

Support the
 Demonstration and
 Evaluation of Strategies
 to Reduce Impaired
 Driving fatalities and
 Injuries within Hispanics
 Population
 Final Technical Report/Promising
 Practices
 August, 2008

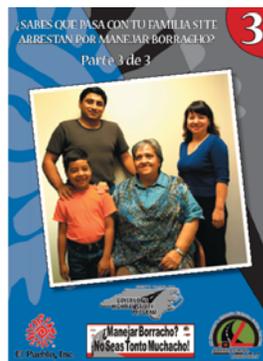


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I. INTRODUCCION

The Latino population in North Carolina has increased significantly over the past ten years making North Carolina one of the two states with the fastest growing Latino populations in the nation. Along with that growth has come an increase of Latino involved DWI's.

In 2002 Latinos accounted for 13.15% of all DWI arrests in the state while the Latino population was at 5.5%. This disproportionate number of arrests gave a clear indication that there was a need to address the problem. Along with this situation we learned that the leading cause of death among Latinos in North Carolina were car crashes, and of these the majorities were alcohol involved.

With this data El Pueblo sought a grant from NHTSA to project how a DWI prevention campaign would help alleviate this situation. We further wanted to know if police intervention along with the media campaign would make any difference in reducing these numbers.

As a result of this grant we conducted a project in three separate areas of the state. The first area, the eastern area, was the controlled area where no advertisement was conducted. The second area was the Triad area, where the advertisement was done but no additional enforcement was conducted and the ad's only showed a social message. The third area, the Triangle, included the same ad's only with a message indicating that enforcement would be eminent. We also displayed the names of those arrested for DWI in the Latino newspapers every week. Additionally DWI checkpoints were conducted and the results of these checkpoints were published in the local Spanish newspapers.

Understanding the culture and way of thinking of the Latino population in North Carolina, the DWI prevention messages were focused on how driving while impaired affected not only the drivers, but their families and community as well.

The results of the two year project were positive and fruitful.

II. BACKGROUND

Motor vehicle injuries are by far the leading cause of death for North Carolina Hispanics. According to the North Carolina Center for Health Statistics, more than 20 percent of Hispanic deaths in 2002 were due to motor vehicle crashes, compared to only 2.2 percent for Whites and 2.4 percent for African Americans.¹ Very little knowledge among Hispanic drivers regarding North Carolina traffic laws and highway safety issues contributed to this disproportionately high number of traffic fatalities and injuries. This lack of knowledge is compounded by linguistic and cultural barriers, including a lack of bilingual service providers and law enforcement officers.

Since 2001, El Pueblo, Inc. has conducted a culturally-appropriate highway safety campaign focusing on occupant protection, including child safety seats and seat belt use. El Pueblo's experience with highway safety messaging for the Hispanic community, coupled with its existing infrastructure, including a statewide network of Hispanic agencies, made it ideal for conducting a research project among North Carolina Hispanics about driving while intoxicated/impaired (DWI).

In 2005, El Pueblo, Inc responded to a request made by the National Highway Traffic Safety Administration (NHTSA) for the establishment of a cooperative agreement to demonstrate and evaluate effective strategies for reducing traffic fatalities and injuries caused by driving while under the influence of alcohol among the Hispanic/Latino population.

¹ <http://www.schs.state.nc.us/SCHS/>

III. PROJECT METHODOLOGY

The principal objective of the project was to present best practices for decreasing driving while under the influence of alcohol among the immigrant Hispanic/Latino community. Through the results of the research project, the overall goal of El Pueblo, Inc was to create a toolkit of strategies that can be implemented in similar states and metropolitan areas that also face the challenge of providing services to the Spanish-speaking immigrant community while working with limited resources.

El Pueblo, Inc worked in collaboration with three key organizations to ensure the success of the demonstration project:

1. The UNC Highway Safety Research Center
2. The NC State Highway Patrol
3. *Nuestra Seguridad* Coalition Task Force

The UNC Highway Safety Research Center provided data on alcohol-related crashes, injuries, and fatalities in the three counties of the project site.

The NC State Highway Patrol was essential to the success of the project. Troopers conducted DWI checkpoints to provide high visibility enforcement in one of the demonstration sites.

The *Nuestra Seguridad* Coalition Task Force ensured that culturally appropriate Spanish-language materials were developed and distributed to Latinos in the appropriate demonstration site areas. They also conducted pre, mid and post media campaign surveys to evaluate learned behavior among the Latino communities.

El Pueblo, Inc collaborated closely with the UNC Highway Safety Research Center and the North Carolina State Highway Patrol designed and implemented an investigative project in three North Carolina areas, which were initially: Mecklenburg, the Triad (Winston-Salem, Greensboro and High Point) area and the Triangle (Raleigh, Durham and Chapel Hill) area. For the testing of strategies, El Pueblo, Inc. selected the Triangle and Triad areas, and it analyzed data in Mecklenburg County, which served as a control site. However, given that actions taken by law enforcement officials in Mecklenburg County were altering DWI arrests among the Hispanic population, it became necessary to switch the control site from Mecklenburg County to the Southeast area of the state (Counties of Duplin, Onslow and Greene). The three sites received different interventions to determine the most effective in reducing drinking and driving.

El Pueblo, Inc believes that while highly visible law enforcement activities can complement a strong social marketing campaign, the addition of law enforcement activities do not create a significant difference in behavior change. Rather, a strong community-based campaign with culturally-appropriate messages utilizing existing resources relied upon by the Hispanic/Latino community can have a better effects among Hispanics.

To measure the effect of the DWI social marketing campaign, pre-, mid- and post-campaign surveys were conducted by the *Nuestra Seguridad* coalition in each of the three project locations. This survey measured the awareness levels of the Hispanic/Latino community regarding drinking and driving.



Although the Hispanic/Latino population of the Triangle, the Triad and the Southeast may not be as large as other metropolitan areas, the exponential growth of this primarily immigrant community is unparalleled. Unlike Hispanics in many regions of the U.S., the North Carolina Hispanic population is composed mostly of first generation immigrants, a large number of whom have come to the state in the past decade. This rapid growth of the Hispanic/Latino immigrant community has presented unique challenges for law enforcement officers and human service providers in North Carolina who have struggled to provide equal access to services. A lack of bilingual personnel and materials in Spanish has made education about highway safety laws, such as safety belt and child safety seat use, difficult and inconsistent. This combination of high immigration into an area with few services available in the target language made North Carolina ideal for a demonstration project.

In the two areas, Triad (Winston-Salem, Greensboro and High Point) and Triangle (Raleigh, Durham and Chapel Hill), El Pueblo, Inc conducted a mass-media social marketing campaign aimed at DWI reduction, in addition to maintaining statistics of arrests and crash data.

Hispanics in the Triad also were benefited from the distribution of written materials, and audiovisual presentations. Hispanics in the Triangle area received the same information in addition to high-visibility law enforcement activities, with collaboration from the North

Carolina Highway Patrol. Data from the Southeast area was observed, but no intervention was performed.

All advertisement included a number to call if they felt they had a drinking problem.

The population studied primarily consists of young (18-26 y/o) Hispanic males with limited English proficiency residing in the Southeast area, the Triangle and the Triad.

An important part of the demonstration project was to identify and establish accurate baseline data which will enable the project to measure true change after campaign activities and interventions.

Upon the establishment of baseline data, the principal goals of the project will be:

1. To decrease alcohol-related fatalities among Hispanics/Latinos in the Triangle and Triad areas by 10% by December 2007
2. To decrease alcohol-related injuries among Hispanics/Latinos in Triangle and Triad areas by 10% by December 2007.
3. To compare the results of a social marketing campaign with a high-visibility enforcement campaign to determine the most effective methods of reducing alcohol-related crashes and fatalities in the Latino community.

IV. PROJECT DESCRIPTION

a. Social marketing campaign

The social marketing campaign developed in collaboration with NHTSA was completed and were ready for use beginning May 1, 2006. TV, radio and newspaper ads were developed, on this first phase, targeting the effects of DWI to the family. Two TV ad's, two radios and four newspaper ad's were developed as part of this first phase. All advertisement included a number to call if they felt they had a drinking problem.

As indicated in the original proposal, the ads were reviewed by the "Nuestra Seguridad" Coalition Task Force, to evaluate the linguistic and cultural appropriateness of the text.



This first series of ad's are rotating weekly so as to change the ad's and not make them to monotonous. The TV ad's were being displayed in Univision TV, and played in 3 weeks increments with one week off; the ad's played 60 times per month.

In the print Media, the ad's are also rotating and have been displayed weekly. The ad's run in ¼ page color print. These are being displayed in the Triad and Triangle regions, working in collaboration with Que pasa y La Conexion, local Spanish newspaper.

Ad's are also being utilized in radio in the same areas. Though a combined effort with Que Pasa radio, La Ley Radio, La Movidita Radio, La Regia and others, they have agreed to play two additional ad's for everyone we pay for.

In addition to the social marketing messages, and in collaboration with Que Pasa y La Conexion, we printed the names of Latino drivers that were arrested for DWI throughout the Triangle area, in the Latino newspapers. This was a hot topic within the Latino community. Through our participation on several radio talk shows, we received valuable and very positive feedback from the community. There seems to be an overwhelming support for this action and many Latinos fear that their names will show up in the newspaper if they were arrested and as a result they were not drinking and driving. Since we started doing this the average weekly arrests for DWI went down in the Triangle.

Cada tres días un latino muere o queda seriamente herido por conducir borracho en las carreteras de Carolina del Norte.

Esta semana los siguientes latinos fueron arrestados por conducir borrachos en el Condado de Wake y Durham

Fecha	Nombre	Apellido	Lugar
11/27/06	Aldo	Sánchez	Wake
11/27/06	Rene	Morales Díaz	Wake
11/27/06	Mario	Mendoza López	Wake
11/28/06	Oscar	Rojas Ramírez	Durham
11/29/06	Miguel	Romero	Wake
11/29/06	Rene	Hernández	Wake
11/29/06	Victor	Costa	Wake
11/30/06	José	Morales	Wake
12/01/06	José	Ruiz-Rodea	Wake
12/01/06	José	Resendiz Alanis	Wake
12/01/06	Jorge	Manzanarez	Wake
12/01/06	Heriberto	Cruz	Wake
12/01/06	John	Cedillo	Wake
12/01/06	Kristin	Ardillo	Wake
12/02/06	Ismael	Martinez	Wake
12/03/06	Lamberto	Vasquez	Wake
12/03/06	Gilberto	Robledo	Wake
12/03/06	Alexander	Porter	Wake
12/03/06	Antonio	Hernández	Wake
12/03/06	Lorenzo	Hernández	Wake
12/03/06	David	Guarino	Wake
12/03/06	Manuel	Gomez	Wake
12/04/06	Sandro	Velero Ceron	Wake
12/04/06	Isaias	Ramirez	Wake
12/04/06	Timothy	De La Fuente	Wake

¿LE TOCARA A USTED HOY?

ARRESTOS POR DWI
 Total no-latinos: 77
 Total Latinos: 25

Manejar Borracho?
No Seas Tonto Muchacho!

A year after of the developed of the first phase of the media campaign, we developed the second phase, this time focusing on the consequences of DWI have on the Hispanic community, keeping the same way to display it on newspaper, TV and radio, rotating the ad's every week.



A key to the success of the social marketing campaign was El Pueblo's relationship with the Spanish-language media of North Carolina. Primary outlets used for the campaign included *Univision 40* television, *La Ley 96.9 FM* radio, *Que Pasa Radio*, *La Regia radio*, *La Movidita radio* and *Que Pasa* and *La Conexión* newspapers.

On December 2007, we finalized our DWI Media Campaign, stopped to advertise in local Spanish newspapers, radio and television.

b. Printed materials

In addition to the social marketing messages, as the education piece of the project, we developed a series of different printed materials: posters, bumper sticker and “*fotonovelas*”. We worked closely with NHTSA and the *Nuestra Seguridad Coalition* Task Force to test the materials to ensure that these were linguistically and culturally appropriate and distributed to the Latino population in the demonstration site areas.

The poster with similar message than the newspaper ad’s was developed and placed in the Triangle to highlight enforcement activities.

In collaboration with the North Carolina Alcohol Beverage Commission, posters were posted at ABC stores in the Triad and Triangle. These also were posted in local Hispanic “*Tiendas*” and other stores where beer and wine are sold.

The posters are a reinforcement of the media campaign and helping individuals think before the drive under the influence and as the ad’s included a number to call if they felt they had a drinking problem.

The bumper sticker was one of the most successful ways to reach the community with our message. The bumper sticker was developed using a brainstorming process with the participation of El Pueblo’s staff, the *Nuestra Seguridad Coalition* Task Force and NHTSA. Once was designed and printed it was mass-distributed in combination with the “*fotonovelas*” through the project areas.

