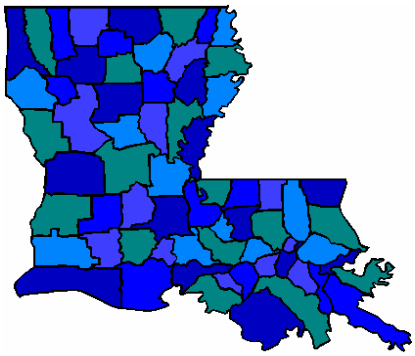
Targets of Opportunity:

State Demonstration Program For Reducing Impaired Driving

Final Report



June 30, 2002

Louisiana Highway Safety Commission

Table of Contents

Table of Contents 1
List of Tables and Figures 2
Executive Summary 3
1. Introduction 4
2. People Involved and Meeting Dates 5
3. Implementation Plan 7
4. Equipment Purchased and Used for the Project 9
4.1 Video Cameras 9
4.2 Portable Breath Testers 10
4.3 Other Items 10
4.4 Issues and Problems with the Purchase of Equipment 12
5. Saturation Patrols and Checkpoints 14
6. Media 16
6.1 Kick-Off Event 16
6.2 Target Driver Message Development 16
6.3 Media Distribution Planning/Scheduling 19
6.4 Public Information/Education Materials Preparation/Production 19
6.5 Strategy for Media Exposure 20
6.6 Problems Encountered 21
7. Enforcement Support Overtime 23
8. Training 24
9. Evaluation Plan 27
10. Evaluation 30
10.1 DWI Arrests 30
10.2 Fatalities 32
10.3 Public Awareness 41
10.4 Summary 41
11. Lessons Learned 43
11.1 Enforcement 43
11.2. Regional Differences 43
11.3. Profiles 43
11.4 Laws and regulations 44
11.5 Look at ways to facilitate arrests and convictions of drunk drivers 45
11.6 Public Relations and Media 45
12.7 Data 46

List of Tables and Figures

Figure 1.1: Louisiana Parishes and Licensed Drivers 4
Table 1.1: Selected 16 Parishes 5
Table 3.1: Steps and Deliverables 8
Table 4.1: Distribution of Cameras 9
Table 4.2: Distribution of Portable Breath Testers 10
Table 4.3: Items Purchased 13
Figure 9.1: Model for Reducing Alcohol-Related Fatalities 27
Table 10.1: DWI Arrests and SFST s Conducted 30
Table 10.2: Submits and Refusals 1999-2001 31
Table 10.3: Submits and Refusals for 12 Months Periods 1999/2000-2000/2001 31
Table 10.4: Fatal Crashes Prior and After Start of the Project for 16 Selected Parishes 32
Table 10.5: : Fatal Crashes Prior and After Start of the Project for 48 not Selected Parishes 33
Table 10.6: : Fatal Crashes Prior and After Start of the Project for All Parishes 33
Table 10.7: Percentage of alcohol-related fatalities for 16 selected parishes 34
Table 10.8: Percent Difference in All Fatalities and Percent Difference in Alcohol-Related Fatalities by Troop 35
Table 10.9: Percentage Change in Driver Fatalities Using Alcohol 36
Figure 10.2: Alcohol-Related Driver Fatalities by Age Group 36
Table 10.10: Driver Fatalities by Gender and BAC 37
Figure 10.3: Driver Fatalities Using Alcohol by Gender 37
Table 10.11 Percentage of Alcohol-Related fatal Crashes by Time of Day 37
Figure 10.4 Average BAC by Age – Average and Trend Line 38
Figure 10.5: Fatalities versus Patrol Hours 39
Figure 10.6: Number of Fatalities versus SFSTs 40

Executive Summary

Louisiana consistently ranks high among the states with respect to alcohol-related fatalities. Close to half of the traffic fatalities were alcohol-related in the past five years. Enforcement activities for the "Targets of Opportunity" project were conducted from July 1, 2000, through September 30, 2001, and have shown several key findings:

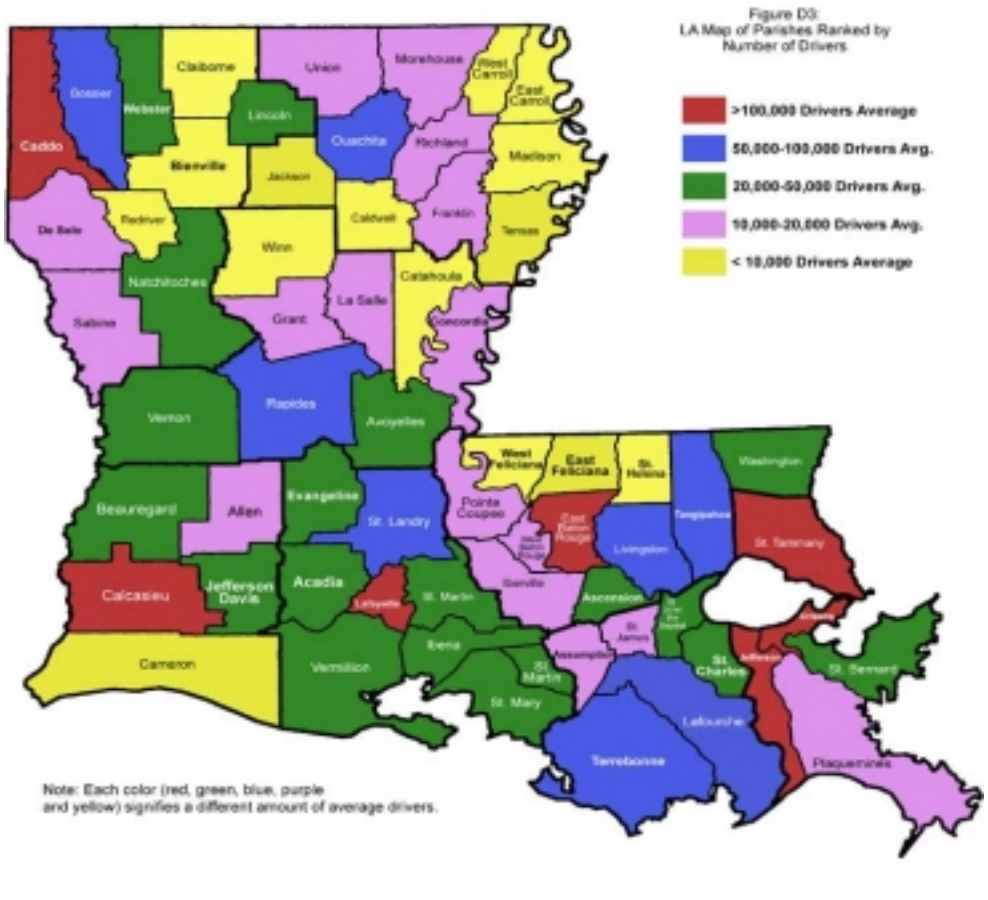
- Alcohol-related fatalities in the state reduced from 48.8% to 45.6% .
- Increased enforcement reduced alcohol-related fatalities by 14.8% in 16 selected parishes.
- There was a 5.3% decline in the percentage of alcohol-related fatalities during the 12-month enforcement period of the project (July 1, 2000 through June 30, 2001).
- The numbers of SFSTs conducted is strongly related to a decrease in the number of traffic fatalities. On the average, an increase in 100 SFSTs will save 3 additional lives or $9 million. On the average, an increase in 1000 hours of saturation patrol will save 4 lives or $12 million.
- Increased enforcement with public awareness campaigns is more effective with "moderate drinkers" who drive with alcohol concentrations below 0.10 and return home before midnight.
- Increased enforcement with public awareness campaigns is more effective with youth, ages 15 to 24, than with adults ages 30 and above.
- Public awareness of enforcement has increased during the enforcement period.
- There are regional differences in Louisiana with respect to alcohol. While 46% of traffic fatalities are alcohol-related in south Louisiana, only 30% of traffic fatalities were alcohol-related in north Louisiana in the 12 months of enforcement.

1. Introduction

In 1999, Louisiana ranked seventh among the states with respect to alcohol-related traffic fatalities. Data from the Fatal Analysis Reporting System (FARS) for 1999 estimates that for the calendar year 46% of traffic fatalities in Louisiana were alcohol-related. This was 8 percentage points above the nationwide estimate of 38%. The objective of the "Targets of Opportunity" project was to decrease the percentage of fatal alcohol-related fatalities in Louisiana.

Louisiana's estimated population as of July 1, 1998, was 4,368,967, and the state covers an area of 43,566 square miles. The urban/rural breakdown is 68% and 32%, respectively. The racial breakdown is 67% white, 31% African-American and 2% other races. The state is divided into 64 parishes. These parishes are grouped into 8 planning regions, which delineate the state's media markets. Each parish has an elected sheriff who serves as the chief law enforcement official. Cities and towns are served by local law enforcement agencies. There are approximately 250 local police departments and 64 local sheriff offices. Figure 1, which is a reproduction of the Figure D3 of the 1999 Traffic Records Data Report, shows the parishes of Louisiana with the colors indicating the number of licensed drivers.

Figure 1.1: Louisiana Parishes and Licensed Drivers



In order to obtain the largest possible effect for the limited resources the grant provided, 16 parishes with the highest three-year average of alcohol-related fatalities were selected for enforcement activities (see Table 1.1).

Table 1.1: Selected 16 Parishes

Parish	Licensed Drivers	Alcohol-Related Fatalities	Alcohol-Related Injuries
Ascension	45,114	9	92
Bossier	58,583	3	96
Caddo	154,652	9	213
Calcasieu	122,636	13	254
East Baton Rouge	260,388	17	239
Jefferson	309,923	14	401
Lafayette	122,656	12	174
Lafourche	56,021	8	132
Livingston	54,104	8	79
Orleans	235,044	18	306
Ouachita	91,202	5	128
Rapides	82,277	6	111
St. Landry	54,730	6	81
St. Tammany	125,550	15	174
Tangipahoa	60,300	7	92
Terrebonne	68,875	9	166

The Louisiana State Police (LSP) was the primary enforcement agency to carry on activities during the project. Other local police agencies within these 16 parishes were solicited to participate by the Louisiana Highway Safety Commission. Media coordination was developed through coordinated efforts of the Louisiana State Police, Cranch-Hardy & Associates and Rafael Bermudez & Associates. Letters of Support were solicited and received from the Louisiana State Police, the Louisiana Sheriffs Association, the Louisiana Municipal Police Association and the Louisiana District Attorney's Association.

