and drive, you're putting a lot on the line.



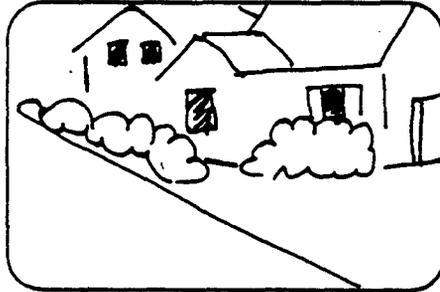
2. (FLASH TO WOMAN TAKING ALCOSENSOR THEN BACK TO CAR AT HOUSE)

ANNCR VO: In North Carolina, the cost of car insurance becomes at least four times higher for anyone caught driving drunk, and that rate lasts for three years.



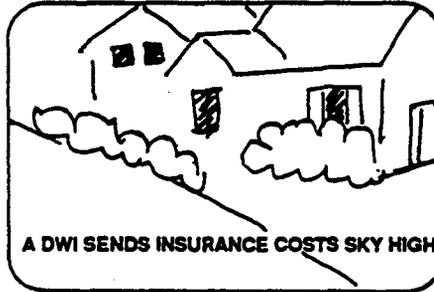
3.(GRAPHIC SHOWS NUMBERS CHANGING.)

VO: In other words, a DWI conviction can be like adding a \$200.00 a month car payment to your monthly driving budget except . . .

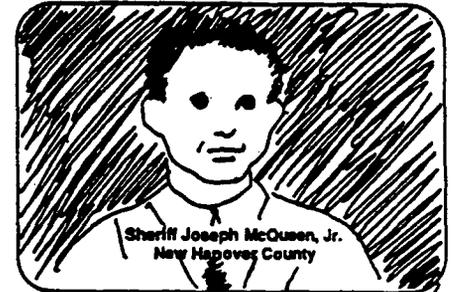


4. (CAR DISAPPEARS OR IS REPLACED BY RAMSHACKLE HEAP.)

VO: . . . that doesn't include the cost of the car.



5. (GRAPHIC COMES UP.)

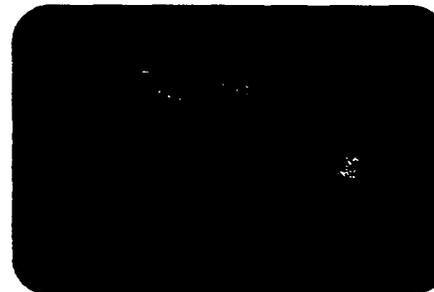


6. (MCU OF SHERIFF)

SHERIFF: We take impaired driving seriously. And the results for drinking drivers can be costly in many ways.



