

Increasing Seat Belt Use In New York City

Evaluation of a Demonstration Project



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| 16. Abstract <p>A high-visibility seat belt enforcement program was implemented along Northern Boulevard and surrounding neighborhoods in northern Queens, New York City. The goal was to determine if high-visibility enforcement could increase belt use in a localized diverse community within a major city. Enforcement levels were substantial. Nearly 6,000 tickets were issued across the four program waves conducted about every three months from June 2007, through April 2008. Media consisted of locally placed billboards and posters plus substantial police presence including 160 belt use checkpoints. Residents recalled seeing the billboards, posters, and the police checkpoints. Belt use along Northern Boulevard increased significantly over the life of the program ($p < .05$) and as compared to similar measurements conducted along Grand Concourse in the Bronx, a comparison area ($p < .01$). It was concluded that an urban police agency, with strong leadership and sufficient resources, can increase belt use along a known high-risk corridor without purchasing prohibitively expensive citywide media.</p> | | | |
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BACKGROUND

Seat belt use is the single most important factor in preventing or reducing the severity of injuries to vehicle occupants involved in a traffic crash. When used properly, lap/shoulder belts reduce the risk of fatal injury to front seat passenger car occupants by 45% and the risk of moderate to severe injury by 50%. However, of the 30,521 occupants of passenger vehicles killed in traffic crashes in 2006 where belt use was known, an estimated 55% were not wearing seat belts according to the National Highway Traffic Safety Administration's National Center for Statistics and Analysis (NCSA).

Selective Traffic Enforcement Programs (STEPS) are a proven method to change motorists' behavior and do it quickly. Occupant protection STEPs can raise seat belt use rates more substantially and more quickly than any other currently available program as they create a perception among motorists that they will be ticketed if they do not buckle up (Solomon et al., 2002). STEP programs typically span several weeks with the first and second weeks focused on publicity and the remaining weeks concentrated on publicity combined with intense and highly visible enforcement.

Most STEPS have relied on all available print and broadcast media for earned and paid publicity. Sometimes, however, it may be of interest to target a selected high-risk neighborhood within a larger metropolitan area. Use of citywide or areawide media would be both expensive and inappropriate. Of interest to this program was if it would be possible to create a STEP program, with measureable effects on belt use and recall of the buckle-up message, using enforcement centered on the identified neighborhood and neighborhood localized media.

STUDY OBJECTIVE

The objective of this study was to evaluate the effects of a seat belt media and enforcement demonstration program in an ethnically and socially diverse neighborhood in New York City.

METHODS

The New York community was generally defined as *Northern Boulevard*, a stretch of roadway in northern Queens that runs from about Shea Stadium to the East River, and all of the surrounding neighborhoods. These neighborhoods include lower and middle socio-economic Black, White and Asian residents. The Northern Boulevard area of Queens had previously been identified by the New York Police Department as a special priority area known to have many vehicle crashes.

Media was entirely localized, consisting of billboards, posters, and actual police presence for belt use checkpoints and roving patrols. Citywide print, radio, and television outlets were not used as these would have been prohibitively expensive. Enforcement during the program's four waves was extremely intense, resulting in 6,724 belt use tickets written on just a few miles of roadway.

Preusser Research Group's evaluation approach included distributing public awareness surveys at select Department of Motor Vehicles (DMV) offices and conducting roadside seat belt observations in specific geographic areas and site locations.

DMV Surveys

During Wave 1, surveys were distributed at both College Point (Queens) and Bronx DMV registries before and after the media/enforcement period. During the second and third waves, surveys were *only* distributed in the College Point office during the post periods. During the fourth wave, surveys were distributed in both the College Point office and the Bronx office before and after the media and enforcement period.

The campaign media and enforcement dates were:

Media Flight Dates:

1. July 9–22, 2007
2. Oct 8–21, 2007
3. Jan 7–20, 2008
4. March 24–April 6, 2008

Enforcement Dates:

1. July 20–24, 2007
2. October 19–23, 2007
3. January 18–22, 2008
4. April 4–8, 2008

Roadside Seat Belt Observations

Pre- and post-media/enforcement seat belt observations were conducted along the stretch of Northern Boulevard between 106th Street and 59th Street. Community belt use observations were also conducted along parallel roadways to Northern Boulevard including 31st Avenue at 111th Street to Steinway to 39th Street to Queens Boulevard at 58th Street. These community observations incorporated parts of the 108th, 114th, and 115th designated enforcement precincts.

Grand Concourse in the Bronx was chosen as the comparison seat belt observation site. Like Northern Boulevard, it is a major urban arterial with similar traffic volume and mixed socio-demographics. Community observations were also taken along Jerome Avenue, which runs parallel to Grand Concourse. Grand Concourse in the Bronx was considered to be far enough away from Northern Boulevard in Queens where this comparison population would likely not have any indication that a Queens-specific enforcement program was taking place.

Bronx seat belt use was observed during both the pre- and post- dates for Wave 1 (June 2007) and again during the pre- and post- dates for the final wave (April 2008).

Observation Procedures & Schedule

Observations were conducted by two trained research assistants. Both directions of traffic were observed, during day and evening hours (9 a.m. to 1 p.m. and 4 p.m. to 9 p.m., respectively). Vehicle type, race, sex and belt use were recorded for the *driver only* for each observed vehicle. These methods were used on both program and comparison roadways.

Observation Schedule

Wave 1 pre-seat-belt observations on Northern Boulevard in Queens and the surrounding precinct communities took place on Wednesday, June 20 and Saturday, June 23, 2007. Pre-observations on Grand Concourse in the Bronx and the surrounding comparison/control community took place on Thursday, June 21 and Sunday, June 24. Post-seat-belt observations in Queens were conducted on Wednesday, July 25, and Saturday, July 28. Post-seat belt observations in the Bronx took place on Thursday, July 26, and Sunday, July 29.

Wave 2 post-only observations took place on Wednesday, October 24, and Saturday, October 28. Only the enforcement area (Northern Boulevard, Queens) was observed during this wave.

Wave 3 post-only observations took place on Wednesday, January 23, and Saturday, January 26. Only the enforcement area (Northern Boulevard, Queens) was observed during this wave.

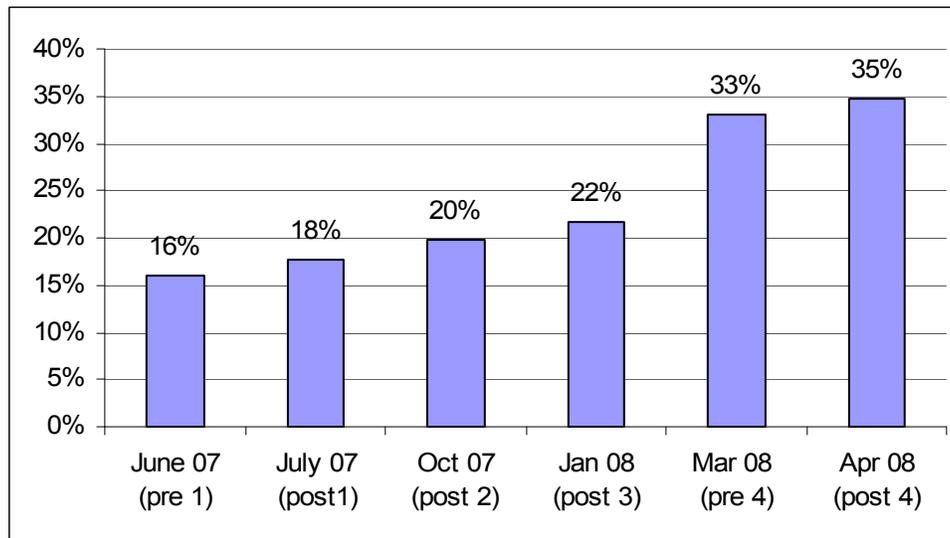
Wave 4 Pre-seat-belt observations on Northern Boulevard in Queens and the surrounding precinct communities took place on Saturday, March 15, and Wednesday, March 19. Pre-observations on Grand Concourse in the Bronx and the surrounding control community took place on Sunday, March 16, and Thursday, March 20. Post-seat-belt observations in Queens were conducted on Wednesday, April 9, and Saturday, April 12. Post-seat-belt observations in the Bronx took place on Thursday, April 10, and Sunday, April 13.

RESULTS

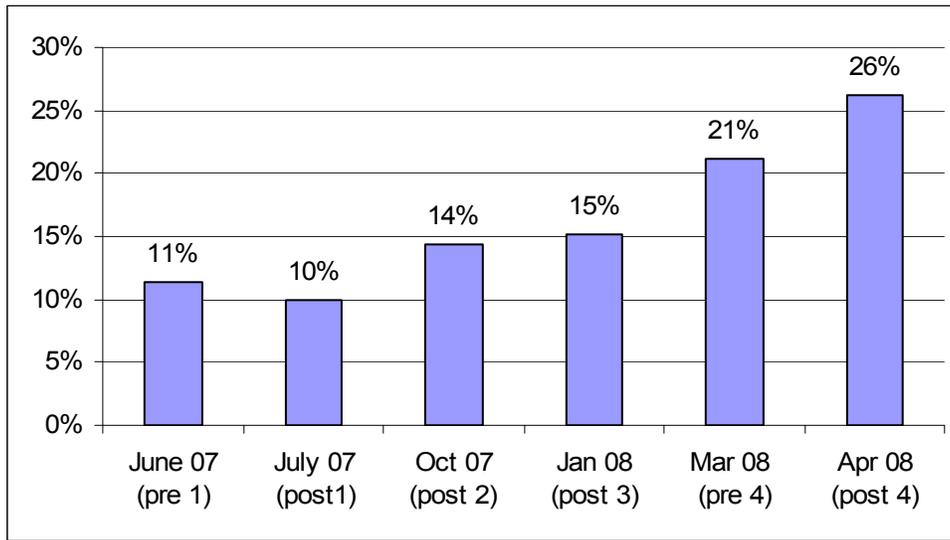
DMV Surveys

There were increases in the Queens media awareness from pre- to post-Wave 1 for a select group of survey questions. Specifically, the approximately 40% of respondents who answered “Yes” to “*Have you recently read, seen or heard anything about seat belts in New York?*” were then asked to select one or more of the following media sources: newspaper, radio, bus shelter, TV, poster, billboard, police checkpoint, or other. In Queens, increases were shown across all four waves for **billboards**, **posters** and **police checkpoints**. These increases are shown in the following three figures. Since this was a program localized to only one area of New York, media and outreach were restricted to billboards, posters and actual police presence. These were the media sources that residents remembered. Newspapers, television and radio would have been cost prohibitive and thus were not used.

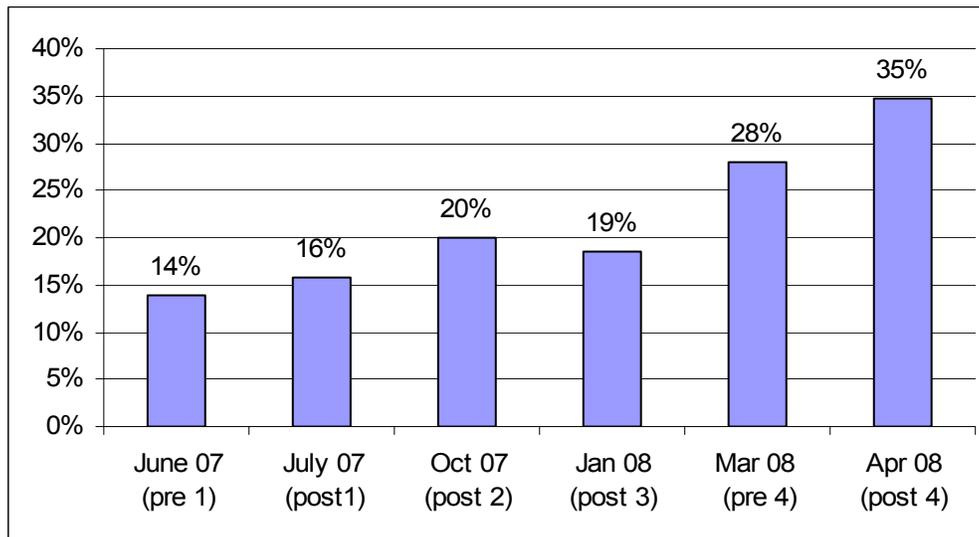
Queens Media Recognition, Billboard



Queens Media Recognition, Poster



Queens Media Recognition, Police Checkpoint



Seat Belt Observations

Observed seat belt use exhibited significant increases. Keep in mind, the first wave of the campaign took place directly after a large-scale national *Click It or Ticket* (CIOT) mobilization, so belt use started off higher than what might be expected to be normal for the program area.

Significant changes in Queens' seat belt use from pre- to post-Wave 1 were noted in the following categories: Overall (87.3% to 89.0%), Whites (86.4% to 88.7%), Males (86.1% to 88.1%), and

Northern Boulevard as opposed to local/side roads in Queens (88.6% to 90.7%). There were no significant changes in the Bronx over the same period.

Significant changes in Queens' seat belt use were also noted overall in Wave 4, pre- to post- (85.1% to 88.7%), in Whites (85.0% to 88.1%), Blacks (81.5% to 88.3%), Males (84.3% to 87.8%), Females (87.9% to 92.0%), on Northern Boulevard (85.8% to 89.0%) and on local/side roads (84.1% to 88.4%). The last wave of enforcement was thus very successful in Queens. Belt use in the Bronx also showed some significant improvement, albeit not to the extent of what was seen in Queens.

Observations were conducted throughout the day and evening hours. While Wave 1 showed no apparent changes in belt use during the day, belt use from Wave 1 pre- to post- at night (4 p.m. to 9 p.m.) approached significance (86.7% to 88.8%). In Wave 4, there were significant changes in Queens in both daytime (85.7% to 88.9%) and evening hours (84.5% to 88.5%).

Seat belt observations were conducted on Wednesday and Saturday in Queens; and Thursday and Sunday in the Bronx. When examining day of week results, belt use rates increased slightly on both days in Queens (approaching significance), but these changes were not large enough to be considered significant.

Most importantly, belt use along Northern Boulevard increased significantly over the life of the program ($p < .05$) and increased as compared to the Bronx ($p < .01$).

DISCUSSION

This program was unique in that it accomplished high-visibility enforcement in an urban area without using broadcast media. Residents recalled the billboards and roadside posters; the police presence; and increased their belt use. A very large number of tickets were written. Belt use was generally high (well above the national average) prior to the program and then increased significantly beyond these levels. The results clearly demonstrate that an urban police agency, with strong leadership and available police resources, can increase belt use along a known high-risk corridor without purchasing prohibitively expensive citywide media.