2. People Involved and Meeting Dates

The original proposal for this project was submitted to the National Highway Traffic Safety Administration (NHTSA) on June 18, 1999. Colonel James Champagne and Bobby Breland first met to discuss and evaluate strategy for implementation of the project. During the period June 18 through September 30, 1999, several individuals from various state agencies and organizations were selected to participate. All parties were in place and ready to commence on September 30, 1999, the effective start date for the project. A committee was established to oversee the demonstration project. A number of

individuals were enlisted, both state employees and public persons, to carry on various aspects of the "You Drink & Drive. You Lose." demonstration project. These people are listed in Appendix A. There were many other individuals involved with this project connected to one or the other of the listed organizations who lent invaluable assistance and knowledge, without whom this project would not have been possible.

Although there were no regular scheduled meetings, a number of meetings took place during the initial phases of the project. Appendix B depicts the meeting dates of the most significant meetings held prior to enforcement implementation on July 1, 2000.

3. Implementation Plan

In order to achieve our goal of decreasing the percentages of fatal alcohol-related crashes, it was necessary to significantly increase DWI enforcement activities throughout our state. This was achieved through the purchase of new equipment, statewide saturation patrols, extensive public information and education, advanced DWI training and data collection and evaluation.

The Louisiana Highway Safety Commission contracted with Bobby Breland to serve as the overall project director responsible for coordinating the project and developing the implementation plan. The plan was revised after strategy meetings were conducted with all possible participating parties. Original plans for the purchase of equipment were revised due to wishes of Louisiana State Police top management. Enforcement activities were revised to include not only saturation patrols but also sobriety checkpoints. This revision was made in view of a legal decision - approving such checkpoints – that was handed down by the Louisiana Supreme Court. The original proposal was also revised after receiving initial instructions from the National Highway Traffic Safety Administration during the kick-off meeting held in Washington, D.C. The time line is depicted in Table 3.1.

The kick-off event was held on June 28, 2000, in front of the State Police Headquarters. The specific individuals or organizations present at the Baton Rouge kick-off event are listed in Appendix C.

Table 3.1: Steps and Deliverables

Item	Due Date
Evaluation Methodology Meeting	11/8-10/99
Saturation Patrol Sites	12/31/99
Training Schedule	12/21/99
LSP Ride-along Program for Media, District	12/31/99
Submission of Phase I Detailed Implementation Plan	01/01/00
Federal COTR Approves Phase I Plan	02/03/00
Saturation Patrol Schedule	02/29/00
PIO Activity Plans	02/29/00
Detailed Implementation Plan	03/15/00
Public Relations/Media Plan	03/15/00
Implementation Monitoring Schedule	04/01/00
Letters of Cooperation from Law Enforcement Agencies	04/01/00
Detailed Phase I Evaluation Plan	06/01/00
Kick-off Press Conference	06/28/00
Federal COTR approves Phase I Evaluation Plan	07/01/00
Equipment Distribution	07/01/00
Final Technical Briefing	05/01/02

4. Equipment Purchased and Used for the Project

Louisiana State Police proposed to purchase a variety of equipment in support of the detection, apprehension and prosecution of impaired drivers. All equipment was to be purchased, distributed and placed in operational condition in order to be utilized by the implementation date of July 1, 2000. A detailed list of the proposed purchases is presented in Appendix D. The main items to be purchased were video cameras, portable breath testers and equipment/material to facilitate training. Additional items were purchased to support the use of these three main items.

4.1 Video Cameras

Video cameras were to be placed in state police units to assist arresting officers in every phase of an arrest involving a suspected drunk driver. The cameras were to be used to film the physical conditions of suspects during the course of the standardized field sobriety tests. Past experience had shown that evidence obtained through the use of video cameras was very convincing and on some occasions had caused suspects to waive their defense. This type of evidence accelerates the entire adjudication process and reduces the number of hours an arresting officer must devote to the judicial process. The cameras placed in state police units located in all troop areas within the state were disbursed as follows:

Table 4.1: Distribution of Cameras

Troop	*Number of Cameras*	*Vicinity*
A	8	Baton Rouge
B	10	New Orleans
C	6	Houma
D	6	Lake Charles
E	7	Alexandria
F	7	Monroe
G	7	Shreveport
I	6	Lafayette
L	7	Covington

4.2 Portable Breath Testers

Portable breath testers were to be used in conjunction with SFST/DRE evaluations to assist in determining probable cause for an arrest. Such testers were thought to save many man hours by assisting in the determination of a driver's degree of impairment prior to executing formal arrest, testing and booking procedures.

Table 4.2: Distribution of Portable Breath Testers

Troop	*Number of PBT's*	*Vicinity*
A	10	Baton Rouge
B	10	New Orleans
C	10	Houma
D	10	Lake Charles
E	10	Alexandria
F	10	Monroe
G	10	Shreveport
1	10	Lafayette
L	10	Covington

4.3 Other Items

Various other items were planned to be purchased to support the use of equipment. The exact quantity planned to be purchased is listed in the appendix.

- Video Tapes for In-Car Cameras: These tapes were to be distributed at the rate of 200 video tapes per camera assigned. The tapes are offered as evidence during the course of an administrative per se hearing or during a judicial adjudication.

- VHS Dual Deck Video Recorders/Duplicators: This equipment was necessary in order to maintain a proper chain of evidence for the trooper involved in a video taped incident. Under proper supervision this equipment allows the tape to be dubbed or duplicated. Both the original and duplicate tape were to be tagged and logged. The original was to be maintained under lock

and key at the troop. The duplicate tape was to be turned over to the appropriate District Attorney's Office.

- VHS Video Tape Erasers/Degausers: Erasers were considered necessary in order to reuse video tapes once it was determined that they were no longer required for evidentiary purposes.

- Portable Breath Tester Supplies for Portable Breath Testers were be distributed at the rate of 30 tester supplies per PBT assigned.

- SFST Pocket Manuals were to be issued to Louisiana State Troopers and local law enforcement agencies to assist them in administering the standardized field sobriety test on the side of the road. This would enable the arresting officer to be thorough in his administering of the test.

- Projectors were to be utilized by State Police Public Information Officers (PIOs) in order to provide DWI training and presentations at police academies, schools, conferences, civic and professional organization gatherings, as well as other events.

- Projector Screens were sought to be utilized by Public Information Officers with the multimedia projectors.

- Polaroid Cameras were to be issued to troopers utilized in the Enforcement Support roles in the local lockup or troop. The arrested person would be photographed and the photo maintained with the report in order to easily track the reports as they are being completed. This would eliminate any possibility of confusion of individuals and reports.

- Digital Cameras were to be used during investigations of alcohol-related crashes. These cameras have zoom capabilities allowing officers to take clear, close-up pictures of items such as beer cans, whiskey bottles, etc. The cameras would enable law enforcement to take better images at crash scenes, which in turn can be immediately reproduced and provided for newspaper stories or be used during educational presentations for teenage students at high schools throughout Louisiana. The cameras would be placed in the two state police regions and would be distributed by PIO Supervisors. Such distribution would ensure that each Public Information Officer would have access to cameras when needed.

- Display boards would be used for educational/instructional presentations at schools, conferences, civic and professional organization gatherings, as well as at other events. The boards can display photographs, printed material and eye catching logos. The Display Boards would be issued to the Louisiana State Police Public Information Officers.

- Computer scanners would be used to scan news articles, photographs and printed material into computer programs for use in the DWI educational/instructional presentations. The scanners would be issued to PIO's who presently do not have them.

- Public Information Materials, such as pamphlets, would be distributed as needed statewide. Funds from this category would also be used to produce Public Service Announcements for radio and television, and billboard production and advertising when possible.

4.4 Issues and Problems with the Purchase of Equipment

All equipment was planned to be purchased, distributed and placed in operational condition and to be utilized by the implementation date of July 1, 2000. The majority of the commodities were ordered by the Louisiana State Police Operational Development Section, and the actual purchase of the equipment was handled through the Department of Public Safety Purchasing Section. The coordinating and ordering of training materials, such as the SFST Instructor and Student Manuals, SFST Pocket Manuals and the DRE Training Equipment Packages was handled by the State Police Applied Technology Section.

All of the equipment was purchased on time, with the exception of the SFST Instructor and Student Manuals because of a delay in receiving the manuals that was caused by the manufacturer. The updated versions of the manuals have not been printed. There was a delay in ordering the billboards while awaiting clarification from NHTSA on how the funds could be spent on production and advertising. However, authorization was received for the production of the billboards and they were completed and on display prior to September 30, 2001. The list of commodities purchased as of this date is given in Table 4.3.

Table 4.3: Items Purchased

Number of Items	Item
64	In-Car Video Cameras
24,518	Video Tapes
91	Portable Breath Testers
2,700	Portable Breath Tester Supplies
16	Polaroid Cameras
5	Cases of Polaroid Film
10	Multimedia Projectors
10	Projector Screens
3	Digital Cameras
9	Display Boards
5	Computer Scanners
9	VHS Dual Deck Video Recorders/Duplicators
4	VHS Video Tape Erasers/Degausers
175	Verdict II On-Site Device DRE Field Test Kits
9	25" Color Monitors
60	DRE Training Equipment Packages

Portable Breath Testers (PBT)

After the Portable Breath Testers (PBT) were purchased and distributed a challenge arose. Sgt. Chustz advised the LSP Operational Development Section that the LSP was losing DWI cases in several jurisdictions due to the use of the PBTs. The District Courts were ruling the PBTs as a chemical test for intoxication under strict interpretation of LA. Revised Statue 32:669(c), requiring that the tested subject be read the standard DWI Rights Form prior to a chemical test. Since the courts were ruling the PBTs a chemical test for intoxication, this also required documentation that the devices were properly calibrated prior to use, that the troopers had been properly trained and that required monthly maintenance of the devices was being followed.

The problems with the PBTs were presented to the DPS Office of Legal Affairs. After much discussion, the Legal Section recommended that the Department suspend the use of the devices.

Lt. Col. John LeBlanc issued an order on March 12, 2001, discontinuing the use of PBTs until the problems with the device were resolved.

Video tape storage

The storage of the tapes has presented a problem. Currently, the tapes are being secured in each Shift Supervisors' office. As the volume of tapes grows, a new storage system for the recycled tapes will have to be developed.

