

South Carolina Chief's and Sheriff's Meeting

Nighttime Seat Belt Enforcement and Criminal Interdiction: the Washington Experience

Presented by:

Lowell M. Porter, Director
Washington Traffic Safety Commission

Date:

January 28, 2010

Location:

Columbia, SC



Purpose

- Review Washington's Nighttime Seat Belt Enforcement Project and its outcomes;
- What was learned about the high risk drivers and their propensity for involvement in crime; and
- What was learned about this enforcement strategy and interdicting crime.



Overview:

- WA Nighttime Seat Belt Project Overview;
- Media and law enforcement results;
- Project challenges & lessons learned;
- Washington crash data;
- Preliminary findings of the project research;
- Question and Answer.

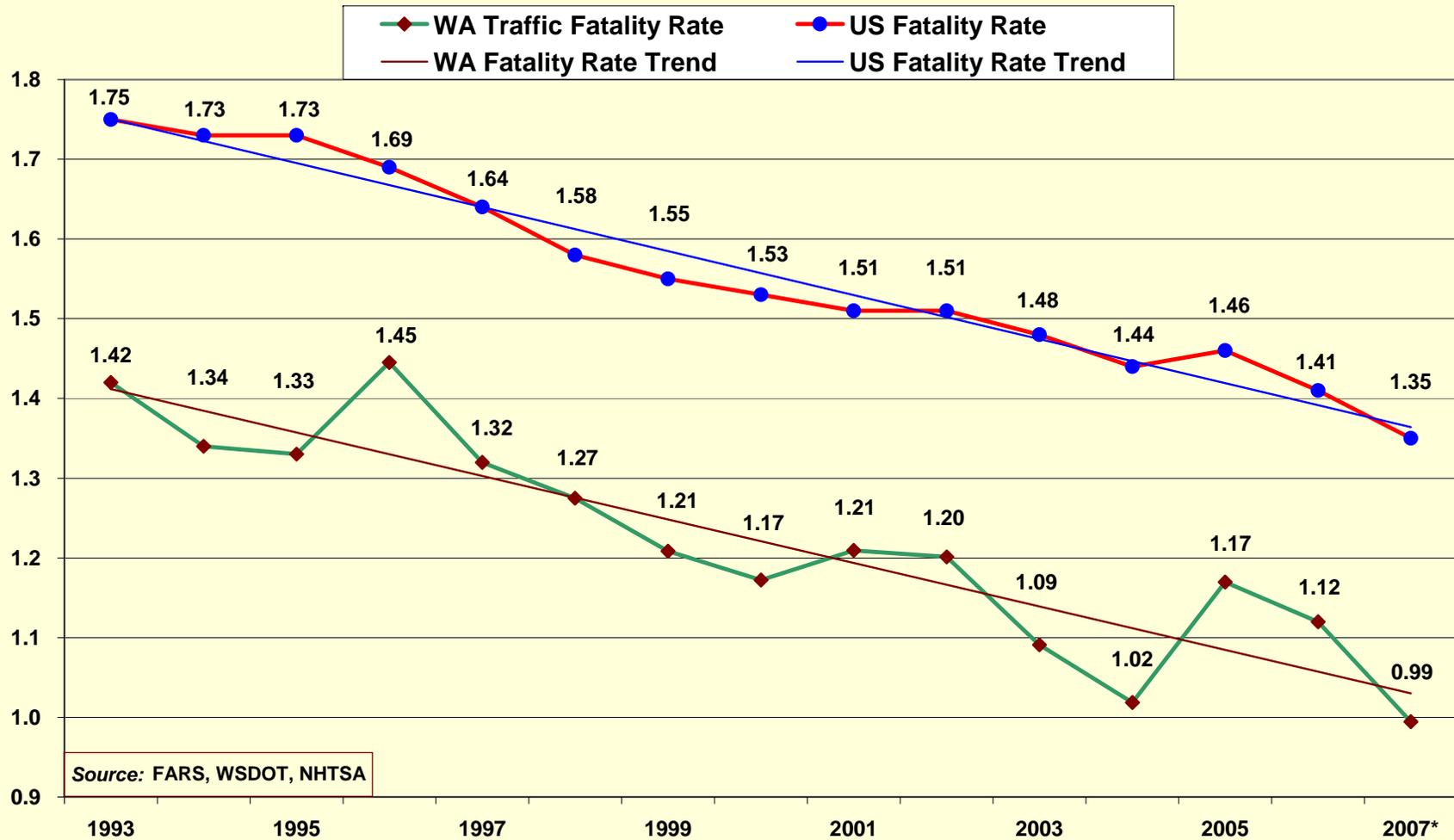


Problem Identification:

- What led the state of Washington to move all seat belt media and enforcement resources from daytime to nighttime?
- Could the traditional “Click-It-Or-Ticket” Model be modified for effective implementation at night; and
- Could these initiatives replicate seat belt use rates experienced during the day?

WASHINGTON and U.S. TRAFFIC FATALITY RATES, 1993-2007*

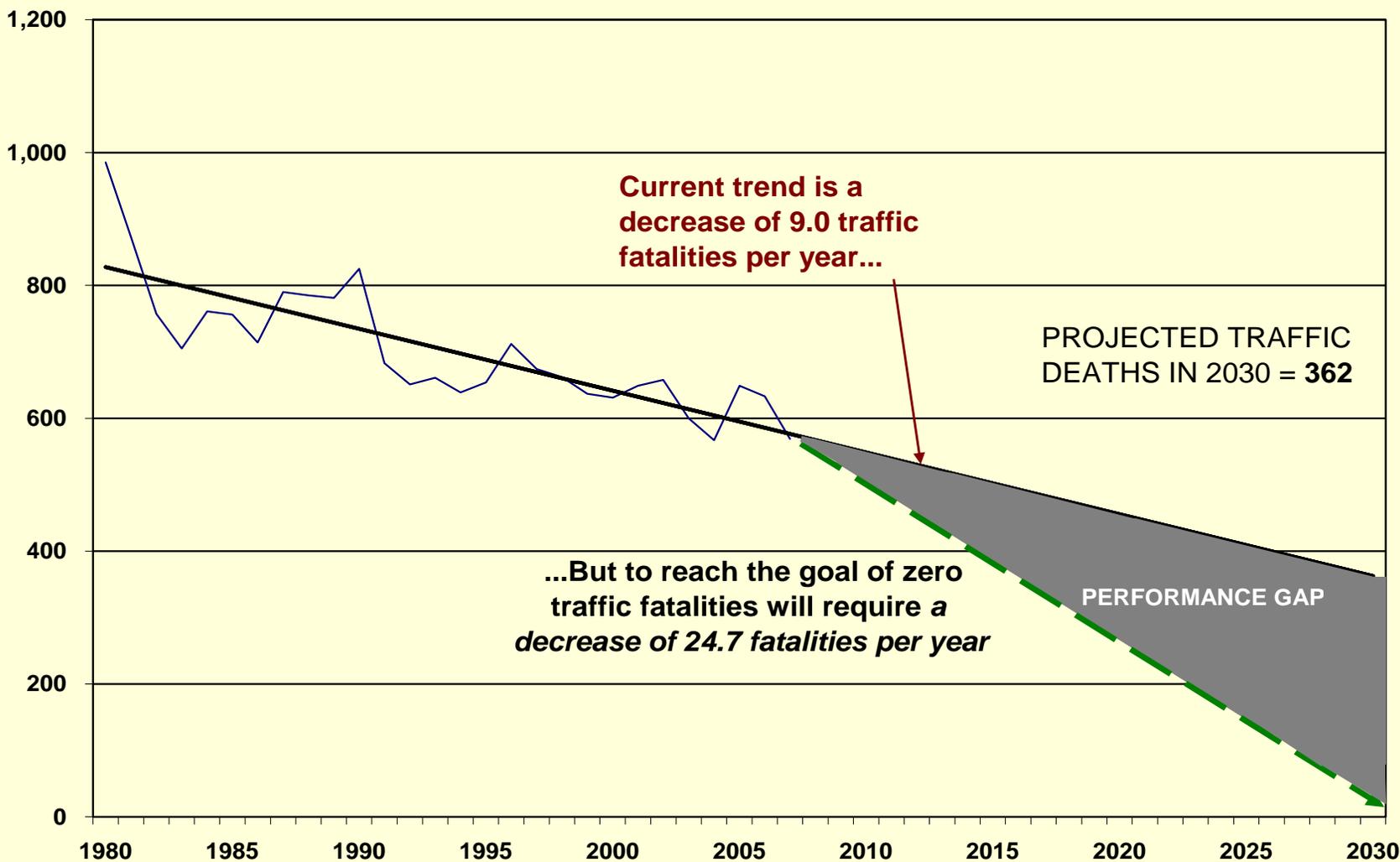
Traffic fatalities per 100 million vehicle-miles traveled, *2007 figures based on preliminary data as of 6/18/08