I. INTRODUCTION

Seat belt use is the single most important factor in preventing or reducing the severity of injuries to vehicle occupants involved in a traffic crash. When used properly, lap/shoulder belts reduce the risk of fatal injury to front seat passenger car occupants by 45% and the risk of moderate to severe injury by 50%. However, of the 20,413 occupants of passenger vehicles killed in traffic crashes in 2007 where belt use was known, an estimated 49% were not wearing seat belts according to National Highway Traffic Safety Administration's National Center for Statistics and Analysis (2007b).

Selective Traffic Enforcement Programs (STEPS) are a proven method to change motorists' behavior and do it quickly. A STEP is traffic enforcement targeted to specific jurisdictions based on the analyses of crashes, DWI, speeding, aggressive driving, and other highway safety issues. Occupant protection STEPs can raise seat belt use rates more substantially and more quickly than any other currently available program as they create a perception among motorists that they will be ticketed if they do not buckle up (Solomon et al., 2007).

Canada was the first country in North America to demonstrate that highly publicized occupant protection enforcement increases compliance with occupant protection laws. In the mid-1970s, mandatory seat belt laws were passed in the Canadian provinces. Within months, the seat belt use rate surged to as high as 71%. However, shortly thereafter, the use rate declined. Years later, occupant protection STEPs used in several provinces led to sharp increases in seat belt use (Jonah et al., 1982; Williams et al., 2000). Continued use of STEPs contributed to Canada's achievement of an 87% use rate by the 1990s.

New York experienced a similar rise and fall in its seat belt use rate following passage of the first statewide seat belt law in the United States in 1984. In 1985, the community of Elmira in Chemung County, NY conducted a three-week publicity and enforcement program based on the Canadian STEP model. The Elmira STEP effort, the first in the United States, successfully reversed a falling seat belt use rate. The use rate improved from 49% to 77% in just three weeks time (Williams et al., 1987).

North Carolina enacted a seat belt law in 1986. Shortly thereafter, police officers began issuing tickets and seat belt use rose to 78%, higher than anywhere else in the country. By the middle of 1993, the rate had dropped to 65%. North Carolina decided to embark on a long-term program to increase its seat belt use rate in 1994. The program was named *Click It or Ticket* and it was the first statewide occupant protection STEP attempted in the United States.

North Carolina began by using a STEP model resembling the Canadian and Elmira programs. High levels of seat belt and child restraint use were achieved using stepped up enforcement, increased publicity and widespread public information and education focusing on enforcement. By July 1994, STEPs in North Carolina had achieved an 81% driver seat belt use rate (Insurance Institute for Highway Safety, 1994).

Between 1995 and 1997, NHTSA funded statewide occupant protection STEPs in over two-dozen States under the auspices of the Campaign Safe and Sober program. These States

conducted an average of four STEP waves for each year of funding. Most of these programs garnered widespread law enforcement support. But unlike CIOT in North Carolina, none of these programs extensively used paid media. Instead, these States relied heavily on earned media and public service announcements to get their message to the public. Furthermore, program publicity was not always focused on stepped up enforcement, but rather on health and safety themes. All of these STEP States experienced measurable increases in belt use over time, though the wave-to-wave increases were usually small (Solomon et al., 1999).

In November 2000, South Carolina adopted the CIOT program. This STEP program included both an earned and paid media effort supported by a grant (\$500,000) from the Air Bag & Seat Belt Safety Campaign. Both the paid and earned media efforts focused exclusively on occupant restraint enforcement. During a two-week enforcement period, the South Carolina Highway Patrol, in association with local law enforcement, conducted 3,303 checkpoints and wrote 19,815 belt use citations. By the end of the two-week enforcement period, 80% of motorists surveyed at DMV offices reported knowing of *Click It or Ticket*; 82% heard about checkpoints; and 40% had actually gone through a checkpoint. Observed front-seat occupant belt use increased by 14 percentage points, from 65% before enforcement to 79% during the second enforcement week (Solomon & Preusser, in process).

Shortly after South Carolina's successful CIOT campaign, a partnership among NHTSA Region 4 officials, the Air Bag & Seat Belt Safety Campaign and State highway safety officials was formed to conduct a *Click It or Ticket* program across the southeast. All eight States in the region (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) participated in the program. The May 2001 program was structured so that all of the States simultaneously undertook a five-week earned media campaign, a two-week paid media campaign beginning one week after the start of earned media, and a two week intensive enforcement effort beginning one week after the start of paid media. Locally conducted observations of belt use and surveys of awareness of the program before, during, and after the campaign were also carried out. Some 3,250 law enforcement agencies participated in the program, conducting over 25,000 checkpoints or patrols during the two-week enforcement period. Enforcement resulted in 119,805 seat belt citations, 9,495 child restraint citations, 8,478 DWI arrests, recovery of 254 stolen cars and apprehension of 1,471 fugitives. Results of surveys conducted in driver licensing offices throughout the eight States showed a dramatic increase in awareness of recent seat belt messages on television and radio, as well as in the print media. Observations of seat belt use showed statewide increases of between 4 and 20 percentage points across the States (Solomon, 2002).

Evaluation of the southeast regionwide program provided further evidence that the full implementation of the *Click It or Ticket* model, specifically the use of paid media, can contribute to an improved belt use rate. However, the study States were all within one geographical region. To evaluate more widespread application of the CIOT model and to measure its effectiveness, a wider geographical range of States would be needed.

The results of the May 2002 CIOT program evaluation confirmed that intensive short term and well publicized enforcement can produce large gains in seat belt use. The results also suggested that enforcement with only modest paid media and intensive enforcement with no paid media has some effect on the belt use rate, but not to the same extent as *full implementation* of CIOT with paid advertisement placement.

Nearly every State currently uses occupant protection STEPs to improve the seat belt use rate. Most States conduct at least one STEP wave per year. Most schedule wave activities occur simultaneously with the national mobilization. Mobilizations typically occur in May and are associated with substantial national and local belt use publicity. Currently, these mobilizations are conducted by NHTSA in conjunction with thousands of State and local law enforcement agencies. Because a large number of States currently use the *Click It or Ticket* slogan (about two-thirds), national mobilizations are also referred to as *Click It or Ticket* campaigns.

STEPS, which rely on high-visibility enforcement, have evolved as an effective means to increase belt use. Visibility has been created by using all available print and broadcast media for earned and paid publicity. However, it may be of interest to target a selected high-risk neighborhood within a larger metropolitan area. Use of citywide or area-wide media would be both expensive and inappropriate. Of interest to this project was if it would be possible to create a STEP effect on belt use using enforcement centered on one identified neighborhood and neighborhood localized media. If yes, then it might be possible for police agencies to effectively target high-risk neighborhoods. This study accomplished that objective: it implemented a STEP in a local, targeted, and high-risk neighborhood in New York City.

The remainder of the report is organized as follows:

- Section II, **NYPD Program**, describes the cooperative agreement between NHTSA and the NYPD, as well as a general project overview.
- Section III, **Methods**, explains the methods and procedures used during data collection for both public awareness surveys and roadside seat belt observations.
- Section IV, **Results**, presents results from data collection related to DMV surveys and observational belt use surveys.
- Chapter V, **Discussion**, provides highlights of the evaluation campaign as well as any successes or potential issues.
- Chapter VI, **References**, provides a reference list for any cited information in the report.
- **Appendix A** provides copies of the Queens and Bronx DMV surveys that were used to collect public awareness information.
- **Appendix B** contains maps of both Queens and Bronx roadways where our observers collected roadside seat belt use observation information.
- **Appendix C** provides a copy of the actual observation form used for the roadside seat belt observations.
- **Appendix D** contains additional tables documenting NYPD Traffic Control Division enforcement activity that was submitted to PRG by TrafficStat personnel. This enforcement activity covers Click It or Ticket mobilizations for 2006 to 2008.
- **Appendix E** provides visuals of the actual bus shelter signage that was used during the program.

II. NYPD PROGRAM

A. COOPERATIVE AGREEMENT BETWEEN NYPD and NHTSA

The New York City Police Department Manhattan Traffic Control Division was awarded a NHTSA cooperative agreement to develop and implement a demonstration program to increase seat belt use among urban motorists including high-risk populations (minorities and youth). This effort addresses a Congressional mandate directing NHTSA to focus on increasing seat belt use among underserved populations. One of the requirements of this mandate was that the coordinating organization, NYPD, be located within a major metropolitan area including a diverse community in a highly concentrated area. NYPD was chosen to address this mandate due to its diversity and the fact that it is the largest in the Nation, with over 39,000 sworn officers in 76 precincts, a highway patrol, and additional specialized units. The campaign was required to have a clear enforcement message in order to make the public aware of the demonstration program designed to increase seat belt use among urban motorists.

New York's residents live in the city's five geographically distinct, ethnically diverse boroughs: Manhattan, the Bronx, Brooklyn (Kings), Queens, and Staten Island (Richmond). With a population of just over 8,000,000 and a mix of 44.7% White, 26.6% African American, and 27% Hispanic, New York City is one of the most diverse cities in the Nation. As previously mentioned, the NYPD includes 76 precincts and has traffic enforcement authority in each of the five boroughs. NYPD has a state-of-the-art TrafficStat data management system that compiles and analyzes traffic crash and citation data on a weekly basis, which will be used when possible in order to develop an urban model for increasing seat belt use. The "lessons learned" from the development of this model will be transferable to other urban areas in the United States.

B. PROJECT OVERVIEW

The NYPD decided to use a section of Northern Boulevard in Queens as the site for conducting its demonstration program; while Grand Concourse in the Bronx was designated as the "control" community.

The target section of Northern Boulevard was chosen due to its close proximity to Manhattan's Traffic Control Division, thus allowing for speedy deployment while remaining close to the precinct area if a sudden emergency were to arise. PRG examined Census tract and demographic information in order to "match" Grand Concourse in the Bronx as the control roadway. While Northern Boulevard is demographically unique in terms of ethnicity, Grand Concourse was the closest match when looking for a control roadway. Also, both roadways are the same type of road (main corridor/throughway) and have likely comparable traffic volumes. Please note, a control site should be close enough to the target site in order to make community and area comparisons, but not too close (the control area should have no knowledge of any media messages or enforcement activity occurring in a neighboring community).

No special media or enforcement took place in the Bronx. In Queens, paid media, seat belt checkpoints and roving patrols in the surrounding precinct communities were conducted during each of four program

waves. All overtime enforcement activity was carried out by Manhattan Traffic Control Division, with support from three area precincts (108, 114, and 115) as well.

Using high-visibility enforcement coupled with paid media has repeatedly proven to be an effective strategy to create behavior change in those that tend not to wear seat belts.

Media

NHTSA chose the Tombras Group, Inc., as the media firm for this program. It was tasked with organizing all media buys and media placement for the campaign. The first media flight for the campaign ran from **July 9–22, 2007**; the second media ran from **October 8–21, 2007**; the third ran from **January 7–20, 2008**; and the fourth and final media flight ran from **March 24–April 6, 2008**. Media used included bus shelter ads, standard 8-sheet posters, and 30-sheet posters (billboards).

While NHTSA's national *Click It or Ticket* logo was included on each one, the actual messages on bus shelter ads and the posters varied between the following four slogans (please see Appendix E for examples of the signage):

- **DON'T GO BELTLESS.**
Cops are cracking down on unbuckled drivers and passengers
- **SAVE YOUR EXCUSES.**
Cops are cracking down on unbuckled drivers and passengers
- **PSSSST . . .**
Cops are cracking down on unbuckled drivers and passengers
- **HEY, YOU IN THE CAR . . .**
Cops are cracking down on unbuckled drivers and passengers

Bus shelter ads, standard 8-sheet posters, and 30-sheet posters (billboards) were set up in various locations along the main corridor of Northern Boulevard and in the surrounding precinct areas during each flight. Variable message signs (VMS) were set up on North Boulevard by Manhattan's TCD and had the following rotating messages displayed during seat belt checkpoints: (1) *Click It or Ticket*, (2) *Seat Belt Enforcement Zone*, and (3) *Seat Belts Save Lives*. The TCD also conducted outreach in the local community, such as presentations at community board meetings and display tables and information at local businesses. Media totals by media type and wave are listed in Table 1 below. The total amount budgeted for program media was \$113,000; **\$112,540** was actually spent.

Table 1. Number of Paid Media Postings and Cost, by Wave

| | BUS SHELTER ADS | <i>COST \$</i> | 8-SHEET POSTERS | <i>COST \$</i> | 30-SHEET POSTERS | <i>COST \$</i> | TOTALS |
|----------------------------|--------------------------------|-----------------------|----------------------------|-----------------------|-----------------------------|-----------------------|---------------------|
| Wave 1 | 26 | \$12,155.00 | 46 | \$6,647.00 | 18 | \$9,333.00 | \$28,135.00 |
| Wave 2 | 26 | \$12,155.00 | 46 | \$6,647.00 | 18 | \$9,333.00 | \$28,135.00 |
| Wave 3 | 26 | \$12,155.00 | 46 | \$6,647.00 | 18 | \$9,333.00 | \$28,135.00 |
| Wave 4 | 26 | \$12,155.00 | 46 | \$6,647.00 | 18 | \$9,333.00 | \$28,135.00 |
| CAMPAIGN TOTALS | 104 | \$48,620.00 | 184 | \$26,588.00 | 72 | \$37,332.00 | \$112,540.00 |

Enforcement Activity

In addition to the media, heightened enforcement activity was conducted during each of the four waves. Enforcement activity took place on Northern Boulevard (checkpoints) and within surrounding precinct communities (roving patrols). TCD used overtime hours and the individual precincts contributed to the campaign during regular tour hours. Checkpoints ran on weekdays and weekends, during morning and evening hours, and accounted for both inbound and outbound traffic traveling on Northern Boulevard. Additional enforcement personnel were added during Waves 3 and 4. Approximately 160 checkpoints took place over the course of the program. The enforcement dates ran from Friday to Tuesday each time. The first enforcement period took place **July 20–24, 2007**; the second **October 19–23, 2007**; the third **January 18–22, 2008**; and the final enforcement wave occurred **April 4–8, 2008**. Detailed information on enforcement activity and summons/warning totals is provided in the Results section of this report.

III. EVALUATION METHODS

The objective of this study was to evaluate the effects of a media and enforcement program on increasing seat belt use in a selected area of New York City. Evaluation included distributing public awareness surveys at select DMV offices and conducting roadside seat belt observations in specific geographic areas and site locations.