5. Saturation Patrols and Checkpoints

Implementation of saturation patrols began July 1, 2000. The implementation plan required that Louisiana State Police would conduct at least 120 saturation patrols on 60 weekends during the 15-month implementation period. State Police statistics show that 217 saturation patrols were actually performed during the 15-month period. Saturation patrols were focused in the 16 parishes identified as having the worst alcohol-related fatal crash ratio, listed in Table 1.1. Even though focus was placed in these parishes, patrol assignments were adjusted and occurred in other parishes if it was determined that potential trouble spots existed. Basically, patrols were planned to take place from 10:00 p.m. to 4:00 a.m. on Thursday, Friday, Saturday and Sunday, but were adjusted to different days and times as the need arose.

Along with Louisiana State Police saturation patrols, other local and municipal enforcement agencies were involved in a coordinated effort to conduct patrols during the 60 weekends mentioned above. At least 111 local sheriffs and municipal law enforcement agencies planned to conduct saturation patrols on a statewide basis. For example, saturation patrols were planned to be conducted at the following events: (A) Buckle-Up America (Thanksgiving) - November, (B) 3D Month (Drunk & Drug Driving Month) December, (C) Alcohol Awareness Month - April, (D) Buckle Up Week (Memorial Day, Week)-May, and (E) 4th of July. Through the joint efforts of the Louisiana State Police, sheriffs offices and municipal police agencies, a greater effect could be realized. See Appendix E for a detailed schedule of public information officers' activities and saturation patrols.

The dates and times for saturation patrols were advertised through local media advertisements. Participating law enforcement agencies were required to submit their enforcement operation activity reports to the Louisiana Highway Safety Commission on a monthly basis.

Ride-along saturation patrol monitoring took place at selected saturation patrol sites during the course of the implementation period. Monitoring also took place at selected State Police troops and at municipal police and sheriff's offices. Arrest activity reports were also monitored.

With the exception of Insurance Checkpoints, the Louisiana State Police had not conducted sobriety checkpoints prior to the LA Supreme Court paving the way. A ruling on July 6, 2000, by the Supreme Court of Louisiana opened the door with a legal way of detaining and stopping drivers suspected of being impaired while working within a checkpoint. It is noted that agencies other than the Louisiana State Police also have conducted checkpoints with some success. Louisiana State Police Checkpoints were established by LSP Procedural Order # 410 dated April 7, 2000, and revised January 3, 2001.

The first LSP Sobriety Checkpoint was conducted by Troop B on September 3, 2000, in Jefferson Parish. La. Hwy 3152 northbound on-ramp at La. 3139 was the location. 225 vehicles were screened with 22 Field Sobriety Tests and three (3) DWI arrests were made. A total of 23 sobriety checkpoints were conducted during the enforcement period. Checkpoints were conducted in five of the nine state police troop areas. These included troops A (Baton Rouge), B (New Orleans), C (Houma), L (Covington) and G (Shreveport). The New Orleans Police Department and several other sheriff and local enforcement agencies also conducted them. In excess of 80,000 vehicles passed through a checkpoint and in excess of 20,000 drivers were interviewed at a checkpoint. More than 120 DWI arrests resulted from these interviews. Public service advisory announcements were made informing the public of the checkpoint activity. These announcements resulted in a number of vehicles being driven by designated drivers.

A master plan was constructed by the PIOs as a group in Spring of 2000 that detailed guidelines for attracting the media to our enforcement efforts and thus educating the public on our agenda. This early planning was used as an education tool for establishing to the public our intended plan of bringing attention to the damage caused by impaired drivers and their high percentage of involvement in crashes and fatalities. Further attention was placed on the targeted 16 parishes. A massive media campaign kicked off the enforcement effort, with PIOs staging press conferences in each of our major cities around the State, and in other locations within the 16 affected parishes. The "new" enforcement tools were spotlighted. Video cameras, radars and on-board computers were viewed firsthand by the media. Ride-alongs were conducted in each Troop area. This effort has continued throughout the program. Media, judges and district attorneys were invited to ride along with the troopers during the enforcement times. Bobby Breland and Bob Thompson, from the LHSC, spoke to a group of statewide judges about the “Targets of Opportunity” program in June 2000. The judges indicated their support of the program in a survey taken after the meeting.

6. Media

6.1 Kick-Off Event

It was determined by all parties involved (Louisiana Highway Safety Commission, Louisiana State Police and the Project Director) that a kick-off event would be conducted at the State Police Headquarters in Baton Rouge, as well as the eight other State Police troop areas. (One or more of the 16 targeted parishes are located within each of the State Police troop areas.) On Wednesday, June 28, 2000, a news media event was staged in order to announce the start-up phase of the "Targets of Opportunity" enforcement implementation. To ensure that information would be distributed on a consistent statewide basis, all events were held on the same day and at the same time of day.

A press packet for all media in attendance was prepared, which included a news release, a fact sheet, Louisiana statistics, national statistics and a list of the 16 targeted parishes. A media advisory was sent out before the event, and news media were contacted by telephone regarding the event. The hired public relations consulting company, Rafael Bermudez & Associates, prepared talking points for the two event spokesmen, Col. William R. "Rut" Whittington and Col. Jim Champagne. Similar talking points and press packets were prepared and sent to the other troops for use in their events. Cranch-Hardy & Associates prepared video news releases that were distributed to television stations statewide. The video news releases were also shown at the end of the event. The event included a live demonstration of a standardized field sobriety test, use of the in-car camera and a mock arrest, which was heavily covered by the media.

Media attending the Baton Rouge event were as follows: *The Baton Rouge Advocate, The Alexandria (LA) Daily Town Talk*, WAFB-TV, WBRZ-TV, WBRT-TV of Baton Rouge, WGNO-TV of New Orleans and the Louisiana Radio Network. Subsequent to these media events, news coverage was widespread throughout Louisiana on television and radio and in the print media. Thirty-six (36) newspapers throughout the state ran an article about the Baton Rouge event based on the press release issued.

6.2 Target Driver Message Development

Based on the defined profile of the drivers who are most likely to violate DWI statutes and be involved in DWI-related crashes, concepts were developed to be used to formulate messages aimed at altering DWI occurrences among those who comprise the target audience. Regional differences were also taken into account during the formulation process. Additional information was acquired through interviews with State Police personnel who are familiar with DWI enforcement.

It was decided that the 18-to-24-year-old driving population was a worthy audience for the broadcast component of the Public Information/ Education part of the "Targets of Opportunity" campaign. Since there was a strong enforcement component comprised of both saturation patrols and the acquisition of in-car video cameras for use in State Police patrol units, a decision was made to utilize initial media events, press releases, billboard and collateral materials (brochures) to support the enforcement effort. The broadcast public service announcements (PSAs) were produced to deliver behavior modification messages targeted at 18-to-24-year-old drivers.

Although the issue of "Zero Tolerance" was raised, it was concluded that the consumption of alcoholic beverages by persons under the age of 21 continues to be a problem in Louisiana (as well as in every other state of the nation), thus making the age group a market segment that could not be ignored.

Further research was conducted among persons in the 18-to-24-year-old age group to ensure the greatest possible impact of any message directed at that age category. The largest group of research participants was composed of a class of 20-to-21-year-old students at Louisiana State University. Twenty-eight LSU students donated 2.5 hours of their time to discuss issues regarding alcohol consumption and driving to help determine the best approach to message development. The consensus was that drivers ages 18-24 would more likely listen to someone their age who had caused an alcohol-related vehicular fatality.

Based on the students' conclusion, Cranch-Hardy & Associates personnel began a statewide search for persons under 25 of age who had been convicted of DWI-related manslaughter or vehicular homicide. The Probation & Parole Office of the Louisiana Department of Public Safety & Corrections was especially helpful in that effort.

Of the 13 persons who were identified as possible subjects, telephone interviews narrowed the field to just two individuals: Melanie Hogan of New Orleans and Jackson Moss of Abbeville, Louisiana. Both expressed remorse and a willingness to talk about their respective experiences in the hope of saving lives. Both drivers agreed to be interviewed on camera. Each videotape interview lasted approximately 45 minutes. The interviews were reviewed and segments selected that were then edited into three "test" 30-second PSAs. The test PSAs were then reviewed by several groups who fit the profile of targeted drivers: seniors at University High School and the same LSU students who helped develop the concept. Both groups suggested minor revisions including a spoken or visual reference to incarceration.

Overall, though, they felt the spots would have a positive impact on both the targeted group, and more mature drivers. Also developed were concepts for outdoor advertising and brochures. The outdoor advertising message was aimed at informing drivers about the new in-car cameras. The subject of the brochures was to explain the consequence of each DWI conviction and, of course, DWI fatalities.

Following approval of the "concept" broadcast messages by the test groups, as well as by the Project Director and the Executive Director of the Louisiana Highway Safety Commission, Cranch-Hardy & Associates prepared finished versions of each of the PSAs. Utilizing post-production facilities in Baton Rouge, two 30-second TV PSAs featuring Melanie Hogan and one 30-second version featuring Jackson Moss were produced in finished form. Visual graphics, crash-scene footage and sound effects were incorporated and mastered on digital format videotape. From that master, duplicates were made in formats required by every television station and cable facility in Louisiana (Beta, 1" or 3/4").

Utilizing the original interview, audio tricks and sound effects, two radio PSAs were produced and digitally mastered featuring Melanie and Jackson. As with the television PSAs, duplicates were made for all radio stations within each of the 16 targeted parishes. Packages containing the radio and television PSAs were then shipped to each of the nine LSP PIOs for distribution to the appropriate broadcast facilities.

In November 2000, a third TV PSA was produced featuring a young Baton Rouge resident who was the victim of an alcohol-related crash. Eric Searcy, who had been offered a baseball scholarship to the University of Southwest Louisiana, was a passenger in a vehicle that was struck broadside by a drunk driver. As a result of the crash, Eric became a quadriplegic and missed an opportunity to pitch in the College World Series. In April 2001, duplicate videotapes were turned over to State Police for distribution to Troop PIOs for airing during the collegiate baseball season. In addition to the broadcast PSAs, Cranch-Hardy & Associates created master artwork in electronic formats for outdoor advertising in sizes that could be reproduced as 14' X 48' bulletins and/or posters. Using the same in-car camera theme as presented in the outdoor advertising, artwork was also electronically formatted for use as theatre advertising. The electronic files for the outdoor advertising and theatre advertising were provided to State Police headquarters in late March 2001. Electronic graphic art files for an information brochure were prepared and provided regarding DWI laws to the Louisiana Highway Safety Commission. The LHSC arranged for printing by the state printing agency.