Washington Traffic Fatalities, 1980-2007

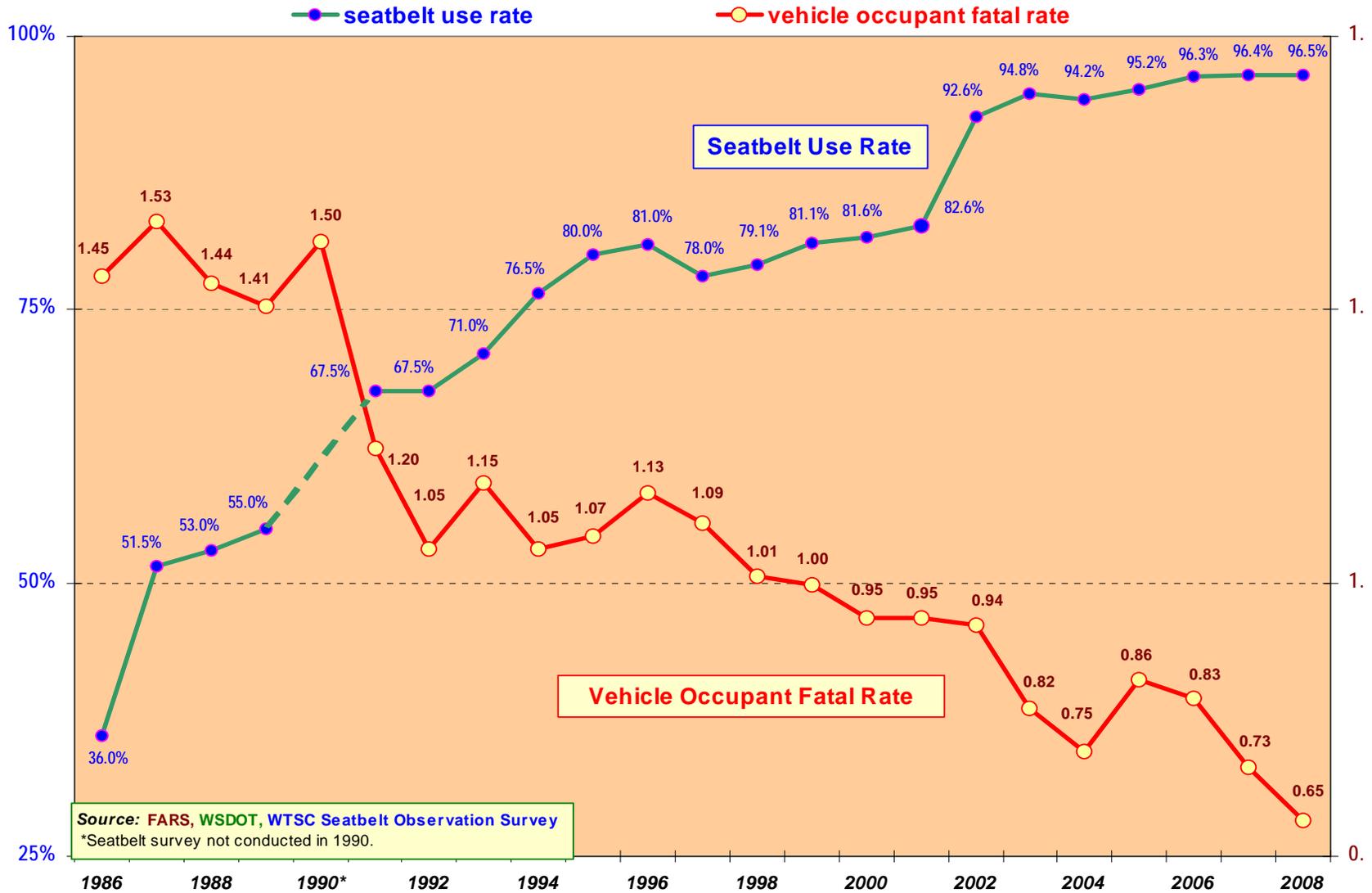
Projected to 2030 (preliminary data for 2007)

PREPARED BY WTSC - June 2008 (Source: FARS)



1986-2008 WA Seatbelt Use Rates & Vehicle Occupant Fatal Rates

Occupant fatalities per 100 million VMT



The WA NTSBE Project:

- A partnership between the WTSC and NHTSA as a 403 Project beginning in 2006:
 - WTSC moved all seat belt program funds to this project;
 - Nighttime focused mobilizations;
 - Spring 2007, 2008, 2009
 - Fall 2007, 2008 403 Grant from NHTSA
- Project Funding (Combined WTSC and NHTSA funding):
 - \$600,000 first project year
 - \$700,000 second project year



The WA NTSBE Project:

- WTSC moved all seat belt program funding to nighttime mobilizations;
- Mobilization budgets;
 - Enforcement: \$300,000 per mobilization
 - Publicity: \$350,00 per mobilization
 - "Sustained" --\$100,000 in between mobilizations
- Dunlap & Assoc. project evaluation;
 - First year preliminary evaluation report in final edit
 - Total evaluation/report



NTSBEP Media Campaign

- How important was the NTSBEP media component to the outcomes of this project?
- Based on these outcomes, were the financial resources programmed in this project a good investment?
- Did these efforts generate similar results as experienced in the daytime CIOT mobilizations?