A. DMV Surveys

The NYPD distributed surveys at the College Point DMV registry in Queens to evaluate public awareness of the media and enforcement that took place on Northern Boulevard and the surrounding precinct areas. The Bronx DMV registry was used as a control office for comparison. Program-related media messaging was used in Queens to raise motorists' awareness of the seat belt enforcement campaign. Media strategies included bus shelter posters, billboard ads, VMS signs, and outreach presentations in local communities by the Manhattan Traffic Control Division's Training Unit. DMV surveys included questions specifically asking about media strategies and perceived enforcement in both the program and control areas.

During Wave 1 and Wave 4, surveys were also distributed at the Bronx DMV for control area comparison measures (sample DMV survey forms for both offices are attached as **Appendix A**). Survey questions for distribution at the Bronx DMV were identical (aside from a single road specific question) to the survey questions distributed at the College Point DMV.

A "pre" period refers to any measurements taken before the start of any media and a "post" period refers to measurements taken after media and enforcement have ended. The media and enforcement dates are provided below for further clarification of the pre/post timeframes.

Media Flight Dates:

5. July 9–22, 2007
6. Oct 8–21, 2007
7. Jan 7–20, 2008
8. March 24–April 6, 2008

Enforcement Dates:

5. July 20–24, 2007
6. October 19–23, 2007
7. January 18–22, 2008
1. April 4–8, 2008

During Wave 1, surveys were distributed at both College Point (Queens) and Bronx DMV registries both prior to and after the media/enforcement period. During the second and third Waves, surveys were *only* distributed in the College Point office during the Post periods. The fourth Wave following the same pattern as Wave 1 – in other words, pre and post surveys were collected surrounding the media and enforcement period. See Table 2 for a description of what

DMV offices were visited by wave. Responses to survey questions were data entered into an Excel spreadsheet and later transferred into SPSS for further analyses. Analyses were conducted for each survey question across all waves.

Table 2. DMV Survey Distribution Areas by Wave Number

| WAVE 1 | WAVE 2 | WAVE 3 | WAVE 4 |
|---------------------------------------|------------------|------------------|---------------------------------------|
| Queens Pre & Post Bronx Pre & Post | Queens Post ONLY | Queens Post ONLY | Queens Pre & Post Bronx Pre & Post |

B. Seat Belt Observations

Site Selection

Northern Boulevard was the enforcement site chosen for this project due to its ethnically diverse neighborhoods including young drivers and high-risk non-seat-belt users, its dense population, and high volume of traffic as a main thoroughfare connecting the 59th Street Bridge and the Nassau County Line (see Map 1 in **Appendix B**).

Pre and post enforcement seat belt observations were conducted along the stretch of Northern Boulevard between 106th Street and 59th Street. Community belt use observations were also conducted along parallel roadways to Northern Boulevard including 31st Avenue at 111th Street to Steinway to 39th Street to Queens Boulevard at 58th Street. These community observations incorporated parts of the 108th, 114th, and 115th designated enforcement precincts (see Map 1 in **Appendix B**).

Grand Concourse in the Bronx was chosen as the comparison seat belt observation site. Like Northern Boulevard, it is a major urban arterial with similar traffic volume and mixed socio-demographics (see Map 2 in **Appendix B**). Community observations were also taken along Jerome Avenue, which runs parallel to Grand Concourse. Observations were recorded along Jerome Avenue from the Route 15 exit at Mosholu Parkway to Yankee Stadium (see Map 2 in **Appendix B**). Grand Concourse in the Bronx is sufficiently distant from Northern Boulevard in Queens such that few Bronx drivers would experience enforcement and fewer still would conclude that a special belt use enforcement program was being conducted in their neighborhood.

Bronx seat belt use was observed during both the pre and post dates for Wave 1 (June 2007) and again during the pre and post dates for the final wave (April 2008).

Observation Procedures

Observations were conducted by two trained research assistants. One assistant drove the observed segment of Northern Boulevard starting at 106th Street and stopping at designated site locations along the corridor to 59th Street. The other research assistant who was seated in the vehicle (or, when safe and possible, standing at roadside for better observation view) conducted observations during each of the stops. The data collection form that was used to collect observation information is attached as **Appendix C**. One “full pass” was made on the designated section of Northern Blvd (blue line on Map 1 in **Appendix B**). Both directions of traffic were observed. Vehicle type, race, sex, and belt use were recorded for the *driver only* for each observed vehicle. These methods were used on both program and comparison roadways.

Observation Schedule

Wave 1 pre seat belt observations on Northern Boulevard in Queens and the surrounding precinct communities took place on Wednesday, June 20, and Saturday, June 23. Pre observations on Grand Concourse in the Bronx and the surrounding control community took place on Thursday, June 21, and Sunday, June 24. Post seat belt observations in Queens were conducted on Wednesday, July 25, and Saturday, July 28; post seat belt observations in the Bronx took place on Thursday, July 26 and Sunday, July 29.

Wave 2 post-only observations took place on Wednesday, October 24 and Saturday, October 28. Only Northern Boulevard was observed during this wave.

Wave 3 post-only observations took place on Wednesday, January 23, and Saturday, January 26. Only Northern Boulevard was observed during this wave.

Wave 4 Pre seat belt observations on Northern Boulevard in Queens and the surrounding precinct communities took place on Saturday, March 15, and Wednesday, March 19. Pre observations on Grand Concourse in the Bronx and the surrounding control community took place on Sunday, March 16, and Thursday, March 20. Post seat belt observations in Queens were conducted on Wednesday, April 9, and Saturday, April 12. Post seat belt observations in the Bronx took place on Thursday, April 10, and Sunday, April 13.

IV. RESULTS

A. Public Awareness Measurement (DMV Surveys)

Over the course of the campaign, a total of 8,185 DMV surveys were collected; 3,347 in both offices during the two pre-wave periods and 4,838 in both offices for all four post-wave periods. See Table 3 for a detailed breakdown by office location. Please note: The Bronx office has a much lower volume of people and licensed drivers than College Point in Queens, as apparent in the survey return rates shown below.

Table 3. Survey Respondent Totals, Queens and Bronx DMV Offices

| College Point (Queens) DMV | | | | | | Bronx DMV | | | |
|----------------------------|-----------------|----------------|----------------|--------------|---------------|-------------|--------------|--------------|---------------|
| June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March PRE | April POST | June PRE | July POST | March PRE | April POST |
| 1,023 | 1,000 | 979 | 901 | 970 | 996 | 637 | 461 | 717 | 501 |

Respondent demographics remained consistent throughout the duration of the program, except for Wave 2 in Queens, where there was a lower proportion of respondents under 21 (see Table 4 for details). Survey demographic questions were phrased in a way to reflect the U.S. Census polling (age categories, race/ethnic breakdown, etc.) Across all waves and office locations, there were more male than female survey respondents, and most fell into the 26-to-39 age group. Many of the College Point respondents self-reported as falling into the “Other” race category, followed by “White,” then “Asian.” In the Bronx, even more answered “Other” followed by “Black” then “White.” There were a large number of respondents that reported a Hispanic ethnicity in both offices.

Appendix A summarizes general respondent characteristics from the four waves of DMV surveys conducted in Queens and the two waves conducted in the Bronx for this demonstration program (June/July, October, January and March/April). All statistical significance testing was done with chi-square analysis at the $p < 0.01$ level. Comparisons were computed for Wave 1 (pre versus post), and the pre-test for Wave 1 was also used as the baseline comparison for Waves 2 and 3. Thus, chi-square analyses were also computed comparing Wave 1 pre to Wave 2, and comparing Wave 1 pre to Wave 3. Finally, Wave 4 pre and post were also compared.

There were no significant changes in Queens when examining survey results from questions relating to the seat belt wearing habits and perceived enforcement efforts of the law (specifically Questions 9 and 10). See Appendix A for a detailed breakdown of results; percentages remained stable across all waves.

There were increases in the Queens media awareness from pre-Wave to post-Wave 1 for a select group of survey questions (see Table 6). Specifically, if respondents answered “Yes” to “*Have you recently read, seen or heard anything about seat belts in New York?*” they were then asked to select one or more of the following media sources: newspaper, radio, bus shelter, TV, poster, billboard, police checkpoint or other. In Queens, increases were shown all across all four Waves for **billboards, posters and police checkpoints**. We believe that respondents may have referred to “posters” instead of “bus shelters” as the latter had particularly low response rates. Since Waves 2 and 3 only had post measures, chi-square analyses were conducted using Pre Wave1 as a baseline. The media awareness data for **billboards** is shown in Figure 1 and revealed significant increases between pre-Wave 1 and post-Wave 3 ($p < .01$). There were no significant changes in responses to **posters**, yet the data show an increase over time (see Figure 2). **Police checkpoints** did show significant changes (Pre -Wave 1 vs. post-Wave 2, $p < .0001$; and pre-Wave 1 vs. post-Wave 3, $p < .01$) which can be seen in Figure 3.

Figure 1. Queens Media Recognition, Billboard

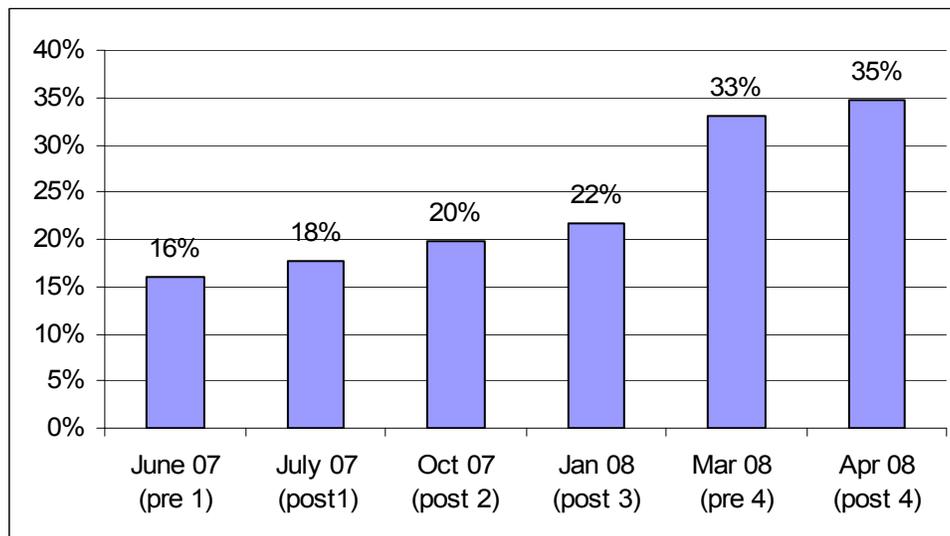


Figure 2. Queens Media Recognition, Poster

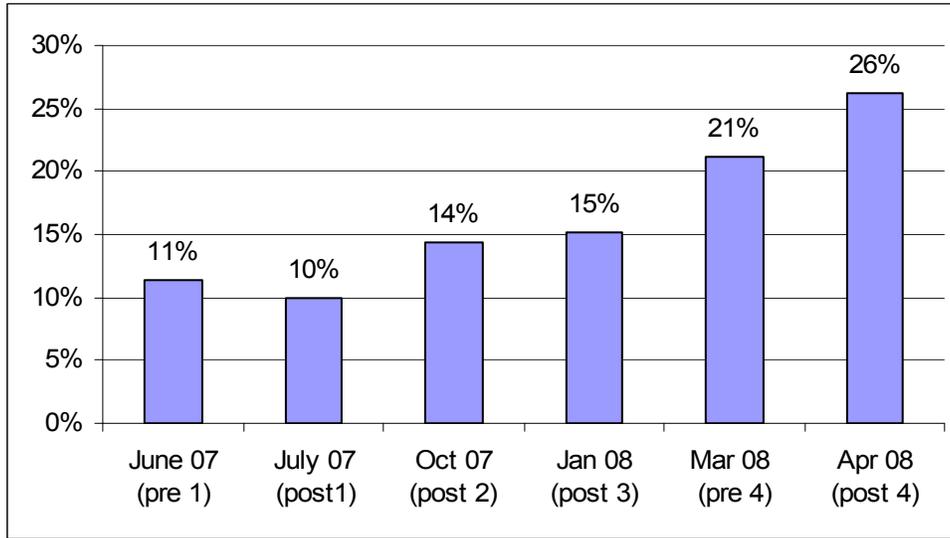
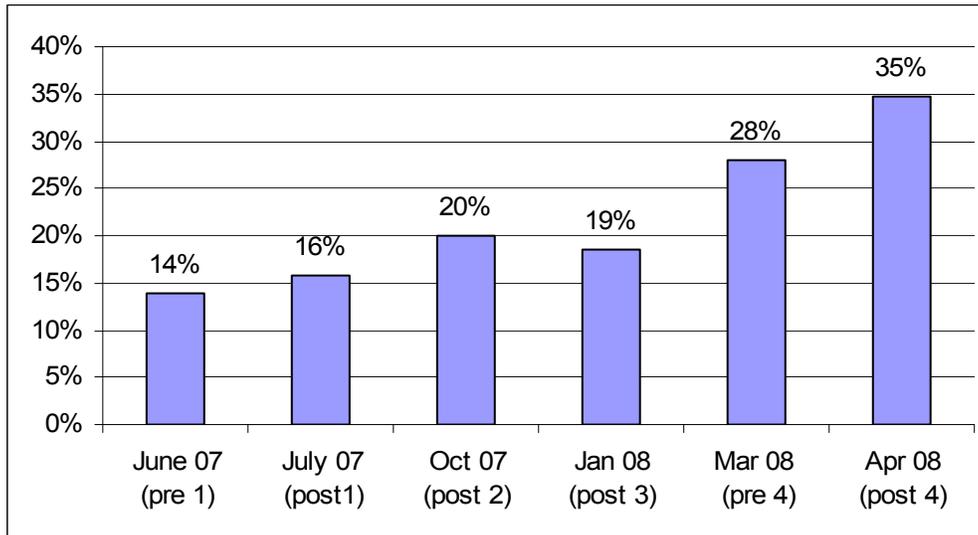


Figure 3. Queens Media Recognition, Police Checkpoint



The responses obtained from the Bronx DMV did not show this pattern. The responses across two waves for **billboards** showed an early rise only to drop in the post-Wave 4 (pre-Wave 1 = 23.7%, post-Wave 1 = 24.9%, pre-Wave 4 = 29.2%, post-Wave 4 = 25.4%), as was the case with **police checkpoints** (pre-Wave 1 = 20.0%, post-Wave 1 = 22.4%, pre-Wave 4 = 25.6%, post-Wave 4 = 24.0%). Responses to **posters** showed an erratic up and down pattern (pre-Wave 1 = 20.1%, post-Wave 1 = 16.1%, pre-Wave 4 = 23.0%, Post W4 = 17.1%). Overall there were no significant changes in media awareness in the Bronx.