Antes de manejar borracho...



¡Piensa a quien dejas atrás!

El Pueblo, Inc.

NHTSA

Si bebes todos los días, quizás puedes tener un problema. Llama a El Pueblo para recibir ayuda (919) 835-1525

¿Manejar Borracho? ...¡No Seas Tonto Muchacho!

La Policía estará vigilando para arrestar a los conductores embriagados

The “*fotonovelas*” was developed with the hope to educate the Latino population to the dangers of DWI. This was done from the point of view of the police, the court system and family members.

Once the preliminary “*fotonovelas*” scripts were written, were submitted to NHTAS for review. As indicated in the original proposal, the “*fotonovelas*” were reviewed by several Latino male volunteers and by the “*Nuestra Seguridad*” Coalition Task Force to evaluate the linguistic and cultural appropriateness of the text.

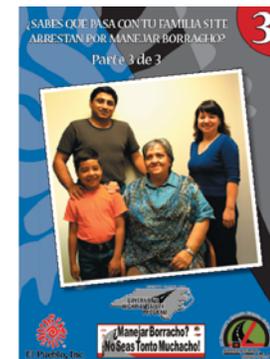


Having the final script allows us to start the process of design and printing.

The series of three story books, with a story which continues from book to book, tells the sad story of a Latino who was arrested for DWI at a checkpoint. Would take the reader through the paths of arrest, it continues through the court process and finally in the third book, we see how the family is affected and the consequences, both emotionally and financially, to the families as a result of a DWI.



These story books were utilized as the education portion of the campaign, since they inform the reader of those aspects of DWI that they indicated in the survey, that they don't know or fail to understand.



Once it was designed and printed it was mass-distributed in collaboration with the *Nuestra Seguridad* Coalition Task Force through the Triangle and Triad areas.

c. Community outreach

A key component of the educational part of the campaign was to participate on several fairs, Latinos festival and events as an effective way to reach the Latino community, and La Fiesta del Pueblo organized by El Pueblo, was a perfect sample, with more than 25,000 attendees is the biggest Latino festival of the state and great opportunity to reach a big number of the Latino residents.

El Pueblo, Inc organized, in the Triangle area, an annual fair that include a Public Safety Fair. At the Public Safety Fair, local law enforcement agencies and member agencies of the *Nuestra Seguridad* coalition were at hand to conduct educational activities with the local Hispanics.

Our DWI prevention messages were widespread throughout the event. The most visible DWI prevention message was seen on the main stage, where a giant banner of our bumper sticker slogan hung, boldly asking “¿Manejar Borracho? ¡No seas tonto muchacho!”



Over 25,000 Fiesta goers passed through the Public Safety Fair, every year, receiving valuable information on our DWI Prevention project along with other public safety issues.

The DWI prevention project was very visible at Fiesta del Pueblo every year. We also had our DWI golf cart simulation to demonstrate the effects of DWI on the driver. This

golf cart, when used with the Fatal Vision goggles, show the driver the difficulties of driving a predetermined course without knocking down the cones.

But it was not only Fiesta del Pueblo; we also went to several local festival and fairs through the project areas with our DWI simulation and educational materials.



We also were educating Latino high school students to the dangers of DWI. Working together with our Latino service clubs we had been able to participate in several DWI simulations with the golf cart, doing outreach to our younger community.



d. Presentation and media interview

El Pueblo, Inc hosted a statewide Latino conference every year. The attendees generally are community leaders, Latino youth, and Latino workers. On 2006, during the 12th Foro, we conducted a DWI workshop. The work shop consisted of a State Trooper, a lawyer and a victim, and each one talked about the DWI issue from their point of view.

On June 8th and 9th 2007, we had the 13th annual *Foro Latino* and during this conference we conducted two DWI workshops. The participants from throughout the state were looking forward to expanding the program to their areas.

e. DWI checkpoints

The law enforcement component of the project was the DWI checkpoint. The collaboration with the NC State Highway Patrol was essential to the success of the project. Troopers and local Police Departments conducted DWI checkpoints to provide high visibility enforcement at the Triangle area.

On April 23, 2006 we did the first DWI checkpoint in the Garner area. The checkpoint was conducted with the assistance of Cary police as well as Garner police. This checkpoint was conducted in an area where fatal car crashes have been known to occur and in many of these cases Latinos were involved. Ten DWI arrests were executed between the hours of 10:00 PM and 2:00 AM. Of the ten arrested, five were Latinos.

None had heard of our campaign.

The second DWI checkpoint was conducted by Raleigh Police Department. This checkpoint was conducted during the same hours on Friday May 26, 2006. This checkpoint netted 14 arrests of which three were Latinos. Non of these had heard of the campaign either.

The next checkpoint was scheduled for July 28, 2006 with the NC Highway Patrol and Durham police department. Of the twelve arrested, four were Latinos. Non had heard of our campaign.

Two DWI checkpoints were also conducted during 2007. One checkpoint with Cary PD on January 12, 2007, with ten arrest, two were Latinos, and one with NCSHP March 31, 2007 in Raleigh, with fifteen arrest, five were Latinos.

Also the DWI checkpoint was a great opportunities to distribute the “*fotonovelas*” and bumper stickers, as educational part of the activity.



V. PROJECT EVALUATION

a. Community Survey.

To measure the effect of the DWI social marketing campaign, educational activities and DWI checkpoints, pre-, mid- and post- campaign surveys were conducted by *Nuestra Seguridad* coalition and volunteers in each of the three project locations. The objective of the survey was measured the awareness levels of the Hispanic/Latino community regarding drinking and driving.

A first questionnaire, both in English and Spanish, was developed to be used during the pre-campaign. The questions were submitted to NHTSA for inputs prior to the surveys were conducted (See Appendix A)

This survey was used in the pilot tests. The first pilot test was conducted over the telephone. Of 113 calls made, ten surveys were completed. The second pilot test was conducted in person at a local Hispanic markets. Ten surveys were completed.

The face to face pilot test was most successful when considering the amount of time that it took to complete the 10 pilot surveys at the supermarket versus the 10 complete phone surveys.

As the survey pilot test show us, we decided to conduct the survey in person by trained coalition members and volunteers.

Survey participants received a packet of the campaign materials upon completion of the survey.

For the middle and post campaign a second questionnaire was developed in collaboration with NHTSA. At this time we add questions related with the media campaign and the printed materials. The middle and post campaign survey were also conducted in person by trained coalition members and volunteers (See Appendix B)

The *Nuestra Seguridad* coalition members and volunteers that conducted the survey participated on a training which included general information of the project, characteristics of the questionnaire and general recommendation to conduct a survey (See Appendix C).

The population studied primarily consists of young (18-26 y/o) Hispanic males with limited English proficiency residing in the Southeast area, the Triangle and the Triad.

Three hundred surveys were conducted on each of the project areas, at Latino community centers, Latinos stores, festivals, churches, community colleges (ESL Students) and libraries among others.

The pre-campaign survey were conducted between February and September of 2006, before initiating action, that were used to observe the initial situation and established a comparative baseline for results obtained in surveys conducted during and after actions were applied.

The middle-campaign were conducted during the months of April of 2007 through November of 2007 and the post-campaign started after of the media campaign was finished on January 2008, at this time we already collected 85% of the survey and the complete data will be process and analyze as soon we have all the surveys.

Once the survey were applied by the *Nuestra Seguridad* coalition members and volunteers, they sent it back to El Pueblo office where the Research Assistant organized, codified and transcribed the information into the data base that allowed to process and analyze the collected data to obtain the results.

The effects of the campaign were observed when the results of middle- and the post campaign were compared with the baseline established by the initial situation (Pre-Campaign results).

**b. UNC Highway Safety Research Center: Alcohol-related Crashes and
DWI Charges data.**

University of North Carolina Highway Safety Research Center elaborated tables and figures show the trends in alcohol-related crashes and DWI charges among Hispanic drivers in North Carolina from 2002 through 2007. Because complete data for 2007 are not yet available the following represent partial-year data for each of the years 2002 through 2006 to ensure comparability with 2007 data. The crash data represent the first 9 months of each year, since 2007 crash data are only complete through September. The DWI charge data represent the first 11 months of each year; DWI charge data for December 2007 were not yet complete in the AOC data base obtained for analysis.

Analyses were organized to present the most straightforward comparison of the two intervention communities – the Triad (Forsyth and Guilford counties) and the Triangle (Durham and Wake counties) – with a meaningful comparison or “control” region. The formally designated control community consists of 3 counties from Southeast North Carolina – Duplin, Greene and Onslow.

The result is that both the DWI and crash data are subject to substantial year-to-year variation. To have another, more stable comparison, we aggregated data from the remaining 93 counties. Although the 3-county control data are shown, interpretations of trends are based on comparison with the 93-county data.

VI. RESULTS AND DISCUSSION

a. Pre-campaign, middle-campaign and Post-campaign survey

The following tables and figures display results derived from analyses of the community surveys implemented in North Carolina's Triad, Triangle, and Southeast regions. While the pre-phase survey data is useful for general comparison purposes, only the mid- and post-phase survey data were analyzed and directly compared here. Since an identical survey instrument was implemented across all three regions for both the mid- and post-phase, these data offer a unique opportunity to compare the results of the community outreach and police enforcement interventions described previously.

The data were transformed, recoded and subsequently analyzed in a statistical software package (SPSS). The results of these analyses are displayed in six tables and two figures below. The first table provides descriptive information for the variables used in later analyses. This table is followed by a brief discussion on interpretation and variable recoding.

The next three tables (Tables 2-4) compare respondents' drinking and driving behaviors, knowledge or information, and beliefs about police enforcement across both phases and all three geographic regions. Each table is followed by a brief explanation of the analytic procedure and a discussion of the results.

The final two tables (Tables 5-6) and figures (Figures 1-2) examine the correlates or predictors of drinking and driving behaviors. Specifically, these tables explore the potential influence of geographic region and survey phase, population demographics, general risk or protective factors, drinking and driving knowledge or information, and perceived police enforcement on both the odds of recent drinking and driving behavior and the odds of recently reducing one's drinking and driving. Again, each table is followed by a brief explanation of the analytic procedure and a discussion of the results.

Overall, the results of these analyses showed that differences in drinking and driving behaviors, and in changes in these behaviors, were difficult to predict across geographic region and survey phase. It is possible that non-random sampling and substantial differences in unmeasured characteristics within changing Hispanic populations may confound some of these results, and likewise may mask potential effects that the current intervention may have actually had on drinking and driving behaviors. Nonetheless, these results do highlight important risk and protective factors that are associated with drinking and driving behavior among Hispanics. In addition, the social message campaign may have had some success in reducing drinking and driving behavior through its emphasis on anti-DWI slogans and perceptions of police enforcement. These results also indicate that future interventions may be able to increase their level of success by focusing on targeting DWI-related information (e.g., information on blood-alcohol limit and police enforcement) to specific high-risk populations (e.g., those who usually drink away from home and who frequently drive motor vehicles).

Table 1. Descriptive Statistics for Variables Used in Logistic Regressions (Mid- and Post-Phase Surveys)

Variable		Frequency (or Mean)	Percent (or min/max)
DWI less now than 3 months ago	No	222	43.3
	Yes	291	56.7
DWI in the past 6 months	No	1269	70.9
	Yes	521	29.1
Geographic region (survey phase)	*Triad (mid)	300	16.7
	Triad (post)	300	16.7
	Triangle (mid)	300	16.7
	Triangle (post)	300	16.7
	Southeast (mid)	297	16.5
	Southeast (post)	300	16.7
Marital status	*Single	869	49.6
	Married	884	50.4
Family live here with you in NC	*No	760	43.5
	Yes	988	56.5
English proficiency	Low	816	46.4
	*Average	744	42.3
	High	197	11.2
Where do you usually drink alcohol?	Never drink	682	38.6
	*Only mentions drinking at home	349	19.7
	Drinks at friends' homes	352	19.9
	Drinks in public setting	385	21.8
Ever use transportation other than car (e.g., bus, taxi)	*No	1092	61.4
	Yes	687	38.6
How often do you drive a motor vehicle?*	Never	136	8.1
	A few days a year	60	3.6
	A few days a month	68	4.0
	A few days a week	233	13.9
	Every day	1183	70.4
Is it against the law to DWI in NC?	*No	441	24.5
	Yes	1356	75.5
What is the legal blood-alcohol limit?	0.08	213	11.9
	*Other; don't know	1582	88.1
Seen or heard at least one slogan	*No	555	31.1
	Yes	1227	68.9
Been a passenger in car crash where driver was DWI	*No	1627	93.3
	Yes	117	6.7
Age**	Mean	27.99	(min: 15) †
	Standard deviation	8.71	(max: 80)
Perceived deterrence scale**	Mean	3.47	(min: 0)
	Standard deviation	1.49	(max: 5)
* indicates category is used as baseline (reference category) in regression analyses. ** indicates variable is treated as continuous in regression analysis. † the variable "age" is recoded in analysis so that the baseline category is the average age (27.99).			

