

2015 Portland Traffic Safety Report

February 8, 2016

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Active Transportation and Safety Division
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Introduction

One death on our city streets is one too many.

Portland families deserve safe streets on which to walk, bike, operate mobility devices, access transit, and drive. PBOT aims to make our transportation system the safest possible and to move toward zero traffic-related fatalities and serious injuries in the next 10 years.



PBOT views every live saved and every serious injury prevented in pursuit of this goal as a victory.

Recent Trends

Between 1986 and 2000, it became far less likely that Portland residents would be seriously injured or killed in a traffic crash. During this period, Portland's trend was much more positive than the country as a whole. In more recent years, Portland has been losing some ground. Since 2010, the likelihood of a serious injury or a death has increased in Portland. This trend underscores the need for Vision Zero - we must be aggressively proactive in improving the safety of our roads.



Figure 1 Traffic Fatalities per 100,000 Residents Source: US Census, Federal Highway Administration

Portland's safety performance remains significantly better than the U.S. as a whole; but other large cities are doing better when comparing likelihood that a person will be killed in a traffic crash. For example, traffic deaths in Seattle occur 16% less frequently when adjusted for population. In Stockholm, where Vision Zero is a well-established policy, there is an 82% lower likelihood that a person will die in a traffic crash than in Portland.

Portland has historic traffic fatality data ranging from 2015, back to 1925. In 2015, 37 people were killed in traffic crashes in Portland.

Roadway Fatalities per 100,000 People (2009)	
City	Fatalities per 100,000
Stockholm	1.1
New York (lowest in U.S.)	3.9
San Francisco	4
Seattle	5.2
Portland	6.2
United States	11.6

Table 1 Roadway Fatalities per 100,000 People Source: CDC

Recent Trends: By Mode

2015 saw an increase in fatal crashes compared to 2014.

Looking over the past decade, however, there is an overall trend where fatalities are staying about the same level. The increase in fatalities in 2015 was completely represented by the 20 occupants of cars and trucks were killed by traffic. In 2014, only 7 occupants of cars and trucks suffered fatal injuries. Bicycle fatalities increased from 1 to 2. Motorcycle fatalities stayed constant at 5. The best news in 2015 was that pedestrian fatalities were down compared from 15 fatalities in 2014 to 10 fatalities in 2015.

Recent Trends: By Mode

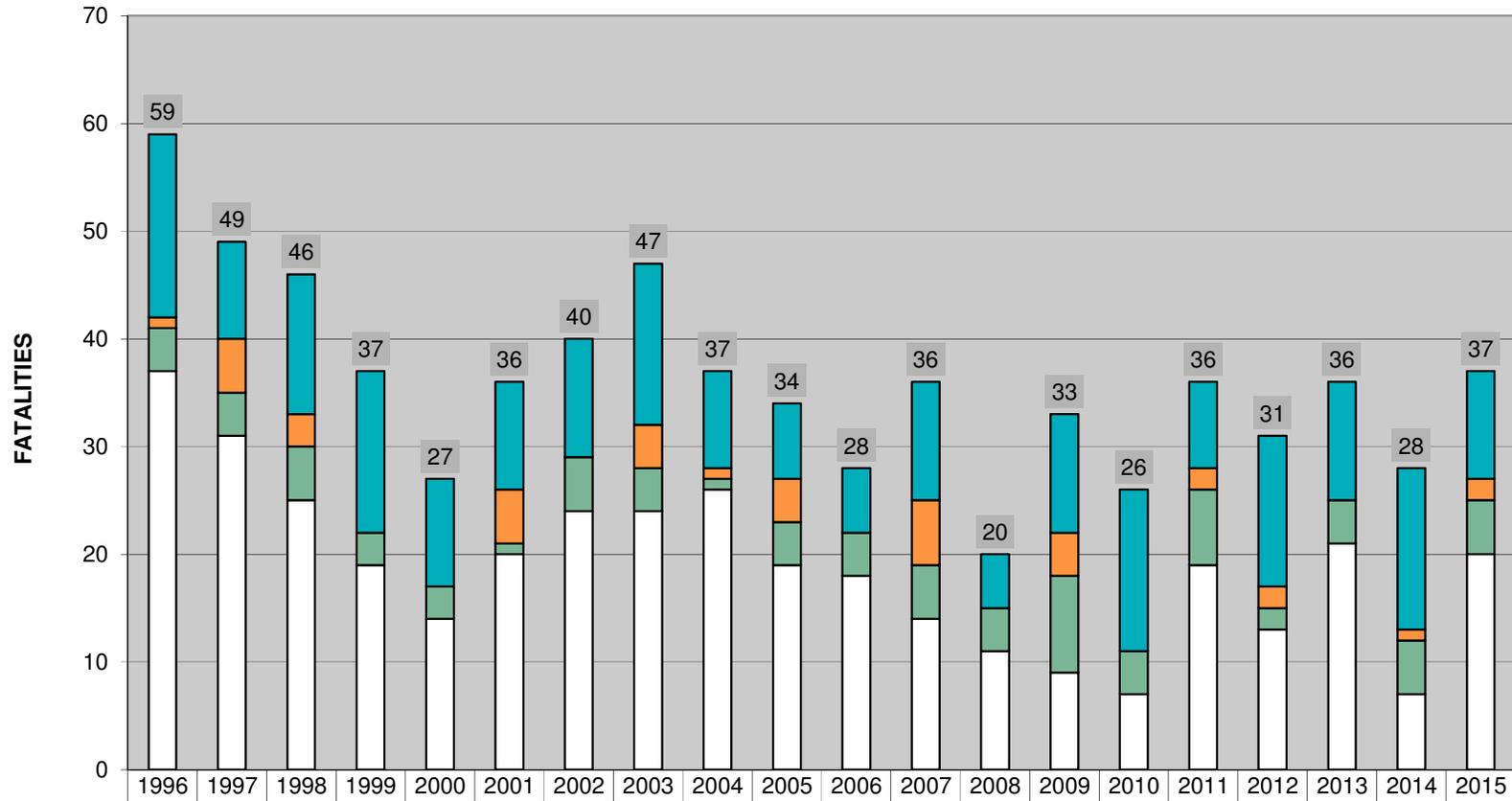
Motor Vehicle Occupants: In 2015, 20 people died as an occupant of a car or a truck. While other modes remained at a constant level or improved compared to 2014, fatalities for occupants of cars and trucks increased from a historic low of 7 in 2014 to 20 in 2015.