After answering “Yes” to seeing or hearing anything about seat belts and selecting where they saw or heard the message, respondents were then asked to provide information on what kind of message they saw or heard (an open ended question: “*What did it say?*”) Responses for this question were coded into message categories such as enforcement, safety, instructional, or in some cases, specific slogans.

There were statistically significant changes in Queens between the four Waves in relation to the recollection of actual seat belt related messages and/or slogans. When analyzing the general enforcement message category (i.e. “buckle up or the police will stop you” or “wear your seat belt or you’ll pay a fine”), there was an increase in Wave 1 from Pre to Post (15.9% to 27.7%, $p < .0001$), whereas there was a decrease from Pre Wave 1 to Wave 3 (15.9% to 8.5%, $p < .01$). Pre to Post Wave 4 showed a strong increase as well (13.8% to 34.6%, $p < .0001$). The only significant change in the Bronx was a large decrease in Wave 4 from 48.5% Pre to 14.6% Post ($p < .0001$).

The general instructional message category also showed a significant decrease from Pre to Post in Wave 1 (34.5% to 15.5%, $p < .0001$). No other message category or specific campaign slogan was recalled at a significantly higher level during any Wave. Please note, the June/July DMV surveys (and belt use observations) were conducted *directly after* the national CIOT campaign; as such, some initial effects may be an overflow from that. In Queens, there was a significant decrease in Wave 4 (33.8% Pre to 21.8% Post, $p < .01$), whereas the Bronx showed a large increase (4.1% pre-Wave to 46.8% post-Wave, $p < .0001$).

Table 4. Survey Question 16, Media Recognition

| SURVEY QUESTION | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|--|-----------------------------------|--------------------|---------------------|--------------------|--------------------|--------------------|------------------|-----------------|-----------------|--------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Q16. Have you recently read, seen or heard anything about seat belts in New York? | <i>N=1,024</i> | <i>N=1,000</i> | <i>N=979</i> | <i>N=901</i> | <i>N=970</i> | <i>N=960</i> | <i>N=636</i> | <i>N=461</i> | <i>N=694</i> | <i>N=500</i> |
| YES (“HearYes = 1”) | 61.6% | 59.9% | 58.6% | 60.9% | 53.9% | 53.9% | 64.5% | 57.7% | 55.6% | 57.2% |
| <i>If yes, where did you see or hear about it?</i> | | | | | | | | | | |
| Newspaper | 15.5% | 13.6% | 12.7% | 12.5% | 19.9% | 19.1% | 22.6% | 21.3% | 27.7% | 23.0% |
| Radio | 22.9% | 19.6% | 17.0% ^{\$} | 16.3% [^] | 25.7% | 28.3% | 34.9% | 34.3% | 31.5% | 25.6% |
| Bus Shelter | 4.8% | 3.9% | 4.4% | 4.9% | 6.3% | 8.8% | 6.1% | 5.6% | 8.5% | 8.4% |
| TV | 26.0% | 21.3% | 21.5% | 20.9% [^] | 34.5% | 31.1% | 56.0% | 49.6% | 44.0% | 50.5% |
| Poster | 11.3% | 9.9% | 14.3% | 15.2% | 21.2% | 26.2% | 20.1% | 16.1% | 23.0% | 17.1% |
| Billboard | 16.1% | 17.6% | 19.8% | 21.6% [^] | 33.1% | 34.8% | 23.7% | 24.9% | 29.2% | 25.4% |
| Police checkpoint | 13.9% | 15.8% | 20.0% ^{\$} | 18.6% [^] | 28.0% | 34.7% | 20.0% | 22.4% | 25.6% | 24.0% |
| <i>If yes, what did it say?</i> | | | | | | | | | | |
| General Enforcement Message | 15.9% | 27.7% [*] | 8.5% ^{\$} | 19.0% | 13.8% | 34.6% [#] | 8.8% | 12.8% | 48.5% | 14.6% [#] |
| General Safety Message | 10.3% | 10.8% | 10.2% | 10.4% | 13.8% | 15.7% | 10.2% | 10.5% | 20.7% | 14.0% |
| General Instructional Message | 34.5% | 15.5% [*] | 38.7% | 36.4% | 33.8% [*] | 21.8% [*] | 19.0% | 22.9% | 4.1% | 46.8% [#] |
| Click It or Ticket | 35.4% | 42.7% | 41.8% | 31.8% | 34.6% | 26.6% | 22.9% | 18.8% | 22.0% | 22.2% |

* Wave1 Pre to Wave 1 Post showed a change statistically significant at p<.01 level

\$ Wave 1 Pre to Wave 2 Post showed a change statistically significant at p<.01 level

^ Wave 1 Pre to Wave 3 Post showed a change statistically significant at p<.01 level

Wave 4Pre to Wave 4 Post showed a change statistically significant at p<.01 level

B. Seat Belt Observations

Results from roadside seat belt observations in Queens are shown in Figures 4 and 5. Information is included for key categories (overall, race, sex, main roadway vs. side roads and day vs. night). Chi-square analyses were conducted with significance set at $p \leq .01$. Any statistically significant changes are marked on the Figures with an asterisk (*). Analyses were conducted for Wave 1 Pre vs. Post, Wave 1 Pre vs. Wave 2 Post, Wave 1 Pre vs. Wave 3 Post, and Wave 4 Pre vs. Post.

Observed seat belt use exhibited significant increases. Keep in mind, the first wave of the campaign took place directly after a large-scale national CIOT mobilization, so belt use started off higher than would be expected to be “normal” for both Queens and the Bronx. Over the course of the year-long program, belt use remained high and even increased in some instances. Past studies have shown how difficult it is for any location (city, state, region) to sustain the effects of CIOT throughout the year. Note that Bronx belt use shows steady declines between Waves which is the expected result given no special belt use programs. Overall belt use rates for Queens and the Bronx can be seen in Figures 4 and 5, respectively.

Figure 4. Queens – Overall Belt Use by Wave

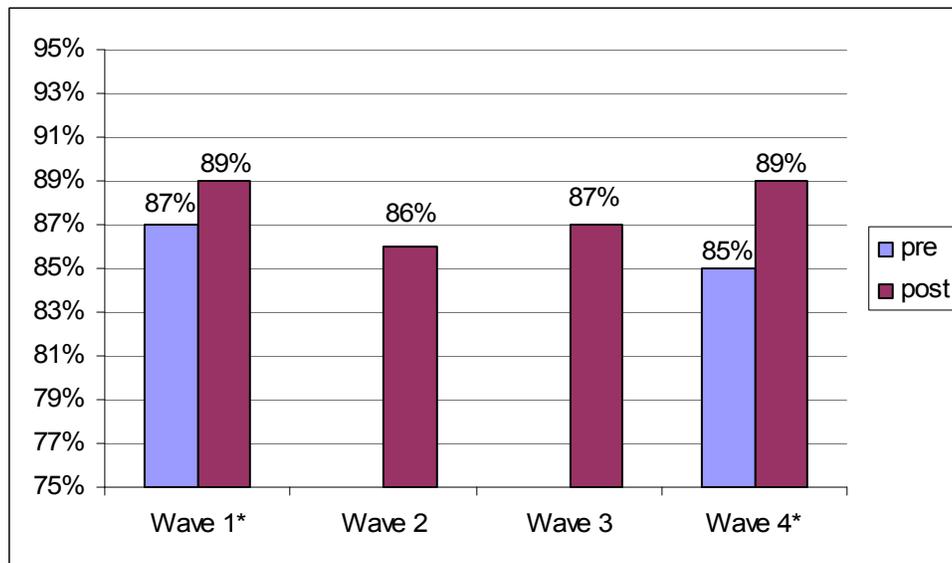
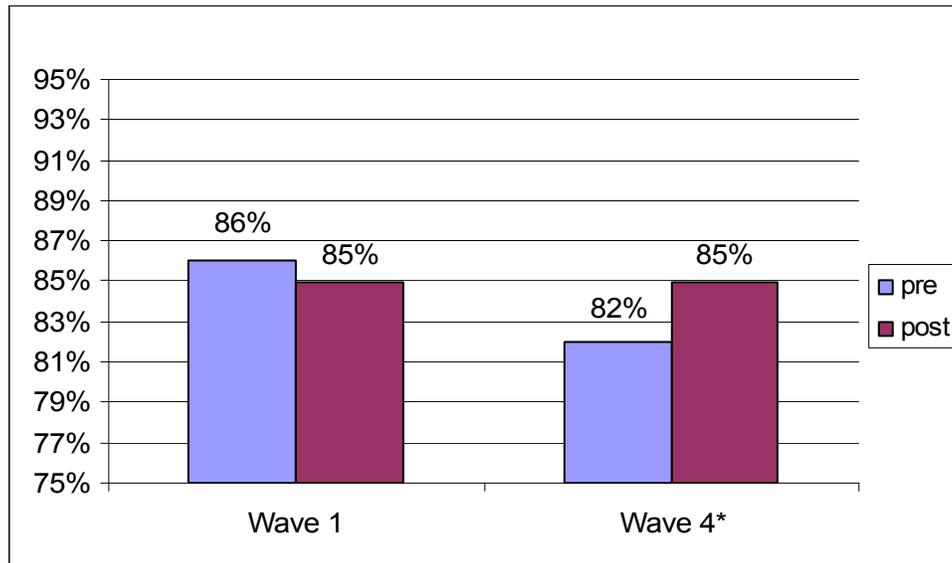


Figure 5. Bronx – Overall Belt Use by Wave



Significant changes in Queens seat belt use from Pre to Post 1 were noted in the following categories: Overall (87.3% to 89.0%), Whites (86.4% to 88.7%), Males (86.1% to 88.1%), and Northern Boulevard as opposed to local/side roads in Queens (88.6% to 90.7%). There were no significant changes in the Bronx over the same period (See Tables 7 and 8 for details) .

Table 5. Queens, Wave 1 – Belt Use Rate by Category

| | Wave 1 | | |
|----------------------------|--------|--------|--------------|
| | Pre | Post | significance |
| QUEENS OVERALL | 87.3% | 89.0%* | p<.01 |
| Race | | | |
| White | 86.4% | 88.7%* | p<.01 |
| Black | 86.4% | 86.5% | -- |
| Asian | 93.1% | 93.1% | -- |
| Gender | | | |
| Male | 86.1% | 88.1%* | p<.01 |
| Female | 91.8% | 92.6% | -- |
| Road | | | |
| Main Corridor (N. Blvd) | 88.6% | 90.7%* | p<.01 |
| Side/Local Road | 85.4% | 86.6% | -- |
| Time of Day | | | |
| Daytime (8 a.m.-to 1 p.m.) | 88.0% | 89.2% | -- |
| Evening (4 p.m. to 9 p.m.) | 86.7% | 88.8% | -- |
| N Overall | N=5071 | N=5249 | |

* indicates statistically significant results

Table 6. Bronx, Wave 1 – Belt Use Rate by Category

| | Wave 1 | | |
|----------------------------|---------------|---------------|--------------|
| | Pre | Post | significance |
| BRONX OVERALL | 86.2% | 85.2 | -- |
| Race | | | |
| White | 86.7% | 86.6% | -- |
| Black | 84.4% | 82.9% | -- |
| Asian | 95.5% | 91.5% | -- |
| Gender | | | |
| Male | 84.4% | 83.5% | -- |
| Female | 93.5% | 92.1% | -- |
| Road | | | |
| Main Corridor (N. Blvd) | 86.5% | 85.3% | -- |
| Side/Local Road | 85.6% | 85.0% | -- |
| Time of Day | | | |
| Daytime (8 a.m.-to 1 p.m.) | 86.4% | 84.5% | -- |
| Evening (4 p.m. to 9 p.m.) | 86.0% | 85.8% | -- |
| <i>N Overall</i> | <i>N=3777</i> | <i>N=3721</i> | |

Significant changes in Queens’ seat belt use were also noted overall in Wave 4, Pre to Post (85.1% to 88.7%), in Whites (85.0% to 88.1%), Blacks (81.5% to 88.3%), Males (84.3% to 87.8%), Females (87.9% to 92.0%), on Northern Boulevard (85.8% to 89.0%) and on local/side roads (84.1% to 88.4% - see Table 9 for details). The last wave of enforcement was thus very successful in Queens. Belt Use in the Bronx also showed some significant improvement, albeit not to the extent of what was seen in Queens (see Table 10).

Table 7. Queens, Wave 4 – Belt Use Rate by Category

| | Wave 4 | | |
|----------------------------|---------------|---------------|--------------|
| | Pre | Post | significance |
| QUEENS OVERALL | 85.1% | 88.7 | p<.01 |
| Race | | | |
| White | 85.0% | 88.1% | p<.01 |
| Black | 81.5% | 88.3% | p<.01 |
| Asian | 88.3% | 91.7% | -- |
| Gender | | | |
| Male | 84.3% | 87.8% | p<.01 |
| Female | 87.9% | 92.0% | p<.01 |
| Road | | | |
| Main Corridor (N. Blvd) | 85.8% | 89.0% | p<.01 |
| Side/Local Road | 84.1% | 88.4% | p<.01 |
| Time of Day | | | |
| Daytime (8 a.m.-to 1 p.m.) | 85.7% | 88.9% | p<.01 |
| Evening (4 p.m. to 9 p.m.) | 84.5% | 88.5% | p<.01 |
| <i>N Overall</i> | <i>N=5177</i> | <i>N=5565</i> | |

Table 8. Bronx, Wave 4 – Belt Use Rate by Category

| | Wave 4 | | |
|----------------------------|----------------|---------------|--------------|
| | Pre | Post | significance |
| BRONX OVERALL | 81.5% | 84.6 | p<.01 |
| Race | | | |
| White | 81.4% | 85.7% | p<.01 |
| Black | 80.7% | 82.8% | -- |
| Asian | 90.4% | 93.0% | -- |
| Gender | | | |
| Male | 79.7% | 82.9% | p<.01 |
| Female | 88.4% | 92.0% | -- |
| Road | | | |
| Main Corridor (N. Blvd) | 81.4% | 84.3% | p<.01 |
| Side/Local Road | 81.7% | 85.4% | p<.01 |
| Time of Day | | | |
| Daytime (8 a.m.-to 1 p.m.) | 80.7% | 84.8% | p<.01 |
| Evening (4 p.m. to 9 p.m.) | 82.2% | 84.5% | p<.01 |
| <i>N Overall</i> | <i>N= 3918</i> | <i>N=4225</i> | |

Observations were conducted throughout the day and evening hours; while there were no apparent changes in belt use during the day, belt use from Wave 1 Pre to Post at night (4 p.m. to 9 p.m.) approached significance (86.7% to 88.8%, $p = .017$). In Wave 4, there were significant changes in Queens in both daytime (85.7% to 88.9%) and evening hours (84.5% to 88.5% - see Figure 6). In the Bronx, no differences were found in Wave 1, and in Wave 4 only daytime belt use showed a significant change (80.7% to 84.8%, see Figure 7). Seat belt observations were conducted on Wednesday and Saturday in Queens; and Thursday and Sunday in the Bronx. When examining day of week results, belt use rates increased slightly on both days in Queens, but these changes were not large enough to be considered significant.