Table 1 (above) displays general descriptive information for all variables found in the subsequent analyses. Specifically, for categorical variables (e.g., Geographic region; marital status), this table includes frequencies and percentages of respondents for each answer category. For instance, this table shows that approximately 29% of respondents report driving while intoxicated in the past 6 months, compared to 71% who report not driving while intoxicated in the past 6 months. For continuous variables (e.g., age; perceived deterrence), averages (means), standard deviations, and minimum/maximum values are reported here. For example, the average age for respondents in these data is about 28 years old, while respondents' ages range from 15 to 80 years old.

All blank or invalid survey responses have been recoded as missing, and these cases are deleted in analyses. The descriptive statistics reported in Table 1 are calculated using all valid responses for each variable. In addition, some variables have been recoded for analytic purposes. For example, while there are a total of 1,797 potential respondents from the mid- and post-phase surveys, there are 1,790 valid cases for the "DWI in the past 6 months" item. As mentioned, 71% of these respondents report not driving while intoxicated. This response category has been recoded to include respondents who drink but have not driven while intoxicated as well as those who do not drink at all (and therefore do not drink and drive either). In contrast, the "DWI less now than 3 months ago" item, which was coded to measure reductions in DWI behavior, has only 513 valid cases. This variable has substantially fewer valid cases because it includes only those respondents who initially reported drinking and driving at least once in the past 6 months. Table 1 shows that about 57% report drinking and driving less now than they did 3 months ago.

The "Seen or heard at least one slogan" variable indicates whether the respondent has seen or heard any one of the following four anti-DWI slogans from any source: (1) "You drink, you drive, you lose"; (2) "Friends don't let friends drive drunk"; (3) ¿Manejar Borracho? ¡No Seas Tonto Muchacho!; (4) "Pasa las Llaves" (Pass the Keys)." Finally, the "Perceived deterrence scale" is a summated scale consisting of five items regarding

respondents' perceptions of police enforcement and the likelihood of getting caught while drinking and driving (see Table 4). Higher values on this variable indicate that the respondent perceives a greater police presence and/or a higher likelihood of facing official sanctions for drinking and driving.

Table 2: Percentage Comparisons for Drinking and Driving Behavioral Items (by County and Survey Phase)

<i>Area: (Treatment)</i>	Southeast (Control)		Triad (Message only)		Triangle (Message & police)		Total
	Mid	Post	Mid	Post	Mid	Post	
<i>Mid- or Post-Intervention:</i>	Mid	Post	Mid	Post	Mid	Post	
Respondent has driven while intoxicated in past 6 months	25 (297)	13* (299)	45 (300)	39 (295)	27 (300)	26 (299)	29% (1790)
Respondent drives after drinking less now compared to 3 months ago	56 (75)	69 (39)	44 (131)	51 (113)	83 (80)	55* (75)	57% (513)
<i>Note:</i> Table entries are percentages (N of valid cases in parentheses). * indicates a statistically significant difference between mid- to post-intervention (at a 95% confidence level).							

The analysis presented in Table 2 examines whether there are statistically significant differences in drinking and driving behaviors between mid-phase and post-phase surveys among respondents in each geographic region. Specifically, Z-tests were conducted, using a 95% confidence interval, to determine whether the mid- and post-phase percentages (or proportions) are actually different or instead likely due to chance. An asterisk (*) indicates a statistically significant difference between mid-phase and

post-phase surveys in the proportion of respondents who answered “yes” to either drinking and driving question.

According to the results in Table 2, there was a significant reduction from mid- to post-phase in the proportion of respondents from the Southeast region who reported driving while intoxicated in the past six months (from 25% to 13%). In other words, 25% of mid-phase Southeast respondents reported recently drinking and driving, compared to only 13% of post-phase Southeast respondents. While the proportion of respondents from the Triangle and Triad regions who reported drinking and driving in the past six months appears to have declined from mid- to post-phase, these differences are not statistically significant.

In addition, Table 2 shows a significant reduction from mid- to post-phase in the proportion of respondents from the Triangle region who report less driving after drinking now compared to three months ago (from 83% to 55%). Further, although the proportions of respondents from the Southeast and Triad regions who have reduced their drinking and driving behaviors appear to have increased, these differences are not statistically significant.

Table 3: Percentage Comparisons for Information Items (by County and Survey Phase)

<i>Area: (Treatment)</i>	Southeast (Control)		Triad (Message only)		Triangle (Message & police)		Total
	Mid	Post	Mid	Post	Mid	Post	
<i>Mid- or Post-Intervention:</i>	Mid	Post	Mid	Post	Mid	Post	
Respondent has heard of El Pueblo	57 (297)	25* (297)	12 (300)	23* (299)	48 (300)	38* (298)	34% (1791)
Respondent knows it is against the law to drive while intoxicated in NC	73 (297)	54* (300)	65 (300)	87* (300)	86 (300)	87 (300)	75% (1797)
Respondent knows the legal blood-alcohol limit is .08	3 (297)	3 (300)	17 (300)	18 (300)	29 (298)	3* (300)	12% (1795)
Respondent has seen or heard at least one of the four anti-DWI slogans	48 (297)	43 (297)	63 (300)	86* (288)	88 (300)	85 (300)	69% (1782)
<i>Note:</i> Table entries are percentages (N of valid cases in parentheses). * indicates a statistically significant difference between mid- to post-intervention (at a 95% confidence level).							

Table 3 reports whether there are differences between mid-phase and post-phase in respondents' knowledge or information regarding drinking and driving. As in Table 2, these results are separated by geographic region, and z-tests were performed to determine whether differences were significant at a 95% confidence level.

This table shows an overall increase in DWI-related knowledge and information between mid- and post-phase among Triad residents only, with one exception: there is

not a significant change in the proportion of Triad respondents who know the legal limit (.08) for blood-alcohol content. In fact, compared to the other knowledge and information items, relatively few respondents across all three geographic regions knew the BAC limit.

In addition, the results reported in Table 3 indicate that there were significant reductions in some information items within the Southeast and Triangle regions. These differences may be due to nonrandom sampling procedures, or to substantial population changes between survey phases.

Table 4: Percentage Comparisons for Police Enforcement Items (by County and Survey Phase)

<i>Area: (Treatment)</i>	Southeast (Control)		Triad (Message only)		Triangle (Message & police)		Total
	<i>Mid- or Post-Intervention:</i> Mid	Post	Mid	Post	Mid	Post	
Respondent thinks more people are being stopped for DWI by police compared to last year	71 (282)	62* (289)	64 (295)	82* (292)	91 (290)	89 (290)	76% (1734)
Respondent has read recently about Latinos being arrested for DWI	68 (295)	59* (291)	70 (297)	89* (296)	94 (299)	90 (290)	79% (1768)
Respondent has heard about police DWI roadblocks or checkpoints in the area	44 (297)	47 (300)	42 (299)	71* (297)	78 (299)	59* (300)	57% (1792)
Respondent thinks he/she very likely would be stopped and arrested if DWI in the area	79 (297)	66* (297)	62 (300)	63 (300)	66 (300)	60 (300)	66% (1797)
Respondent thinks local police very strictly enforce DWI laws	77 (297)	66* (300)	60 (300)	65 (300)	72 (300)	54* (300)	66% (1797)

Note: DWI = “driving while intoxicated” or “drinking and driving.” Table entries are percentages (N of valid cases in parentheses). * indicates a statistically significant difference between mid- to post-intervention (at a 95% confidence level).

Table 4 reports whether there are mid-phase and post-phase differences in respondents’ perceptions of DWI-related police enforcement; again, these results are separated by geographic region, and z-tests were performed to determine whether differences were significant at a 95% confidence level. Similar to Table 3, this table generally shows a significant increase from mid- to post-phase in information regarding DWI-related police enforcement among Triad residents only. However, these increases in information regarding stops, arrests, and roadblocks among Triad residents has not

been accompanied by significant increases in respondents' perceived likelihood of being caught or perceptions of police enforcement as very strict. In addition, Table 4 shows significant decreases in some enforcement items among Southeast and Triangle residents. It is possible that mid- to post-phase increases in perceived enforcement among Triad respondents is due to the social marketing campaign's success in making DWI-related risks increasingly salient to these residents. On the other hand, the mid- to post-phase decreases in perceived enforcement among Triangle respondents may reflect residents' awareness of the increase (mid-phase) and subsequent decline (post-phase) in DWI roadblocks due to the experimental intervention in the Triangle region.

Table 5. Logistic Regressions Predicting Log Odds of Driving while Intoxicated in Past 6 Months

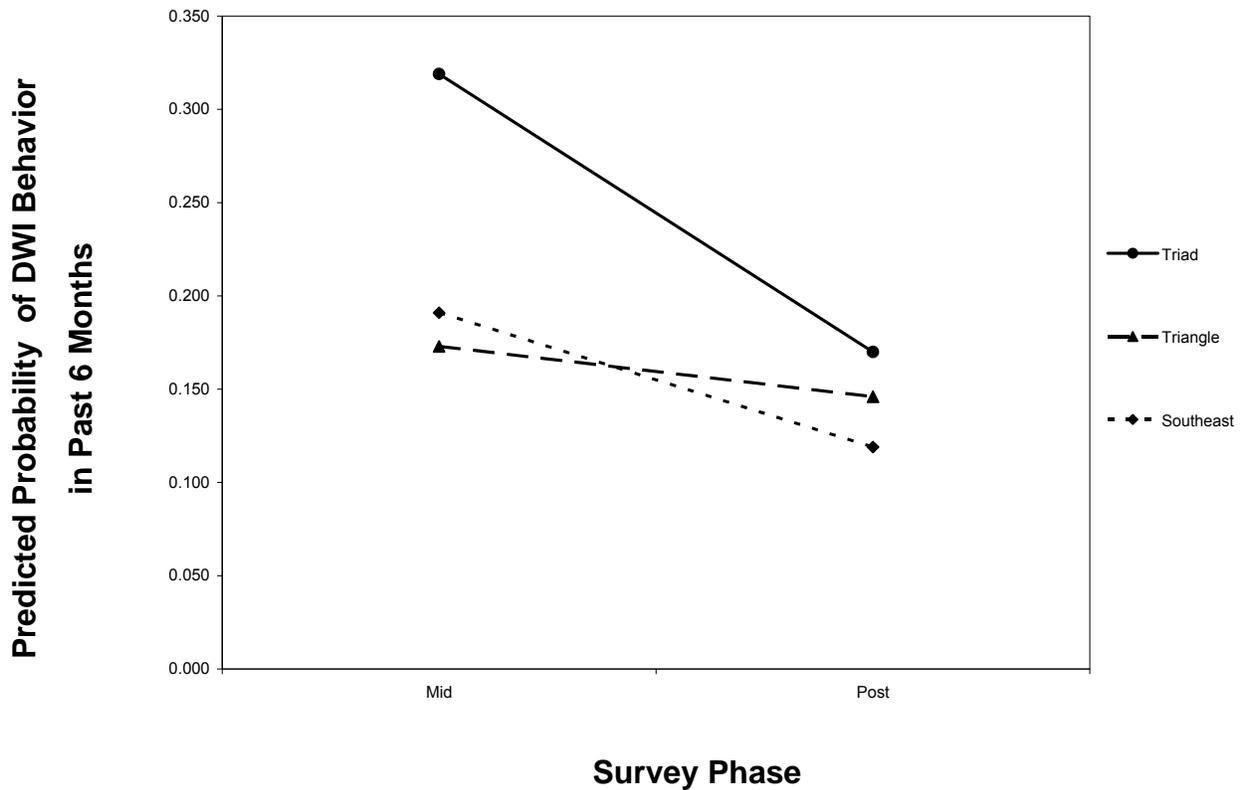
<i>Variable</i>	Model 1 (Controls)	Model 2 (Information)	Model 3 (Deterrence)
Geographic region and survey phase			
Post-phase (e.g., post-phase Triad)	-.902* (.406)	-.913* (.401)	-.827* (.438)
Triangle (i.e., mid-phase Triangle)	-.954* (.385)	-.940* (.391)	-.807* (.446)
Post-phase * Triangle (interaction)	.824* (2.279)	.795* (2.214)	.627
Southeast (i.e., mid-phase Southeast)	-.821* (.440)	-.764* (.466)	-.684* (.505)
Post-phase * Southeast (interaction)	.418	.435	.263
Controls			
Age (centered at mean)	-.005	-.004	-.003
Married	.084	.082	.083
Family in NC	.282	.266	.256
Low English proficiency	.288	.294	.228
High English proficiency	.050	.120	.103
Never drink	-4.292* (.014)	-4.244* (.014)	-4.245* (.014)
Drink at friends' houses	1.253* (3.500)	1.253* (3.502)	1.191* (3.291)
Drink in public settings	1.269* (3.558)	1.318* (3.737)	1.394* (4.033)
Use public transportation	-.057	-.047	-.086
Frequency of driving motor vehicle	.170* (1.185)	.172* (1.187)	.180* (1.198)
Information items			
Know it's against law to DWI in NC		-.278	-.306
Know legal blood-alcohol limit is .08		-.306	-.250
Seen or heard at least one slogan		.532* (1.702)	.704* (2.022)
Deterrence items			
Perceived deterrence scale			-.188* (.829)
Was passenger in car crash with DWI driver			.492
Model information			
Constant	-1.03*	-1.22*	-.758
-2 Log L	1210.15	1198.77	1184.49
Model χ^2 (comparison model in parentheses)	620.72* (null)	11.38* (Δ Model 1)	14.28* (Δ Model 2)
Nagelkerke pseudo-R ²	.484	.491	.499

Note: N=1471. * indicates p<.05. Table entries are log odds regression coefficients (odds ratio in parentheses).