Paid Media Campaign Overview:

Date	Paid Media	Bonus Media	Total Value (paid and bonus)*	Total # of ads (pd & bonus)	Reach and frequency Males 18/34
May '07	\$290,000 (835) 16 daily papers	\$194,000 (805)	\$482,000	1,640	90% / 11 TV
Oct. '07	\$258,000 1187 TV 1664 Radio 4 daily papers	\$288,000 955 TV 1661 Radio	\$545,000	2142 TV 3325 Radio	78% / 6 TV 59% / 9 Radio
May '08	\$299,000 1955 TV 1663 Radio 4 daily papers	\$309,000 2692 TV 1847 Radio	\$607,592	4647 TV 3510 Radio	80% / 6 TV 60% / 9 Radio
Nov. '08	\$270,000 1522 TV 1626 Radio 4 daily papers	\$301,141 2298 TV 1742 Radio	\$571,000	3820 TV 3368 Radio	83% / 5 TV 61% / 9 Radio
May '09	\$272,000 1979 TV 1801 Radio 4 daily papers	\$265,000 2200 TV 2300 Radio	\$537,000	4179 TV 4101 Radio	87% / 6 TV 60% / 11 Radio

^All dollar figures have been rounded.

*Includes newspaper which is paid only.

Earned Media Results:

Mobilization Date	Number of counties with patrols	No. of daily newspapers pitched	# of dailies that ran stories	Weeklies pitched	weeklies that ran stories	TV pitched	T.V. stations that ran stories	Radio pitched	Radio pick up	Web Stories	Total stories	total PSAs from the earned media effort:
May-07	20	21	19	74	39	22	19	153	107	26	442	1717
Oct. '08	19	19	11	76	29	22	17	108	61	19	215	737
May-08	26	26	18	88	40	19	17	147	75	26	311	428
Nov. '08	23	21	13	80	31	19	16	164	94	23	424	705
May '09	22	20	20	109	52	18	14	136	77	44	371	289



The Number of Media Stories Covered:

	Dailies	Weeklies	T.V.	Radio	PSAs	Web	Total
May '07	18	39	118	267	1717	26	2185
Oct. '07	12	31	82	90	737	19	971
May '08	22	42	90	157	428	26	765
Nov. '08	13	31	48	332	705	23	1152
May '09	21	52	41	212	289	44	659