7. SHERIFF: Don't take chances. Make sure there's always a sober driver behind the wheel.



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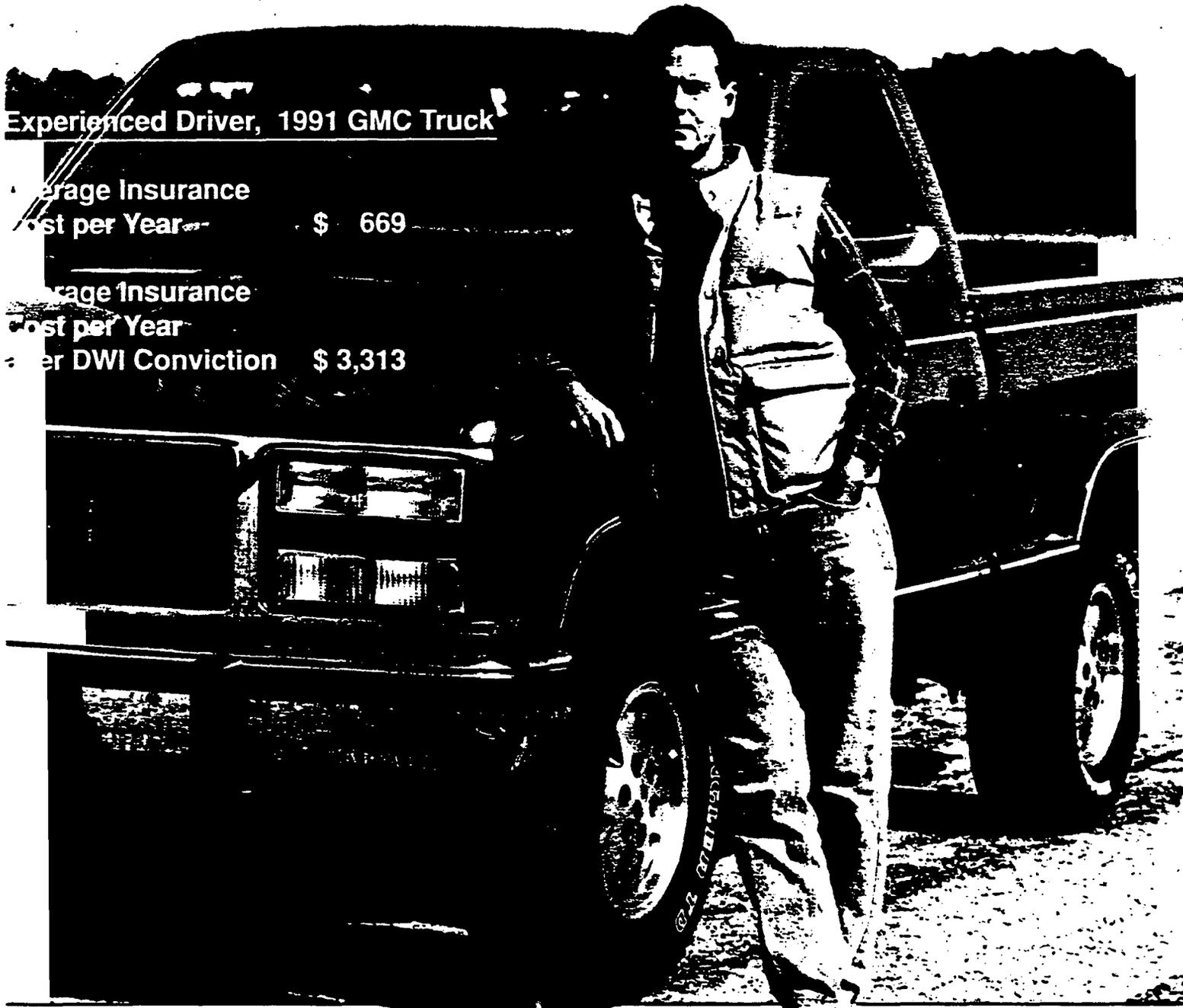
Posters

ONE DWI COULD MAKE YOU KISS THAT TRUCK GOOD-BYE.