Figure 6. Queens – Belt Use Rate by Time of Day, Waves 1 and 4

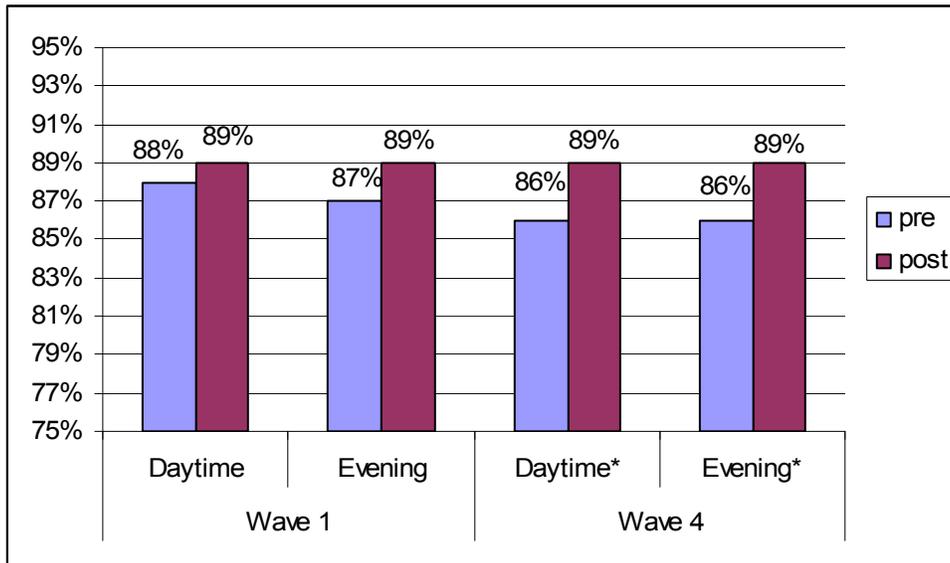
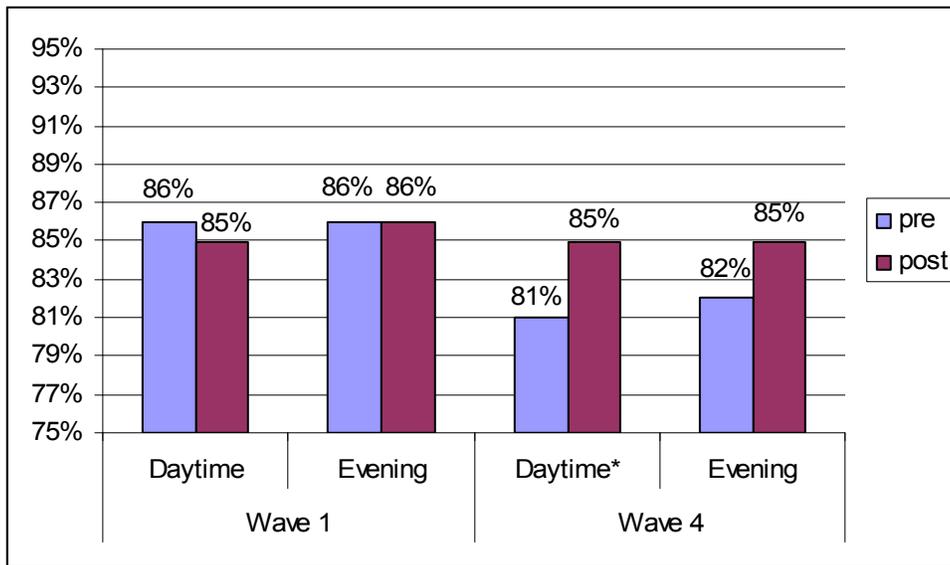


Figure 7. Bronx – Belt Use Rate by Time of Day, Waves 1 and 4



Seat belt use rates in Queens showed some significant differences across waves 1 and 4 at the Northern Boulevard sites (Figure 8). The observations carried out on side/local streets only showed a significant change across wave 4 (Figure 9).

The data collected along Northern Boulevard showed a starting belt use rate of 88.6% in June of 2007. Observed belt use rose to 90.7% in July 2007. This change was significant. It should be noted that this first wave of observations took place at the tail end of the national CIOT campaign and that this could have inflated the observed belt use rate during this period.

Figure 8. Queens – Belt Use Rate by Wave, Main Corridor

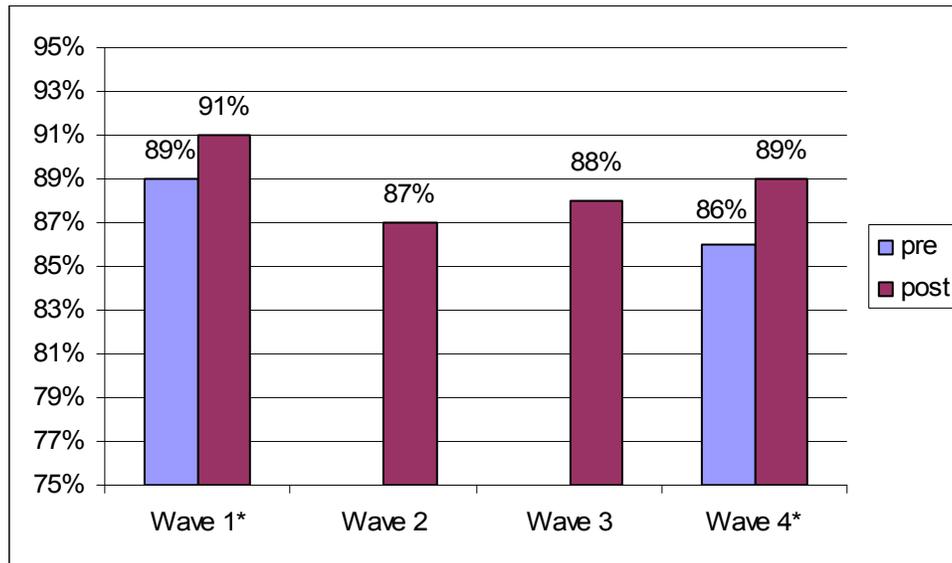
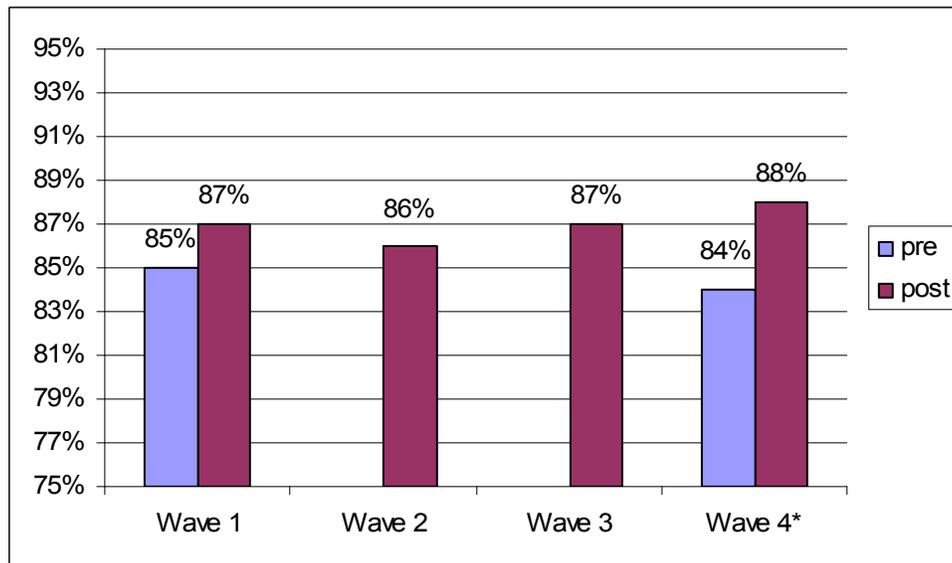


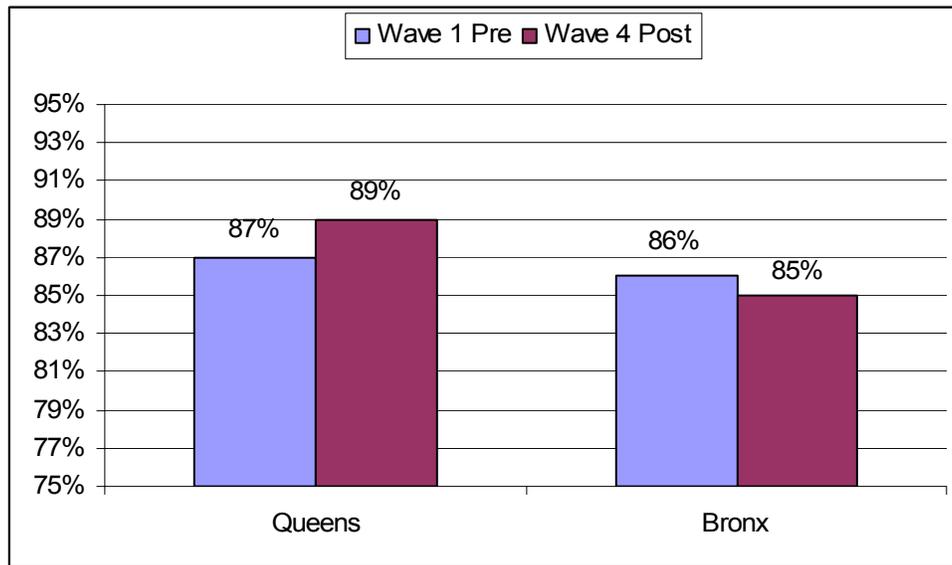
Figure 9. Queens – Belt Use Rate by Wave, Side/Local Roads



After the second wave of enforcement (October 2007), the belt use rate was 86.5%, representing a significant decrease from the 90.7% observed in July 2007. However, since no observations were conducted immediately preceding the October activities, it is not clear whether this represents a return to the pre-CIOT rates. A similar case can be made for the January 2008 data, which showed an 87.7% belt use, a significant drop from July 2007. Again, since no data were collected prior to the January activity, it is not clear what this rate actually represents. For instance, it is quite possible that belt use rate had dropped between the July and October observations and that the 86.5% observed in post-Wave 2 actually represented an increase from

baseline (i.e. uninfluenced by the CIOT national campaign). The March 2008 observations show an 85.8% belt use, the lowest rate observed during this program, and probably the only measure uninfluenced by enforcement programs. The change from March to April 2008 (85.8% to 89.0%) was highly significant. In short, the two most direct measures of changes pre to post (Wave 1 and Wave 4) showed significant improvement, suggesting that the heightened enforcement was a success. The most noteworthy finding here is that in addition to the increase in belt use levels among categories/Waves, Click It or Ticket levels (e.g. higher than normal) were sustained in Queens throughout the program. As can be seen in Figures 4 and 5 above, Bronx belt use dropped as expected after Wave 1 Pre, while Queens remained steady and even increased in several instances. Comparisons between the first Pre in Queens with last Post were significant (87.3 to 88.7; using $p < .05$). Results of a logistic regression showed a significant interaction between Borough and Wave, suggesting that the change from Pre Wave 1 to Post Wave 4 was, as expected, significantly greater in Queens than in the Bronx ($p < .01$, See Figure 10).

Figure 10. Pre Wave 1 to Post Wave 4, by Borough



C. Enforcement Activity

The information listed in the following tables is a combination of reports provided by TrafficStat and Manhattan’s Traffic Control Division. Enforcement activity took place on Northern Boulevard (checkpoints) and within surrounding precinct communities (roving patrols). TCD utilized overtime hours and the individual precincts contributed to the campaign during regular tour hours. Precincts 108, 114 and 115 added to the enforcement efforts conducted by TCD. In summary, TCD issued **6,784** summonses over the course of the campaign. This total includes adult belt, child belt and other violations. During Waves 1 through 4, TCD gave out the following total summonses (respectively): 1,665; 2,190; 1,283; and 1,646. The three precincts surrounding the program area of Northern Boulevard contributed an additional **1,611** total summonses to the effort. Tables 9 – 12 provide a detailed breakdown of summonses issued by both TCD and the individual precincts. Additional tables containing TCD summons/warning information for Click It or Ticket mobilization periods (2006 – 2008) are attached as **Appendix D** and were provided by TrafficStat.

Table 9. Reported Enforcement Activity Conducted During Wave 1 (July 2007)

| URBAN TRANSPORTATION SAFETY PROJECT | | | | | | | | | | | |
|--|--|-------------|--|------------|-----------------|------------|----------------------------|------------|-----------------|-------------|--|
| "CLICK IT OR TICKET" | | | | | | | | | | | |
| Wave 1 Enforcement Period: July 20 - 24, 2007 | | | | | | | | | | | |
| Where/When Summonses Were Issued | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | ARRESTS | | OTHER SUMMONSES | | TOTALS | | |
| | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD | |
| 108 | 75 | 246 | 8 | 32 | 0 | 0 | 8 | 41 | 91 | 319 | |
| 114 | 138 | 503 | 18 | 56 | 0 | 2 | 26 | 103 | 182 | 662 | |
| 115 | 264 | 481 | 32 | 54 | 3 | 0 | 116 | 149 | 412 | 684 | |
| Totals | 477 | 1230 | 58 | 142 | 3 | 2 | 150 | 293 | 685 | 1665 | |
| Weekend | ** | 458 | | 91 | | | | 91 | | 640 | |
| Weekday | | 772 | | 51 | | | | 202 | | 1025 | |
| Totals | | 1230 | | 142 | | | | 293 | | 1665 | |
| AM | | 560 | | 42 | | | | 166 | | 768 | |
| PM | | 670 | | 100 | | | | 127 | | 897 | |
| Totals | | 1230 | | 142 | | | | 293 | | 1665 | |
| Checkpoints* | | | | | | | | | | 168 | |
| Roving Patrols | | | | | | | | | | 1497 | |
| Totals | | | | | | | | | | 1665 | |

* 25 Checkpoints were conducted, 694 total vehicles were stopped

** Shading indicates unavailable, not conducted or not provided information

Table 10 shows summons and arrest totals collected during Wave 2 of the campaign (October 2007). There were 2,570 total summonses issued by both TCD and the three surrounding precincts during Wave 2. There were **2,190** total summonses issued by TCD during this Wave (either on Northern Blvd. or in the surrounding community precinct areas), including 1,792 adult seat belt tickets, 195 child restraint violations, and 203 other summonses. Precincts 108, 114 and 115 contributed to TCD's program efforts and distributed an extra 380 summonses during regular working hours (110 adult belt violations, 56 child restraint, and 214 other). These precincts made 8 arrests during Wave 2 of this campaign.

