

Traffic Safety Facts

Traffic Tech – Technology Transfer Series

Increasing Seat Belt Use in New York City

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 percent and the risk of moderate to severe injury by 50 percent.

Selective Traffic Enforcement Programs (STEPS) are a proven method of changing motorists' behavior and doing 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. STEPs 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 print and electronic media for earned and paid publicity. This program sought to create a STEP in selected high-risk neighborhoods within a larger metropolitan area using only low-cost media and police pressure.

Preusser Research Group evaluated the effects of a seat belt media and enforcement demonstration program in an ethnically and socially diverse neighborhood in New York City.

Evaluation

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, which included lower and middle socioeconomic Black, White, and Asian residents. The Northern Boulevard area of Queens had previously been identified by the New York Police Department (NYPD) as a special priority area known to have many vehicle crashes. Queens was selected as the target site, and the Bronx was selected as the control site.

Media was entirely localized, consisting of billboards and posters. Citywide print, radio, and television outlets were not used for cost reasons.

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. Approximately 160 checkpoints took place over the course of the program. In

addition to the seat belt checkpoints, police used roving patrols and increased their visibility and presence.

While NHTSA's national *Click It or Ticket* logo was included on each ad, the actual messages on bus shelter ads and the posters varied among the following four slogans:

- 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

Public Awareness Surveys

During Wave 1, the NYPD conducted public awareness surveys at the targeted site and control site before and after the media/enforcement period. During the second and third waves, surveys were distributed only in the target site during the post periods. During the fourth wave, surveys were distributed in both sites pre and post the media and enforcement period. The table below shows the campaign media and enforcement dates.

| Media Flight Dates | Enforcement Dates |
|--------------------------|-------------------------|
| July 9 – July 22, 2007 | July 20 – July 24, 2007 |
| Oct. 8 – Oct. 21, 2007 | Oct. 19 – Oct. 23, 2007 |
| Jan. 7 – Jan. 20, 2008 | Jan. 18 – Jan. 22, 2008 |
| March 24 – April 6, 2008 | April 4 – April 8, 2008 |

Roadside Seat Belt Observations

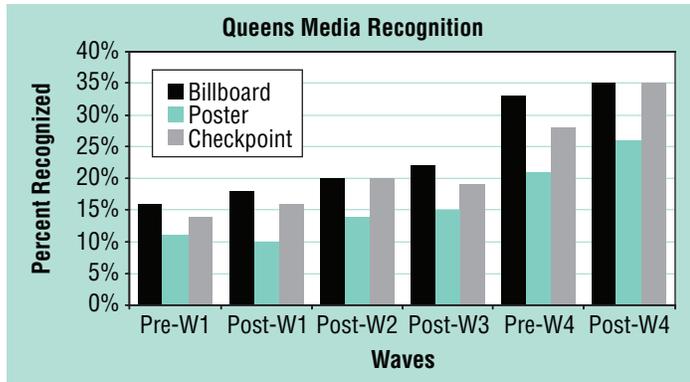
Pre and post seat belt observations were conducted in both the target and control sites. Bronx seat belt use was observed during both the pre and post dates for Wave 1 (June 2007) and again during the pre and post dates for the final wave (April 2008).

Results

Public Awareness Surveys

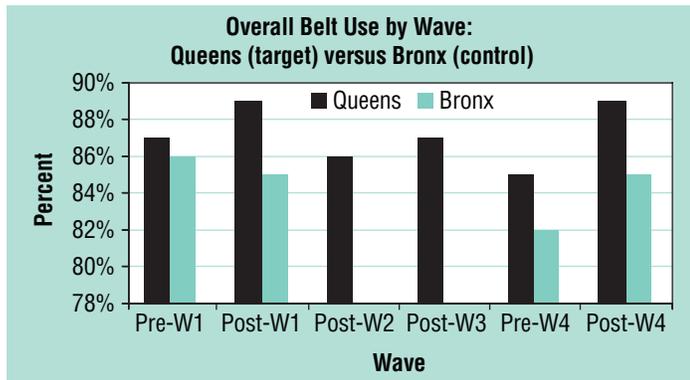
There were increases in the Queens media awareness from pre to post Wave 1 for a select group of survey questions. The approximately 40 percent of respondents who

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 (i.e., 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. The following figure shows these increases. 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.



Seat Belt Observations

Observed seat belt use showed substantial increases. The first wave of the campaign took place directly after a large-scale national *Click It or Ticket* 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 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.

Queens, Wave 4 – Belt Use Rate by Category

| | Wave 4 | | |
|-------------------------|----------------|----------------|--------------|
| | Pre | Post | Significance |
| Queens Overall | 85.1% | 88.7% | p<.01 |
| <i>Race</i> | | | |
| White | 85.0% | 88.1% | p<.01 |
| Black | 81.5% | 88.3% | p<.01 |
| Asian | 88.3% | 91.7% | — |
| <i>Gender</i> | | | |
| Male | 84.3% | 87.8% | p<.01 |
| Female | 87.9% | 92.0% | p<.01 |
| <i>Road</i> | | | |
| Main Corridor (N. Blvd) | 85.8% | 89.0% | p<.01 |
| Side/Local Road | 84.1% | 88.4% | p<.01 |
| <i>Time of Day</i> | | | |
| Daytime (8 a.m.–1 p.m.) | 85.7% | 88.9% | p<.01 |
| Evening (4 p.m.–9 p.m.) | 84.5% | 88.5% | p<.01 |
| Overall N | N=5,177 | N=5,565 | |

Conclusion

This program was unusual in that it accomplished high-visibility enforcement in an urban area without using electronic media. Belt use was generally high (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 high-risk corridor using reasonably priced media.

How to Order

Download a copy of *Increasing Seat Belt Use in New York City* (68 pages) from www.nhtsa.gov, or write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394. Patty Ellison-Potter, Ph.D. was the project manager for this study.



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