6.3 Media Distribution Planning/Scheduling

To achieve the greatest possible impact, Cranch-Hardy & Associates worked closely with Rafael Bermudez & Associates, the LHSC, State Police and other law enforcement agencies to design a schedule by which the Public Information/Education materials would be introduced on a region-by-region basis during the implementation phase of the program. The regions were defined by those parishes which comprise each of the nine, letter-designated Louisiana State Police Troops. Such factors as alcohol-related injury and fatality rates, media market size, media event subject matter, media cooperation and corresponding national events and conflicts were taken into account.

Upon finalization of the schedule, Cranch-Hardy & Associates prepared a critical path production/distribution plan that assured timely delivery of all information/education materials to the appropriate print and broadcast media, as well as other parties who assisted with the message delivery process, in each region during the implementation. A database was compiled into a Media Guide that included information regarding all broadcast organizations and newspapers in each of the 16 targeted parishes broken out by Troop. Included in the database were the names of all appropriate contact persons at each station/publisher. The Media Guide denoted which broadcast organizations had local news broadcasts and could therefore use news releases and those that could utilize only PSAs.

It was agreed upon by all involved in the program's implementation that the PSAs might be given more attention if delivered "in person" by the respective Troop PIOs. That distribution process was followed and the materials were delivered to the PIOs on July 5, 2000. Because the PSA distribution was assigned to State Police PIOs, there was no direct contact between the broadcasters and the Louisiana Highway Safety Commission or the public information/education contractors. Thus, no records of which stations aired the PSAs, nor how many times the announcements were broadcast, were received by the grantee or its contractor.

6.4 Public Information/Education Materials Preparation/Production

With both approved message(s) and a distribution plan, the public relations firm proceeded to prepare master broadcast-ready and/or print-ready materials from which duplicates could be made and distributed to all appropriate media according to the scheduled introduction of the program in each region.

The produced materials were designed to be customized for each region during the implementation phase. Cranch-Hardy & Associates, Inc., from Baton Rouge was chosen to coordinate the broadcast media effort, and to prepare certain other mass media and collateral materials. Rafael Bermudez & Associates, Inc. (RB&A), another Baton Rouge-based firm, was contracted to coordinate the Public

Relations aspects of the Public Information and Education program for the "Targets of Opportunity" campaign.

6.5 Strategy for Media Exposure

The public relations firm (RB&A) developed a strategy for maximizing exposure of the program in the news media. The objective was to ensure that a high number of Louisiana drivers became aware of the program and that potential drunken drivers would become less inclined to violate Louisiana's DWI statutes. The first phase of the strategy development consisted of a thorough review of the program and meetings with Louisiana Highway Safety Commission program administrators, relevant personnel at Louisiana State Police and others. Media research was conducted, which included the collection of data and statistics from the geographic areas selected by the Louisiana Highway Safety Commission for increased DWI enforcement activities. It was determined that the targeted areas are within Louisiana's seven major media markets, meaning publicity generated covered the entire state. Data collected and researched was used to produce appropriate media materials that would reach each of the targeted areas.

Efforts were made to coordinate with a national event in December 2000. However, coordination with the national effort was poor. NHTSA switched advertising agencies midstream, without alerting the advertising and public relations officials in the five pilot states. Information packets were received too late to coordinate our efforts with the national events. Other requests for materials were met with delayed responses or no response at all.

The following media events were undertaken:

- Details of the message began with naming the program, "You Drink & Drive. YOU LOSE." All messages have been created around that theme. Specific messages have included the loss suffered by a victim of drunk driving, the loss suffered by an impaired driver who caused a fatality, the cost of driving impaired in terms of dollars and the increased risk of youth driving while impaired. Other messages have included an initial explanation of the program, an explanation of sobriety checkpoints and notice of training and equipment Louisiana State Police have used during the implementation phase.
- The kick-off event included a live demonstration of a field sobriety test, use of the in-car camera and a mock arrest, which was heavily covered by the media.
- Distribution of statewide news releases and photographs.
- Local media events
- Statistical data was prepared for media events

- A strategy was then developed for local program kick-off events. Fact sheets and releases were customized and prepared for each Troop area.
- A Letter to the Editor of Louisiana newspapers, signed by Col. Jim Champagne, Executive Director of the Louisiana Highway Safety Commission, was distributed in mid-December.
- Strategy development and preparation of materials for the MADD-LHSC-State Police media event held in Baton Rouge on Dec. 19, 2000.
- Ten feature articles each with a photograph or graphic, were produced and distributed.
- News clippings were received, copied and archived. News clippings and logs of television coverage have been collected, which show that the program has received considerable attention statewide. Over 500 newspaper clippings have been archived, and more than 140 mentions of the program have been made on television news programs in the Baton Rouge, Lafayette and Lake Charles areas.
- Fact sheets and news releases were customized and prepared for each Troop area.
- "A sobriety checkpoint could be coming to your area." Additionally, news releases and media advisories were produced and distributed for the checkpoint training session, along with photographs of training sessions for use with local media.
- Statewide news conferences held June 29, 2001, to commemorate anniversary of the program and emphasize 4th of July enforcement efforts. Flags representing the number of alcohol-related traffic fatalities were displayed.

6.6 Problems Encountered

In retrospect, there were several problem areas associated with Public Information/Education aspect of the "Targets" program.

(1) There was opposition to the development of messages targeted toward persons under the age of 21. Under the concept of "Zero Tolerance," persons that age should not be drinking at all. That objection was overcome through the recognition of the continuing alcohol-related traffic fatalities involving under-age drivers.

(2) There was a problem associated with featuring persons in the PSAs who had driven while intoxicated and caused a fatality. Some believed that such persons should not be given a platform or any notoriety, despite the initial research findings and despite the goal of impacting behavior of a high-risk group of drivers.

(3) There was a problem associated with the PSA distribution system. Knowing the demands placed on the time of many of the Troop PIOs under normal circumstances, they may not have been able to devote as much attention to promoting the "You Drink And Drive. YOU LOSE" campaign as they would like to have. Assuming that to be the case, it might have been better to have distributed the PSAs directly through the auspices of the Louisiana Highway Safety Commission.

(4) Another problem was the dependence on PSAs as a communication method. When PSAs are delivered to broadcasters, they are added to stacks of other PSAs that are delivered daily to promote other worthy organizations and causes--everything from anti-drug abuse messages to those from the American Heart Association, The Cancer Society and others. All PSAs are competing for a finite amount of time available for airing such announcements. Unless broadcast managers can be convinced to give a particular PSA special attention, the announcement is rotated into an airing cycle, then out after new PSAs arrive. There is very little that can be done to control the time periods during a given day when the PSAs might be aired nor the duration of time (weeks, months) the PSAs will be kept in rotation. Since reach and frequency are integral to the success of any message delivery program/campaign, it can be reasonably assumed that the messages prepared for the "Targets of Opportunity" broadcast campaign had only minimum exposure to the viewing/listening population, especially the 18-24-year-olds being targeted. To achieve results with a campaign of this sort, funds must be available to purchase media time during programming segments to which target groups are counted as listeners/viewers.

(5) Limited communication and coordination from the national advertising agency was a problem associated with the public relations efforts.

7. Enforcement Support Overtime

The Louisiana State Police Public Information Officers (PIOs) were responsible for the coordination of saturation patrol activities of "Targets of Opportunity" enforcement on a statewide basis. This coordination provided for joint saturation patrol campaigns by the Louisiana State Police, Municipal Police Departments and Sheriff's Offices. In addition to identifying and scheduling the patrols, PIOs worked in conjunction with the media firms of Cranch-Hardy and Associates and Rafael Bermudez and Associates in order to provide all enforcement agencies with necessary information regarding when and where media coverage and public service announcements were provided. These activities involved appearances by PIOs and others on television and radio and in newspaper interviews, educational/training appearances, conferences, shopping malls, social events, etc. State Police Public Information Officers also worked in conjunction with the two media firms mentioned above in the development of public service announcements and in the production and distribution of pamphlets. PIOs were available to discuss and answer questions regarding media releases, pamphlets and the "Targets of Opportunity" enforcement activities. Such publicity was designed to demonstrate the united effort of the various law enforcement agencies within the state.

State Police Public Information Officers were responsible for issuing invitations for the news media, judges, district attorneys and legislators to ride with them during saturation patrol activities. The ride-along schedule provided for sixty-one (61) opportunities during the implementation phase for invitees to participate. The ride-along invitations were issued in the 16 targeted parishes. Again, through the joint efforts of PIOs and the contracted media firms, saturation patrols were publicized and announced to the public.

During enforcement wave periods and other special events, Louisiana State Police assigned at least one trooper in each of the 16 targeted parishes specifically for the purpose of completing DWI arrest reports, implied consent affidavits, booking documents, etc., and for conducting breath alcohol tests in local lockups or state police troops. Placement of these troopers improved arrest turnaround time by one to two hours per arrest, thereby releasing road troopers for additional enforcement action during what would normally be administrative time spent producing the necessary paperwork.

LSP PIOs were responsible for assisting the "Targets of Opportunity" Project Director with the monitoring of saturation patrols, arrests, testing and booking activities. They were responsible for ensuring that all enforcement and reporting activities met with the criteria set forth by NHTSA and the Louisiana Highway Safety Commission. For example, on a monthly basis, all participating law enforcement agencies were required to submit their enforcement operation activity reports to the

Louisiana Highway Safety Commission. The reports included both pre- and -post event publicity, including a description of electronic media coverage. Clippings of print media coverage were also submitted by municipal and sheriff's enforcement agencies. They were also responsible for working with the project director, media firms, and project evaluator within a coordinated framework.

This effort was coordinated through LSP's Operational Development Section and each Troop Executive Officer. After identifying the 16 affected parishes, the Troops were contacted and told of the grants' objectives. The LSP Troops concentrated their effort within the 16 parishes by working 60 weekends during the 15-month implementation period. Each Troop was given the same amount of hours during each of the periods. If a troop was unable to fill the detail, LSP Operational Development was contacted and troops needing additional hours were given extra hours. The coordination effort has been ongoing as enforcement stats are reviewed after each weekend period. The reports are shared with the troop commanders and supervisors.

The primary implementing agency has been the Louisiana State Police. There has been limited task forcing in troop areas where shifts routinely work with the Sheriffs Dept. or local Police Dept. More group effort between agencies has been noted during the Sobriety Checkpoints efforts.

Statistics from the saturation patrols are obtained by the Troop Public Information Officers on the Monday following the weekends and forwarded to the LSP Operational Development for review and compilation.