Experienced Driver, 1991 GMC Truck

**Average Insurance
Cost per Year** \$ 669

**Average Insurance
Cost per Year
after DWI Conviction** \$ 3,313

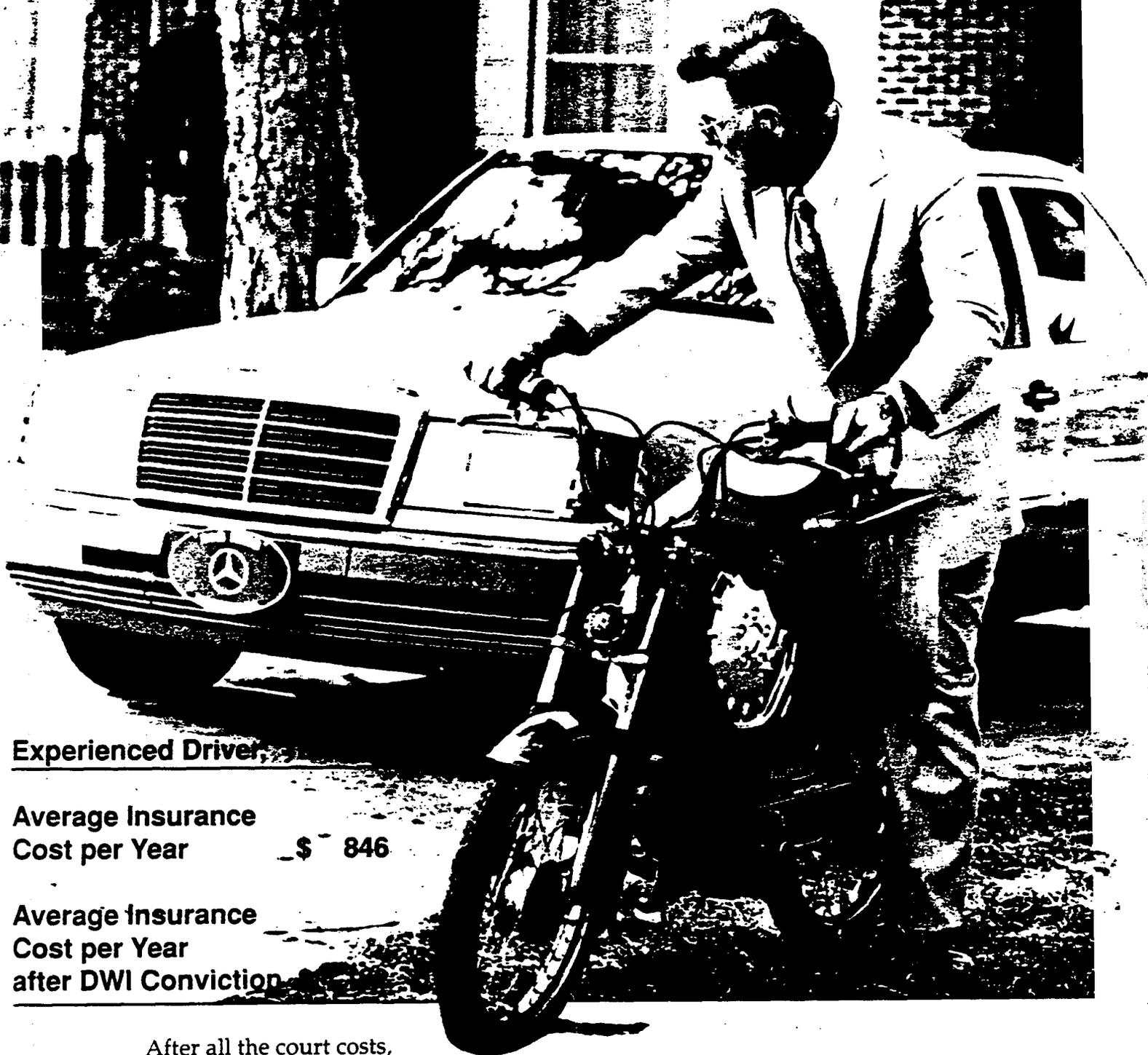
A high-contrast, black and white photograph of a man in a suit leaning against the side of a GMC truck. The man is looking towards the camera with a serious expression. The truck is a large, dark-colored vehicle, likely a pickup truck or a large van, with a prominent front grille and headlights. The background is dark and indistinct.

Nice truck, but many people cannot afford to keep a new truck after a DWI conviction. What most people do not realize is that after all the court costs, lawyer fees and fines, comes the high cost of driving when you get your license back.

At the least, a DWI makes your insurance costs FOUR times higher for THREE years.

A DWI SENDS INSURANCE COSTS SKY HIGH.

A DWI CONVICTION CAN CHANGE YOUR LIFESTYLE



Experienced Driver,

**Average Insurance
Cost per Year \$ 846**

**Average Insurance
Cost per Year
after DWI Conviction**

After all the court costs, lawyer fees, fines and penalties, your auto insurance is automatically at least four times higher for a DWI conviction, and that rate lasts for three years.

We're trying to make a point. When you drink and drive, you're putting a lot on the line.

A DWI SENDS INSURANCE COSTS SKY HIGH.

**THINK OF A DWI CONVICTION
AS A \$200/MONTH CAR PAYMENT
(CAR NOT INCLUDED).**



Two hundred dollars a month is the typical
ADDITIONAL cost of car insurance after a DWI
conviction, and that rate lasts for three years.

The cost of driving after a DWI conviction is a lot like
adding a car payment to your driving budget, except that doesn't include the cost of the car.

A DWI SENDS INSURANCE COSTS SKY HIGH.