Table 10. Reported Enforcement Activity Conducted During Wave 2 (October 2007)

| URBAN TRANSPORTATION SAFETY PROJECT | | | | | | | | | | |
|---|--|-------------|--|------------|-----------------|------------|----------------------------|------------|-----------------|---------------|
| "CLICK IT OR TICKET" | | | | | | | | | | |
| Wave 2 Enforcement Period: October 19 - 23, 2007 | | | | | | | | | | |
| Where/When Summonses Were Issued | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | ARRESTS | | OTHER SUMMONSES | | TOTALS | |
| | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD*** |
| 108 | 20 | 584 | 0 | 80 | 0 | 0 | 21 | 36 | 41 | 700 |
| 114 | 5 | 804 | 1 | 37 | 1 | 0 | 56 | 96 | 62 | 937 |
| 115 | 85 | 404 | 55 | 78 | 7 | 0 | 137 | 71 | 277 | 553 |
| Totals | 110 | 1792 | 56 | 195 | 8 | 0 | 214 | 203 | 380 | 2190 |
| Weekend | ** | 698 | | 161 | | | | 75 | | 934 |
| Weekday | | 1094 | | 34 | | | | 128 | | 1256 |
| Totals | | 1792 | | 195 | | | | 203 | | 2190 |
| AM | | 928 | | 33 | | | | 102 | | 1063 |
| PM | | 864 | | 162 | | | | 101 | | 1127 |
| Totals | | 1792 | | 195 | | | | 203 | | 2190 |
| Checkpoints* | | 190 | | 12 | | | | 59 | | 261 |
| Roving Patrols | | 1602 | | 183 | | | | 144 | | 1929 |
| Totals | | 1792 | | 195 | | | | 203 | | 2190 |

*40 checkpoints were conducted, 1650 total stopped vehicles

** Shading indicates unavailable, not conducted or not provided information

***125 OT Tours used

Table 11 shows summons and arrest totals collected during Wave 3 of the campaign (January 2008). There were 1,512 total summonses issued by both TCD and the three surrounding precincts during Wave 3. There were **1,283** total summonses issued by TCD during this Wave (either on Northern Blvd. or in the surrounding community precinct areas), including 1,054 adult seat belt tickets, 125 child restraint violations, and 104 other summonses. One arrest was made by TCD during the Wave 2 enforcement period. Precincts 108, 114 and 115 continued their contributions to TCD's program efforts by distributing an extra 229 summonses during regular working hours (96 adult belt violations, 19 child restraint, and 114 other). These precincts also made 10 arrests during the January Wave.

Table 11. Reported Enforcement Activity Conducted During Wave 3 (January 2008)

| URBAN TRANSPORTATION SAFETY PROJECT | | | | | | | | | | |
|---|--|-------------|--|------------|-----------------|------------|----------------------------|------------|-----------------|---------------|
| "CLICK IT OR TICKET" | | | | | | | | | | |
| Wave 3 Enforcement Period: January 18 - 22, 2008 | | | | | | | | | | |
| Where/When Summonses Were Issued | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | ARRESTS | | OTHER SUMMONSES | | TOTALS | |
| | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD*** |
| 108 | 19 | 249 | 7 | 26 | 0 | 0 | 0 | 26 | 26 | 301 |
| 114 | 45 | 387 | 3 | 54 | 0 | 1 | 0 | 22 | 48 | 463 |
| 115 | 32 | 418 | 9 | 45 | 10 | 0 | 114 | 56 | 155 | 519 |
| Totals | 96 | 1054 | 19 | 125 | 10 | 1 | 114 | 104 | 229 | 1283 |
| Weekend | ** | 423 | | 69 | | | | 67 | | 559 |
| Weekday | | 631 | | 56 | | | | 37 | | 724 |
| Totals | | 1054 | | 125 | | | | 104 | | 1283 |
| AM | | 536 | | 21 | | | | 53 | | 610 |
| PM | | 518 | | 104 | | | | 51 | | 673 |
| Totals | | 1054 | | 125 | | | | 104 | | 1283 |
| Checkpoints | | 106 | | 14 | | | | 24 | | 144 |
| Roving Patrols | | 948 | | 111 | | | | 80 | | 1139 |
| Totals | | 1054 | | 125 | | | | 104 | | 1283 |

*40 checkpoints were conducted, 1195 total stopped vehicles

** Shading indicates unavailable, not conducted or not provided information

***190 OT Tours used

Table 12 shows summons and arrest totals collected during Wave 4 of the campaign (April 2008). There were 1,963 total summonses issued by both TCD and the three surrounding precincts during the final Wave. There were **1,646** total summonses issued by TCD during this Wave (either on Northern Blvd. or in the surrounding community precinct areas), including 1,376 adult seat belt tickets, 214 child restraint violations, and 56 other summonses. Zero arrests were made by TCD during the Wave 4 enforcement period. Precincts 108, 114 and 115 continued their contributions to TCD's program efforts by distributing an extra 317 summonses during regular working hours (149 adult belt violations, 30 child restraint, and 141 other). These three precincts made 13 arrests during the April Wave.

Table 12. Reported Enforcement Activity Conducted During Wave 4 (April 2008)

| URBAN TRANSPORTATION SAFETY PROJECT | | | | | | | | | | |
|---|--|-------------|--|------------|--------------------------|------------|----------------------------|------------|-----------------|---------------|
| "CLICK IT OR TICKET" | | | | | | | | | | |
| Wave 4 Enforcement Period: April 4 - 8, 2008 | | | | | | | | | | |
| Where/When Summonses Were Issued | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | OTHER ARRESTS | | OTHER SUMMONSES | | TOTALS | |
| | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD | Precinct | TCD*** |
| 108 | 70 | 330 | 2 | 25 | 1 | 0 | 5 | 6 | 77 | 361 |
| 114 | 31 | 437 | 2 | 55 | 0 | 0 | 0 | 28 | 30 | 520 |
| 115 | 48 | 609 | 26 | 134 | 12 | 0 | 136 | 22 | 210 | 765 |
| Totals | 149 | 1376 | 30 | 214 | 13 | 0 | 141 | 56 | 317 | 1646 |
| Weekend | ** | 515 | | 168 | | | | 19 | | 702 |
| Weekday | | 861 | | 46 | | | | 37 | | 944 |
| Totals | | 1376 | | 214 | | | | 56 | | 1646 |
| AM | | 673 | | 44 | | | | 17 | | 734 |
| PM | | 703 | | 170 | | | | 39 | | 912 |
| Totals | | 1376 | | 214 | | | | 56 | | 1646 |
| Checkpoints | | 127 | | 17 | | | | 6 | | 150 |
| Roving Patrols | | 1249 | | 197 | | | | 50 | | 1496 |
| Totals | | 1376 | | 214 | | | | 56 | | 1646 |

*40 checkpoints were conducted, 1044 total stopped vehicles

** Shading indicates unavailable, not conducted or not provided information

***200 OT Tours used

V. DISCUSSION

The NYPD program was unique in that it accomplished high-visibility enforcement in an urban area without using costly broadcast media. Residents recalled the billboards and roadside posters, recalled the police presence, and, subsequently, increased their belt use. A large number of tickets were written. Belt use was generally high (well above the national average) prior to the program and then increased significantly beyond these levels. The program clearly demonstrates that an urban police agency, with strong leadership and available police resources, can increase belt use along a known high-risk corridor without the need to purchase prohibitively expensive citywide media.

The enforcement resources utilized during this program were substantial. Nearly 6,800 summonses were issued over the course of the campaign; very intensive enforcement considering the small geographic area that was targeted. NYPD's TCD conducted numerous checkpoints (160+) and provided extensive manpower to conduct additional roving patrols.

There were increases in the Queens media awareness from Pre to Post 1 for a select group of survey questions. Specifically, if respondents answered "Yes" to "*Have you recently read, seen or heard anything about seat belts in New York?*" they were then asked to select one or more of the following media sources: newspaper, radio, bus shelter, TV, poster, billboard, police checkpoint or other. In Queens, increases were shown all across all four Waves for billboards, posters and police checkpoints.

Observed seat belt use did exhibit some significant increases. Keep in mind, the first wave of the campaign took place directly after a national CIOT mobilization, so belt use started high. However, over the course of the year, belt used remained high and even increased in some instances in Queens while declining in the Bronx. It is difficult for any location to sustain the effects of CIOT throughout the year. Specifically, significant changes in Queens seat belt use from Pre to Post 1 were noted in the following categories: Overall (87.3% to 89.0%), Whites (86.4% to 88.7%), Males (86.1% to 88.1%), and Northern Boulevard as opposed to local/side roads in Queens (88.6% to 90.7%).

The final wave of enforcement was the most successful in Queens in terms of belt use. Significant changes in Queens' seat belt use in Wave 4, Pre to Post were noted in the following categories: Overall (85.1% to 88.7%), Whites (85.0% to 88.1%), Blacks (81.5% to 88.3%), Males (84.3% to 87.8%), Females (87.9% to 92.0%), on Northern Boulevard (85.8% to 89.0%) and on local/side roads (84.1% to 88.4%).

The NYPD program showed how law enforcement can successfully address belt use in one neighborhood. Historical evidence of a STEP has shown that it takes both paid and earned media (especially wide-reaching media like television and radio) *and* extensive heightened enforcement to create real awareness and cause behavior change in a specified region. Also, these STEPs typically include longer media and enforcement periods, which has shown to be effective in keeping the message visible for a longer period of time; thus increasing recollection of certain campaign-specific messages and visibility of law enforcement on a given roadway. We would consider the NYPD program to be very useful as a guide or strategy for future small scale enforcement programs in similarly diversified city locales. This program serves to be somewhat of a modification to the larger, proven-effective CIOT model. It seems to be

successful when used in the right location under the right circumstances, but should not be considered as a broad “how to” template for any statewide or regionwide program for which the full use of broadcast media is appropriate.

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APPENDIX A:

DMV Survey Respondent Demographics and Driving Habits

DMV Survey Respondent Demographics and Driving Habits, Queens and Bronx

| RESPONDENT DEMOGRAPHIC/ DRIVING CHARACTERISTIC | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|---|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Gender | <i>N=1,015</i> | <i>N=993</i> | <i>N=970</i> | <i>N=887</i> | <i>N=956</i> | <i>N=988</i> | <i>N=622</i> | <i>N=457</i> | <i>N=713</i> | <i>N=491</i> |
| Male | 71.0% | 66.0% | 66.7% | 65.6% | 65.7% | 67.8% | 56.4% | 52.7% | 61.2% | 59.3% |
| Female | 29.0% | 34.0% | 33.3% | 34.4% | 34.3% | 32.2% | 43.6% | 47.3% | 38.8% | 40.7% |
| Age | <i>N=1,017</i> | <i>N=995</i> | <i>N=974</i> | <i>N=895</i> | <i>N=965</i> | <i>N=986</i> | <i>N=635</i> | <i>N=454</i> | <i>N=712</i> | <i>N=491%</i> |
| Under 21 | 12.2% | 9.2% | 6.2%^ | 11.9% | 9.1% | 7.7% | 12.4% | 13.4% | 9.0% | 12.0% |
| 21-25 | 17.9% | 17.1% | 16.6% | 16.5% | 17.0% | 19.2% | 16.2% | 13.9% | 16.9% | 18.7% |
| 26-39 | 35.0% | 37.8% | 39.0% | 34.0% | 36.7% | 36.6% | 35.1% | 36.1% | 39.2% | 37.5% |
| 40-49 | 20.2% | 20.5% | 21.4% | 19.5% | 20.3% | 22.3% | 23.0% | 23.3% | 22.5% | 22.2% |
| 50-59 | 9.1% | 11.2% | 11.7% | 13.3% | 11.4% | 9.6% | 10.2% | 9.7% | 8.7% | 6.5% |
| 60+ | 5.5% | 4.2% | 5.1% | 4.6% | 5.5% | 4.6% | 3.0% | 3.5% | 3.8% | 3.1% |
| Race | <i>N=977</i> | <i>N=961</i> | <i>N=932</i> | <i>N=863</i> | <i>N=901</i> | <i>N=952</i> | <i>N=581</i> | <i>N=428</i> | <i>N=664</i> | <i>N=464</i> |
| White | 40.6% | 43.2% | 39.8% | 41.4% | 37.3% | 37.4% | 16.4% | 16.6% | 13.6% | 14.7% |
| Black | 7.5% | 6.9% | 7.0% | 7.3% | 11.2% | 8.6% | 32.0% | 32.9% | 28.0% | 27.8% |
| Asian | 19.3% | 17.7% | 16.2% | 17.8% | 17.2% | 17.6% | 2.9% | 3.0% | 3.2% | 1.7% |
| Native American | 0.4% | 0.7% | 1.3% | 1.2% | 1.1% | 0.7% | 2.1% | 0.9% | 2.0% | 1.7% |
| Other | 32.1% | 31.2% | 35.7% | 32.2% | 33.2% | 35.6% | 46.6% | 46.5% | 53.3% | 54.1% |
| Hispanic | <i>N=980</i> | <i>N=974</i> | <i>N=954</i> | <i>N=871</i> | <i>N=915</i> | <i>N=948</i> | <i>N=605</i> | <i>N=442</i> | <i>N=694</i> | <i>N=481</i> |
| Yes | 35.1% | 36.9% | 40.7% | 35.9% | 37.9% | 38.9% | 57.7% | 55.0% | 59.4% | 60.1% |
| No | 64.9% | 63.0% | 59.3% | 64.1% | 62.1% | 61.1% | 42.3% | 45.0% | 40.6% | 39.9% |

^Wave1 Pre to Wave 2 Post showed a change statistically significant at p<.01 level

DMV Survey Respondent Demographics & Driving Habits, Queens and Bronx cont'd.