Table 5 provides the results of logistic regressions predicting the odds of a respondent reporting driving while intoxicated in the past 6 months. This analysis essentially examines the net effect of each predictor (or independent variable) on the odds of recent drinking and driving behavior (or dependent variable), while holding other variables constant (e.g., control, information, and deterrence variables). Model 1 examines only the effects of geographic region, survey wave, and control variables. Model 2 includes DWI-related information variables, and Model 3 adds deterrence variables. To aid interpretation of the effects of geographic region and survey phase on recent drinking and driving behavior, predicted probabilities were calculated for each region and phase and displayed graphically in Figure 1.

Statistically significant effects are marked with an asterisk (*) and are accompanied by an odds ratio (in parentheses), since the odds ratio offers a convenient way to interpret these predicted effects. For example, Model 3 indicates that respondents who usually drink in public settings (e.g., bars/clubs or on the street) are about four times as likely (4.033) to have driven while intoxicated in the past 6 months as compared to those who do not mention usually drinking in public settings, net of all other variables. According to Model 3, other factors that increase the odds of drinking and driving include drinking with friends and frequently driving a motor vehicle. As one would expect, holding the other variables constant, this model also suggests that people who drink are 99% ($1 - 0.014 = 0.986$) more likely to drive while intoxicated than those who do not drink at all. In addition, the odds of drinking and driving are higher among respondents who have seen or heard an anti-DWI slogan, and lower among respondents with greater values on the perceived deterrence scale.

Figure 1. Graphical Representation of the Predicted Probability of Self-Report DWI Behavior in the Past Six Months, by Survey Phase and Geographic Region, Net of Covariates (See Table 5)



Note: Predicted probabilities calculated using logistic regression coefficients (Model 3, Table 5) for respondents at the mean or baseline for all other variables in the model.

Figure 1 illustrates the effects of geographic region and survey phase on self-reported drinking and driving behavior in the past 6 months. The lines represent changes from mid- to post-phase in the predicted probability that a respondent from a given geographic region is in the “drove while intoxicated in past 6 months” category. This figure illustrates the statistically significant decrease from mid- to post-phase in the

predicted probability of drinking and driving behavior among Triad region respondents (see “Post-phase” coefficient in Model 3 of Table 5). On the contrary, there was not a significant mid- to post-phase increase or decrease in recent drinking and driving behavior among the Southeast or Triangle region respondents.

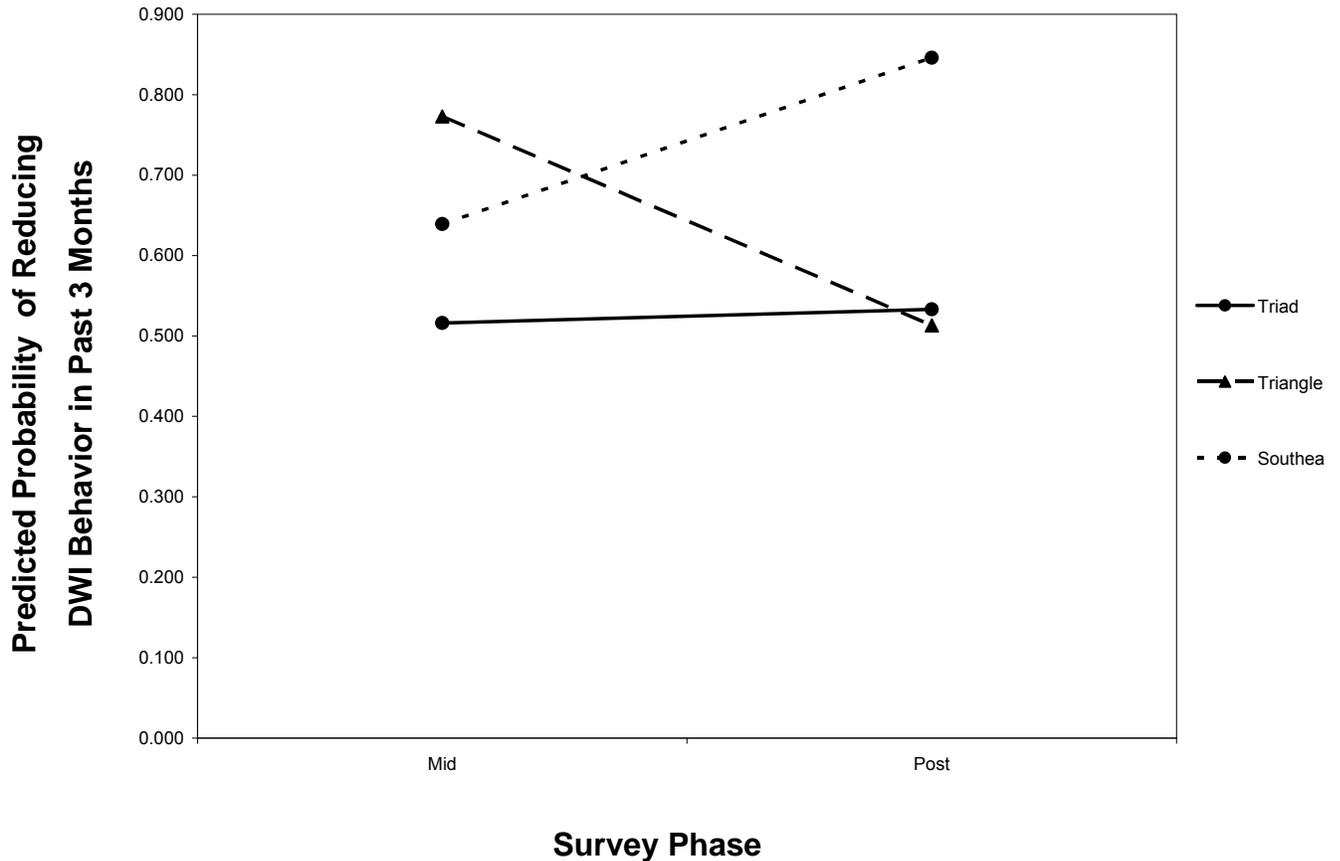
Table 6. Logistic Regressions Predicting Log Odds of Drinking and Driving Less Now than 3 Months Ago

<i>Variable</i>	Model 1 (Controls)	Model 2 (Information)	Model 3 (Deterrence)
Geographic region and survey phase			
Post-phase (e.g., post-phase Triad)	.426	.102	.068
Triangle (i.e., mid-phase Triangle)	1.679* (5.360)	1.369* (3.932)	1.158* (3.184)
Post-phase * Triangle (interaction)	-1.825* (.161)	-1.424* (.241)	-1.237* (.290)
Southeast (i.e., mid-phase Southeast)	.445	.494	.505
Post-phase * Southeast (interaction)	.592	.994	1.062
Controls			
Age (centered at mean)	-.003	-.008	-.011
Married	.119	.180	.187
Family in NC	-.448* (.639)	-.560* (.571)	-.579* (.561)
Low English proficiency	-.630* (.533)	-.449	-.304
High English proficiency	.533	.380	.423
Drink at friends' houses	-1.226* (.294)	-1.288* (.276)	-1.258* (.284)
Drink in public settings	-.607	-.709* (.492)	-.891* (.410)
Use public transportation	-.411	-.255	-.228
Frequency of driving motor vehicle	-.156	-.201	-.215
Information items			
Know it's against law to DWI in NC		.552	.509
Know legal blood-alcohol limit is .08		.864* (2.373)	.723
Seen or heard at least one slogan		.795* (2.214)	.653* (1.921)
Deterrence items			
Perceived deterrence scale			.272* (1.312)
Was passenger in car crash with DWI driver			-.250
Model information			
Constant	1.622*	.716	.065
-2 Log L	559.36	536.90	525.66
Model χ^2	67.15*	22.46*	11.24*
(comparison model in parentheses)	(null)	(Δ Model 1)	(Δ Model 2)
Nagelkerke pseudo-R ²	.183	.238	.265

Note: N=458. * indicates p<.05. Table entries are log odds regression coefficients (odds ratio in parentheses).

Models 1-3 in Table 6 are similar to those found in Table 5. Table 6 provides the results of logistic regressions predicting the odds of a respondent reporting drinking and driving less now compared to 3 months ago. To aid interpretation of the effects of geographic region and survey phase on changes in drinking and driving behavior, predicted probabilities were calculated for each region and phase and displayed graphically in Figure 2. According to Model 3 in Table 6, factors that decrease the odds of drinking and driving less now compared to 3 months ago include living with family in North Carolina, drinking at friends' houses, drinking in public settings. On the other hand, respondents with greater values on the perceived deterrence scale are more likely to have reduced their drinking and driving behavior in the past 3 months. In addition, respondents who have seen/heard at least one anti-DWI slogan are nearly twice as likely to have reduced their drinking and driving behavior as compared to respondents who have not seen/heard any of these slogans. It is possible that respondents who have heard an anti-DWI slogan were more likely to admit driving while intoxicated in the past 6 months (see Table 5), and subsequently were also more likely to have reduced their drinking and driving behavior after gaining DWI-related information (see Table 6).

Figure 2. Graphical Representation of the Predicted Probability of Change in Self-Report DWI Behavior (Less Now than Three Months Ago) by Survey Phase and Geographic Region, Net of Covariates (See Table 6)



Note: Predicted probabilities calculated using logistic regression coefficients (Model 3, Table 6) for respondents at the mean or baseline for all other variables in the model.

Figure 2 illustrates the effects of geographic region and survey phase on self-reported changes in drinking and driving behavior in the past 3 months. The lines represent changes from mid- to post-phase in the predicted probability that a respondent from a given geographic region is in the “drink and drive less now compared to 3 months ago” category. This figure illustrates a statistically significant decrease from mid- to post-phase in the predicted probability of reducing drinking and driving behavior among

Triangle respondents (see “Post-phase * Triangle” coefficient in Model 3 of Table 6). On the contrary, there was not a significant mid- to post-phase increase or reduction in drinking and driving behavior among the Southeast or Triangle respondents.

b. Alcohol-related Crashes and DWI Charges.

The following tables and figures show the trends in alcohol-related crashes and DWI charges among Hispanic drivers in North Carolina from 2002 through 2007. Because complete data for 2007 are not yet available the following represent partial-year data for each of the years 2002 through 2006 to ensure comparability with 2007 data. The crash data represent the first 9 months of each year, since 2007 crash data are only complete through September. The DWI charge data represent the first 11 months of each year; DWI charge data for December 2007 were not yet complete in the AOC data base obtained for analysis.

Analyses were organized to present the most straightforward comparison of the two intervention communities – the Triad (Forsyth and Guilford counties) and the Triangle (Durham and Wake counties) – with a meaningful comparison or “control” region. The formally designated control community consists of 3 counties from eastern North Carolina – Duplin, Greene and Onslow. These are largely rural counties with small populations and small Hispanic populations. The result is that both the DWI and crash data are subject to substantial year-to-year variation. To have another, more stable comparison, we aggregated data from the remaining 93 counties. Although the 3-county control data are shown, interpretations of trends are based on comparison with the 93-county data.

The results are shown in the two tables and six figures on the following pages. The two tables – one showing the percent of crash-involved drivers who had been drinking, the other showing DWI charges as a proportion of all traffic charges – provide the basic information in this report. Interpretation of the meaning of the basic tabular data is aided by three figures arraying the data in each table. A brief explanation is provided for each figure.

Figure 1 and Figure 4 provide the basic distributions for Hispanic drivers only. They show the temporal trends in alcohol-involved crashes and DWI charges. To fully

understand those trends, they need to be considered in the context of the trends among the driving population as a whole.

Figures 2 and 5 show the trends in Hispanic drinking-driver crashes and DWI charges adjust for general trends. This is done by showing a ratio of Hispanic to non-Hispanic driver trends. Comparing these patterns for the intervention communities with those of the remaining 93 counties provides an indication of what effect the interventions had on drinking-driver crashes and DWI charges. Because it can be difficult to see relative changes in trend lines a final set of figures is provided to aid in interpretation.