Record of TV PSA Airings

REPORT OF TVPSAs
THROUGH JULY

DATE	TIME	TITLE	STATION
115	0823	HS STUDENT	WWAY
115	0614	TRUCK	WWAY
115	1926	BUSINESSMAN	WWAY
115	1218	TRUCK	WWAY
116	1150	BUSINESSMAN	WWAY
116	1042	HS STUDENT	WWAY
116	1000	TRUCK	WWAY
117	0723	TRUCK	WWAY
117	1730	HS STUDENT	WWAY
117	2310	BUSINESSMAN	WWAY
117	1009	HS STUDENT	WWAY
119	0139	BUSINESSMAN	WWAY
119	2321	HS STUDENT	WWAY
120	1810	BUSINESSMAN	WWAY
120	1400	HS STUDENT	WWAY
120	1204	TRUCK	WWAY
121	1000	BUSINESSMAN	WWAY
121	0641	TRUCK	WWAY
121	2120	TRUCK	WWAY
121	0229	BUSINESSMAN	WWAY
122	2320	TRUCK	WWAY
122	1009	BUSINESSMAN	WWAY
122	0949	HS STUDENT	WWAY
122	0845	TRUCK	WWAY
123	2000	TRUCK	WWAY
123	1026	TRUCK	WWAY
123	1028	HS STUDENT	WWAY
123	1130	BUSINESSMAN	WWAY
125	0300	TRUCK	WWAY
126	1820	TRUCK	WWAY
127	1000	TRUCK	WWAY
127	1212	BUSINESSMAN	WWAY
127	0100	TRUCK	WWAY
128	0641	HS STUDENT	WWAY
128	0614	HS STUDENT	WWAY
128	0600	TRUCK	WWAY
128	2310	TRUCK	WWAY
129	0641	HS STUDENT	WWAY
129	1958	ENFORCEMENT	WJKA
129	0858	ENFORCEMENT	WJKA
129	0723	TRUCK	WJKA
129	0813	BUSINESSMAN	WWAY
129	0606	ENFORCEMENT	WJKA
129	0637	TRUCK	WWAY
130	0109	TRUCK	WJKA
130	2325	BUSINESSMAN	WWAY
130	0053	HS STUDENT	WWAY
130	0028	TRUCK	WJKA
130	0756	TRUCK	WWAY
130	0124	ENFORCEMENT	WJKA

REPORT OF TVPSAs
THROUGH JULY

DATE	TIME	TITLE	STATION
131	1229	TRUCK	WJKA
131	0641	TRUCK	WVAY
201	0606	ENFORCEMENT	WJKA
202	0146	BUSINESSMAN	WVAY
204	1014	TRUCK	WVAY
204	0715	ENFORCEMENT	WJKA
204	0120	TRUCK	WJKA
205	0723	ENFORCEMENT	WJKA
205	0641	TRUCK	WVAY
206	0715	ENFORCEMENT	WJKA
206	0053	BUSINESSMAN	WVAY
206	0054	ENFORCEMENT	WJKA
207	0123	ENFORCEMENT	WJKA
207	1714	ENFORCEMENT	WJKA
207	0139	TRUCK	WJKA
207	0637	TRUCK	WVAY
207	0659	ENFORCEMENT	WJKA
208	0758	ENFORCEMENT	WJKA
208	0614	ENFORCEMENT	WJKA
209	1046	BUSINESSMAN	WVAY
209	1820	HS STUDENT	WVAY
210	0930	TRUCK	WVAY
210	1253	HS STUDENT	WVAY
210	0044	BUSINESSMAN	WVAY
210	2343	ENFORCEMENT	WJKA
210	0021	ENFORCEMENT	WJKA
211	0816	ENFORCEMENT	WJKA
211	0652	ENFORCEMENT	WJKA
212	1100	BUSINESSMAN	WVAY
212	2318	BUSINESSMAN	WECT
212	1035	TRUCK	WVAY
213	0629	ENFORCEMENT	WJKA
213	1129	TRUCK	WJKA
213	0200	HS STUDENT	WVAY
213	0112	TRUCK	WECT
214	0659	TRUCK	WJKA
214	0059	TRUCK	WJKA
215	1035	TRUCK	WVAY
215	0100	HS STUDENT	WVAY
215	0035	BUSINESSMAN	WECT
216	0131	BUSINESSMAN	WVAY
216	2317	TRUCK	WECT
217	1200	HS STUDENT	WVAY
217	1022	TRUCK	WVAY
218	0637	TRUCK	WVAY
218	0759	ENFORCEMENT	WJKA
218	2325	BUSINESSMAN	WECT
218	1734	BUSINESSMAN	WVAY
219	0028	TRUCK	WJKA
219	0816	ENFORCEMENT	WJKA