8. Training

The original plan called for update Standardized Field Sobriety Testing (SFST) training to be provided to approximately thirty-five (35) SFST instructors. The class was to consist of some 16 LSP troopers and 19 officers from other Louisiana municipal and/or sheriff's offices. Two guest instructors with the National Highway Traffic Safety Administration conducted the update training. Upon completion of the training, instructors had the latest information available on how to perform SFST tests. The following specific training was conducted:

- The State Police Training Academy currently offers basic Standardized Field Sobriety Testing (SFST) and Intoxilyzer 5000 Operator courses to approximately 600 officers per year. "Targets of Opportunity" funding offered an opportunity to increase the training in several areas of DWI detection, apprehension, investigation and arrest of violators impaired from alcohol and drugs.

A variety of courses were utilized to achieve the training goal of becoming more effective in preventing the loss of life due to impaired drivers.

- Two Drug Recognition Expert (DRE) training classes were conducted, which produced 25 police officer graduates. The last class is scheduled to be completed by the end of July 2002 and is expected to graduate another 15 students. The students in these classes came from all areas of the state, with an overwhelming majority coming from the 16 parishes focused in the grant. The students were selected from a variety of State, Sheriff, and City Police departments based on their knowledge and background in DWI investigations. Louisiana State Police also had two students that completed DRE Instructor Development School following their initial training.
- A training update for the new 2000 Standardized Field Sobriety Testing Course Lesson Plan was conducted by NHTSA to inform SFST instructors of the changes in the new SFST lesson plan. There were 36 SFST instructors from various agencies and training academies throughout Louisiana and nine instructors from other states that attended. This was the first time that this course had been offered. This information allowed SFST instructors to pass on the new information as it was introduced across the nation.
- The Northwestern University Center for Public Safety and LSP conducted a series of DWI investigator training courses to give experienced officers the most up-to-date information available in the DWI investigation field. These courses were offered to all law enforcement agencies in the state. A total of 299 officers and nine prosecutors attended these courses at nine different locations and gave remarkably high appraisals for the course. Topics in the course included:
    - review of SFST, including the 2000 updated material
    - review and discussion of detection and apprehension techniques
    - review and discussion of the chemical testing options and capabilities in determining the cause of impairment
    - review and discussion of report writing skills and techniques utilized in writing complete and articulate reports
    - review and discussion of drugs that impair driving and how they affect the body
    - review and discussion of courtroom dynamics. This block of instruction included everything from proper etiquette to word selection while testifying.

In addition to the specific training, there were 1000 SFST Training Manuals (2000 edition) purchased for use by statewide SFST instructors. Over 620 manuals have been requested, produced and distributed. The majority of the training from these requests were given between May 1 and Sept. 1, 2001. Also, the Louisiana State Police and the Louisiana Highway Safety Commission developed a DWI Investigator Pocket Manual to use as a reference and note-taking guide when making DWI arrests. These Manuals include answers to frequently asked questions and sources of reference information needed in processing DWI violators. Six-thousand copies were ordered and disseminated to agencies throughout the state upon receiving requests.

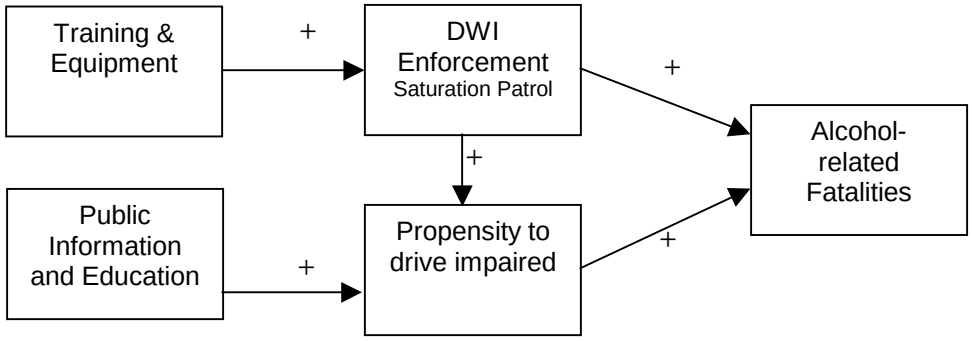
Sobriety checkpoint training. As discussed in Section 5 (*Saturation Patrols and Checkpoints*), the program was adapted to take advantage of the Louisiana Supreme Court's July 6, 2000, ruling that allowed previously prohibited sobriety checkpoints to be conducted. Since more than a decade had elapsed since the Supreme Court's 1989 ruling that sobriety checkpoints were unconstitutional, program officials felt it would be advisable to offer training to law enforcement agencies on legal and safe procedures for conducting sobriety checkpoints.

In this regard, the Louisiana Highway Safety Commission and LSP developed a curriculum and sponsored a one-day training course for local law enforcement agencies on how to conduct sobriety checkpoints. The training course was held on November 1, 2000, at a Baton Rouge hotel. The training course was well attended by officers representing police departments and sheriffs' offices from across the state. The training was divided into two main sections – an indoor, classroom-type session in the morning, followed by an outdoor demonstration in the hotel parking lot. The demonstration involved a simulated sobriety checkpoint manned by State Police personnel. Several television and radio stations and one newspaper accepted an invitation to cover the demonstration, and it received extensive media coverage that evening and the following day.

9. Evaluation Plan

The objectives of the program were to reduce alcohol-related fatalities, and to determine the effectiveness of a "Target of Opportunities" type intervention. In order to measure the effectiveness of the actions taken, it is imperative to develop a model. Figure 9.1 shows how several factors affect alcohol-related fatalities. For instance, the purchase of equipment and training of police officers was expected to enable the state police to increase the effectiveness of the DWI enforcement. DWI enforcement, on the other hand, was expected to directly affect the number of alcohol-related fatalities by arresting impaired drivers. In addition, the DWI enforcement was expected to have an indirect effect by influencing drivers' behavior (i.e. a person's propensity to drive impaired).

Figure 9.1: Model for Reducing Alcohol-Related Fatalities



As Figure 9.1 also shows, public information and education will also affect the drivers' propensity to drive impaired. Reducing the propensity of drivers to drive impaired will reduce alcohol-related fatalities. Therefore, public education and news events were staged to increase public awareness of the impaired driving problems in Louisiana.

The variables we use to evaluate the effectiveness of the program all relate to our model. Three sets of measurements will be taken to measure

(1) the reduction in alcohol-related crashes,

(2) the effectiveness of DWI enforcement, and

(3) the effectiveness of the public awareness campaign.

Three hypotheses will be tested to evaluate the effectiveness of the program. The first hypothesis deals with fatalities, the second hypothesis deals with DWI arrests and the third hypothesis deals with the survey of public attitude toward drinking and driving.

Fatalities

The main hypothesis of this project is that DWI enforcement combined with public information and education will reduce alcohol-related traffic fatalities. In statistical terms, this is formulated as hypothesis 1:

H_1: DWI enforcement combined with public information and education will decrease alcohol-related fatalities

To test this hypothesis, data on measurements described below have been collected and a formal statistical significance test will be used. The measurements are: the number and percentage of alcohol-related fatalities, and the number and percentage of alcohol-related fatal crashes. The number and percentage of alcohol-related fatalities are the primary measurements used to derive a statistical measure of effectiveness. An interrupted time series analysis approach will be used to analyze monthly data of fatal traffic crashes. An intervention variable will be used to test the significance of a reduction in alcohol-related fatal traffic crashes after July, 2000. However, measurements of alcohol-related crashes are hampered by the fact that in many crashes, BAC tests are not given or BAC tests are still pending. Pending cases can often not be recovered because the supplemental forms have not been submitted. For instance, in 1997, 38% of BAC results were pending and could not be recovered. For this reason, alcohol-related fatalities will be estimated using the imputation method used in FARS (Multiple Imputation of Missing Blood Alcohol Concentration (BAC) values in FARS, October 1998, DOT HS 808 816)

Exploratory data analysis will also be used to gain insight into how other factors affected the percentage of alcohol-related fatal crashes. These factors are age, sex, time of day, day of week, parish, holidays and urban/rural area. Based on the 1995 to 1998 data, these factors played an important role in alcohol-related crashes in the past and it thus can be expected that they will play an important role in the future. For instance, the alcohol-related number of fatal crashes on Saturdays and Sundays are about twice the number of alcohol-related crashes on weekdays. Also, on weekends the percentage of fatal crashes involving alcohol is about twice as high as during the week. The evening hours and early morning hours on weekends have the highest frequency of alcohol-involved crashes. Friday night and Saturday night involve the highest frequency of alcohol-related fatal and injury crashes. Data also show that drivers ages 15-20 have a four times higher fatal crash rate on weekends than drivers ages 21 and higher.

Saturation Patrols

The following hypothesis 2 will be tested to assess the effectiveness of DWI enforcement:

H_2 Increased saturation patrols and increased number of SFSTs conducted will decrease the number of fatalities

Overtime data will be used to test the hypothesis. It is expected that the number of SFSTs will increase in the 15 months of saturation patrol.

Also, exploratory data analysis will be used to study the age distribution of the BAC and location/parish of arrests. In addition, other data on saturation controls, timing, manpower and location will be kept to correlate fatalities with increase in patrols.

Survey Data

The third set of measurements involves the public awareness campaign. The following hypothesis will be tested to assess its effectiveness.

H_3: The public awareness campaign will increase the public awareness of enforcement of impaired driving laws

The primary measurements used to test this hypothesis will be obtained from three telephone surveys, conducted at the beginning, middle and end of the 15-month implementation period.

10. Evaluation

This section provides some preliminary analysis based on data available at this point. This section should be interpreted with caution because much of the data is incomplete. However, the section provides an outline of how the evaluation will be done when more reliable data are available. It also should be noted that it takes at least six months to get complete data. The DWI statistics from COBRA are available on a quarterly basis, with a delay of three months. The fatality statistics arrive on a continuous basis. Although 90% of the reports come in a timely fashion, some reports are delayed by over six months. Many of the BAC test results are pending, and thus alcohol involvement has to be estimated. To estimate alcohol involvement, prior arrest data is used, which is not readily available.

10.1 DWI Arrests

Table 10.1 provides an overview of the number of standardized field sobriety tests (SFST) and the number of DWI arrests conducted by the State Police and local agencies. For instance, in the 15-month enforcement period, while conducting saturation patrols, state police made 1,383 DWI arrests. During the same period local police and sheriffs agencies made 605 DWI arrests. Note that these figures do not include DWI arrests made during regular patrols. Also, State Police worked 16,091 hours during saturation patrols. Local enforcement and sheriffs agencies worked 11,370 hours during their special enforcement emphasis.

