



Washington's Target Zero Teams Project: Reduction in Fatalities During Year One

Jessica Cicchino¹

Highly visible sobriety checkpoint programs have been shown to be an effective method of reducing alcohol-related driving crashes (Elder et al., 2002). However, the use of checkpoints is prohibited in 12 States, including Washington. These States have tested other alternatives, including highly visible saturation patrols. In November 2006, the Washington Traffic Safety Commission (WTSC) sponsored the Nighttime Emphasis Enforcement Team (NEET) pilot project in Snohomish County. The goal of the NEET pilot project was to reduce serious injuries and fatalities due to impaired driving through the deployment of a fully dedicated team of Washington State Patrol (WSP) troopers concentrating on nighttime enforcement of impaired driving. NEET troopers were not responsible for responding to calls for service. Rather, they were assigned exclusively to NEET teams.

Over the initial 27 months of the pilot project, the NEET troopers made 1,975 arrests for driving under the influence (DUI). Although efforts were focused on impaired driving enforcement, the detachment also issued 2,338 speeding citations and 1,385 seat belt citations. Traffic fatalities decreased by 40.3% in Snohomish County between 2005 (the year before the detachment operations began) and 2008. In contrast, traffic fatalities decreased by 17.7% in the remaining counties in Washington from 2005 to 2008, and by 14.3% in the rest of the Nation.

On July 1, 2010, the Target Zero Teams Project (TZTP) began, as a collaboration among WTSC, WSP and local law enforcement agencies, with the goal of deploying the NEET concept in the three largest counties in Washington State: King County, Pierce County,

and Snohomish County (which had participated in the NEET project). The project was supported with approximately \$4.5 million of carry-forward funds that were available to the State to address its impaired driving problem. In 2010, 51.2% of Washington State's population lived in one of these three counties, and they accounted for 63.8% of the traffic fatalities in Washington State (NHTSA, 2012; U.S. Census Bureau, 2012). The label "Target Zero Teams" originates from Washington's Strategic Highway Safety Plan, which is entitled "Target Zero" to reflect Washington's goal of reducing traffic fatalities to zero by the year 2030, and which names impaired driving a top priority. The purpose of this research note is to describe the first year of the project and report the reduction in fatalities in the TZTP counties after its first 10 months of operation.

Project Description

Eighteen WSP troopers and three sergeants were selected to join the TZTP based on their training, experience, and motivation in enforcing impaired driving. Three detachments of six troopers and one sergeant were deployed in each of the three TZTP counties. The TZTP troopers' positions were backfilled so that the WSP did not experience a loss of troopers on regular patrol and that the TZTP did not detract from already-existing WSP initiatives. As in the NEET pilot project, the detachments were relieved of their normal assignments as WSP troopers to enable them to focus on impaired driving enforcement. The detachment teams would patrol from 6 p.m. to 4 a.m. Wednesday through Saturday nights.

Beyond the WSP trooper detachments, the TZTP operated in an integrated systems model in which local law enforcement, the court system, and community stakeholders were involved. Local law enforcement officers

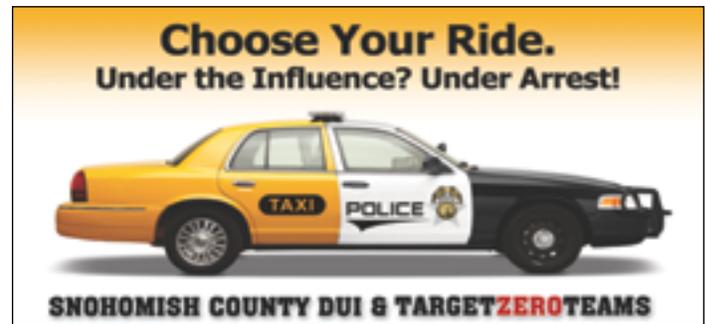
¹Formerly with NHTSA's Office of Behavioral Safety Research.

from 44 agencies in the three counties joined the TZTP detachments over the first year of the project to patrol in high-risk areas. The three counties had four Target Zero managers who coordinated Target Zero Traffic Safety Task Forces that implemented traffic safety initiatives on a local level, and four Law Enforcement Liaisons, who were law enforcement professionals who worked with the Target Zero managers to enhance relationships with local law enforcement. Specially assigned Target Zero prosecutors dedicated to the effort were introduced in King and Snohomish Counties. Since the establishment of the special prosecutors, the backlogs of DUI cases in King and Snohomish Counties that had spanned up to 20 months were eliminated and most cases were processed within 48 hours of the issuance of a citation.