Figures 3 and 6 show the yearly adjusted Hispanic drinking driver and DWI rates for the two intervention communities divided by the rates in the 93 other counties. These figures ultimately provide the most direct and easily seen patterns of drinking driver crashes and DWI charges for Hispanic drivers. Any intervention effects of the Triad and Triangle programs can be seen most clearly in these figures.

Table 1 Percent of crashes in which driver had been drinking, by year, driver ethnicity and region.

	Non-Hispanic						Hispanic					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
Other NC counties	3.23%	2.73%	2.82%	2.91%	3.02%	3.09%	8.71%	7.75%	7.92%	7.67%	7.03%	7.27%
Control counties*	4.19%	3.55%	3.47%	3.83%	3.54%	4.46%	12.66%	11.29%	9.71%	11.06%	9.91%	8.51%
Triad	2.80%	2.15%	2.34%	2.37%	2.62%	2.51%	7.47%	7.81%	8.06%	6.55%	7.40%	7.16%
Triangle	2.06%	1.56%	1.66%	1.70%	1.66%	1.74%	8.14%	6.29%	6.51%	5.75%	5.81%	5.39%
State total	3.05%	2.53%	2.62%	2.71%	2.80%	2.87%	8.58%	7.57%	7.72%	7.28%	6.87%	6.87%

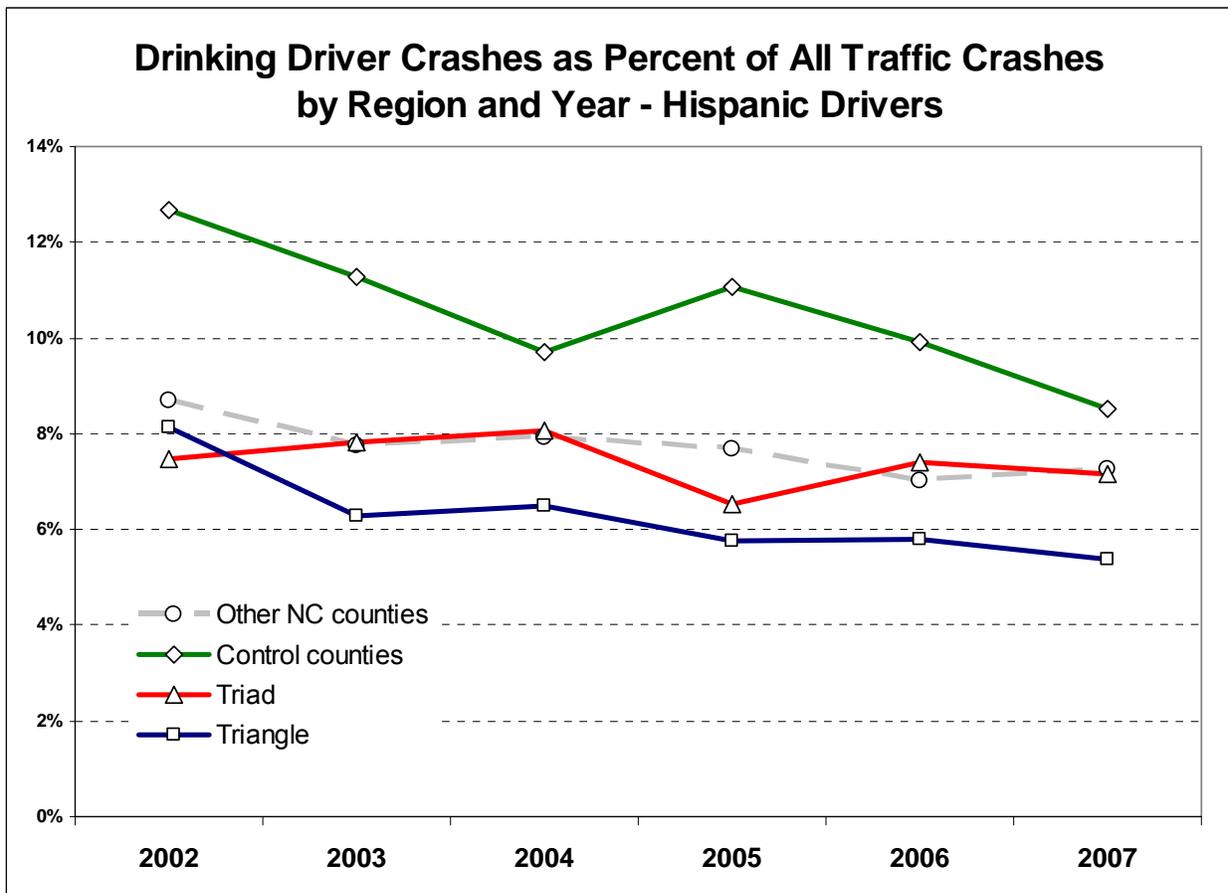
* Duplin, Greene and Onslow

Table 2 DWI charges as a percent of all traffic charges, by year, driver ethnicity and region

	Non-Hispanic						Hispanic					
	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
Other NC counties	8.39%	7.91%	7.26%	6.85%	6.37%	6.25%	13.47%	12.54%	11.71%	10.11%	8.59%	7.61%
Control counties*	9.20%	9.01%	7.80%	7.53%	6.57%	6.86%	16.26%	15.24%	13.61%	11.24%	6.98%	7.06%
Triad	6.14%	5.62%	5.05%	4.37%	4.38%	3.82%	11.47%	11.65%	10.02%	8.26%	7.64%	6.27%
Triangle	5.14%	4.65%	4.66%	5.01%	5.12%	4.15%	11.92%	10.65%	10.13%	9.36%	7.54%	6.45%
State total	7.87%	7.38%	6.80%	6.43%	6.04%	5.80%	13.15%	12.29%	11.41%	9.89%	8.31%	7.30%

* Duplin, Greene and Onslow

Figure 1 Percent of Hispanic driver crashes in which the driver had been drinking by year and region



This figure shows that the percent of crash-involved Hispanic drivers who had been drinking has generally declined, albeit slightly, since 2002. Whether this is unique to Hispanic drivers or represents a more general pattern in North Carolina requires comparing Hispanic to non-Hispanic drivers, as shown in the following figure.

Figure 2 Ratio of Hispanic driver crashes in which the driver had been drinking compared to drinking in non-Hispanic driver crashes by year and region

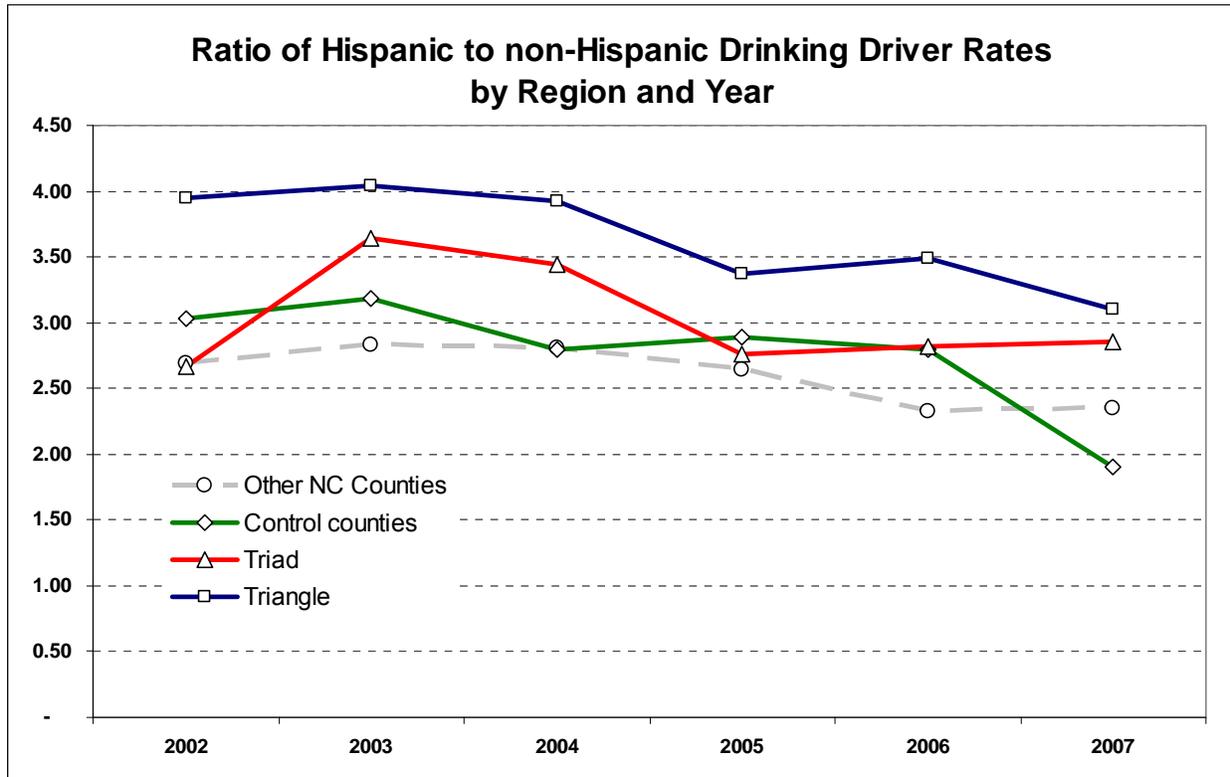
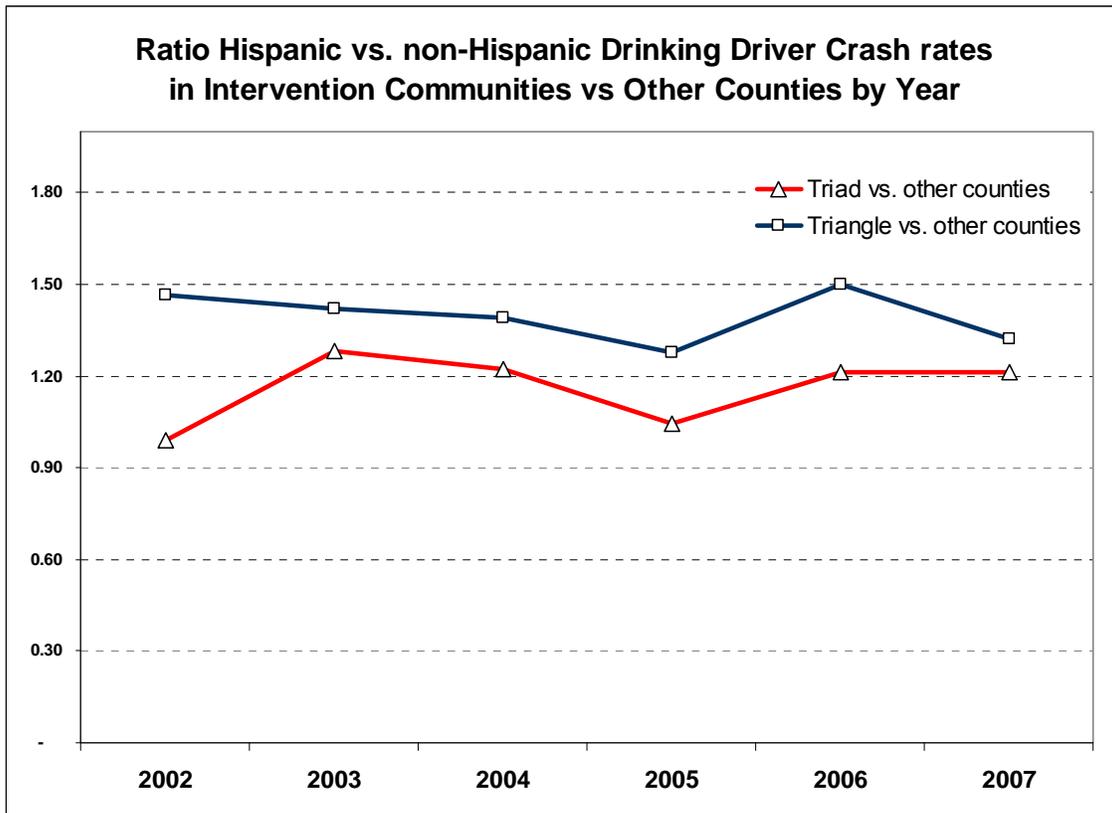