REPORT OF TVPSAs
THROUGH JULY

DATE	TIME	TITLE	STATION
219	1140	TRUCK	WWAY
219	1440	TRUCK	WWAY
220	0138	TRUCK	WJKA
221	0100	TRUCK	WJKA
221	1035	BUSINESSMAN	WWAY
221	0139	TRUCK	WECT
223	0139	TRUCK	WWAY
223	1828	HS STUDENT	WECT
223	1106	HS STUDENT	WWAY
223	0106	ENFORCEMENT	WJKA
224	1353	BUSINESSMAN	WWAY
225	0028	TRUCK	WJKA
226	0108	TRUCK	WECT
226	0029	TRUCK	WJKA
226	0229	HS STUDENT	WWAY
227	0135	HS STUDENT	WECT
228	0651	BUSINESSMAN	WECT
301	2312	HS STUDENT	WECT
302	0151	BUSINESSMAN	WWAY
302	1811	TRUCK	WECT
302	1114	BUSINESSMAN	WWAY
303	2346	BUSINESSMAN	WWAY
303	0018	BUSINESSMAN	WECT
303	0049	BUSINESSMAN	WJKA
304	0858	BUSINESSMAN	WJKA
304	1014	BUSINESSMAN	WWAY
304	1725	BUSINESSMAN	WECT
304	0129	HS STUDENT	WECT
304	0637	TRUCK	WWAY
304	1956	BUSINESSMAN	WJKA
305	1644	BUSINESSMAN	WECT
305	0052	TRUCK	WECT
306	1821	TRUCK	WECT
306	0229	BUSINESSMAN	WWAY
306	0108	YOUNG MALE	WJKA
307	0758	YOUNG MALE	WJKA
307	1718	TRUCK	WECT
307	0054	YOUNG MALE	WJKA
307	0157	HS STUDENT	WECT
307	1936	BUSINESSMAN	WJKA
308	0016	YOUNG MALE	WJKA
308	0614	BUSINESSMAN	WJKA
308	0229	BUSINESSMAN	WWAY
309	0120	YOUNG MALE	WJKA
309	0117	BUSINESSMAN	WWAY
311	0945	BUSINESSMAN	WECT
311	1756	YOUNG MALE	WJKA
311	0659	BUSINESSMAN	WJKA
311	0641	HS STUDENT	WWAY
311	0728	YOUNG MALE	WJKA