Table 10.1: DWI Arrests and SFST s Conducted

	DWI ARREST	NUM SFST	TOTAL HOURS
State Police	1,383	2,883	16,091
Local Agencies	605	1,205	11,370
Total	1,988	4,088	27,461

Complete DWI arrest data are difficult to obtain on a monthly basis. The most reliable DWI arrest data are provided by the Louisiana Office of Motor Vehicles. These statistics are only available on a yearly basis for statewide enforcement.

Table 10.2: Submits and Refusals 1999-2001

	Submits and Refusals			
Year	Submit 1	Submit 2+	Refusal 1	Refusal 2+
1999	15,498	2,922	6,226	1,259
2000	14,807	2,627	6,235	1,234
2001	12,921	2,073	6,040	1,161

The data for 2001 are incomplete. However Table 10.3 shows a comparison of the 12 months prior and 12 months after the project start date. There is indication that there was a decline in submits and refusals from the 12 months prior to the 12 months after.

Table 10.3: Submits and Refusals for 12 Months Periods 1999/2000-2000/2001

Year	2000/2001	1999/2000	% Change
Submits	16,526	18,062	-8.5%
Refusals	7,230	7,446	-2.9%
Total Arrests	23,756	25,508	-6.9%

There are several issues which had to be addressed before an analysis could be performed:

- Although the enforcement period was 15 months, the following analysis will use only the 12 months prior and the 12 months after the start of the program. Using the 15 months would involve comparing two different sets of months, i.e. we would compare March 1999 to June 2000 with July 2000 to September 2001. To avoid a confounding of a month effect with the treatment effect only 12 of the 15 months were chosen.
- The main enforcement was within 16 parishes. Thus the analysis will concentrate on these parishes and contrast these results with the statistics of the other 48 parishes.
- The program “Targets of Opportunity” has focused on drivers of motor vehicles. Thus high pedestrian alcohol-related fatal crashes and fatal crashes involving bicycles and/or motorcycles may skew the result.
- BAC results were available for only 45% of the drivers. The alcohol involvement for the drivers with unknown BAC result was estimated using the imputation method provided by NHTSA. BAC results available at a later date may change the estimates.

10.2 Fatalities

A analysis of the 1999 to 2001 data suggest that there was a decline of fatal crashes and fatalities when comparing the 12 months prior to the start of the project with the first 12 months of the enforcement period. There was also a difference between the 16 Parishes selected for enforcement and the 48 parishes with no additional or only some additional enforcement. The 16 selected parishes had 481 fatal crashes with 538 fatalities in the 12 month prior to the start of the project. In the 12 months after 1st of July 2000 there were 461 fatal crashes with 516 fatalities in the 16 selected parishes (see Table 10.4). This amounts to a reduction of 4.2% of fatal crashes and 4.1% fatalities in the 16 parishes. The alcohol-related crashes were estimated using the same method used by FARS prior to 2000. The estimates show a 13.0% reduction in alcohol-related crashes and a 14.8% reduction in alcohol-related fatalities. Driver fatalities who tested positive for alcohol declined by 16.7%. Overall, there was a 5.3% percentage point reduction of alcohol-related fatalities in these 16 parishes, namely from 47.6% to 42.3%.

Table 10.4: Fatal Crashes Prior and After Start of the Project for 16 Selected Parishes

	Fatal Crashes		Alcohol Involved			% Alcohol Involved	
Comparison	Crashes	Fatalities	Drivers Killed	Alcohol Crash	Alcohol Fatalities	Crashes	Fatalities
12 Months Prior	481	538	140	231	256	47.9%	47.6%
12 Month After	461	516	117	201	218	43.5%	42.3%
Difference	-4.2%	-4.1%	-16.7%	-13.0%	-14.8%	-4.4%	-5.3%

In the same time period the 48 parishes with only some additional enforcement showed some reduction in alcohol-related fatalities, namely the alcohol-related fatalities decreased 7%. However, this did not result in a significant overall reduction of the percentage of alcohol-related fatalities. The number of drivers killed testing positive for alcohol increased in the 48 parishes by 1.3%. Results for the 48 parishes are displayed in Table 10.5.

Table 10.5: : Fatal Crashes Prior and After Start of the Project for 48 not Selected Parishes

	Fatal Crashes		Alcohol Involved			% Alcohol Involved	
Comparison	Crashes	Fatalities	Drivers Killed	Alcohol Crash	Alcohol Fatalities	Crashes	Fatalities
12 Months Prior	386	428	126	192	215	49.7%	50.2%
12 Month After	365	401	127	185	200	50.6%	49.8%
Difference	-5.4%	-6.3%	1.3%	-3.6%	-7.0%	1.0%	-0.4%

Figure 10.6. shows the changes in alcohol-related crashes for all 64 parishes. The data suggest that there was a decline of fatal crashes and fatalities for the state of Louisiana when comparing the 12 months before the start of the project with the first 12 months of the enforcement period. The 12 months prior to the start of the project had 867 fatal crashes with 966 fatalities. The 12 months after 1st of July 2000 had 826 fatal crashes with 917 fatalities. This amounts to a reduction of 4.7% of fatal crashes and 5.1% fatalities in Louisiana. The estimates of the alcohol-related crashes show a 8.8% reduction in alcohol-related crashes and a 11.3% reduction in alcohol-related fatalities. Overall, there was a 3.2% percentage point reduction of alcohol-related fatalities, from 48.8% to 45.6%.

Table 10.6: : Fatal Crashes Prior and After Start of the Project for All Parishes

	Fatal Crashes		Alcohol Involved			% Alcohol Involved	
Comparison	Crashes	Fatalities	Drivers Killed	Alcohol Crash	Alcohol Fatalities	Crashes	Fatalities
12 Months Prior	867	966	266	422	471	48.7%	48.8%
12 Month After	826	917	244	385	418	46.6%	45.6%
Difference	-4.7%	-5.1%	-8.2%	-8.8%	-11.3%	-2.1%	-3.2%

The preliminary findings support the hypothesis that additional enforcement accompanied with increased efforts for public awareness of the enforcement yields a reduction in alcohol-related fatalities. There also is indication of a direct correlation between amount of enforcement effort and reduction in

alcohol-related crashes. The 16 parishes where enforcement was strongest had the highest reduction in alcohol-related fatalities when compared with the 48 parishes where enforcement was lighter.

Table 10.7: Percentage of alcohol-related fatalities for 16 selected parishes

LA	Parish	%Alc-Fat-Prior	%Alc-Fat-After	Difference
South	Ascension	44.4%	39.0%	-5.4%
	Calcasieu	45.2%	43.2%	-2.0%
	East Baton Rouge	46.1%	40.4%	-5.8%
	Jefferson	43.3%	59.3%	16.1%
	Lafayette	54.1%	52.5%	-1.6%
	Lafourche	44.7%	32.9%	-11.8%
	Livingston	58.9%	41.6%	-17.4%
	Orleans	61.5%	50.2%	-11.4%
	St. Landry	59.9%	52.1%	-7.8%
	St. Tammany	36.6%	58.7%	22.2%
	Tangipahoa	52.4%	36.6%	-15.8%
	Terrebonne	62.8%	35.6%	-27.2%
North	Bossier	27.1%	35.7%	8.6%
	Caddo	41.2%	23.3%	-17.9%
	Ouachita	35.1%	25.1%	-10.0%
	Rapides	44.4%	40.5%	-3.8%
	All 16	47.6%	42.3%	-5.3%
	South	50.8%	46.0%	-4.7%
	North	38.2%	29.5%	-8.7%

A closer look at the 16 selected parishes shows that the project was not equally effective in all parishes (see Table 10.7). The four parishes (Rapides, Bossier, Caddo and Quachita) which are in the northern part of Louisiana, and where drinking is less popular to begin with, had on the average a reduction of 8.7% in alcohol-related fatalities. The 12 parishes in the south of Louisiana, where drinking is more popular, had on the average only a reduction of 4.7% in alcohol-related fatalities. The difference in percentage of alcohol-related fatalities between north and south Louisiana was 12.6 percentage points (50.8-38.2) prior to the project and was 16.5 percentage points (46.0-29.5) after the project.

Since the main enforcement was through the Louisiana State Police, a comparison of the troop areas pinpoints where the project has been most successful and where it has been less successful. Troop L was the only troop with an increase in alcohol-related fatalities, namely 44%. The number of fatalities increased by 29% in this troop. Troops A and D had only a small reduction in the percentage of alcohol-related fatalities accompanied with an increase in all fatalities in Troop A and no change in Troop D. All other troops had on the average a 28% decline in alcohol-related fatalities and a 15% decline in all fatalities.

Table 10.8: Percent Difference in All Fatalities and Percent Difference in Alcohol-Related Fatalities by Troop

TROOP	%Alcohol Fatalities Prior	%Alcohol Fatalities After	Difference	Reduction/Increase in Alcohol Fatalities	Reduction/Increase in Overall Fatalities
A	49%	41%	-8%	-9%	9%
B	56%	54%	-3%	-22%	-18%
C	53%	34%	-19%	-50%	-22%
D	45%	43%	-2%	-4%	0%
E	44%	41%	-4%	-16%	-8%
F	35%	25%	-10%	-34%	-8%
G	38%	28%	-10%	-39%	-18%
I	56%	52%	-4%	-13%	-7%
L	44%	49%	5%	44%	29%
All Troops	48%	42%	-5%	-15%	-4%
ADL	46%	44%	-2%	7%	13%
BCEFGI	48%	41%	-7%	-28%	-15%

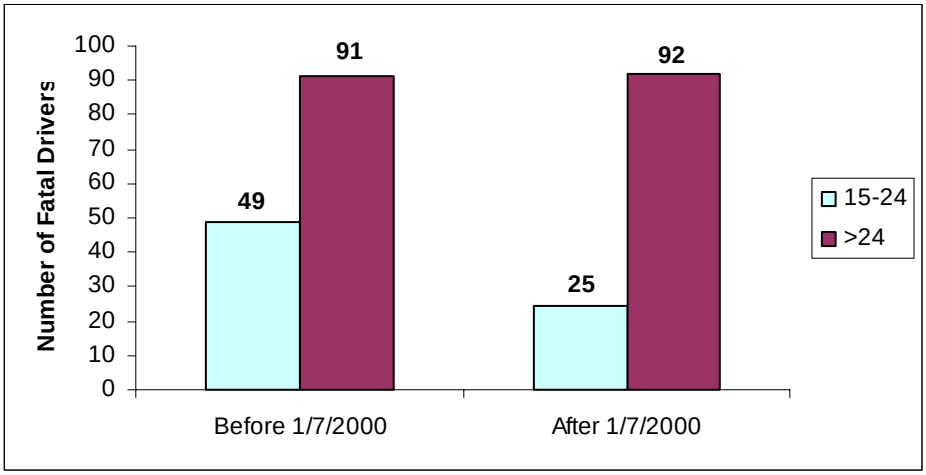
This result clearly demonstrates that troops with a major decline in alcohol-related fatalities had a major reduction in overall fatalities, while troops with minor or no decline in alcohol-related fatalities had no decline in overall fatalities. Thus enforcement effort which leads to a reduction in the percentage of alcohol-related fatalities will reduce overall fatalities.