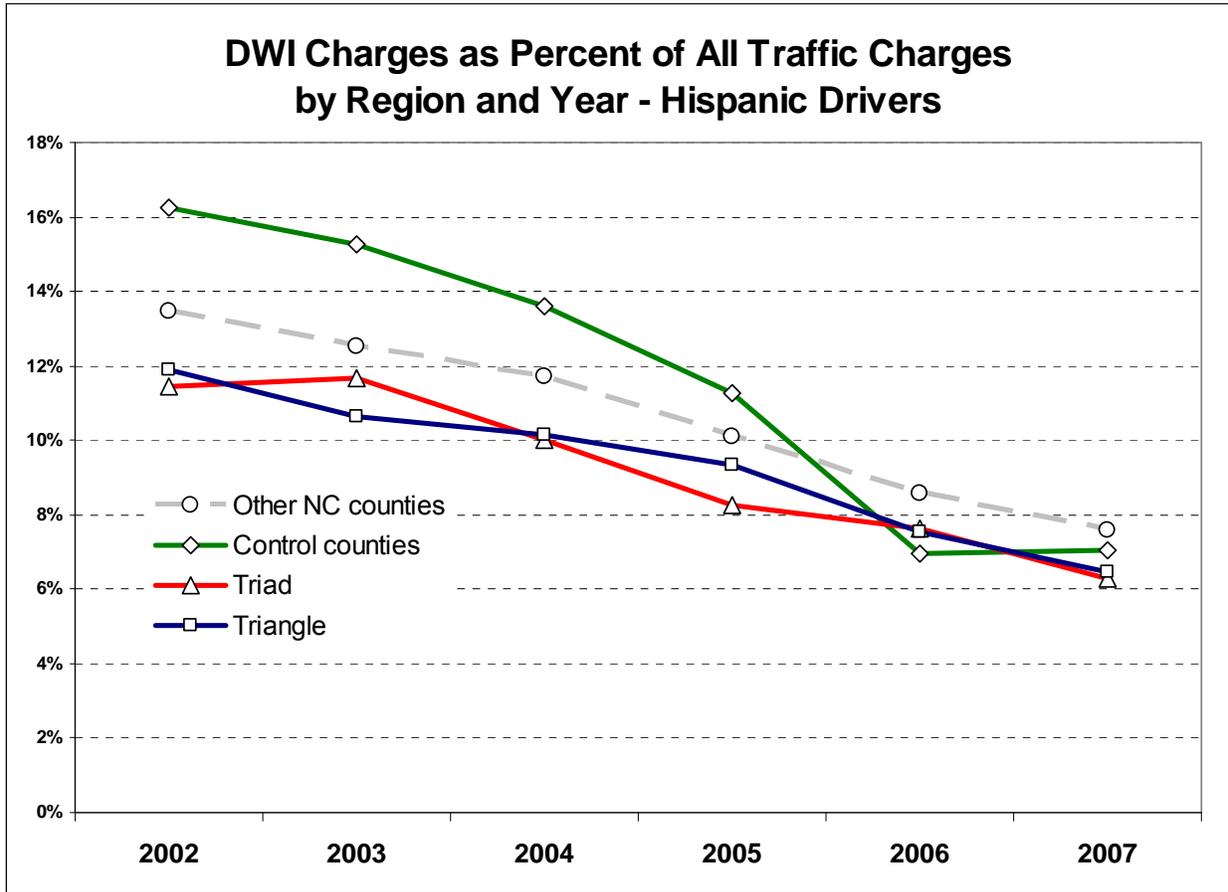
Figure 2 shows the ratios of the percent of Hispanic crash-involved drivers who had been drinking to the percent of non-Hispanic crash-involved drivers who had been drinking. For example, during 2002 in the Triangle counties, 8.14% of crash-involved Hispanic drivers had been driving, whereas 2.06% of non-Hispanic crash-involved drivers had been drinking, resulting in a ratio of $3.95 = (8.14/2.06)$. Using this ratio, rather than simply examining the proportion of Hispanic drivers who had been drinking, helps to remove the effects of changes in factors that may have affected drinking-driving (or crashing) generally (e.g., congestion, inclement weather, general economic conditions), providing a clearer picture of effects that might be attributable to the program itself. There has been a generally greater decline in Hispanic drinking driver crashes than among non-Hispanics since 2004. This is seen in statewide numbers (excluding the three study regions) and in both the study intervention regions. There was no comparable decline in the control counties until 2007; however, the pattern in the control counties is difficult to interpret because their population is small.

Figure 3 Percent of Hispanic drinking driver crashes in intervention communities compared to other NC counties by year



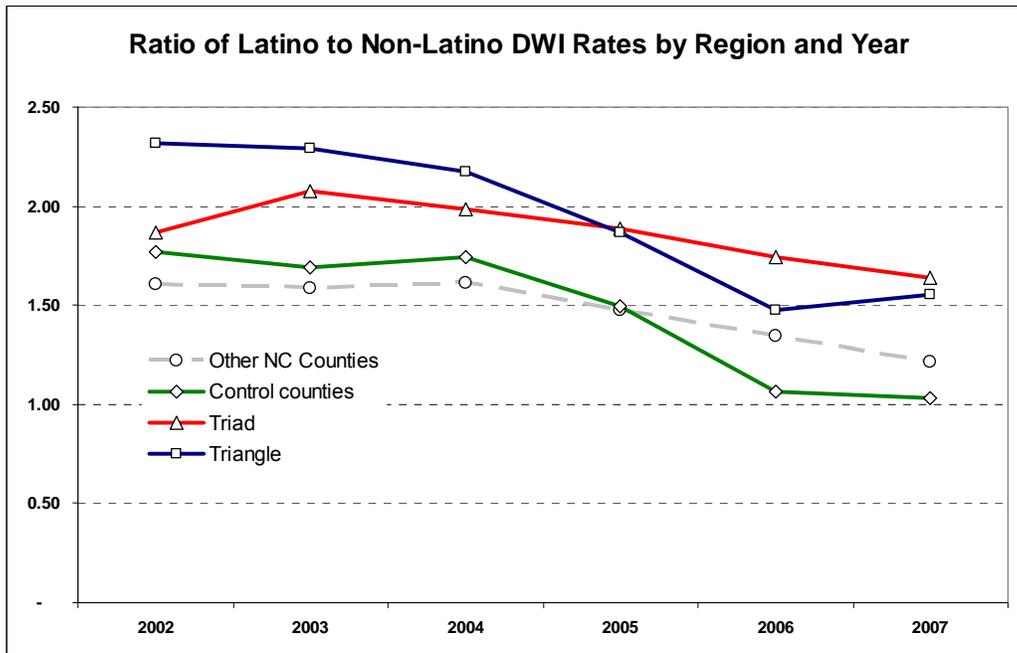
This figure shows the ratio of Hispanic vs. non-Hispanic drinking driver crash rates in the two intervention communities, relative to the rest of the state (the values shown for the Triad and Triangle in Figure 2 are divided by those for the remaining counties in the state). This is an effort to show visually the changes in Hispanic alcohol-involved crashes in the two intervention communities adjusting for secular trends. That is, the fluctuations in the trends should be specific to factors at work among the Hispanic population of these communities rather than broader factors affecting all drivers or Hispanic drivers in other communities. This ratio declined somewhat from 2003 to 2005, then reversed distinctly in 2006. For the Triad this may simply reflect an atypically low year in 2005, within the context of a stable pattern from 2003 through 2007. The Triangle does appear to have had a continuing decline from 2002 through 2005, with a substantial reversal in 2006, then a drop in 2007.

Figure 4 Hispanic driver DWI charges as a percent of all Hispanic driver traffic charges



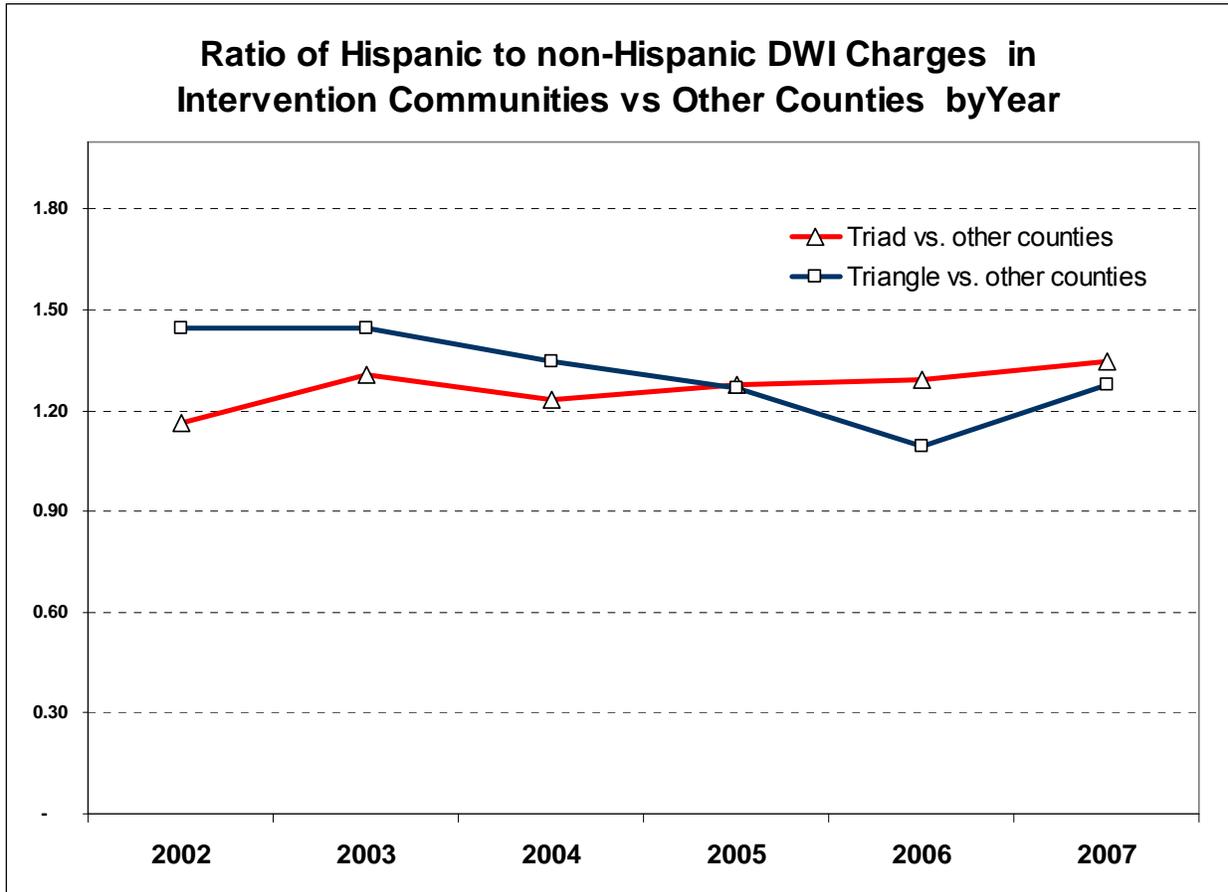
There was a clear, essentially linear decrease in the percent of Hispanic drivers charged with DWI from 2002 through 2007. The two intervention communities were consistently somewhat below the rate for the remainder of the state, but there was no difference in the trajectory among those communities and that in other areas. The sharper decline in the control counties cannot be clearly interpreted, because of the small number of cases involved. Although this downward trend appears to be an encouraging indicator of a declining amount of drinking-driving with the Latino community, it may simply reflect changing DWI enforcement patterns over the time period. The following figure addresses that possibility.

Figure 5 Comparison of Hispanic to non-Hispanic DWI charge rates by year and region.



Overall DWI enforcement declined from 2002 through 2007 in North Carolina, for a variety of reasons, including reduced law enforcement manpower availability. The overall decline in DWI enforcement accounts for much of the trend seen in Figure 4. In an effort to adjust for this reduced level of enforcement, the proportion of all Hispanic driver traffic charges accounted for by DWI charges was divided by the percent of non-Hispanic driver traffic charges represented by DWI charges. Figure 5 shows the trend in DWI charges among Hispanic drivers adjusted to account for the overall decline in DWI enforcement. This clearly shows that the decline in Hispanic driver DWI charges is not entirely due to reduced DWI enforcement; if that was the case, the trends would be flat. In the Triad, since 2003 there has been a linear decline in DWI charges as a proportion of all charges among Hispanic drivers as compared to non-Hispanics. The decline in the Triangle began a year earlier then accelerated rapidly from 2004 to 2006, reversing slightly in 2007. Overall, the pattern in the Triad is nearly identical to that seen statewide, whereas from 2004 to 2006 there was a greater decrease in the Triangle, with a clear reversal in 2007. It appears that rather than a reversal in trend, 2006 may have simply been an atypically low year for the triangle. If 2006 involved particular program activities in 2006 and perhaps 2005, which ceased in 2007, this pattern could indicate an effect of program activities in the Triangle.

Figure 6 Comparison of Hispanic vs non-Hispanic DWI charge rate ratios in intervention communities compared to other NC counties by year



This figure provides a clearer picture of how the Hispanic DWI charges rates, adjusted for general enforcement trends, in the intervention communities compare with those elsewhere in the state. There clearly was no change in the Triad, whereas there was a sustained decline in the Triangle, beginning in 2003, accelerating somewhat from 2005 to 2006 then dramatically reversing in 2007.