Motorcyclists: In 2015, five motorcycle fatalities occurred in Portland. Motorcycle crashes in 2015 stand out for having a high proportion involving DUII, excessive speed, and other high-risk behaviors.

Bicyclists: There were 2 bicycle fatalities in 2015. Over the past decade, there are an average of 1.7 bicycle fatalities each year in Portland.

Pedestrians: There were 10 pedestrian fatalities in 2015. Nationally, pedestrians make up 14% of all traffic fatalities. In Portland, over the past ten years, they have made up a third of fatalities, more than double the national average.

TRAFFIC FATALITIES IN PORTLAND
by mode of travel
1996-2015



All Fatal	59	49	46	37	27	36	40	47	37	34	28	36	20	33	26	36	31	36	28	37
Ped Fatal	17	9	13	15	10	10	11	15	9	7	6	11	5	11	15	8	14	11	15	10
Bike Fatal	1	5	3	0	0	5	0	4	1	4	0	6	0	4	0	2	2	0	1	2
Motorcycle Fatal	4	4	5	3	3	1	5	4	1	4	4	5	4	9	4	7	2	4	5	5
Motorist Fatal	37	31	25	19	14	20	24	24	26	19	18	14	11	9	7	19	13	21	7	20

People Killed on Portland Streets in 2015

Name	Date	# Fatalities	Mode
Bruce Pratt	1/1/2015	1	Pedestrian
Aron Haid	1/30/2015	1	Motor Vehicle
Tara Freemole	2/22/2015	1	Motorcycle
Dale McConachie	2/25/2015	1	Motor Vehicle
Arianna Lundin	3/7/2015	1	Motor Vehicle
Samuel Wilkins	3/11/2015	1	Pedestrian
Brady Jackson	4/15/2015	1	Motor Vehicle
Alexandria Cooper	4/19/2015	1	Motor Vehicle
Cynthia Boone	5/4/2015	1	Motor Vehicle
Jack Davis	5/17/2015	2	Motor Vehicle
Jacob Farrar			
Jared Mack	5/20/2015	1	Motor Vehicle
Michael Hartman	5/25/2015	1	Motor Vehicle
Mark Angeles	5/27/2015	1	Bicycle
Thomas Gazzola	6/3/2015	1	Pedestrian
George Carlson	6/14/2015	1	Pedestrian
Marlene Poppo	7/4/2015	1	Pedestrian
Todd Lane	7/21/2015	1	Motor Vehicle
Adrienne Wilson	8/7/2015	1	Pedestrian
Robert Gabriel	8/9/2015	1	Motorcycle
Edgar Caceres	8/10/2015	1	Pedestrian
Jason Braggs	8/14/2015	1	Motorcycle
Byron Watterson	8/19/2015	1	Motor Vehicle
Joshua Terry	8/23/2015	1	Motorcycle
Mary Edwards	8/26/2015	1	Pedestrian
Nicolas Lopez	9/3/2015	1	Motor Vehicle
Jane Robson	9/6/2015	1	Motor Vehicle
Carlton Hill	9/16/2015	1	Motor Vehicle
	9/20/2015	1	Motorcycle
Ronald Shapland	9/26/2015	1	Pedestrian
Christopher Chandler	9/27/2015	1	Pedestrian
Nicholas Horsey	11/1/2015	1	Pedestrian
Gebrehiwet Abraha	11/17/2015	1	Motor Vehicle
Linda Johnston	12/4/2015	1	Motor Vehicle
Donald Conant	12/7/2015	1	Motor Vehicle
Martin Greenough	12/12/2015	1	Bicycle
Andrew Lambert	12/13/2015	1	Motor Vehicle