Law enforcement officers involved in the TZTP used “data-driven” enforcement strategies to select locations they would patrol. The WSP received a grant from the Bureau of Justice Assistance (BJA) of the U. S. Department of Justice to support a Data Driven Approach to Crime and Traffic Safety (DDACTS) component to the project. In the DDACTS model, location-based crime and crash data were mapped to uncover “hot spots” that had high incidences of crime and crashes. Patrolling then occurred in these high-risk locations as identified by the data. The BJA funding supported Geographic Information Systems analysts at the WSP who performed the mapping to pinpoint these high-risk locations. Maps with impaired-driving-crash locations were used to guide deployment of the TZTP troopers, and the maps were updated with new data every 42 days.

Publicity for the TZTP came primarily from earned media during the project’s first year. Video and radio public service announcements were produced with the message “We’re On the Team,” and featured law enforcement officers, prosecutors, servers, sellers, and citizens who discussed being members of the “team” against impaired driving in Washington. In addition, billboards and ads on buses displayed the message, “Choose Your Ride” (see Figure 1). The WTSC also used social media to increase visibility of the TZTP. Social media included a TZTP Facebook page, and a Web page called waTikileaks (<http://watikileaks.com>) that broadcasted the locations of increased DUI enforcement. Additional earned media included news coverage of increased DUI enforcement and outreach to alcohol servers and sellers.

Figure 1
Billboard Used to Publicize the TZTP



Results

Enforcement

Table 1 displays the number of DUI arrests made, and speeding and seat belt citations issued by TZTP troopers during the first 12 months of the project in each county. The troopers made 3,402 DUI arrests, issued 3,371 speeding citations, and issued 933 seat belt citations. These totals are for TZTP troopers only, and do not include arrests made and citations issued by local law enforcement officers participating in the project.

Table 1
DUI Arrests and Citations Issued During First Year of the TZTP

Arrests and Citations	County			Total Per Offense
	King	Pierce	Snohomish	
DUI Arrests	1,344	1,049	1,110	3,402
Speeding Citations	870	764	1,737	3,371
Seat Belt Citations	233	440	260	933

The numbers of arrests and citations by the TZTP troopers during the first year of the project were similar to what was seen during the NEET pilot project, and exceeded the numbers from the NEET project for DUI and speeding. Over the first 27 months of the NEET project, troopers made an average of 73 DUI arrests per month, issued an average of 87 speeding citations per month, and issued an average of 51 seat belt citations per month. During the first year of the TZTP, in each county troopers made an average of 95 DUI arrests per month, issued an average of 94 speeding citations per month, and issued an average of 26 seat belt citations per month.

Fatalities

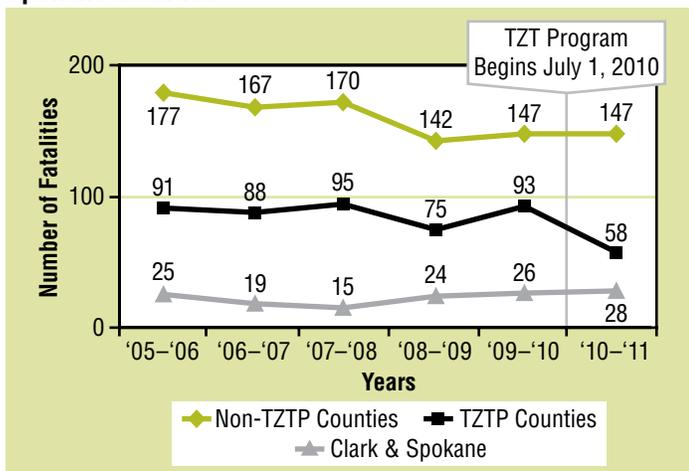
The WTSC generated data from the Fatality Analysis Reporting System in July 2011 on the number of drug- and alcohol-involved fatalities, speeding-related fatali-

ties, and total traffic fatalities in the TZTP counties and, as a comparison, the next two largest counties in Washington (Clark and Spokane Counties) and the rest of the State (i.e., all non-TZTP counties) for the first 10 months of the project (July 2010 to April 2011). Data from these 10 months were analyzed because, at the time the data were retrieved, reliable fatality data were available only through April 2011. Drug- and alcohol-involved fatalities are defined as fatalities involving drivers with blood alcohol concentrations (BACs) of .01 grams per deciliter or greater, a positive drug test, or alcohol involvement noted in the police report.