| RESPONDENT DEMOGRAPHIC/ DRIVING CHARACTERISTIC | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|--|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Miles Driven Last Year | <i>N=1,003</i> | <i>N=987</i> | <i>N=960</i> | <i>N=883</i> | <i>N=950</i> | <i>N=967</i> | <i>N=593</i> | <i>N=425</i> | <i>N=687</i> | <i>N=477</i> |
| Less than 5,000 | 25.9% | 23.4% | 21.7% | 26.8% | 22.2% | 21.3% | 36.4% | 34.8% | 29.5% | 37.9% |
| 5,000 to 10,000 | 30.8% | 29.4% | 29.7% | 30.0% | 29.2% | 32.3% | 28.3% | 25.4% | 34.2% | 29.8% |
| 10,001 to 15,000 | 20.0% | 23.1% | 24.5% | 21.9% | 27.7% | 25.7% | 17.4% | 22.6% | 17.8% | 14.3% |
| More than 15,000 | 23.2% | 24.1% | 24.2% | 21.3% | 20.9% | 20.7% | 17.9% | 17.2% | 18.5% | 18.0% |
| Vehicle Driven Most Often | <i>N=970</i> | <i>N=958</i> | <i>N=921</i> | <i>N=854</i> | <i>N=921</i> | <i>N=973</i> | <i>N=576</i> | <i>N=411</i> | <i>N=668</i> | <i>N=455</i> |
| Car | 62.5% | 62.3% | 61.7% | 60.5% | 62.0% | 56.8% | 58.2% | 50.9% | 57.2% | 56.7% |
| Pickup Truck | 2.8% | 3.3% | 4.0% | 2.3% | 3.3% | 5.0% | 3.0% | 6.6% | 2.2% | 1.5% |
| SUV | 16.7% | 17.2% | 16.5% | 19.0% | 17.5% | 18.7% | 14.4% | 15.6% | 17.2% | 16.0% |
| Mini-van | 8.4% | 9.9% | 8.6% | 10.2% | 10.2% | 10.6% | 14.6% | 15.3% | 11.1% | 13.8% |
| Full-van | 3.2% | 2.9% | 2.4% | 2.8% | 1.8% | 2.6% | 1.7% | 2.7% | 2.7% | 2.2% |
| Other | 6.4% | 4.3% | 6.8% | 5.2% | 5.2% | 6.3% | 8.2% | 9.0% | 9.6% | 9.7% |

Survey Questions 8 – 15, Queens and Bronx

| SURVEY QUESTION | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|--|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Q8. How often do you use a seat belt when you ride in a car, van, sport utility vehicle or pick up? | <i>N=1,013</i> | <i>N=993</i> | <i>N=968</i> | <i>N=891</i> | <i>N=960</i> | <i>N=982</i> | <i>N=620</i> | <i>N=452</i> | <i>N=706</i> | <i>N=494</i> |
| Always | 82.7% | 84.3% | 82.6% | 83.2% | 84.6% | 82.6% | 88.1% | 82.3% | 87.0% | 84.4% |
| Nearly Always | 9.3% | 9.5% | 9.3% | 10.1% | 9.4% | 9.1% | 6.9% | 11.1% | 7.2% | 9.9% |
| Sometimes | 4.6% | 3.9% | 5.4% | 5.2% | 4.0% | 5.2% | 3.2% | 4.6% | 4.5% | 4.5% |
| Seldom | 1.2% | 0.8% | 1.4% | 0.8% | 0.8% | 1.4% | 0.3% | 1.3% | 0.6% | 0.6% |
| Never | 2.2% | 1.5% | 1.2% | 0.8% | 1.3% | 1.7% | 1.5% | 0.7% | 0.7% | 0.6% |
| Q9. Do you think the Police enforce the seat belt law: | <i>N=1,014</i> | <i>N=987</i> | <i>N=959</i> | <i>N=887</i> | <i>N=947</i> | <i>N=974</i> | <i>N=612</i> | <i>N=449</i> | <i>N=703</i> | <i>N=494</i> |
| Very strictly | 41.6% | 41.1% | 44.2% | 44.5% | 45.9 | 46.8% | 42.3% | 40.1% | 45.8% | 41.9% |
| Somewhat strictly | 39.8% | 40.7% | 37.2% | 39.2% | 35.8 | 35.2% | 36.4% | 38.3% | 35.7% | 38.5% |
| Not very strictly | 13.1% | 12.8% | 13.2% | 11.3% | 13.0 | 12.0% | 15.2% | 13.6% | 12.4% | 13.8% |
| Rarely | 3.2% | 3.2% | 2.8% | 3.4% | 3.0 | 2.9% | 2.9% | 5.1% | 3.4% | 4.5% |
| Not at all | 2.3% | 2.1% | 2.5% | 1.6% | 2.3 | 3.1% | 3.1% | 2.9% | 2.7% | 1.4% |

Survey Questions 8 – 15, Queens and Bronx cont'd.

| SURVEY QUESTION | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|---|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Q10. What do you think the chances are of getting a ticket if you don't wear your seat belt? | <i>N=1,011</i> | <i>N=987</i> | <i>N=963</i> | <i>N=884</i> | <i>N=945</i> | <i>N=977</i> | <i>N=613</i> | <i>N=450</i> | <i>N=704</i> | <i>N=493</i> |
| Always | 29.3% | 29.9% | 32.9% | 31.3% | 28.9% | 30.8% | 35.7% | 32.9% | 38.4% | 34.3% |
| Nearly Always | 25.8% | 24.9% | 24.9% | 26.4% | 27.9% | 27.9% | 23.0% | 23.1% | 21.4% | 23.1% |
| Sometimes | 31.7% | 33.5% | 30.5% | 31.9% | 31.0% | 30.4% | 29.4% | 31.6% | 30.1% | 29.0% |
| Seldom | 8.5% | 7.7% | 7.3% | 6.6% | 7.8% | 5.9% | 6.4% | 6.2% | 5.8% | 7.9% |
| Never | 4.7% | 4.0% | 4.4% | 3.8% | 4.3% | 4.9% | 5.5% | 6.2% | 4.3% | 5.7% |
| Q11. Have you ever received a ticket for not wearing your seat belt? | <i>N=1,018</i> | <i>N=995</i> | <i>N=967</i> | <i>N=891</i> | <i>N=957</i> | <i>N=982</i> | <i>N=614</i> | <i>N=446</i> | <i>N=707</i> | <i>N=497</i> |
| Yes | 29.4% | 28.7% | 31.3% | 28.5% | 29.5% | 28.3% | 20.0% | 16.8% | 21.8% | 18.3% |
| No | 70.6% | 71.3% | 68.7% | 71.5% | 70.5% | 71.7% | 80.0% | 83.2% | 78.2% | 81.7% |

Survey Questions 8 – 15, Queens and Bronx cont'd.

| SURVEY QUESTION | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|--|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Q12 @ College Point DMV. In the past 30 days, how often have you traveled on or near Northern Blvd. in Queens, NY? | <i>N=1,015</i> | <i>N=991</i> | <i>N=959</i> | <i>N=887</i> | <i>N=970</i> | <i>N=975</i> | <i>N=623</i> | <i>N=450</i> | <i>N=699</i> | <i>N=501</i> |
| Very Often | 48.3% | 47.0% | 49.1% | 49.8% | 44.2% | 43.5% | 33.4% | 32.0% | 31.2% | 37.1% |
| Somewhat often | 23.2% | 23.3% | 20.8% | 22.2% | 21.8% | 22.4% | 19.7% | 21.6% | 19.9% | 18.0% |
| Not very often | 14.8% | 15.2% | 15.2% | 14.7% | 17.1% | 17.9% | 18.3% | 18.9% | 18.7% | 18.6% |
| Rarely | 7.9% | 9.2% | 8.8% | 8.1% | 10.6% | 9.4% | 14.8% | 13.3% | 12.9% | 14.2% |
| Not at all | 5.9% | 5.2% | 6.2% | 4.9% | 6.3% | 6.8% | 13.8% | 14.2% | 17.3% | 12.2% |
| Q13 @ College Point DMV. Have you received a seat belt ticket on or near Northern Blvd. in Queens in the past year? | <i>N=1,019</i> | <i>N=991</i> | <i>N=963</i> | <i>N=884</i> | <i>N=950</i> | <i>N=973</i> | <i>N=610</i> | <i>N=446</i> | <i>N=704</i> | <i>N=497</i> |
| Yes | 6.8% | 5.7% | 6.3% | 4.6% | 6.3% | 5.9% | 3.3% | 2.5% | 2.6% | 2.0% |
| No | 93.2% | 94.3% | 93.7% | 95.4% | 93.7% | 94.1% | 96.4% | 97.5% | 97.4% | 98.0% |

Survey Questions 8 – 15, Queens and Bronx cont'd.

| SURVEY QUESTION | QUEENS (COLLEGE POINT) DMV OFFICE | | | | | | BRONX DMV OFFICE | | | |
|---|-----------------------------------|-----------------|----------------|----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| | WAVE 1 | | WAVE 2 | WAVE 3 | WAVE 4 | | WAVE 1 | | WAVE 4 | |
| | June 07 PRE | July 07 POST | Oct 07 POST | Jan 08 POST | March 08 PRE | April 08 POST | June 07 PRE | July 07 POST | March 08 PRE | April 08 POST |
| Q14. In the past month, have you seen or heard about extra enforcement where police were looking at seat belt use? | <i>N=1,024</i> | <i>N=988</i> | <i>N=979</i> | <i>N=879</i> | <i>N=952</i> | <i>N=971</i> | <i>N=613</i> | <i>N=449</i> | <i>N=704</i> | <i>N=499</i> |
| Yes | 49.2% | 46.1% | 46.7% | 47.4% | 40.2% | 44.3% | 45.7% | 43.0% | 37.4% | 37.3% |
| No | 50.8% | 53.9% | 53.3% | 52.6% | 59.8% | 55.7% | 54.3% | 57.0% | 62.6% | 62.7% |
| Q15. In the past month, have you personally experienced enforcement by police looking at seat belt use? | <i>N=1,016</i> | <i>N=982</i> | <i>N=958</i> | <i>N=880</i> | <i>N=949</i> | <i>N=968</i> | <i>N=611</i> | <i>N=446</i> | <i>N=701</i> | <i>N=498</i> |
| Yes | 37.7% | 35.9% | 38.7% | 35.8% | 33.4 | 36.2 | 32.7% | 29.6% | 29.7% | 29.7% |
| No | 62.3% | 64.1% | 61.3% | 64.2% | 66.6 | 63.8 | 67.3% | 70.4% | 70.3% | 70.3% |

APPENDIX B:
COLLEGE POINT AND BRONX DMV SURVEY FORMS

COLLEGE POINT AND BRONX DMV SURVEY FORMS

This Driver Licensing Office is assisting in a vehicle safety study. Your answers to the following questions are voluntary and anonymous. Please complete the survey and then put it in the drop box.

1. Your sex: Male Female

2. Your age: Under 21 21-25 26-39 40-49 50-59 60 Plus

3. Your race: White Black Asian Native American Other

4. Are you of Spanish/Hispanic origin? Yes No

5. Your Zip Code: _____

6. About how many miles did you drive last year?
 Less than 5,000 5,000 to 10,000 10,001 to 15,000 More than 15,000

7. What type of vehicle do you drive most often?
 Passenger car Pickup truck Sport utility vehicle Mini-van Full-van Other

8. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pick up?
 Always Nearly always Sometimes Seldom Never

9. Do you think the Police enforce the seat belt law:
 Very strictly Somewhat strictly Not very strictly Rarely Not at all

10. What do you think the chances are of getting a ticket if you don't wear your seat belt?
 Always Nearly Always Sometimes Seldom Never

11. Have you ever received a ticket for not wearing your seat belt?
 Yes No

12. In the past 30 days, how often have you traveled on or near Northern Blvd in Queens, NY?
 Very often Somewhat often Not very often Rarely Not at all

13. Have you received a seat belt ticket on or near Northern Blvd in Queens in the past year?
 Yes No

14. In the past month, have you seen or heard about extra enforcement where police were looking at seat belt use?
 Yes No

15. In the past month, have personally experienced enforcement by police looking at seat belt use?
 Yes No

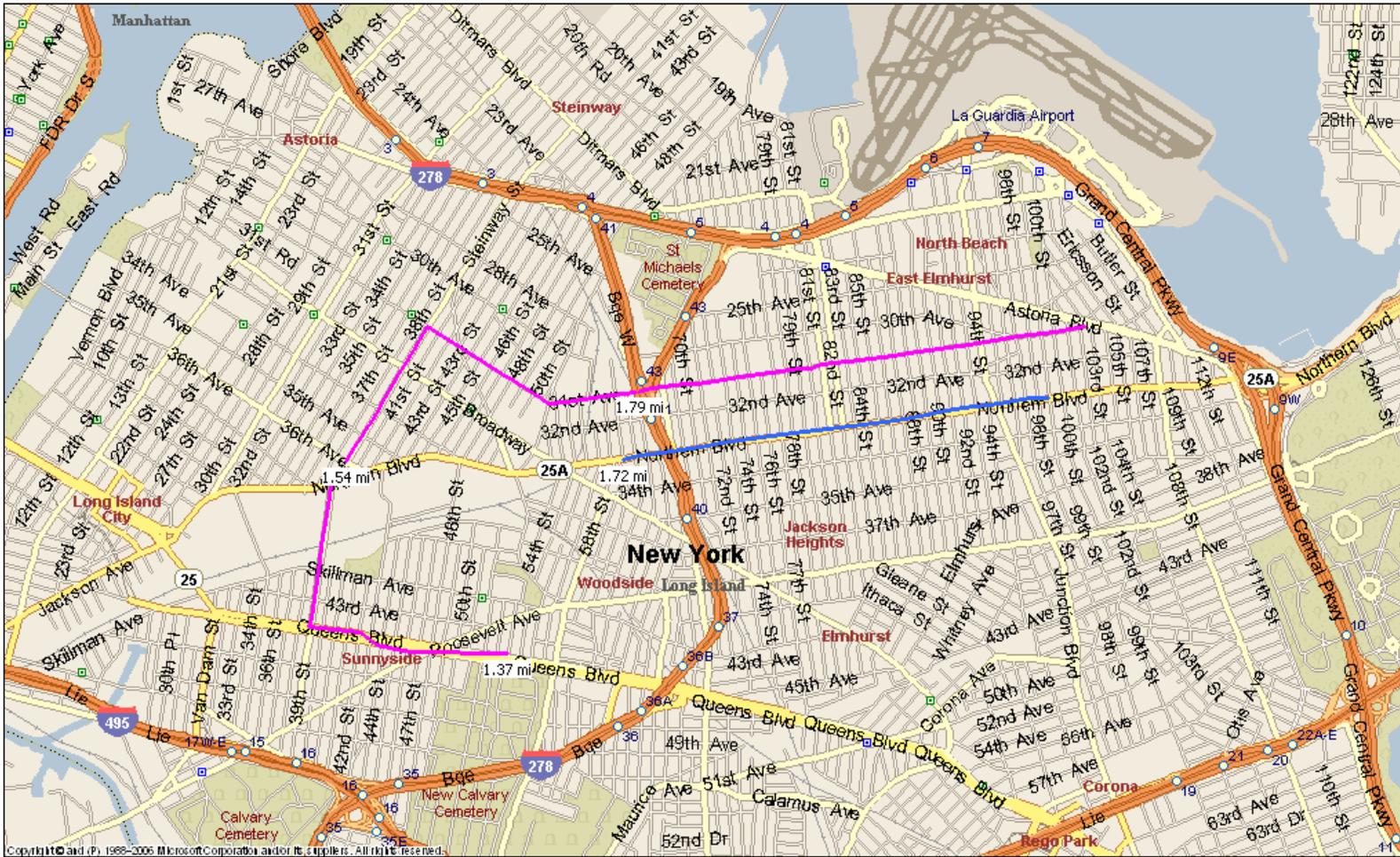
16. Have you recently read, seen or heard anything about seat belts in New York?
 Yes No