Recent Trends: By Location

High Crash Corridors: One of Portland's most significant transportation safety lessons learned in the last decade has been the relationship between arterial roadways and crashes. The majority of serious crashes in the Portland area occur on arterial roadways. In the Portland Metro region, you are 4.3 times more likely to get in a serious crash on an urban arterial roadway that runs through the city than on a highway, such as I-5, I-205 or I-84. The Portland Bureau of Transportation has designated the worst of these arterial roadways High Crash Corridors. These 10 roadways, representing just 3 percent of Portland's road network, were the site of 27 percent of traffic fatalities in 2015.

East Portland: As East Portland, including all crashes on or east of 82nd Ave, is bisected by 6 of Portland's 10 High Crash Corridors. In 2015, East Portland had fewer fatal crashes in than in many previous years. In 2015, 9 of the city's traffic fatalities were in East Portland, of which 3 were pedestrian fatalities.

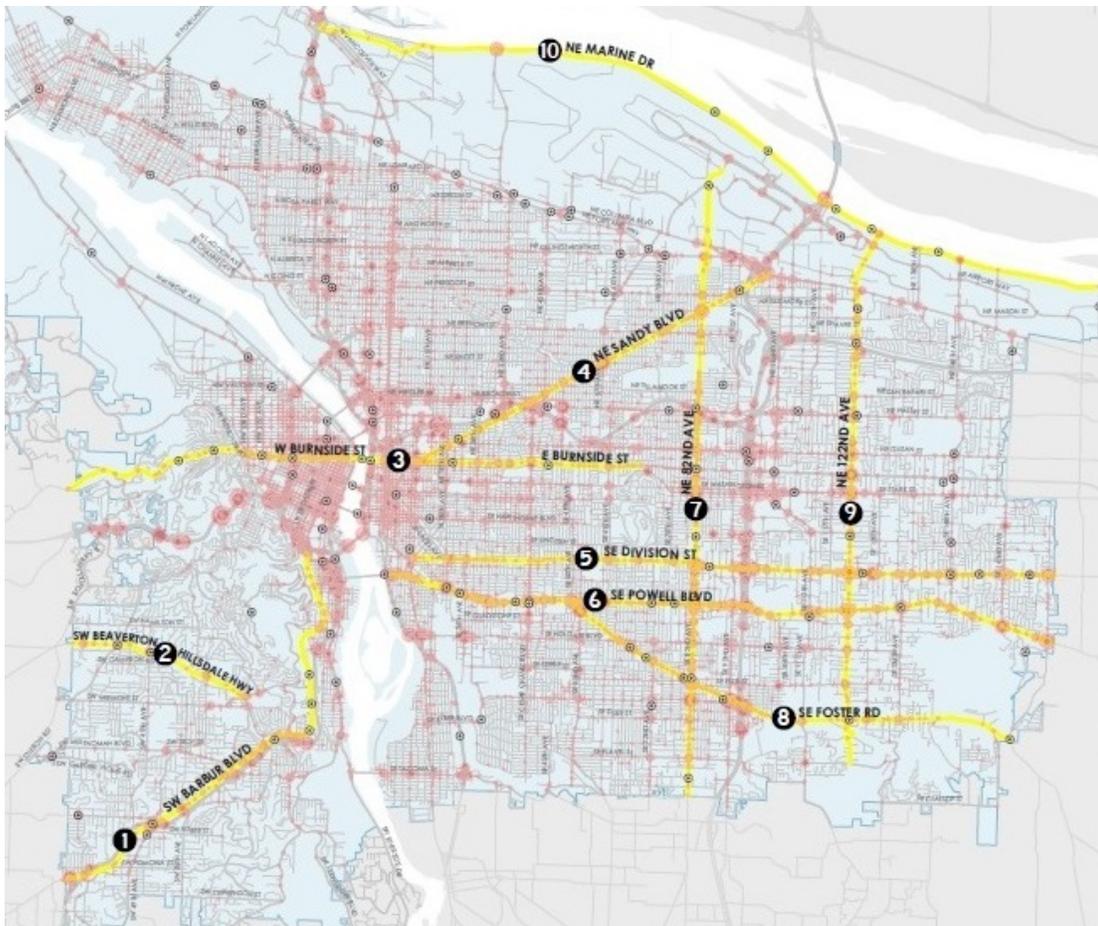


Figure 2 Portland's 10 High Crash Corridors

Key Contributing Factors

The Portland Bureau of Transportation is tracking many factors related to safety of our transportation system. In general, our goals are to manage speed to reduce the number of people who die and get hurt on our streets, encourage people to follow the rules of the road when travelling, and support efforts that increase courtesy and predictability.

The data summarized below is based on 2015 data:

DUII: 54% of fatal crashes in Portland include at least one person who was under the influence of alcohol or drugs. Of particular note is that 75% of motorcycle fatalities include DUII. 30% of pedestrian fatalities involve either an intoxicated pedestrian or driver.

Speed: Speed is a significant factor in crash severity. About 80% of the Portland's fatalities and serious injuries occur on just 19% of our roadways that are posted at 30 MPH or higher. A person is 25 times more likely to be killed on a Portland road posted at 35 MPH or higher compared to a road posted at 25 MPH or slower, when comparing per mile of roadway.

Roadway and Lane Departure: Roadway and lane departures occur when a driver does not maintain vehicle position within a lane and either crosses into oncoming traffic or runs off the road into a tree, utility pole, down a bank, or into a body of water. Roadway and lane departures result in 40% of traffic fatalities in Portland. These departures often relate to a combination of factors such as speeding, distraction, and DUII.

Low-Light Conditions: Portland has many days that include dark or low-light conditions for long hours. Data shows that 73% of Portland pedestrian fatalities occur during low-light and dark conditions. It is critical that pedestrians and drivers operate with care in low-light conditions, that pedestrians take reasonable steps to be visible, and as the City works to provide adequate lighting in high-conflict traffic conditions.

