

The Picture

Washington's population of almost seven million¹ travels on almost 115,000 miles of public roadway², including interstate and state highways, Tribal and county roads, and urban and small town streets. The majority of those roadways are shared by motorized and non-motorized vehicles and pedestrians. When we're walking the dog or jogging around our neighborhood, we don't think of ourselves as pedestrians, but that's what we are.

The Problem

Pedestrian deaths and serious injuries have been declining, but the rate of decrease has been slower for pedestrian deaths and serious injury collisions than overall fatalities and serious injuries. In recent years (2007-2011) Pedestrian deaths account for 14 percent of all traffic fatalities, up from 11 percent in 2006-2008.³

Year	All Traffic Deaths	Pedestrian Deaths	All Serious Injuries	Pedestrian Serious Injuries
2009	492	62	2646	289
2010	460	63	2482	292
2011	454	68	2136	288
2012	438	75	2200	337
2013 ⁴	436	50	1915	260

Goal

The goal is to reduce pedestrian deaths and serious injuries to zero as embodied in Washington's Strategic Highway Safety Plan, *Target Zero*®.

WTSC's Role

The Washington Traffic Safety Commission's Pedestrians Program functions as a connector and supporter of partners who can implement effective countermeasures (see below).

For example, as a *Target Zero*® Priority Level Two program, Pedestrians proposals are given priority in the WTSC annual grant process. Each December a Request for Proposals is available at www.wtsc.wa.gov.

Strategy

Our strategy is to use fatality and serious injury data to identify contributing factors. Those factors guide resource allotment and countermeasure implementation.

¹ Population 6.897 million in 2012, U.S. Census Bureau

² 114,886.58 public-road lane miles in 2011, Washington State Department of Transportation

³ Washington Traffic Safety Commission, 2013

⁴ 2013 fatality data is preliminary until 12/31/14

Contributing Factors

Based on analyses of Washington fatal pedestrian crashes, 2007 – 2011, we can answer the following questions.

When are pedestrians being killed?

Nearly one-third of pedestrian deaths occur in the winter months October – March, between the hours of 3pm and 9pm. This time period constitutes the deadliest time for pedestrians, compared to all other hourly time frames and the months April – September.

Where are pedestrians dying?

From 2007-2011, almost half (46%) of pedestrian fatalities occurred at or were related to an intersection. Seventy percent (70%) occurred in urban areas. However two-thirds of Native American pedestrian deaths occurred in rural settings. Over half (54.2%) of pedestrian fatalities occurred in areas with posted speeds of 25-35 mph, and 16.6% occurred on roadways with 60-70 mph posted speeds.

Who are the involved drivers, and what are they doing?

The largest driver age group in pedestrian deaths was 16-25 (21 percent), and the second largest groups, 26-35 and 46-55, tied at 17 percent. In over half (56.6 percent) of pedestrian fatalities, crash investigators determined that the involved drivers made no errors that contributed to the crash. The most prevalent contributing factor among drivers in pedestrian fatal crashes was distraction (20.7 percent). The second-most prevalent factor was failure to yield right-of-way (13.5 percent), which is closely related to distraction. The third most prevalent factor was impairment (11.9 percent). Surprisingly, speeding was a factor in only 6.9 percent of pedestrian deaths, the fourth most prevalent factor.

Who are the pedestrians, and what are they doing?

The largest age group of pedestrians who died was 46-55 (17.9 percent) and the second largest was 56-65 (15.4 percent). Well over half (63.3 percent) were male. Least involved among all age groups were those 1-10 years of age (2.2 percent) and 11-15 (4.7 percent). With 38 percent of pedestrian deaths, crash investigators determined that pedestrians committed no errors that contributed to the crash. The most prevalent pedestrian-contributing factor in fatalities was impairment: Over half (50.8%) of pedestrians killed were impaired by alcohol or drugs. The second most prevalent factor was the pedestrian not being visible to the driver (31 percent). Improper crossing (28.5 percent) was the third most prevalent factor. The fourth most prevalent factor was improper action in the road (21), including standing, lying, working, and playing.

Countermeasures Summary

NHTSA's *Countermeasures that Work*⁵ is our best source for behavioral countermeasures, and it rates effectiveness:

- ***** Demonstrated to be effective by several high-quality evaluations with consistent results
- **** Demonstrated to be effective in certain situations
- *** Likely to be effective based on balance of evidence from high-quality evaluations or other sources
- ** Effectiveness still undetermined; different methods of implementing this countermeasure produce different results
- * Limited or no high-quality evaluation evidence

For Pedestrian programs, there are no five star strategies.

Pedestrian safety zones.

These zones are multi-disciplinary efforts. You target resources for education, enforcement and engineering to a geographic area where a significant portion of the pedestrian crashes are occurring. Messaging is targeted to the data-defined audiences.

Reduce and enforce speed limits.

The goal of reducing speeds is to increase reaction time for both drivers and pedestrians to avoid crashes, as well as reduce the severity of injuries that result when pedestrian crashes occur.

Targeted enforcement.

The purpose of targeted enforcement is to increase compliance with appropriate traffic laws by both pedestrians and motorists.

Conspicuity enhancement.

The purpose of enhancing conspicuity for pedestrians is to increase the opportunity for drivers to see and avoid pedestrians, particularly at night.

Elementary-age child pedestrian training.

The purpose of elementary school pedestrian training is to equip school-age children with knowledge and practice to enable them to walk safely in environments with traffic and other safety hazards.

⁵ *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, 7th Edition, 2013, National Highway Traffic Safety Administration