A breakdown of driver fatalities by age group (Table 10.9) shows that the program was most effective in reducing alcohol-related driver fatalities of youths (ages 15-24). Also, in general the reduction in driver fatalities with low alcohol (0<BAC<0.09) was much larger than the reduction in driver fatalities with high BAC >0.1. For instance the reduction in driver fatalities with BAC between 0.01 and 0.09 was 29% or all drivers and 65% for youth drivers compared to 12% and 41%, respectively.

Table 10.9: Percentage Change in Driver Fatalities Using Alcohol

Ages	BAC=0	BAC 0.01-0.09	BAC>0.09	BAC>0.0
15-24	20%	-65%	-41%	-50%
>25	8%	-5%	2%	1%
All Ages	11%	-29%	-12%	-17%

Figure 10.2: Alcohol-Related Driver Fatalities by Age Group



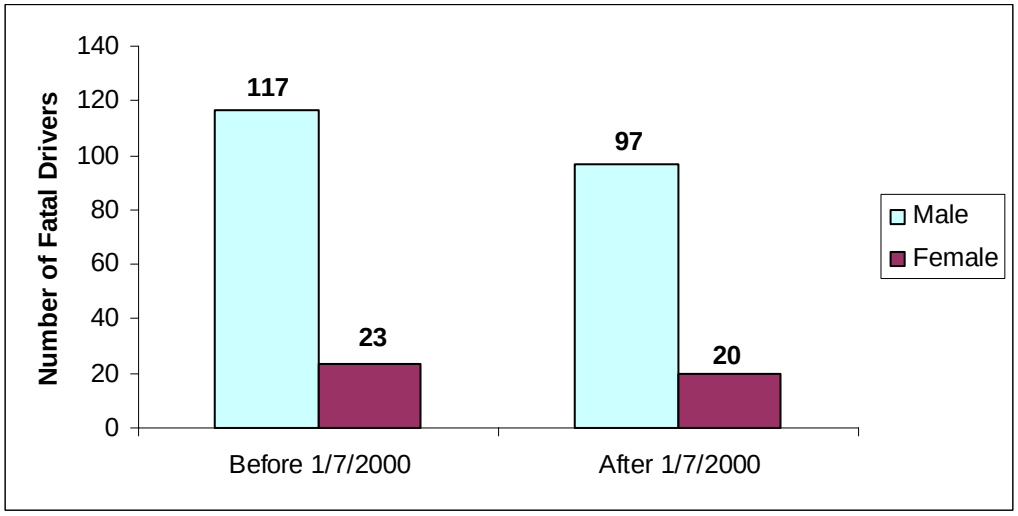
Thus there is strong indication that the program was more effective for youth. Figure 10.2 depicts the number of driver fatalities in the 12 months periods before and after July of 2000. The figure shows that the number of driver fatalities ages 15 to 24 with positive BACs declined by 24 while the number of driver fatalities using alcohol for all other ages increased by 1.

Table 10.10 shows a breakdown by gender which indicates that there was a strong decline of driver fatalities with low alcohol levels.

Table 10.10: Driver Fatalities by Gender and BAC

Gender	BAC=0	BAC 0.01-0.09	BAC>0.09	BAC>0.0
Female	2%	-27%	-12%	-17%
Male	32%	-39%	-11%	-15%
All	11%	-29%	-12%	-17%

Figure 10.3: Driver Fatalities Using Alcohol by Gender



A breakdown of alcohol-related crashes by time of day shows that the evening hours had the most reduction of alcohol-related fatal crashes, namely 20%.

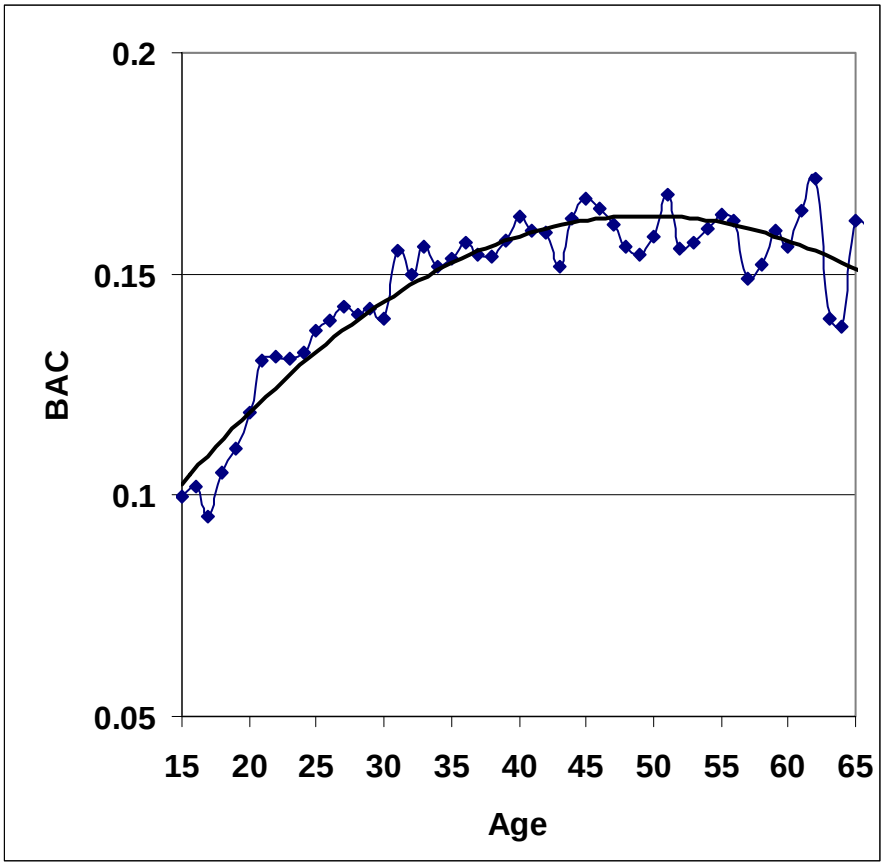
Table 10.11 Percentage of Alcohol-Related fatal Crashes by Time of Day

Day Period	Time	Before	After	Difference
Late Evening Early Morning	11pm-3am	82%	77%	-5%
Day	4am to 8pm	35%	32%	-3%
Evening	9pm-11pm	65%	44%	-20%

These findings along with the findings reported above point toward the conclusion that the "Targets of Opportunity" project was most effective with drivers who drink moderately and return home in the evening hours rather than in the early morning hours. Much of the youths may fall into this category. The heavy drinkers who have BAC above 0.15 tend to be older. This is supported by Figure 10.4. which shows the average BAC level of drivers arrested for DWI. This graph is based on 11,652 DWI arrests

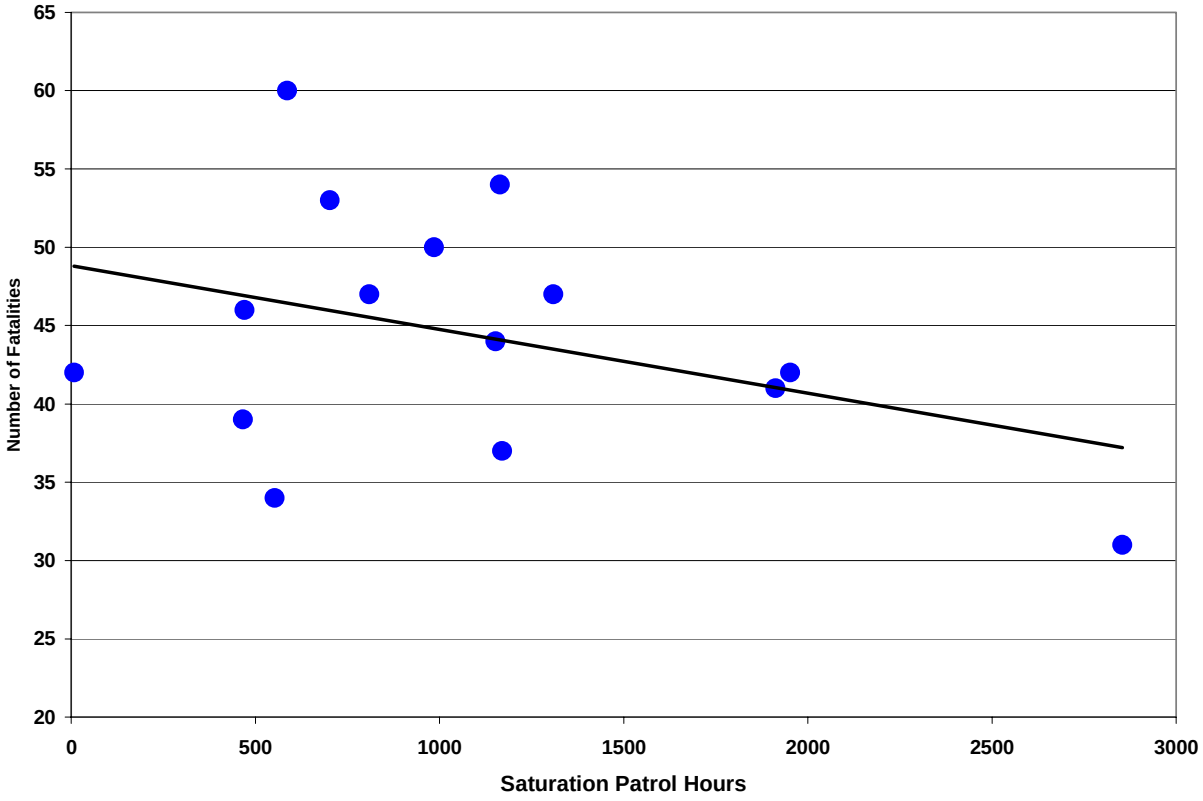
from 2000. The average BAC level of arrested drivers increases with age and approaches a BAC level above 0.15 at the age of 30. The average BAC tends to decline again after age 50.