REPORT OF TVPSAs
THROUGH JULY

DATE	TIME	TITLE	STATION
312	0737	BUSINESSMAN	WJKA
312	0026	TRUCK	WECT
312	0528	HS STUDENT	WWAY
312	0121	BUSINESSMAN	WJKA
312	1746	YOUNG MALE	WJKA
312	0716	BUSINESSMAN	WJKA
313	0658	BUSINESSMAN	WJKA
313	0109	BUSINESSMAN	WJKA
313	0723	YOUNG MALE	WJKA
313	1808	BUSINESSMAN	WJKA
313	0229	HS STUDENT	WWAY
314	0138	YOUNG MALE	WJKA
315	0139	YOUNG MALE	WJKA
315	0636	BUSINESSMAN	WJKA
315	0019	BUSINESSMAN	WECT
316	0235	BUSINESSMAN	WWAY
318	2359	TRUCK	WECT
318	0723	YOUNG MALE	WJKA
318	0629	BUSINESSMAN	WJKA
318	0200	BUSINESSMAN	WWAY
319	0115	BUSINESSMAN	WJKA
320	0037	BUSINESSMAN	WJKA
323	1300	HS STUDENT	WWAY
323	0131	BUSINESSMAN	WWAY
323	2159	HS STUDENT	WWAY
323	1205	BUSINESSMAN	WWAY
323	1046	HS STUDENT	WWAY
323	1820	BUSINESSMAN	WWAY
324	0021	BUSINESSMAN	WWAY
324	0011	YOUNG MALE	WJKA
324	1100	HS STUDENT	WWAY
324	1230	BUSINESSMAN	WWAY
325	0716	BUSINESSMAN	WJKA
325	2302	BUSINESSMAN	WJKA
325	0044	HS STUDENT	WWAY
325	1029	BUSINESSMAN	WJKA
325	1808	YOUNG MALE	WJKA
326	0959	BUSINESSMAN	WJKA
326	1028	BUSINESSMAN	WWAY
326	0559	BUSINESSMAN	WECT
326	2328	BUSINESSMAN	WJKA
326	0816	BUSINESSMAN	WJKA
327	0824	BUSINESSMAN	WJKA
328	0816	BUSINESSMAN	WJKA
329	0659	BUSINESSMAN	WJKA
329	0201	HS STUDENT	WECT
329	0145	YOUNG MALE	WJKA
330	0126	BUSINESSMAN	WWAY
330	0125	BUSINESSMAN	WECT
330	1207	HS STUDENT	WWAY

REPORT OF TVPSAs
THROUGH JULY

DATE	TIME	TITLE	STATION
331	0118	HS STUDENT	WWAY
331	2351	BUSINESSMAN	WWAY
331	2326	HS STUDENT	WWAY
401	1656	BUSINESSMAN	WWAY
401	1724	HS STUDENT	WWAY
401	1730	BUSINESSMAN	WWAY
401	1808	BUSINESSMAN	WJKA
401	0724	YOUNG MALE	WJKA
401	2320	BUSINESSMAN	WWAY
402	1755	YOUNG MALE	WJKA
402	1025	HS STUDENT	WWAY
402	1207	BUSINESSMAN	WJKA
402	0200	HS STUDENT	WWAY
402	0544	BUSINESSMAN	WECT
403	1908	HS STUDENT	WJKA
403	1937	BUSINESSMAN	WJKA
403	0949	HS STUDENT	WWAY
403	1817	HS STUDENT	WECT
403	0014	HS STUDENT	WWAY
403	2259	HS STUDENT	WJKA
403	0824	BUSINESSMAN	WJKA
403	1958	WOMAN	WJKA
404	0101	HS STUDENT	WJKA
404	0100	BUSINESSMAN	WWAY
404	0815	HS STUDENT	WJKA
404	0716	WOMAN	WJKA
404	1129	WOMAN	WJKA
404	2058	WOMAN	WJKA
405	0724	HS STUDENT	WJKA
405	1603	TRUCK	WECT
405	1955	WOMAN	WJKA
405	0644	WOMAN	WJKA
405	1228	WOMAN	WJKA
405	1042	HS STUDENT	WWAY
405	1130	BUSINESSMAN	WWAY
406	1851	HS STUDENT	WJKA
406	1408	HS STUDENT	WJKA
406	0152	YOUNG MALE	WJKA
406	0120	HS STUDENT	WWAY
406	0001	BUSINESSMAN	WECT
407	2346	HS STUDENT	WWAY
407	0012	WOMAN	WJKA
407	1522	HS STUDENT	WJKA
407	1828	HS STUDENT	WJKA
408	0716	WOMAN	WJKA
408	1955	HS STUDENT	WJKA
408	1212	BUSINESSMAN	WJKA
408	0512	HS STUDENT	WJKA
408	2058	BUSINESSMAN	WJKA
408	1829	BUSINESSMAN	WJKA