Olympia Wooden Boat Festival
3000 People



NW Folklife Festival, Seattle
250,000 people



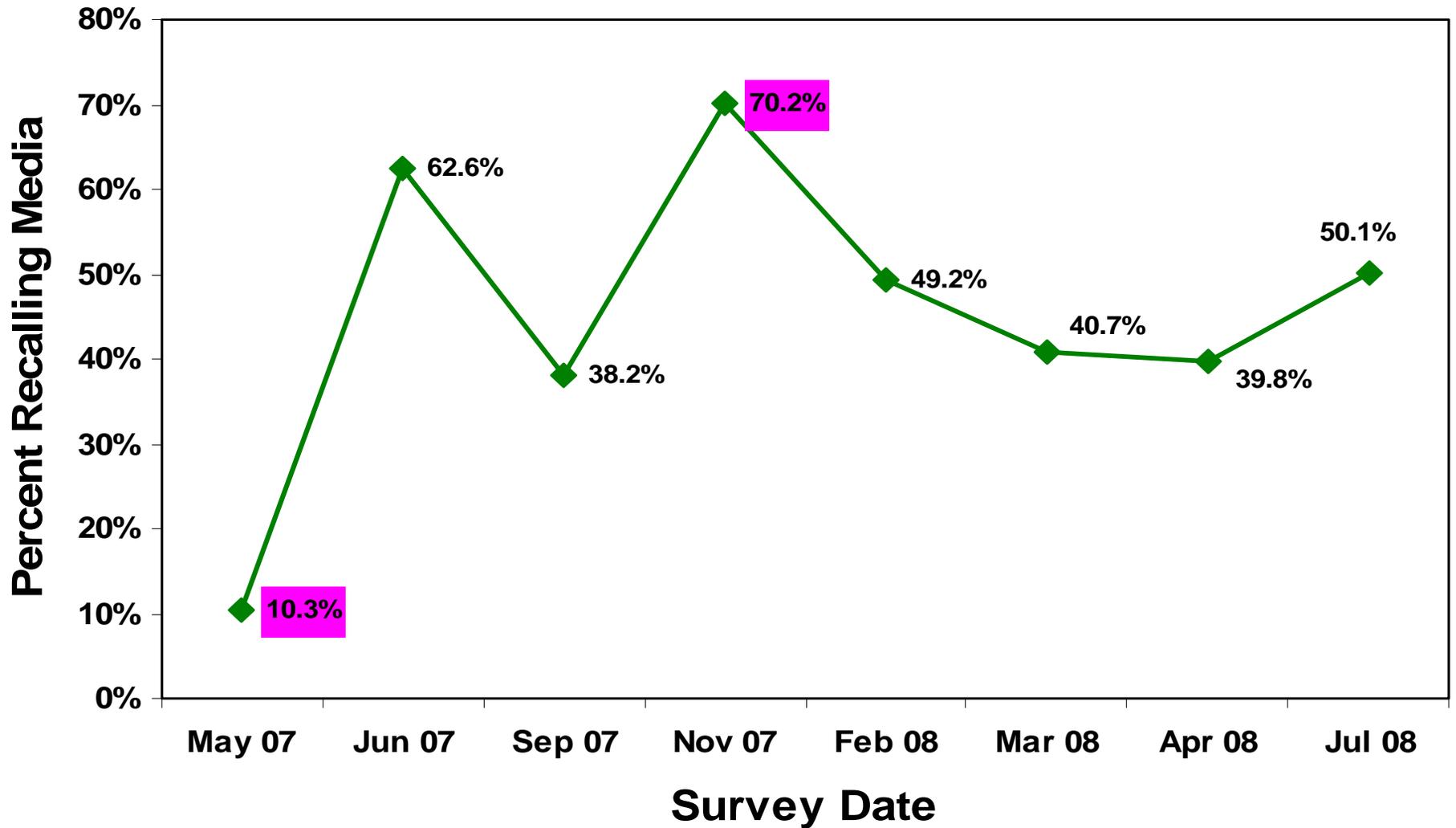
Bloomsday Run, Spokane
90,000 people



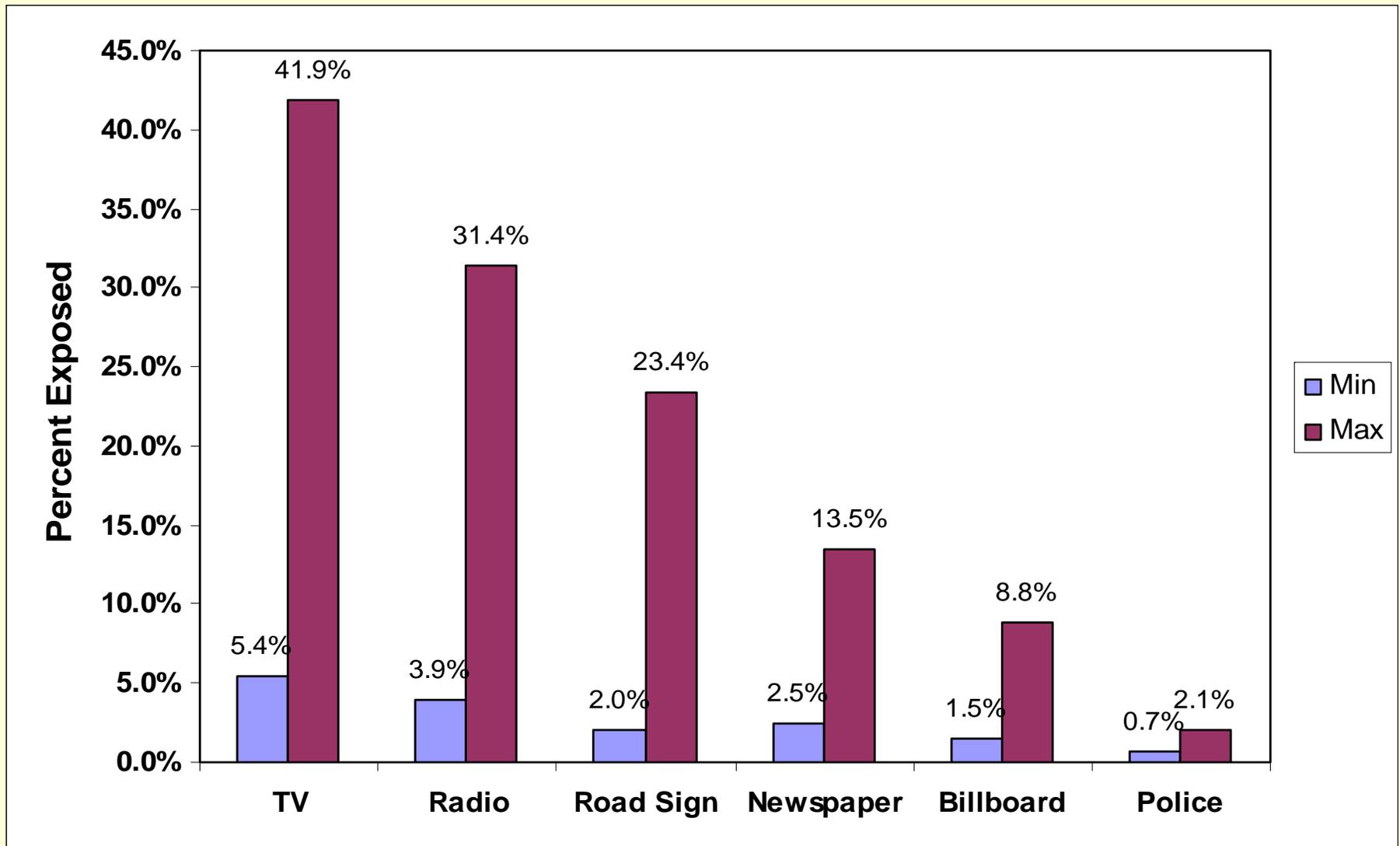
The Lacey Spring Fun Fair
4000 people



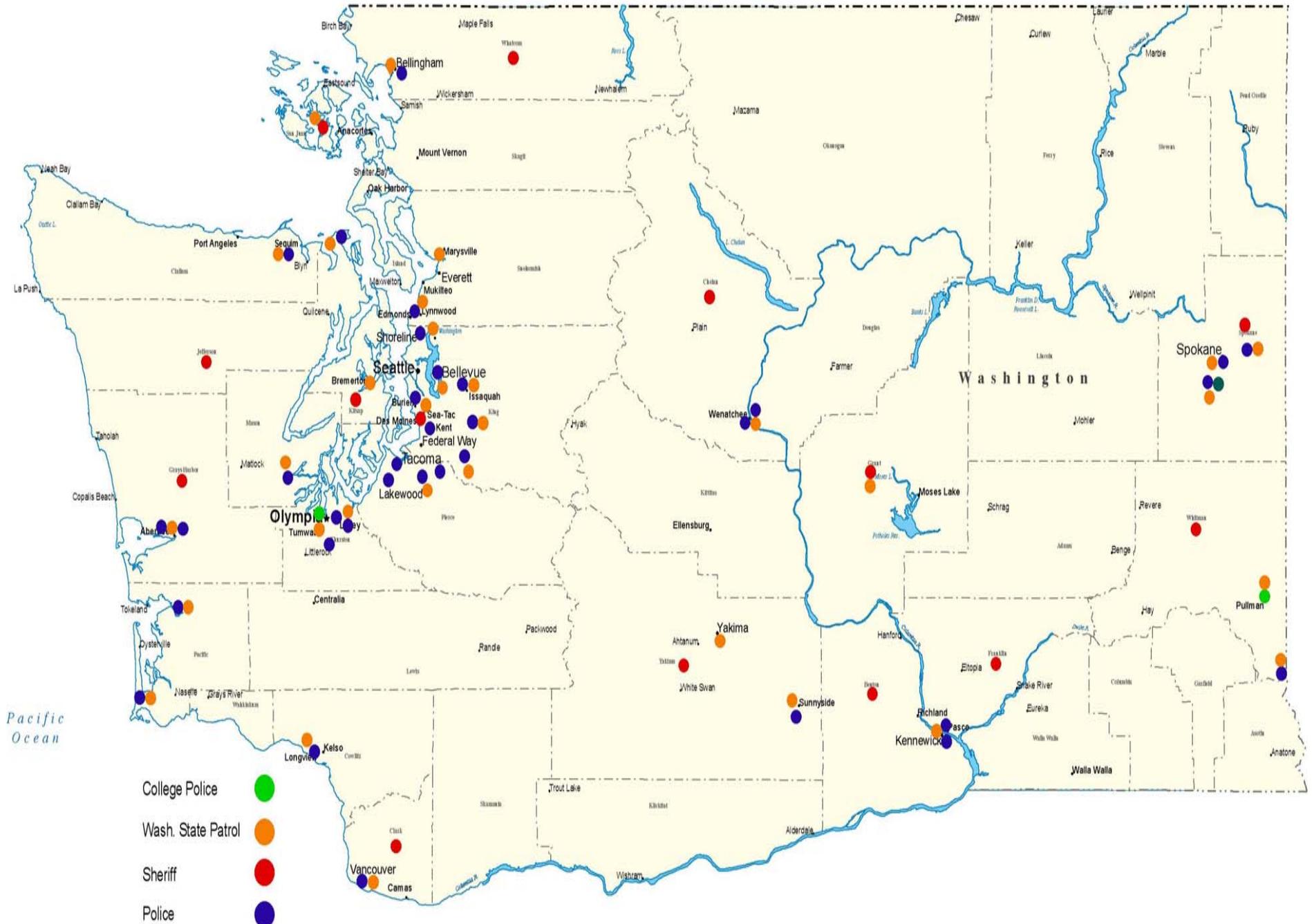
Awareness of NTSBE Media



Media Mentions



Patrols in major population areas:



NTSBE Enforcement Data:

Nighttime Seat Belt Campaign date:	May, 2009	Nov. 2008 NTSBE	May, 2008 NTSBE	Oct, 2007 NTSBE	May, 2007 NTSBE	NTSBE Average	May, 2006 CIOT
Number of agencies participating	72	68	55	49	75	64	135
Hrs worked:	5563	5586	6248	5362	5715	5694	11,731
Violator contacts	10,845	10,121	11,329	7,517	10,380	10,038 (28%)	36,378
Seatbelt citations & warnings	5,258	3653	6,005	4428	5171	4903 (2770)	9892
Child car seat citations and warnings	326	194	286	181	215	240 (77)	276
Aggressive driving:	107	130	98	57	176	114 (38)	135
DUI (alc & drugs):	87	121	105	83	144	108 (30)	108
Other alcohol and drug	101	197	132	113	204	149 (61)	218
Felony warrants & felony arrests	29	66	169	64	66	79 (33)	121
Misd. Warrants:	99	144	158	134	139	135 (79)	283
Suspend/Revoked:	339	382	444	282	344	358 (222)	794
Uninsured:	699	641	583	478	726	625 (585)	2091

Law enforcement activity:



Nighttime Seat Belt Campaign date:	Night patrols Average of five mobilizations	Day patrols
Number of agencies participating	64	135 (bigger L.E. budget)
Hrs worked:	5694	11,731
Violator contacts	10,038 (28%)	36,378
Seatbelt citations & warnings	4903 (2770)	9892
Child car seat citations and warnings	240 (77)	276
Aggressive driving:	114 (38)	135
DUI (alc & drugs):	108 (30)	108
Other alcohol and drug	149 (61)	218
Felony warrants & felony arrests	79 (33)	121
Misd. Warrants:	135 (79)	283
Suspend/Revoked:	358 (222)	794
Uninsured:	625 (585)	2091

Stationary Seat Belt Patrols at Night:

Day:

- ✓ Officer works individually;
- ✓ Easier to schedule;
- ✓ Fewer staffing issues;
- ✓ Easier to see violators.

Night:

- Need more advanced planning;
- Need more officers;
- Hard to see violators;
- Low traffic volumes;
- Law enforcement agencies understaffed;
- **Officers say they are more fun!**



Productivity – Night vs. Day:

Tickets per patrol hour –
night vs. day:

- 74.8% **more** child car seat tickets;
- 82.5% **more** DUI/DUID citations;
- 532.4% **more** felony arrests;
- 79.5% **more** “other alcohol” arrests;
- 3.8% **fewer** seat belt tickets; and
- 85.5% **fewer** speeding tickets.



Washington Vehicle Occupant Deaths:

Before CIOT:

(1998-2002)

517 VO deaths/yr
43% SB use in fatals

After CIOT & before NTSBE:

(2003-2006)

454 deaths/yr (-12%)
56% SB use in fatals

After NTSBE:

(2007-2008)

389 deaths/yr (-14%)
59% SB use in fatals



WA Nighttime Vehicle Occupant Deaths:

Before CIOT:

(1998-2002)

221 VO deaths/yr
31% SB use in fatalities

After CIOT & before NTSBE:

(2003-2006)

200 deaths/yr (-9.3%)
46% SB use in fatalities

After NTSBE:

(2007-2008)

175 deaths/yr (-12.8%)
46% SB use in fatalities



WA Vehicle Occupant Serious Injuries:

Before CIOT:

(2002)

**1,502 VO serious injuries/yr
76% SB use in serious injuries**

After CIOT & before NTSBE:

(2003-2006)

**1,281 serious injuries/yr (-15%)
80% SB use in serious injuries**

After NTSBE:

(2007-2008)

**1,016 serious injuries/yr (-21%)
85% SB use in serious injuries**



WA Nighttime Vehicle Occupant Serious Injuries:

Before CIOT:

(2002)

538 VO serious injuries/yr
63% SB use in serious injuries

After CIOT & before NTSBE:

(2003-2006)

452 serious injuries/yr (-16%)
69% SB use in serious injuries

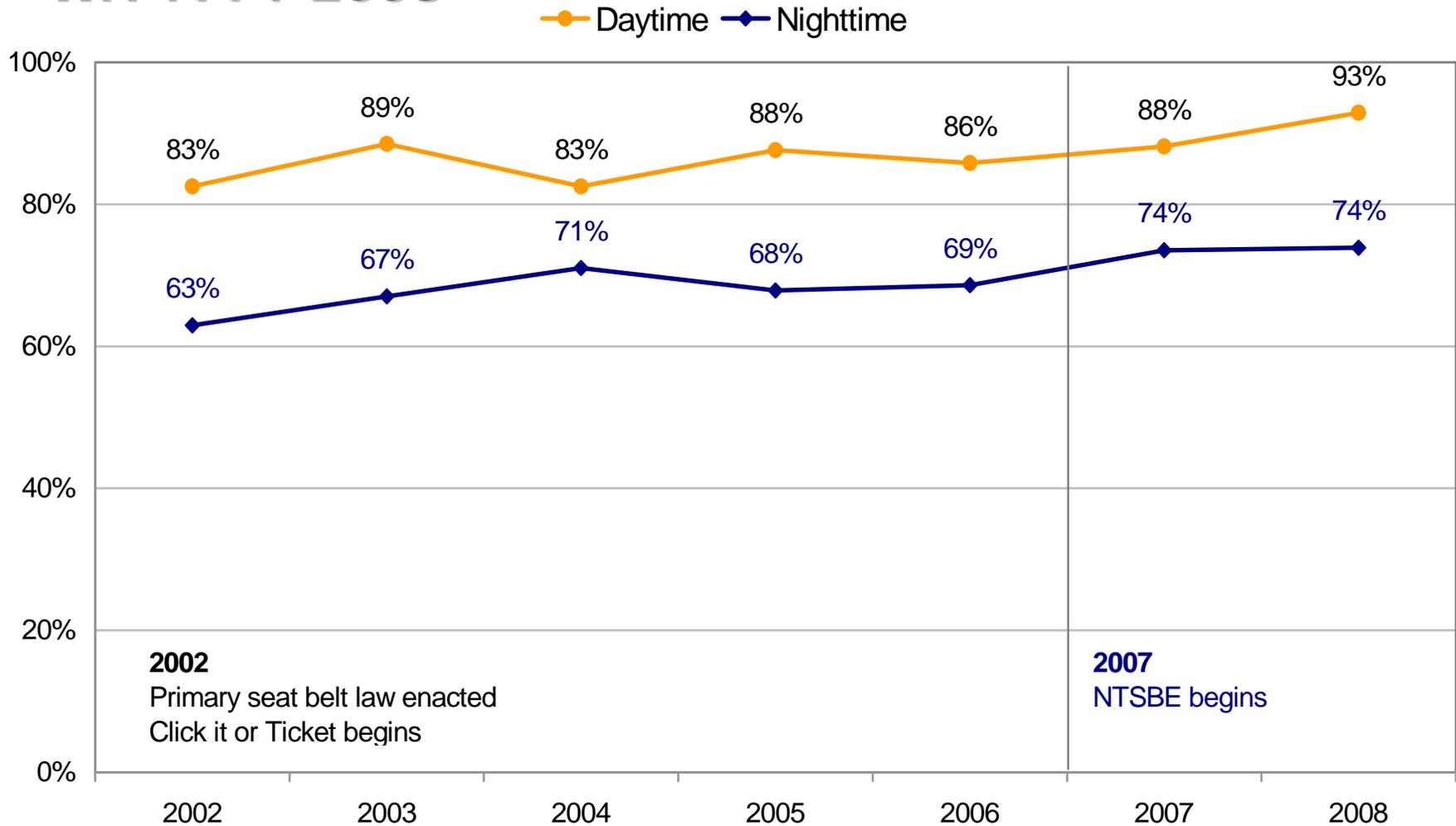
After NTSBE:

(2007-2008)

366 serious injuries/yr (-19%)
74% SB use in serious injuries



Percent Seat Belt Use for Vehicle Occupant Serious Injuries WA 1994-2008

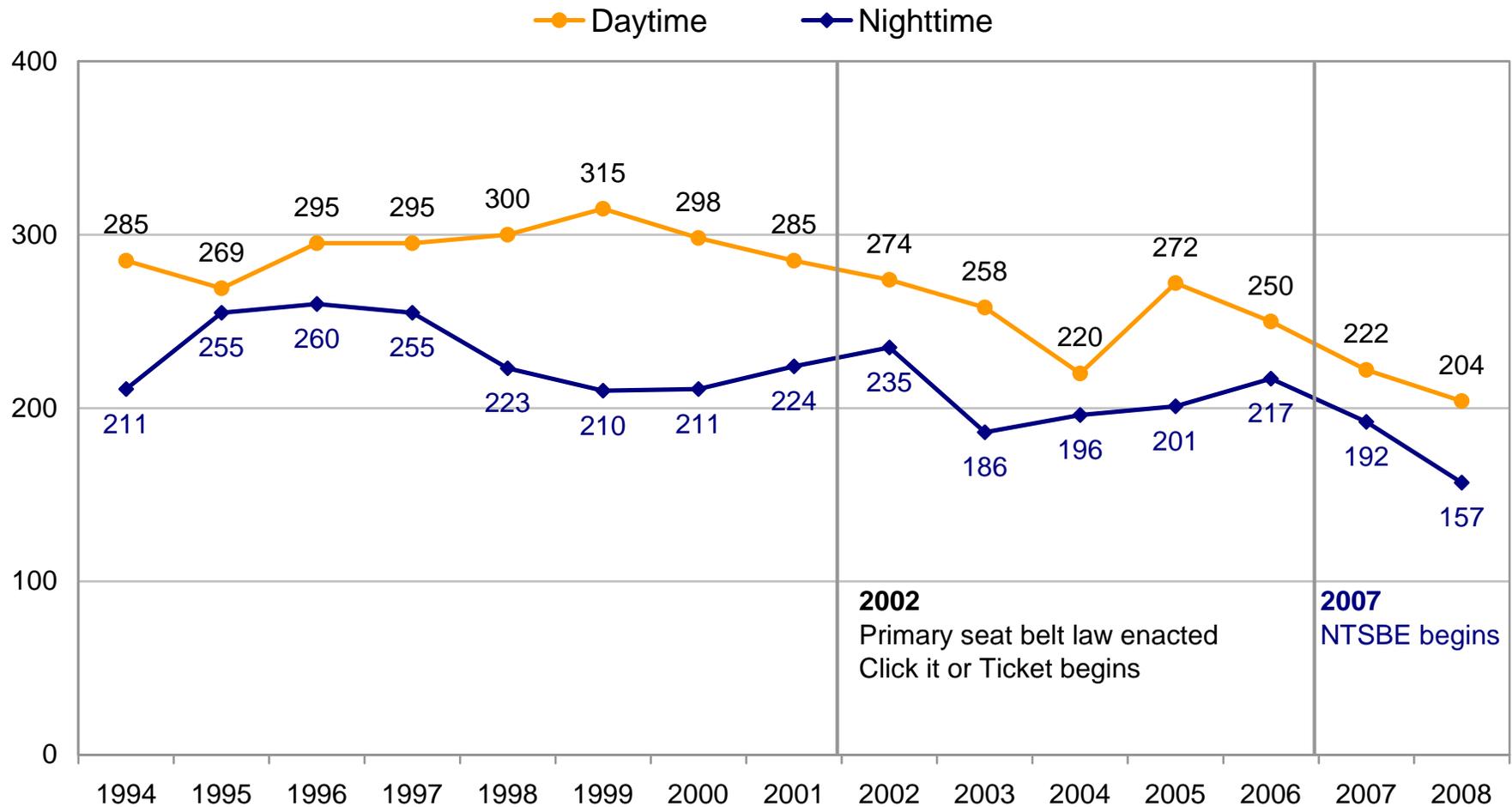


Source: WSDOT

Daytime: 5 AM - 6:59 PM | Nighttime: 7 PM - 4:59 AM

Vehicle occupant deaths with unknown crash hour and seat belt use excluded from analysis.