Fatalities from the first 10 months of the TZTP were compared to the average for the same 10-month period of July through April in the previous five years (July 2005–April 2006, July 2006–April 2007, July 2007–April 2008, July 2008–April 2009, July 2009–April 2010), to account for seasonal effects in traffic fatalities. Poisson log-linear regression was used to analyze the data. Independent variables in the regression models included location (TZTP counties, Clark and Spokane Counties and the rest of the State), period (before or after start of TZTP), and calendar month. The interaction between location and period was examined to determine if the decline in crash fatalities after the implementation of the TZTP was larger in the TZTP counties than in Clark and Spokane Counties and the rest of the State.

Alcohol- and drug-involved fatalities decreased by 34.4% in TZTP counties during the first 10 months of the project compared to the average for the same 10-month period over the previous five years (Figure 2), which was significantly different than the 28.4% increase

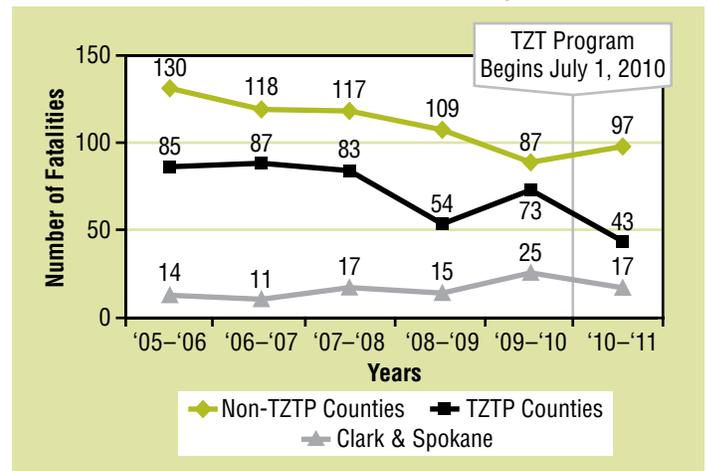
Figure 2
Alcohol- and Drug-Involved Fatalities for July–April in Non-TZTP Counties, TZTP Counties, and Clark and Spokane Counties



seen in Clark and Spokane Counties, $p < .01$, and the 8.5% decline seen in the rest of the State, $p < .05$ during this time.

Speed is not the primary focus of TZTP enforcement efforts, but because drivers involved in speeding-related crashes are often also impaired by alcohol (NHTSA, 2011), the WTSC is interested in the effect of the TZTP on reducing speeding-related fatalities. Speeding-related fatalities decreased by 43.7% in the TZTP counties over the first 10 months of the project when compared to the average for the same period over the previous five years (Figure 3). This decline was significantly different than the 3.7% increase in Clark and Spokane Counties, $p < .05$, and the 13.6% decrease seen in the rest of the State during this time, $p < .05$.

Figure 3
Speeding-Related Fatalities for July–April in Non-TZTP Counties, TZTP Counties, and Clark and Spokane Counties



Total traffic fatalities decreased by 28.2% in the TZTP counties during the first 10 months of the project when compared to the average for the same 10-month period over the previous five years (Figure 4). Clark and Spokane Counties experienced a decrease in fatalities of 0.5% over this period and the rest of the State experienced a more modest decrease in fatalities of 13.4%, and. However, the declines in the TZTP counties did not differ significantly from the declines seen in Clark and Spokane Counties and the rest of the State.

Alcohol- and drug-related fatalities, speeding-related fatalities, and total fatalities from July–April in 2005 to 2011 are broken down by county for the TZTP counties in Table 2. For the first 10 months of the project, alcohol- and drug-involved fatalities decreased by 42.6% in King County, 38.4% in Pierce County, and 10.5% in Snohomish County when compared to the average for