VII. SUMMARY AND CONCLUSIONS

The previously discussed results state the success of the campaign performed by El Pueblo, Inc. as result of a dual program involving Hispanic population awareness of the risks of DWI and increasing law enforcement activities. Nevertheless most of the data should be cautiously interpreted due to the variability of the responses, as well as, most of the input data came from memory-image recalls.

The multidisciplinary team that developed the Program assures the professionalism involved in it, while it covers all the aspects of the concerned issue: historical data on alcohol-related events in the studied area (UNC Highway Safety Research Center), high-visibility law enforcement in one of the areas (NC State Highway Patrol), and elaboration and distribution of educational material in Spanish language for the Latino community (*Nuestra Seguridad Coalition Task Force*).

During this campaign, the studied population was mostly young (average age, 28 years old), Hispanic males with limited English proficiency, residing in the Triad, Triangle, and Southeast areas. El Pueblo, Inc performed mid- and post-phase surveys in these three areas, establishing as a control the Southeast area (where no action was taken). In both, the Triad and the Triangle, mass-media social marketing control was performed, while in the Triangle, high-visibility law enforcement was added.

Based on the results, it can be assured that the conjunction of the community-based social marketing campaign and the high-visibility law enforcement activities resulted in the success of the Program. The social marketing campaign, conformed by communicational means ads and printed materials, along with the active exposition in massive attention events, represented a very important factor regarding the Latino attention to the topic. The distributed audiovisual and written information addresses the problem and its impact in the involved person's life, his/her family and even community. Maybe one of the most impacting strategies used in the social marketing campaign was to publish the names of those involved in DWI arrests in Spanish language newspapers.

This action allowed observing a weekly decrease in the average of the DWI arrests in the Triangle area. Regarding to the DWI messages and slogans distributed during the campaign, the one which has been recognized by the respondents as more popular was the “Manejar Borracho? No seas Tonto Muchacho!” (Driving drunk? Don’t be silly man!) bumper sticker. This slogan was extensively used during the whole campaign, appearing in all written material and media announcements. This fact shows the effectiveness of the project in creating an attractive and recognizable slogan, effective in terms of spreading the message.

The post-campaign responses show a statistical significant reduction (from 83% to 55%) in drinking and driving in the last quarter in the Triangle area, proving the higher efficiency of the dual methodology, while in the other two areas, no statistical difference was found.

Regarding to the amount of people who have DWI knowledge, the mid- and post-data demonstrates an increase (statistical significant) on the responses in the Triad area (while being statistical equal for the other two regions), with the exception of the knowledge of the legal blood-alcohol limit.

The predicting studies based on the results corresponding to respondents who have driven while intoxicated in the past 6 months indicate that those who usually drink in public settings, such as bars/clubs and even at friend’s houses, have been definitely more exposed to drive under the influence. These studies also provide evidence of the diminution of the likelihood of drinking and driving among those who had been reached by the social marketing campaign performed by El Pueblo. Even more evidence regarding to the effectiveness of the educational phase of the program had been obtained when the odds of drinking and driving for the “last 3 months period” were analyzed. A decrease in these odds was shown regarding the issues about drinking in public settings and friend’s houses with the additional factor of those who have family living in NC.

The total percent of crashes concerning drinking and driving at the state involving non-Hispanic drivers has slightly increased since 2005 to 2007 (from 2.71% to 2.87% respectively). On the other hand, the reduction of crashes concerning the Latino population shows a smooth decrease in the same period of time (7.28% to 6.87%).

Furthermore, an impacting reduction in DWI charges can be noticed among the Hispanic population in the period 2005-2007 that reaches an overall decrease from 24% to 31% for the Triad and Triangle area. This represents another important piece of information regarding the effectiveness of the program. Surprisingly, in the control counties, an overall decreasing trend can be clearly observed in the DWI arrests, and even DWI crashes involving Hispanic drivers. The reason for this may be the application of the 287-G immigration agreement.

The data from the analysis of the Triad and Triangle areas indicates that the combination of the community-based social marketing campaign and the high-visibility law enforcement activities were the key for the success of the program. El Pueblo, Inc. considers that written materials, audiovisual presentations, and safety fairs media are key to make aware the Hispanic population about the risk of drinking and driving, but this might not be enough to change the popular behavior. On the other hand, when the possibility of being intercepted by a law enforcement procedure exists; the drinking choices might be different.

El Pueblo, Inc. strongly suggests the application of this campaign in other counties and states across the U.S. where DWI instances are increasing within Latino populations, in addition to continuing the progress in the current counties where it is being implemented.

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APENDIX A
PRE-CAMPAIGN SURVEY QUESTIONNAIRE

***Nuestra Seguridad* Hispanic (Latino) DWI Intervention Project**

Population to be studied:

“The population to be studied consists primarily of young (18-26 age range) Hispanic (Latino) males with limited English proficiency, residing in the Triad and Triangle areas and Mecklenburg County.”

Triangle Area:

Triad Area:

Mecklenburg County:

Introduction:

Good... (morning, afternoon, evening) we are conducting a survey for El Pueblo, a non-profit agency based in Raleigh, and currently they are conducting a project for the National Highway Traffic Safety Administration dealing with Hispanic (Latino) men that drive after having consumed alcohol. The purpose of this campaign is to lessen the crashes and deaths associated with drinking and driving among Hispanic (Latino) men.

Could I take a couple minutes of your time to conduct a survey for this project?

It is not obligatory to respond all of the questions that are asked.

It is not necessary to give any of your personal information; all of the information that you provide us will be confidential and represents no risk to you.

QUESTIONNAIRE

Part 1: Identification:

1. How old are you? _____
2. Marital Status? Single ___ Married ___

Part 2: Knowledge:

3. What do you consider your English proficiency level to be?
low ___ average ___ high ___
4. Have you heard of organization "El Pueblo"? Yes ___ No ___
5. Do you know anything about the "Nuestra Seguridad" program developed by "El Pueblo"? Yes ___ No ___
6. Do you know of any laws related to drinking and driving? Yes ___ No ___
7. Do you know what "DWI" stands for? Yes ___ No ___
8. Do you know what "BAC" stands for? Yes ___ No ___
9. Do you know what the drinking and driving penalties are, if stopped or detained by a police officer? Yes ___ No ___
10. There is a maximum percentage amount of alcohol concentration in the blood after which you could be penalized if the police stops you and performs a test on you to determine whether you are intoxicated. Do you know what value the maximum amount is for alcohol in your blood?
 - a) 0.25 _____
 - b) 0.08 _____
 - c) 0.02 _____
 - d) Don't know _____
11. Have you heard of the "designated driver" concept? Yes ___ No ___

12. Are you aware that current law projects are being developed that would allow for deportation of undocumented person who have been caught driving while intoxicated? Yes ___ No ___

Part 3: Behavior:

Now I would like to ask a few questions about your knowledge of and experiences with drinking and driving.

13. How many alcoholic beverages do you think you can consume and still be able to drive? _____

If you respond with "I do not drink" proceed to question number 28

14. If you drink, where do you usually drink?

- | | | |
|---------------------------------|---------|--------|
| a) In a bar/ club | Yes ___ | No ___ |
| b) At a friends house | Yes ___ | No ___ |
| c) On the street (public place) | Yes ___ | No ___ |
| d) At your home | Yes ___ | No ___ |

15. Have you ever driven after consuming alcohol? Yes ___ No ___

**If "No", Skip down to question 27*

16. How many times? _____

17. Of the ___ times that you have driven after consuming alcohol, how many drinks on average did you consume? Yes ___ No ___

18. Of those ___ times that you have driven after consuming alcohol, did you drive alone? Yes ___ No ___

19. Of those ___ times that you have driven after consuming alcohol, did you drive with friends in the car? Yes ___ No ___

20. Of those ___ times that you have driven after consuming alcohol, did you drive with your family in the car? Yes ___ No ___

21. When you have driven after consuming alcohol, have you ever worried about:

- | | | |
|----------------------------------|---------|--------|
| a) Having a motor vehicle crash? | Yes ___ | No ___ |
| b) Being stopped by police? | Yes ___ | No ___ |
| c) None of the above | Yes ___ | No ___ |

22. Have you ever been convicted for drinking and driving?

**If "No", Skip down to question 25*

Yes ___ No ___

23. How many times? ____

24. After have been convicted, have you driven under the influence again?

Yes ___ No ___

25. Have you had a motor vehicle crash because you had been drinking and driving?

Yes ___ No ___

26. Have you abstained from driving after drinking?

Yes ___ No ___

27. Are you conscious, that drinking and driving is a big risk for you and your family?

Yes ___ No ___

28. Do you know of someone Hispanic (Latino), who has had a motor vehicle crash due to drinking and driving?

Yes ___ No ___

29. Have you ever been in a car driving with friends that had been drinking and driving?

Yes ___ No ___

30. Have you ever prevented a friend from driving after they have consumed alcohol?

Yes ___ No ___

31. In your country, is it common to drink and drive?

Yes ___ No ___

32. Do you think that it is normal to drink alcoholic beverages every day?

Yes ___ No ___

**If "No", Skip down to question 34*

33. How many?

1 – 3 ___ 4 – 6 ___ 6 or more ___

This project would like to find out what be helpful in decreasing the number of Latino men that drink and drive.

34. Do you think it could be helpful if...?

a) The amount of the fine is increased

Yes ___ No ___

b) The time under arrest is increased

Yes ___ No ___

c) The driver's license is suspended indefinitely

Yes ___ No ___

Do you think it could be helpful if...?

d) Police increase check points

Yes ___ No ___

e) Information about how many people have been killed or injured from motor vehicles crashes after drinking and driving

Yes ___ No ___

35. Do you think that Hispanic (Latino) men would avoid driving after consuming alcohol to avoid:

a) Crashes with injuries so severe that hinders one from working.

Yes ___ No ___

b) Crashes with injuries so severe that makes one a burden to their family.

Yes ___ No ___

c) Dying at the crash and leaving the family alone in this country.

Yes ___ No ___

d) Dying at the crash and leaving the family without economical support.

Yes ___ No ___

END OF THE QUESTIONNAIRE

APENDIX B
MIDDLE-CAMPAIGN AND POST-CAMPAIGN SURVEY QUESTIONNAIRE

***Nuestra Seguridad* Hispanic (Latino) DWI Intervention Project**

Population to be studied:

“The population to be studied consists primarily of young (18-26 age range) Hispanic (Latino) males with limited English proficiency, residing in the Triad, Triangle and Southeastern areas.”

Triangle Area:

Triad Area:

Southeastern Area:

Introduction:

Good... (morning, afternoon, evening) we/I are/am with El Pueblo, Inc., a non-profit agency based in Raleigh, and currently are conducting a project for the National Highway Traffic Safety Administration on traffic safety within Latino populations.

Could I take a couple minutes of your time to conduct a survey for this project?

I won't ask for any personal information and anything you tell me will be confidential.

9.- In the past six months, which of the following sayings have you heard or seen? Please check any you have seen or heard and check where you saw or heard:

- a. "You drink, you drive, you lose": Yes ___ No ___
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> TV | <input type="checkbox"/> Brochure |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Friend/Relative |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> At festivals, meetings, events |
| <input type="checkbox"/> Magazine | <input type="checkbox"/> On cars bumper stickers |
| <input type="checkbox"/> Fotonovelas | <input type="checkbox"/> Other, specify: _____ |
| <input type="checkbox"/> Poster | |

- b. "Friends don't let friends drive drunk": Yes ___ No ___
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> TV | <input type="checkbox"/> Brochure |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Friend/Relative |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> At festivals, meetings, events |
| <input type="checkbox"/> Magazine | <input type="checkbox"/> On cars bumper stickers |
| <input type="checkbox"/> Fotonovelas | <input type="checkbox"/> Other, specify: _____ |
| <input type="checkbox"/> Poster | |

- c. "¿Manejar Borracho? ¡No Seas Tonto Muchacho!": Yes ___ No ___
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> TV | <input type="checkbox"/> Brochure |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Friend/Relative |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> At festivals, meetings, events |
| <input type="checkbox"/> Magazine | <input type="checkbox"/> On cars bumper stickers |
| <input type="checkbox"/> Fotonovelas | <input type="checkbox"/> Other, specify: _____ |
| <input type="checkbox"/> Poster | |

- d. "Pasa las Llaves" (Pass the Keys)": Yes ___ No ___
- | | |
|--------------------------------------|---|
| <input type="checkbox"/> TV | <input type="checkbox"/> Brochure |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Friend/Relative |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> At festivals, meetings, events |
| <input type="checkbox"/> Magazine | <input type="checkbox"/> On cars bumper stickers |
| <input type="checkbox"/> Fotonovelas | <input type="checkbox"/> Other, specify: _____ |
| <input type="checkbox"/> Poster | |

10. Do you think that more people are being stopped by police for driving after drinking now, compared to last year? Yes ___ No ___

11. Have you read anything in the news recently about Latinos being arrested for driving after drinking? Yes ___ No ___

12. In the past six months, have you read or heard anything recently about police in this area doing roadblocks or checkpoints to catch drinking drivers? Yes ___ No ___ (skip to #14)

13. Where do you read or heard anything recently about police in this area doing roadblocks or checkpoints to catch drinking drivers?