Number of Vehicle Occupant Deaths WA 1994-2008

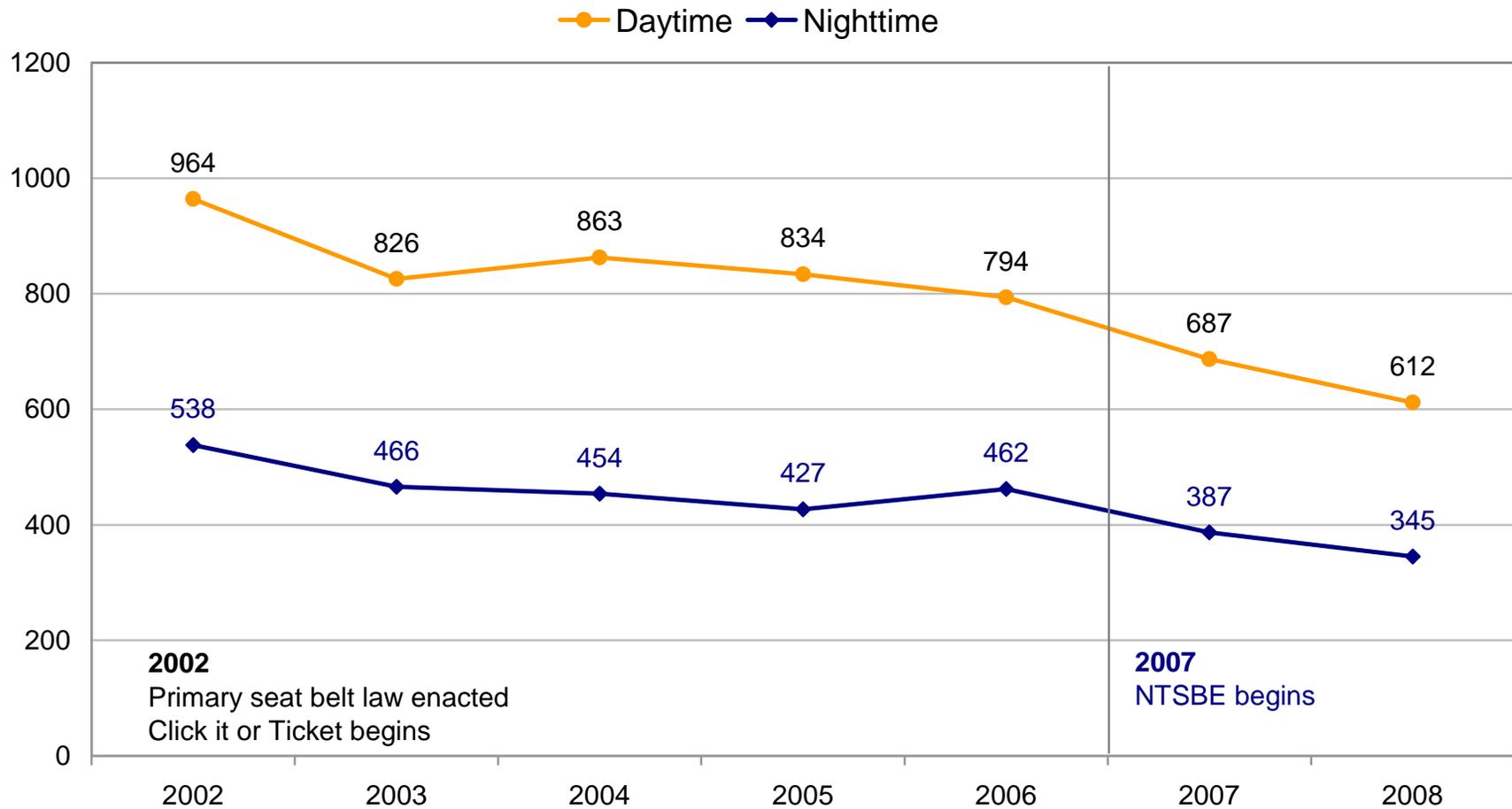


Source: FARS

Daytime: 5 AM - 6:59 PM | Nighttime: 7 PM - 4:59 AM

Vehicle occupant deaths with unknown crash hour excluded from analysis.

Number of Vehicle Occupant Serious Injuries WA 1994-2008



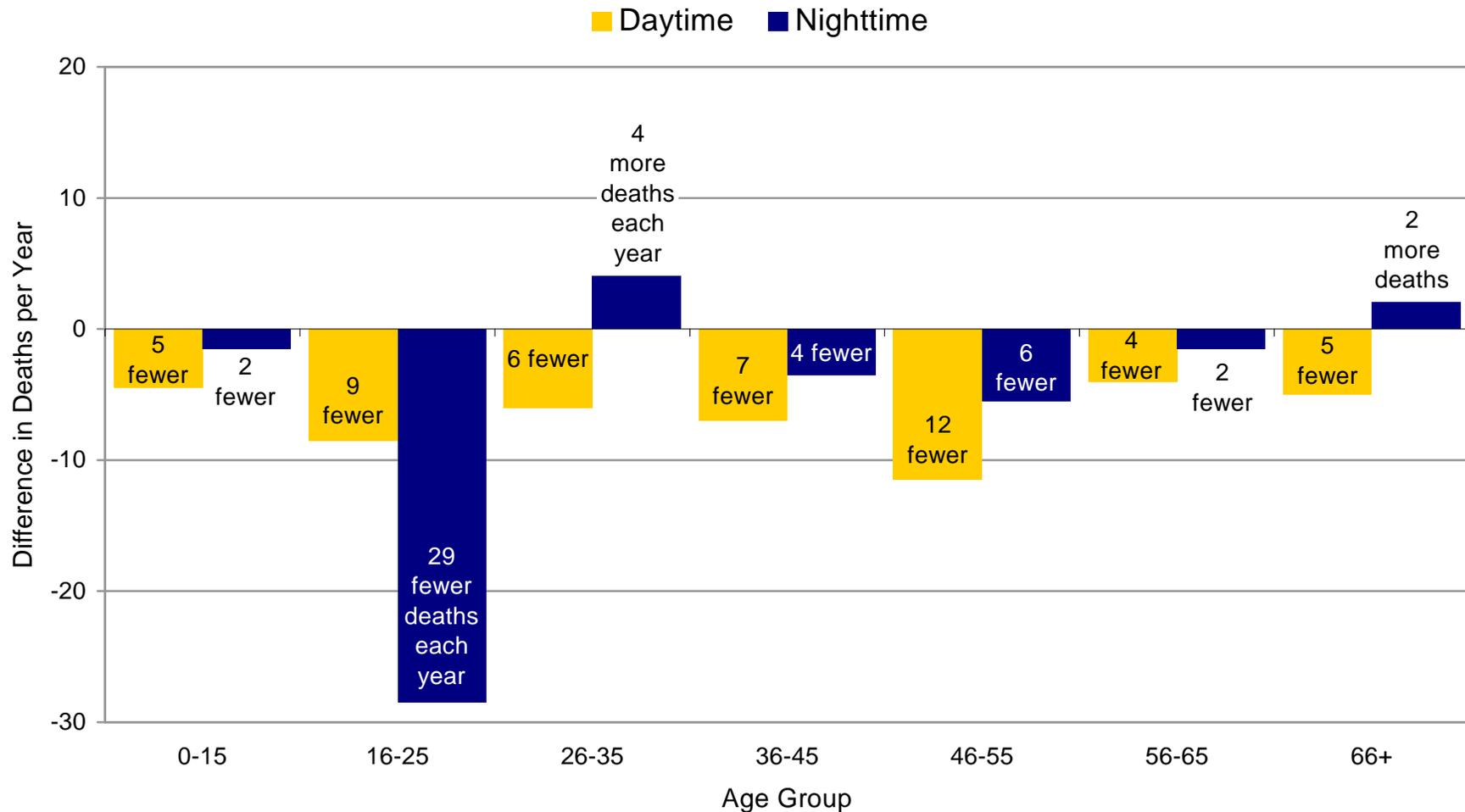
Source: WSDOT

Daytime: 5 AM - 6:59 PM | Nighttime: 7 PM - 4:59 AM

Vehicle occupant deaths with unknown crash hour excluded from analysis.