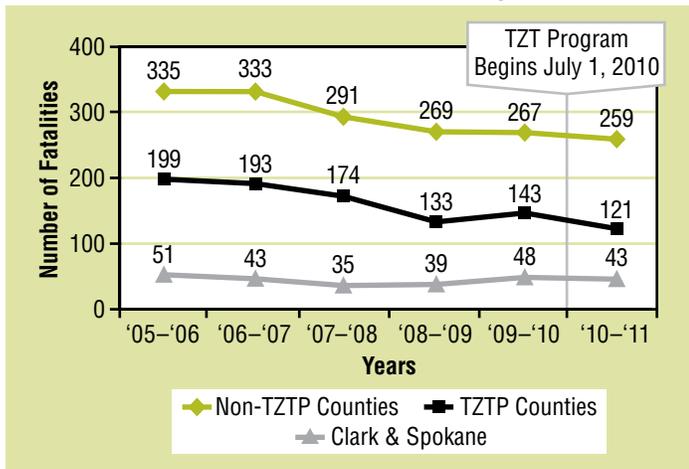
Table 2

Total, Alcohol- and Drug-Involved, and Speeding-Related Fatalities for July–April in King, Pierce and Snohomish Counties

County	Fatality Type	Year							Percent Change
		2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	5-Year Average 2005–2010	2010–2011	
King	Alcohol- and Drug-Involved	49	44	42	36	38	41.8	24	42.6%
	Speeding-Related	48	50	39	21	30	37.6	18	52.1%
	Total	103	109	83	61	63	83.8	54	35.6%
Pierce	Alcohol- and Drug-Involved	26	23	35	25	29	27.6	17	38.4%
	Speeding-Related	20	20	28	20	25	22.6	16	29.2%
	Total	48	50	57	47	42	48.8	36	26.2%
Snohomish	Alcohol- and Drug-Involved	16	21	18	14	26	19	17	10.5%
	Speeding-Related	17	17	16	13	18	16.2	9	44.4%
	Total	48	34	34	25	38	35.8	31	13.4%

Figure 4

Total Traffic Fatalities for July–April in Non-TZTP Counties, TZTP Counties, and Clark and Spokane Counties



the same period over the previous five years. Decreases in speeding-related fatalities for the first 10 months of the TZTP compared to the average for same period over the past five years were 52.1% in King County, 29.2% in Pierce County, and 44.4% in Snohomish County. King County experienced a 35.6% drop in total fatalities during the first 10 months of the program compared to the average for the same period over the previous five years, Pierce County had a 26.2% drop in fatalities in this time period, and Snohomish County had a 13.4% drop in fatalities.

Discussion

In the first 10 months of Washington's TZTP, King, Pierce, and Snohomish Counties experienced larger declines in alcohol- and drug-involved fatalities and in speeding-related fatalities than the rest of the State

and the next two largest counties in the State when compared to the average for the same 10-month period averaged over the previous five years. It is also notable that King and Pierce Counties had larger decreases in alcohol- and drug-involved fatalities and in total fatalities than Snohomish County when compared to the average for the past five years. This was expected, since the TZTP model was new to King and Pierce Counties, but was not new to Snohomish County. The NEET pilot project had operated in Snohomish County during the five-year period and fatalities had already decreased in Snohomish County during that time.

The results reported in this research note, though promising, are preliminary. The National Highway Traffic Safety Administration has contracted with Dunlap and Associates, Inc., to conduct a complete independent evaluation of the TZTP after its full two years of operation. This evaluation will include more sophisticated statistical analyses of changes in fatalities over the course of the project, as well as analyses of changes in non-fatal crashes, public awareness of the TZTP, BACs at arrest for those arrested for DUI, productivity of TZTP troopers, and other information on project effectiveness. This thorough evaluation will examine the extent to which the reduction in fatalities can be attributed to the TZTP and not to other recent impaired driving initiatives in Washington. The patterns of fatalities reported here may change when data are analyzed over the two years of the project.

If the TZTP is found to be effective in reducing injury and fatal crashes over the two-year project period, it will demonstrate that targeted, full-time nighttime detachments of law enforcement may be an effective

approach for deterring impaired driving in States. The full evaluation will also examine the effect of the TZTP on traffic offenses other than impaired driving. Recent evaluations have shown that nighttime seat belt enforcement decreases alcohol-impaired driving, and that the same people tend to be involved in both nighttime seat belt and impaired driving offenses (Solomon, Chaffe, & Preusser, 2009; Thomas, Blomberg, & Van Dyk, 2010). If the TZTP decreases fatalities in areas in addition to impaired driving, as it tentatively looks to have for speeding-related crashes during the project's first 10 months, it would further validate that nighttime enforcement focusing on a single traffic safety issue can affect multiple traffic safety issues.

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