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DATE	TIME	TITLE	STATION
408	1805	BUSINESSMAN	WWAY
408	1028	HS STUDENT.	WJKA
408	1014	HS STUDENT	WWAY
409	0622	BUSINESSMAN	WJKA
409	0824	WOMAN	WJKA
409	2302	YOUNG MALE	WJKA
409	1828	WOMAN	WJKA
409	0046	WOMAN	WJKA
409	1731	HS STUDENT	WJKA
409	0000	HS STUDENT	WJKA
409	0544	HS STUDENT	WECT
410	1207	BUSINESSMAN	WJKA
410	0622	BUSINESSMAN	WJKA
410	0100	YOUNG MALE	WJKA
410	0816	WOMAN	WJKA
410	1756	HS STUDENT	WJKA
410	1629	BUSINESSMAN	WJKA
411	0015	BUSINESSMAN	WJKA
411	1154	TRUCK	WECT
411	0728	BUSINESSMAN	WJKA
411	0636	WOMAN	WJKA
412	0644	BUSINESSMAN	WJKA
412	0858	WOMAN	WJKA
413	0105	HS STUDENT	WJKA
414	0923	HS STUDENT	WECT
414	1413	HS STUDENT	WJKA
414	1022	HS STUDENT	WWAY
414	0030	BUSINESSMAN	WWAY
415	1745	HS STUDENT	WWAY
415	0715	WOMAN	WJKA
415	1225	BUSINESSMAN	WJKA
415	1700	BUSINESSMAN	WWAY
415	0644	BUSINESSMAN	WJKA
416	2359	BUSINESSMAN	WJKA
416	0540	TRUCK	WECT
416	0644	WOMAN	WJKA
416	1731	HS STUDENT	WJKA
416	0824	BUSINESSMAN	WJKA
416	0156	BUSINESSMAN	WECT
417	0224	BUSINESSMAN	WJKA
418	0129	HS STUDENT	WECT
419	0759	BUSINESSMAN	WJKA
420	2307	TRUCK	WECT
420	0153	HS STUDENT	WJKA
420	1810	HS STUDENT	WWAY
421	0049	YOUNG MALE	WJKA
421	2354	HS STUDENT	WWAY
421	1347	YOUNG MALE	WJKA
422	0637	BUSINESSMAN	WJKA
422	2323	BUSINESSMAN	WECT

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DATE	TIME	TITLE	STATION
422	0724	BUSINESSMAN	WJKA
423	1756	HS STUDENT	WJKA
423	0815	WOMAN	WJKA
423	0652	BUSINESSMAN	WJKA
424	1755	HS STUDENT	WJKA
424	0652	BUSINESSMAN	WJKA
425	0824	WOMAN	WJKA
425	0637	WOMAN	WJKA
425	1756	HS STUDENT	WJKA
425	1014	HS STUDENT	WWAY
426	0652	WOMAN	WJKA
427	1029	HS STUDENT	WWAY
427	0128	HS STUDENT	WECT
427	0015	WOMAN	WJKA
428	1329	BUSINESSMAN	WJKA
428	2343	BUSINESSMAN	WJKA
428	0758	HS STUDENT	WJKA
428	2354	HS STUDENT	WWAY
429	1943	BUSINESSMAN	WJKA
429	1014	HS STUDENT	WWAY
429	0759	BUSINESSMAN	WJKA
429	1755	YOUNG MALE	WJKA
429	1817	TRUCK	WECT
430	0158	BUSINESSMAN	WECT
430	1924	BUSINESSMAN	WJKA
430	1014	BUSINESSMAN	WWAY
430	1715	TRUCK	WECT
430	1713	HS STUDENT	WJKA
430	1359	YOUNG MALE	WJKA
430	1029	BUSINESSMAN	WWAY
430	1216	WOMAN	WJKA
501	0824	WOMAN	WJKA
501	1745	YOUNG MALE	WJKA
501	1023	BUSINESSMAN	WWAY
502	1956	WOMAN	WJKA
502	1756	YOUNG MALE	WJKA
502	0121	YOUNG MALE	WJKA
502	0606	BUSINESSMAN	WJKA
502	0556	HS STUDENT	WECT
503	0100	BUSINESSMAN	WWAY
503	0622	YOUNG MALE	WJKA
503	1808	HS STUDENT	WJKA
504	1157	BUSINESSMAN	WWAY
504	0714	BUSINESSMAN	WECT
504	0100	BUSINESSMAN	WWAY
505	0858	YOUNG MALE	WJKA
505	1236	HS STUDENT	WJKA
505	0724	BUSINESSMAN	WWAY
505	0056	BUSINESSMAN	WECT
506	1928	BUSINESSMAN	WJKA