Figure 10.4 Average BAC by Age – Average and Trend Line



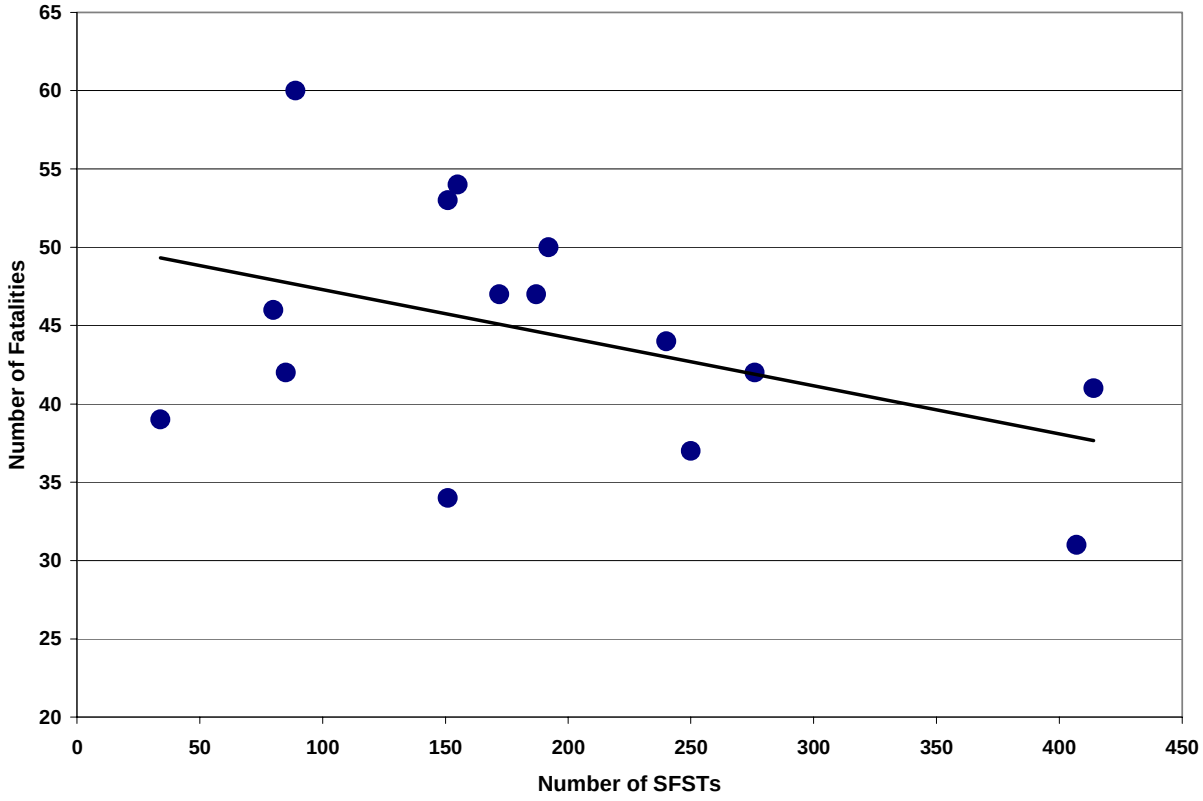
There is indication that an increase in saturation patrol hours reduces the number of fatalities. Figure 10.5 shows the number of fatalities versus the number of patrol hours and a trend line for the 16 parishes. The regression equation was significant at p=0.17. This regression equation suggests that for every 1000 hours of additional patrol 4 lives will be saved. The adjusted R^2 is 14.2%.

Figure 10.5: Fatalities versus Patrol Hours



However, a better predictor for the number of fatalities is the number of SFSTs conducted. Figure 10.6 shows the number of fatalities versus the number of SFSTs for the 16 parishes. The adjusted R^2 is 19% and the regression was significant at p=0.1. The regression equation suggests that for every 100 SFSTs conducted 3 lives are saved. There was no significant relationship between DWI arrests and number of fatalities.

Figure 10.6: Number of Fatalities versus SFSTs



10.3 Public Awareness

The "Target of Opportunity" program, "You Drink & Drive. You LOSE," received significant attention in the print and broadcast media. To date, over 500 articles about the "You Drink & Drive. You LOSE," program were published in newspapers throughout the state. Television stations in Baton Rouge, Lafayette and Lake Charles broadcast more than 140 stories concerning the "You Drink & Drive. You LOSE," campaign. Monitoring of television newscasts in New Orleans, Shreveport, Monroe, and Alexandria could not be conducted. So news stories in those markets could not be included in this report. Also, monitoring of radio news programs was not conducted for any of the media markets.

Three telephone surveys were conducted, one before the start date of July 1, 2000, one after six months (between January 18 to February 11) and a final one toward the end of the enforcement period between July 11 to July 22, 2001. The survey results are provided in Appendix M. The survey shows that the general awareness of the new enforcement program did not increase significantly between the three surveys. The awareness ranged from 7% in the first survey, 12% in the second survey to 6% in the last survey. One of the most significant results of the survey was that the percentage of drivers who said that they saw more police on the road than six months ago steadily increased from 37% in survey one, 40% in survey two to 43% in survey three. The age group 16 to 34, where the reduction of alcohol-related fatalities was the greatest, saw an increase from 43% to 52% saying that they saw more police on the road. For the same age group, the percentage of drivers who said that it would be very likely that they would be arrested if stopped while intoxicated increased from 68% to 75%. All of these reported survey results were significant at the p=0.05 level. The age group of 16 to 34 also reported an increase to the question if the new enforcement program had an impact on behavior. The percentage increased from 33% in the second survey to 37% in the last survey.

10.4 Summary

The evaluation set out to test three hypotheses:

H_1: DWI enforcement combined with public information and education will decrease alcohol-related fatalities

H_2 Increased saturation patrols and increased number of SFSTs conducted will decrease the number of fatalities

H_3: The public awareness campaign will increase the public awareness of enforcement of impaired driving laws

There was significant evidence to support the first two hypotheses. Fatality statistics indicate a downward drift in the first 12 months of the enforcement. Specifically, the 16 parishes with significant increases in enforcement showed a significant reduction of alcohol-related fatalities (14.8%). There is significant evidence that the reduction is most significantly related to the increased number of SFSTs conducted. The relationship suggest that 3 lives are saved for every 100 additional SFST's conducted. There is also a relationship between additional saturation patrol hours and lives saved, namely 4.5 lives saved per additional 1000 hours. Although there was no significant increase in the general awareness of the new enforcement program, the surveys suggests that there was an awareness of an increase in enforcement on the road.

11. Lessons Learned

11.1 Enforcement

The most significant findings were that additional saturation patrols and additional SFSTs conducted saved lives. The number of lives saved per 1000 additional hours in saturation patrol was 4.5. Office of Secretary of Transportation has recently issued revised guidance recommending that $3.0 million be used as the value to avert a fatality when conducting an economic analysis. Using this figure, the savings associated with 1000 additional hours of saturation patrol would amount to $13.5 million.

Police agencies have a variety of issues to deal with, traffic crashes, crime and regular patrol, just to name a few. Much of the efforts regarding the "Targets of Opportunity" project relied on overtime hours. The effort was difficult within State Police when the enforcement hours were depleted early in a month, additional hours were unavailable, and more hours will not be entered until the next month. During those times, the regular on-duty troopers were used for their enforcement efforts during a designated time period, usually in six hour increments. Since on-duty troopers could not concentrate only on impaired drivers, DWI statistics were impacted.

When overtime money from the grant is no longer available, it can be expected that overtime saturation patrols and checkpoints will not be continued. Given the limited resources police agencies have, it is therefore of utmost importance to either find resources to fund overtime for saturation patrols or to find other ways to effectively reduce impaired driving without burdening the limited resources.

11.2. Regional Differences

There are regional differences between north Louisiana and south Louisiana. While in south Louisiana there were 46% of fatalities alcohol related, north Louisiana had 30% of fatalities alcohol related in the first 12 months of the enforcement period. To get the most effect from limited resources, regional differences need to be analyzed and taken into account.

11.3. Profiles

Additional enforcement along with publication of the enforcement has most effect on "moderate drinkers" who drive with BAC levels of 0.09 and below. The enforcement also had more effect on youth, ages 15 to 24. To have greater effect on "heavy drinkers" ages 30 and above, who drive with BAC levels above .15 enforcement should be increased between 11 p.m. and 3 a.m. Also identified should be locations with high alcohol-related crashes.

11.4 Laws and regulations

Checkpoints

At the beginning of the program, checkpoints to conduct DWI tests were not permitted in Louisiana. However, the Louisiana Supreme Court overturned its 1989 ruling which banned the use of checkpoints, and began allowing them (Appendix L). The Supreme Court of Louisiana "set forth the following guidelines as to whether the checkpoint's intrusiveness will withstand constitutional muster under the Fourth Amendment and Louisiana's Article I, Paragraph 5:

1) the location, time and duration of a checkpoint, and other regulations for operation of the checkpoint, preferably in written form, established by supervisory or other administrative personnel rather than the field officers implementing the checkpoint;

2) advance warning to the approaching motorist with signs, flares and other indications to warn of the impending stop in a safe manner and to provide notice of its official nature as a police checkpoint;

3) detention of the motorists for a minimal length of time; and

4) use of a systematic nonrandom criteria for stopping motorists."

The Supreme Court further noticed that: "In evaluating a checkpoint under this tests, the guiding principle must be that the procedures utilize curtail the unbridled discretion of the officer in the field."

States which do not have checkpoints may explore using these guidelines to have checkpoints approved by their courts.

Portable Breathalyzer Testers (PBTs)

In Louisiana, some district courts were ruling the PBTs as a chemical test for intoxication under strict interpretation of a Louisiana Statue. Therefore, police are required to read the tested subject the standard DWI rights prior to a chemical test. Since the Courts were ruling the PBTs a chemical test for intoxication, this also required documentation that the devices were properly calibrated prior to use, that the troopers had been properly trained and that required monthly maintenance of the devices was being followed.

The lesson learned from this experience is that before using a new technique or equipment, input from judges should be sought. In general, many actions may look reasonable at first sight but it is important that they hold up in court.