Change in Vehicle Occupant Deaths by Age Group

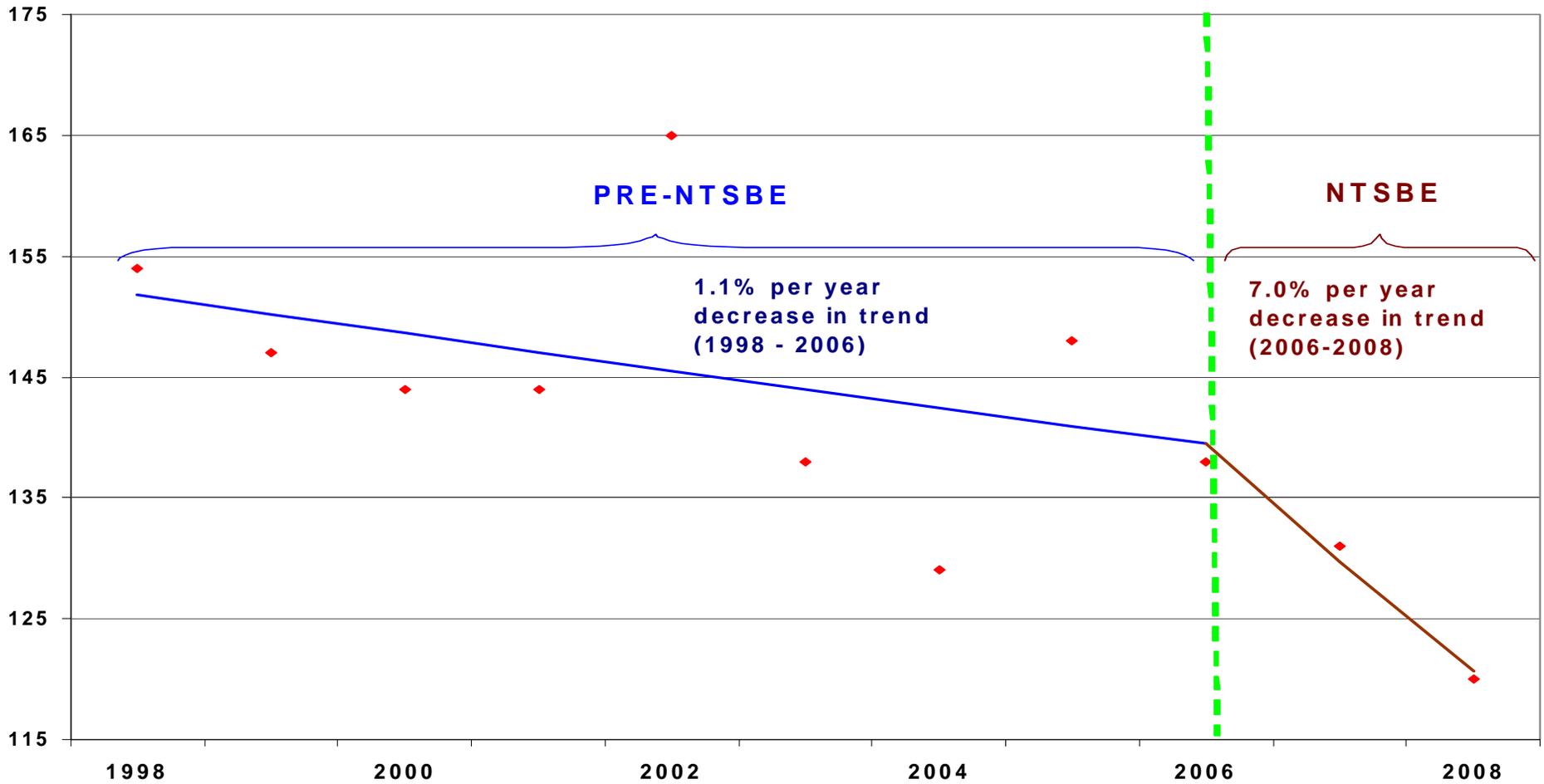
Difference in Deaths per Year from 2005-06 to 2007-08



Data Source: FARS

Vehicle occupant deaths with unknown crash hour excluded.

Washington Alcohol Impaired Driver-Involved Death Trend 1998-2008, By Year, *Night-Time Only* (7 p.m.-4:59 a.m.) Before and During Night-Time Seat Belt Enforcement Project



Regression Analysis Significant at .05 level
Source: FARS, Software: National Cancer Institute

Nighttime High Risk Drivers

- What did this research learn about nighttime high risk drivers?
- Is a nighttime seat belt violation a strong predictor of high risk drivers who are more frequently involved in other dangerous behaviors?

1+ Alcohol Citations

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	10.4	3.0	5.5
<i>Night Belted</i>	4.9	1.4	
<i>Day Unbelted</i>	5.7	1.6	2.2
<i>Day Belted</i>	3.5	1.0	

1+ Moving Violations

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	55.4	1.4	6.4
<i>Night Belted</i>	49.0	1.3	
<i>Day Unbelted</i>	45.1	1.1	5.9
<i>Day Belted</i>	39.2	1.0	

1+ Speeding Violations

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	42.1	1.3	6.5
<i>Night Belted</i>	35.6	1.1	
<i>Day Unbelted</i>	33.2	1.0	0.9
<i>Day Belted</i>	32.3	1.0	

1+ Negligent or Reckless Violations

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	10.4	2.1	2.0
<i>Night Belted</i>	8.4	1.7	
<i>Day Unbelted</i>	7.3	1.5	2.4
<i>Day Belted</i>	4.9	1.0	

1+ License-related Violations

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	14.6	2.4	3.6
<i>Night Belted</i>	11.0	1.8	
<i>Day Unbelted</i>	7.8	1.3	1.8
<i>Day Belted</i>	6.0	1.0	

1+ Criminal Offenses

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	19.8	2.1	6.2
<i>Night Belted</i>	13.6	1.4	
<i>Day Unbelted</i>	9.4	1.0	-0.2
<i>Day Belted</i>	9.6	1.0	

1+ Felonies

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	8.3	2.7	1.4
<i>Night Belted</i>	6.9	2.2	
<i>Day Unbelted</i>	3.2	1.0	0.1
<i>Day Belted</i>	3.1	1.0	

1+ Violent Crimes

<i>Driver Group</i>	<i>% of Group</i>	<i>Ratio to Day Belted</i>	<i>Percentage Point Difference Unbelted-Belted</i>
<i>Night Unbelted</i>	9.1	2.2	2.2
<i>Night Belted</i>	6.9	1.7	
<i>Day Unbelted</i>	3.5	0.9	-0.6
<i>Day Belted</i>	4.1	1.0	

Presentation Summary

- Preliminary NTSBEP Data Shows:
 - The CIOT Model can be successfully modified for use at night;
 - Nighttime seat belt enforcement reduces deaths and serious injuries;



Presentation Summary

- There are multiple ways to conduct nighttime seat belt patrols, and all seem to work well if implemented via strong communications and dedicated law enforcement patrols; and
- There are many peripheral benefits to nighttime seat belt enforcement.



Presentation Summary

- A Nighttime Seat Belt Enforcement Strategy:
 - Produces positive outcomes in other areas of traffic safety (speed and impaired driving);
 - Provides an effective pointer index for identifying high risk and anti-social drivers at increased rates;
 - Produces increased rates of enforcement in many areas of criminal interdiction;



Presentation Summary

- A Nighttime Seat Belt Enforcement Strategy:
 - Is an excellent way to implement DDACTS with a direct connection to a priority area of traffic safety; and
 - Will be further researched in a full-time, high visibility DUI enforcement project in WA.



Conclusion:

- In times of diminishing resources and increasing public demand, developing and implementing effective enforcement strategies that produce multiple benefits and desired outcomes is essential;
- Especially when they directly impact social harm, quality of life, the public's welfare, and the economy.
- **DDACTS** can do precisely this when combined with traffic safety initiatives like NTSBE!



Contact Information

Jonna VanDyk
OP Program Manager
360-725-9885

jvandyk@wtsc.wa.gov

Lowell M. Porter
Director
360-725-9899

lporter@wtsc.wa.gov

Washington Traffic Safety Commission

621 8th Avenue SE, Suite 409

Olympia, WA 98504-0944

www.wtsc.wa.gov