 If yes, where did you see or hear about it? (Check all that apply):
 Newspaper Radio Bus shelter TV Poster Billboard Police checkpoint Other
 If yes, what did it say? _____

APPENDIX C:

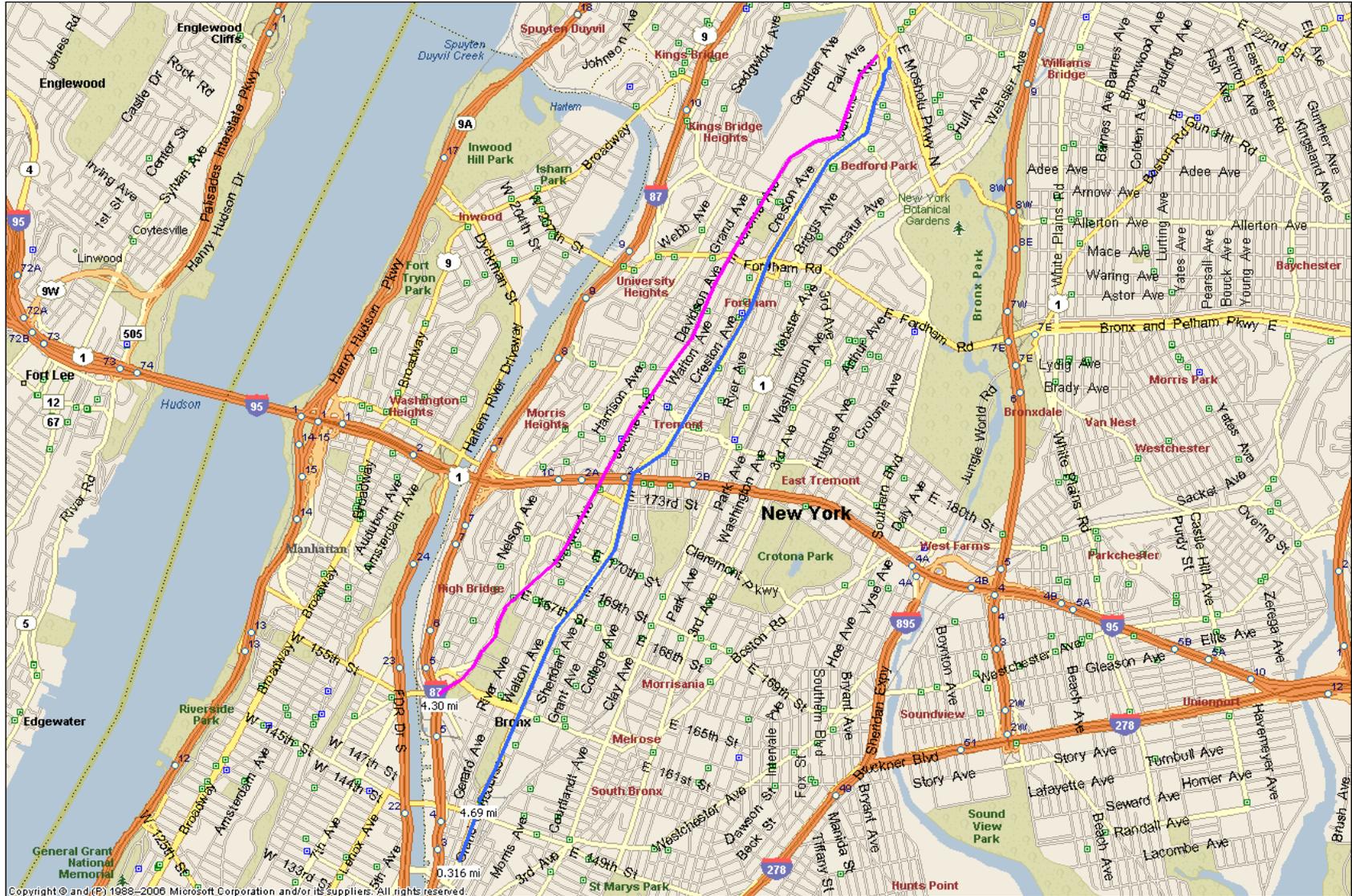
MAPS OF OBSERVATION LOCATIONS – QUEENS & BRONX

Map 1. Queens Belt Observations - Program Area and Surrounding Precinct Communities



- Northern Boulevard Observations
- Community Observations

Map 2. Bronx Belt Observations - Control Area



- Grand Concourse
- Jerome Ave

APPENDIX D:

NEW YORK CITY SEAT BELT OBSERVATION FORM

NYC Seat Belt Observation Data Collection Form

OBSERVER INITIALS: _____ CITY/STATE: _____ TRAFFIC DIRECTION: N S E W

LOCATION: _____
(Street) (Cross Street or other landmark)

DATE: _____ - _____ - _____ DAY OF WEEK: _____ WEATHER CONDITION:
 1 Clear / Sunny 3 Cloudy 5 Clear But Wet
 2 Light Rain 4 Fog

START TIME: _____ END TIME: _____

DRIVER ONLY

| | Location Census Tract Zone Number | Vehicle Type C = Car T = Pick Up S = SUV V = Van | Race W = White B = Black A = Asian U = Unsure | Sex M = Male F = Female U = Unsure | Use Y = Yes N = No | | Location Census Tract Zone Number | Vehicle Type C = Car T = Pick Up S = SUV V = Van | Race W = White B = Black A = Asian U = Unsure | Sex M = Male F = Female U = Unsure | Use Y = Yes N = No |
|----|---|--|---|---|--------------------------|----|---|--|---|---|--------------------------|
| 1 | | | | | | 31 | | | | | |
| 2 | | | | | | 32 | | | | | |
| 3 | | | | | | 33 | | | | | |
| 4 | | | | | | 34 | | | | | |
| 5 | | | | | | 35 | | | | | |
| 6 | | | | | | 36 | | | | | |
| 7 | | | | | | 37 | | | | | |
| 8 | | | | | | 38 | | | | | |
| 9 | | | | | | 39 | | | | | |
| 10 | | | | | | 40 | | | | | |
| 11 | | | | | | 41 | | | | | |
| 12 | | | | | | 42 | | | | | |
| 13 | | | | | | 43 | | | | | |
| 14 | | | | | | 44 | | | | | |
| 15 | | | | | | 45 | | | | | |
| 16 | | | | | | 46 | | | | | |
| 17 | | | | | | 47 | | | | | |
| 18 | | | | | | 48 | | | | | |
| 19 | | | | | | 49 | | | | | |
| 20 | | | | | | 50 | | | | | |
| 21 | | | | | | 51 | | | | | |
| 22 | | | | | | 52 | | | | | |
| 23 | | | | | | 53 | | | | | |
| 24 | | | | | | 54 | | | | | |
| 25 | | | | | | 55 | | | | | |
| 26 | | | | | | 56 | | | | | |
| 27 | | | | | | 57 | | | | | |
| 28 | | | | | | 58 | | | | | |
| 29 | | | | | | 59 | | | | | |
| 30 | | | | | | 60 | | | | | |

Page: _____ of _____

APPENDIX E:

**SUMMONS TOTALS ISSUED BY TCD DURING
CLICK IT OR TICKET MOBILIZATIONS
2006 - 2008**

Table 1. *CLICK IT OR TICKET* MOBILIZATION 2006

| BUCKLE UP NEW YORK - <i>CLICK IT OR TICKET</i> | | | | | | | |
|--|--|--------------|--|------------|--|------------------|------------------------------|
| National CIOT Enforcement Period: May 22 - June 4, 2006 | | | | | | | |
| INITIATIVE TOTALS | | | | | | | |
| | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | Other VTL (Arrests & Summons) | | OT TOURS USED |
| | Reg | OT | Reg | OT | ARRESTS | SUMMONSES | |
| HWY 1 | 119 | 210 | 5 | 14 | 0 | 0 | 11.0 |
| HWY 2 | 216 | 276 | 8 | 36 | 1 | 34 | 12.0 |
| HWY 3 | 96 | 222 | 39 | 28 | 0 | 0 | 12.0 |
| HWY 4 | 46 | 127 | 3 | 0 | 0 | 10 | 6.0 |
| HWY 5 | 76 | 151 | 5 | 6 | 0 | 0 | 8.0 |
| MTTF | 541 | 913 | 9 | 12 | 1 | 0 | 50.0 |
| MTV | 0 | 0 | 0 | 0 | 0 | 2 | 0.0 |
| STED | 46 | 1,276 | 4 | 4 | 1 | 3 | 65.5 |
| PED | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| TCD | 0 | 238 | 0 | 1 | 0 | 12 | 12.5 |
| TOTALS | 1,140 | 3,413 | 73 | 101 | 3 | 61 | 177.0 |

Table 2. *CLICK IT OR TICKET* MOBILIZATION 2007

| BUCKLE UP NEW YORK - <i>CLICK IT OR TICKET</i> | | | | | | | |
|--|--|--------------|--|------------|--|------------------|------------------------------|
| National CIOT Enforcement Period: May 23 - June 6, 2007 | | | | | | | |
| INITIATIVE TOTALS | | | | | | | |
| | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | Other VTL (Arrests & Summons) | | OT TOURS USED |
| | Reg | OT | Reg | OT | ARRESTS | SUMMONSES | |
| HWY 1 | 127 | 217 | 4 | 13 | 0 | 6 | 12.0 |
| HWY 2 | 103 | 238 | 14 | 54 | 0 | 9 | 15.5 |
| HWY 3 | 45 | 294 | 8 | 6 | 0 | 0 | 15.0 |
| HWY 4 | 33 | 154 | 5 | 2 | 0 | 0 | 8.0 |
| HWY 5 | 48 | 201 | 2 | 1 | 0 | 1 | 10.0 |
| MTTF | 176 | 1,240 | 5 | 29 | 0 | 0 | 64.5 |
| MTV | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| STED | 2 | 1,539 | 0 | 1 | 0 | 0 | 77.0 |
| PED | 48 | 0 | 1 | 0 | 0 | 0 | 0.0 |
| TCD | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| TOTALS | 582 | 3,883 | 39 | 106 | 0 | 16 | 202.0 |

Table 3. *CLICK IT OR TICKET* – THANKSGIVING 2007

| BUCKLE UP NEW YORK - <i>CLICK IT OR TICKET</i> | | | | | | | |
|--|---|--------------|---|-----------|--|------------------|------------------------------|
| Thanksgiving CIOT Enforcement Period: November 12 - 25, 2007 | | | | | | | |
| INITIATIVE TOTALS | | | | | | | |
| | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | Other VTL (Arrests & Summons) | | OT TOURS USED |
| | Reg | OT | Reg | OT | ARRESTS | SUMMONSES | |
| HWY 1 | 35 | 270 | 7 | 16 | 0 | 76 | 18.0 |
| HWY 2 | 121 | 324 | 27 | 24 | 0 | 4 | 18.0 |
| HWY 3 | 46 | 320 | 11 | 36 | 0 | 0 | 18.0 |
| HWY 4 | 18 | 170 | 5 | 6 | 0 | 0 | 10.0 |
| HWY 5 | 36 | 216 | 1 | 1 | 0 | 1 | 11.0 |
| MTTF | 134 | 1,289 | 7 | 11 | 0 | 0 | 65.0 |
| MTV | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| STED | 5 | 1,406 | 0 | 5 | 0 | 0 | 71.5 |
| PED | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| TCD | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| TOTALS | 395 | 3,995 | 58 | 99 | 0 | 81 | 211.5 |

Table 4. *CLICK IT OR TICKET* MOBILIZATION 2008

| BUCKLE UP NEW YORK - <i>CLICK IT OR TICKET</i> | | | | | | | |
|--|--|--------------|--|-----------|--|------------------|------------------------------|
| National CIOT Enforcement Period: May 19 - June 1, 2008 | | | | | | | |
| INITIATIVE TOTALS | | | | | | | |
| | (VTL 1229c-3) ADULT SUMMONSES | | (VTL 1229c-1 & 2) CHILD SUMMONSES | | Other VTL (Arrests & Summons) | | OT TOURS USED |
| | Reg | OT | Reg | OT | ARRESTS | SUMMONSES | |
| HWY 1 | 158 | 406 | 13 | 11 | 1 | 1 | 21.0 |
| HWY 2 | 61 | 336 | 20 | 39 | 0 | 35 | 21.0 |
| HWY 3 | 57 | 387 | 5 | 36 | 0 | 0 | 21.0 |
| HWY 4 | 17 | 221 | 0 | 0 | 0 | 1 | 13.0 |
| HWY 5 | 25 | 268 | 5 | 3 | 0 | 6 | 14.0 |
| MTTF | 116 | 1,459 | 3 | 10 | 4 | 190 | 75.0 |
| MTV | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| STED | 0 | 1,483 | 0 | 0 | 0 | 0 | 75.0 |
| PED | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| TCD | 0 | 20 | 0 | 0 | 0 | 0 | 1.0 |
| TOTALS | 434 | 4,580 | 46 | 99 | 5 | 233 | 241.0 |

APPENDIX F:

BUS SHELTER SIGNS (4 SEPARATE MESSAGES)

**DON'T GO
BELTLESS.**

**COPS ARE CRACKING DOWN ON
UNBUCKLED DRIVERS
AND PASSENGERS.**



SAVE YOUR EXCUSES.

**COPS ARE CRACKING DOWN ON
UNBUCKLED DRIVERS
AND PASSENGERS.**



PSSSST...

**COPS ARE CRACKING DOWN ON
UNBUCKLED DRIVERS
AND PASSENGERS.**



**HEY,
YOU' IN
THE CAR...**

**COPS ARE CRACKING DOWN ON
UNBUCKLED DRIVERS
AND PASSENGERS.**