- TV
- Radio
- Newspapers
- Friend/Relative
- I saw it at the street
- I did past through DWI checkpoint
- Other, specify: _____

14. If you were to drive somewhere in this area after you had been drinking, how likely do you think it is that you would be stopped and arrested?

- Very likely
- Somewhat likely
- Not very likely
- Very unlikely

15. How strictly do you think local police enforce drinking and driving laws?

- Very strictly
- Somewhat strictly
- Not very strictly

Not at all strictly

Part 2: Behavior:

Now I would like to ask a few questions about your knowledge of and experiences with drinking and driving.

16. Do you ever use the public bus, taxis, or transportation other than a car?

Yes ___ No___

17. How often do you drive a motor vehicle (check one)?

- every day
- few days a week
- few days a month
- few days a year
- Never

18. Do you drink alcohol (even on special occasions)? Yes ___ No___ (skip to #28)

19. How many alcoholic beverages do you think you can consume and still be able to drive?

1 – 2 ___ 3 - 4 ___ 5 – 6___ 6 or more___

20. Where do you usually drink?

- In a bar/club
- At a friend's house
- On the street (public place)
- At your home

21. In the past six months do you drive after you have been drinking? Yes ___No___ (skip to #25)

22. How many alcoholic beverages did you have that last time that you drive after you have been drinking?

1 – 2 ___ 3 - 4 ___ 5 – 6___ 6 or more___

23. Compared with 6 months ago, would you say you are you drive after drinking:

- Less now
- About the same as before
- More than before

16. In the past six months, how many times have you driven within 2 hours after drinking?

- I haven't done this
- once or twice
- three or more
- I've done this but don't remember how many times

17. In the past six months, when you have driven after consuming alcohol, did you worry about?

- Having a motor vehicle crash?
- Being stopped by police?

18. Are you aware that drinking and driving is a big risk for you and your family? Yes ___ No ___

19. Do you think it might hurt your family if you drive after drinking, even though they are not in the car with you? Yes ___ No ___

20. In the past six months, have you been the driver in a car crash when you had been drinking? Yes ___ No ___

21. In the past six months, have you been a passenger in a car crash where the driver had been drinking? Yes ___ No ___

22. Have you ever prevented a friend from driving after they have consumed alcohol? Yes ___ No ___

Part 3: Identification:

23. How old are you? _____

24. Are you married? Yes ___ No ___

25. Does your family live here with you in North Carolina? Yes ___ No ___

26. If you were not born in the US, how long have you been here? Yes ___ No ___

27. What do you consider your English proficiency level to be? low ___ average ___ high ___

APENDIX C
HOW TO CONDUCT THE DWI SURVEY: TRAINING HANDOUT

Nuestra Seguridad Hispanic DWI Intervention Project

Training for Conducting Surveys

ABOUT THE PROJECT

- Proposal²:

Demonstration and evaluation of strategies for reducing deaths and injuries resulting from driving while intoxicated among the Hispanic population.

- Background³:

A large proportion of Hispanics in the United States lose their lives on the highways and the number of traffic fatalities that result from Hispanics driving while intoxicated is equal to the total number of fatalities resulting from the same reason in the entire United States.

In 2003, 3,167 people of Hispanic origin were fatally injured in motor vehicle crashes, in the entire United States, 48% of those deaths were related to individuals that were driving while intoxicated compared to a total of 40% of deaths, for the same reason, in the entire United States.

Additionally, according to the United States Census, the Hispanic population continues to grow, and it is growing at a faster rate than the total population in the United States. The Hispanic population has experienced a 60% growth since the 1990 Census, making it the largest minority group in the United States, expected to reach a 59 million population by 2030.

² Taken from *Nuestra Seguridad* Hispanic DWI Intervention Project. NHTSA Cooperative Agreement. PROPOSAL.

³ Taken from UNITED STATES DEPARTMENT OF TRANSPORTATION. National Highway Traffic Safety Administration. Discretionary Cooperative Agreement to Support the Demonstration and Evaluation of Strategies to Reduce Impaired Driving Fatalities and Injuries within Hispanic Populations REQUEST FOR APPLICATIONS.

Recent actions to reduce the number of individuals that drive while intoxicated among the general population have focused primarily on efforts of high visibility to increase compliance of the law and have been supported by media advertising.

Studies have demonstrated that those efforts have the ability to reduce fatalities related to individuals driving while intoxicated by 20%. However, the effectiveness of high visibility efforts to increase compliance of the law among the Hispanic population has not been completely evaluated. Moreover, the implementation of efforts of high visibility to increase compliance of the law, supported by media advertising, have not been evaluated adequately to determine if this strategy is effective for this community, considering the cultural differences it possess.

Facing this situation, half way through last year, the National Highway Traffic Safety Administration (NHTSA) made a discretionary call to establish a cooperative agreement to demonstrate and evaluate effective strategies to reduce deaths and injuries caused by driving while intoxicated among the Hispanic population.

El Pueblo, Inc. responded to this call and was selected jointly with the Arizona Governor's Office of Highway Safety as the two organizations that would conduct a project on a national level.

- Objectives⁴:

The principal objective of the campaign is to present best practices for decreasing DWI among the immigrant Hispanic/Latino community. Through the results of the research project, the overall goal of El Pueblo is to create a toolkit of strategies that can be implemented in similar states and metropolitan areas that also face the challenge of providing services to the Spanish-speaking immigrant community while working with limited resources.

⁴ Taken from *Nuestra Seguridad* Hispanic DWI Intervention Project. NHTSA Cooperative Agreement. PROPOSAL.

- **Partners⁵:**

El Pueblo will partner with three key organizations to ensure the success of the demonstration project. These partners are:

1. The UNC Highway Safety Research Center
2. The NC State Highway Patrol
3. Nuestra Seguridad Coalition Task Force

The UNC Highway Safety Research Center will provide data on alcohol-related crashes, injuries, and fatalities in the three counties of the project site and will advise El Pueblo's Research Assistant to ensure that the project methods implemented are sound.

The NC State Highway Patrol is essential to the success of the project. Troopers will conduct 4 annual checkpoints in years one and two, and one in year three to provide high visibility enforcement in one of the demonstration sites. The Highway Patrol will also provide relevant DWI arrest data for the demonstration sites.

The Nuestra Seguridad Coalition Task Force will ensure that culturally appropriate Spanish-language materials are developed and distributed to Hispanics in the appropriate demonstration site areas. They will also conduct pre, mid and post program surveys to evaluate learned behavior among the Hispanic communities.

- **Methodology⁶:**

El Pueblo will select demonstration sites in Triangle and Triad areas, and will analyze data from the Southeast as a control site. Hispanics in the Triad will benefit from distribution of written materials, audio/visual presentations, and radio, television, and newspaper announcements. Hispanics in Triangle area will receive those messages in addition to high-visibility law enforcement activities, with collaboration from the NC Highway Patrol. Data from the Southeast will be

⁵ Taken from *Nuestra Seguridad* Hispanic DWI Intervention Project. NHTSA Cooperative Agreement. PROPOSAL.

⁶ Taken from *Nuestra Seguridad* Hispanic DWI Intervention Project. NHTSA Cooperative Agreement. PROPOSAL.

observed, but no intervention will be performed. In addition, all advertisement will have a number to call if they feel they have a drinking problem.

El Pueblo believes that while highly visible law enforcement activities can complement a strong social marketing campaign, the addition of law enforcement activities will not create a significant difference in behavior change. Rather, a strong community-based campaign with culturally-appropriate messages utilizing existing resources relied upon by the Hispanic community can have an equal effect on reduction of alcohol-related fatalities and crashes among Hispanics.

To measure the effect of the addition of law enforcement activities to a DWI campaign, El Pueblo will conduct a social marketing campaign in both the Triangle and the Triad. The campaign in Triad will focus primarily on social, family, and religious influences and will be delivered through community-based agencies as well as Spanish-language media.

In the Triangle, the social marketing campaign will be supplemented by announcements of enforcement activities in Spanish-language media outlets. The NC Highway Patrol will then conduct DWI checkpoints to accompany these activities. El Pueblo will also invite local law enforcement to participate in an annual Safety Fair specifically for the Latino community in Triangle area as well as at presentations in churches and community centers to increase the visibility of law enforcement officers in the area in a positive environment.

▪ Timeline⁷:

2005 (3 months)	Project begins
2006	<ul style="list-style-type: none">• The Coalition's existing safety materials are revised as necessary and new DWI materials developed at discretion of project staff.• UNC Highway Safety Research Data analyzes and reports alcohol-related fatality and crash data from prior year for Wake, Durham, and Mecklenburg Counties (October 2004-October 2005) to establish baseline.• NC Highway Patrol conducts one DWI checkpoint in Wake County to provide baseline DWI arrest data.

⁷ Taken from *Nuestra Seguridad* Hispanic DWI Intervention Project. NHTSA Cooperative Agreement. PROPOSAL.

	<ul style="list-style-type: none"> • Pre-campaign survey is conducted in Wake and Durham Counties about program name/awareness. • Media campaign is developed and implemented, presentations are conducted and written materials are distributed in the Triangle and Triad areas. • NC Highway Patrol conducts another three DWI checkpoints.
2007	<ul style="list-style-type: none"> • UNC Highway Safety Research Data analyzes and reports alcohol-related fatality and crash data from prior year for Wake, Durham, and Mecklenburg Counties (October 2005-October 2006) to establish baseline. • NC Highway Patrol conducts another four DWI checkpoints. • Media campaign is developed, presentations are conducted and written materials are distributed in the Triangle and Triad areas. • Mid-campaign and post-campaign surveys are conducted. • UNC Highway Safety Research Data analyzes and reports alcohol-related fatality and crash data from prior year for Wake, Durham, and Mecklenburg Counties (October 2006-October 2007) to establish baseline.
2008 (3 months)	Evaluation of findings, identification of best practices and drafting of final report.

ABOUT THE QUESTIONNAIRE

- The first page includes:
 - Identification of the project population (Hispanic males between the ages of 18-26), for the purpose of serving as reference and reminder at the moment of conducting the surveys.
 - Areas where the project is being conducted (Triangle, Triad and Southeast), to match the places where the persons surveyed live.
 - Introduction: text to indicate to the surveyor about information he/she should inform the respondent before the survey is conducted.
- Survey of 34 questions, with three parts:
 - Part 1: Knowledge: questions to identify the level of knowledge of the respondent with respect to the theme of the project and to be able to analyze before and after the implementation of the informative campaign.

- Part 2: Behavior: questions to identify the attitude of the respondents before drinking and driving and to know more about their personal experiences in this sense.
 - Part 3: Identification: questions to verify that the respondent fits within the project population.
- All the questions are rather simple; many have yes or no answers.

BASIC INSTRUCTIONS TO CONDUCT SURVEYS

- Select the respondents according to the characteristics indicated for the project population.
- When addressing the respondent, be polite and respectful.
- Identify yourself, explain what you are doing and reasons for the project, with the purpose of getting the respondent's consent for conducting the survey.
- If the person refuses to be surveyed, do not insist or look upset, just nicely walk away and select another person.
- Read the questions slowly and clearly, without modifications.
- Allow enough time for the respondent to think about his/her answer.
- If the respondent does not understand the question, repeat it slowly, without adding or changing the question.
- When asking do not place emphasis or make additional comments that would lead the respondent to think that you are indicating an answer.
- Do not judge or argue with the opinions submitted by the respondent, stay neutral.
- Do not give advice to the respondents, focus on conducting the survey.
- Be sensible when asking personal questions that could intimidate the respondent.
- Give each respondent an information packet provided and show appreciation for their collaboration.
- Never disclose information about a person, obtained while conducting the survey.

LOGISTICS

- The pilot tests indicated that conducting the surveys in person is the most effective method for this project. We suggest contacting potential respondents in *centros*, Hispanic shops, community activities, or places within your area where Hispanics are commonly found. If you are able to find a group of Hispanic males that you could give the survey to and have them fill it out, you may, as long as you give simple instructions as to how to fill it out.
- El Pueblo, Inc. will provide the surveys and packets to be given to the respondents.
- Fill out the surveys with pencil.
- The surveys must be conducted within one month.
- When finished, the surveys should be sent to El Pueblo, Inc. by mail.



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