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DATE	TIME	TITLE	STATION
506	1224	HS STUDENT	WECT
506	1713	HS STUDENT	WJKA
506	1816	WOMAN	WJKA
507	1035	BUSINESSMAN	WWAY
507	1827	TRUCK	WECT
507	1229	WOMAN	WJKA
507	1756	HS STUDENT	WJKA
507	1956	BUSINESSMAN	WJKA
507	0035	YOUNG MALE	WJKA
507	0816	WOMAN	WJKA
507	2316	HS STUDENT	WJKA
507	0629	BUSINESSMAN	WJKA
508	1757	YOUNG MALE	WJKA
510	0540	BUSINESSMAN	WECT
510	0055	YOUNG MALE	WJKA
511	2317	TRUCK	WECT
512	1022	BUSINESSMAN	WWAY
514	1207	WOMAN	WJKA
514	1629	HS STUDENT	WJKA
514	0229	BUSINESSMAN	WWAY
515	0027	YOUNG MALE	WJKA
515	0648	WOMAN	WJKA
515	1756	YOUNG MALE	WJKA
516	0658	BUSINESSMAN	WJKA
516	1758	HS STUDENT	WJKA
517	0055	HS STUDENT	WJKA
517	0859	WOMAN	WJKA
517	0001	YOUNG MALE	WJKA
518	0152	HS STUDENT	WJKA
518	1145	HS STUDENT	WJKA
519	0010	BUSINESSMAN	WJKA
519	1149	YOUNG MALE	WJKA
520	0122	BUSINESSMAN	WJKA
520	1020	BUSINESSMAN	WWAY
521	0055	BUSINESSMAN	WJKA
522	0622	BUSINESSMAN	WJKA
522	0055	BUSINESSMAN	WJKA
522	0824	WOMAN	WJKA
523	0648	BUSINESSMAN	WJKA
526	0049	BUSINESSMAN	WJKA
526	1507	HS STUDENT	WJKA
527	0758	BUSINESSMAN	WJKA
527	0629	WOMAN	WJKA
527	0500	BUSINESSMAN	WWAY
528	0034	YOUNG MALE	WJKA
530	0637	WOMAN	WJKA
531	1026	BUSINESSMAN	WWAY
531	0122	YOUNG MALE	WJKA
601	1157	BUSINESSMAN	WWAY
601	0106	BUSINESSMAN	WWAY

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DATE	TIME	TITLE	STATION
603	1207	WOMAN	WJKA
603	0858	WOMAN	WJKA
604	0002	BUSINESSMAN	WJKA
605	1714	BUSINESSMAN	WWAY
605	0636	BUSINESSMAN	WJKA
606	1042	BUSINESSMAN	WWAY
607	2302	YOUNG MALE	WJKA
608	0108	BUSINESSMAN	WWAY
609	0954	BUSINESSMAN	WWAY
610	0823	WOMAN	WJKA
611	1059	WOMAN	WJKA
612	1042	BUSINESSMAN	WWAY
612	0816	WOMAN	WJKA
613	0606	WOMAN	WJKA
615	0123	BUSINESSMAN	WWAY
617	2302	YOUNG MALE	WJKA
618	0622	BUSINESSMAN	WJKA
622	0123	BUSINESSMAN	WWAY
623	1100	BUSINESSMAN	WWAY
626	0724	YOUNG MALE	WJKA
626	0134	YOUNG MALE	WJKA
627	0648	BUSINESSMAN	WJKA
716	0628	BUSINESSMAN	WJKA
719	0122	YOUNG MALE	WJKA
722	0628	BUSINESSMAN	WJKA
724	0055	YOUNG MALE	WJKA
725	0606	BUSINESSMAN	WJKA
725	0121	YOUNG MALE	WJKA
729	0629	BUSINESSMAN	WJKA
730	0652	BUSINESSMAN	WJKA
731	0035	YOUNG MALE	WJKA