Key Safety Initiatives

PBOT has several safety initiatives underway in response to these safety trends, with Vision Zero being the overarching framework.

Vision Zero: Vision Zero is one of five major themes in PBOT's Portland Progress: A 2-Year Work plan published in 2015. Portland Progress identifies 18 specific actions PBOT is implementing to make strides toward a street network with zero fatalities and serious injuries. For the latest information about Vision Zero projects and how to get involved, visit visionzeroportland.com.

Crossing Safety: Pedestrian safety is a high priority for PBOT, especially on arterial roadways. As most pedestrian fatalities occur when pedestrians are crossing the street, PBOT is focused on improving crossing safety. With the help of federal grants, state funds, and local partnerships, the Bureau is rolling out a significant number of crossing improvements utilizing Rectangular Rapid Flashing Beacons (RRFBs) on roadways throughout East Portland, as illustrated in the map.

Speed Limits: The relationship between speed and fatal and serious crashes is well established. As speeds increase, so do crash rates. The faster a driver is going results in the driver traveling further down the road before they are able to hit the brakes. Once the brakes are engaged, faster speeds result in greater distance required to bring the vehicle to a stop. It's simple physics. Once vehicle speeds exceed 35 MPH, pedestrians struck by a car are more likely to die than survive. For this reason, PBOT is looking to align the posted speed limits of our roads with the potential conflicts on them. We are pursuing requests to the Oregon Department of Transportation's Speed Control Board to lower posted speeds on local roadways, individually and through an administrative process.

Speed Enforcement: Posted speed limits alone are not enough to control speeding on our roadways. Enforcement is a critical component to the equation. PBOT works closely with Portland Police to find ways to most efficiently enforce traffic laws. To this end, the City of Portland was given legislative authority, in 2015, to utilize safety cameras to enforce speed limits on our High Crash Corridors. These cameras will enforce speed limits on our most dangerous roads 24 hours a day, 7 days a week. The system will be clear and transparent with signage providing drivers with notice that the corridors are photo enforced and showing both the posted speed limit and the driver's current rate of speed. We want drivers to know the corridors where speeds are photo enforced, so they drive the posted speed.

Observations

Traffic in any city is complicated and seemingly unrelated aspects can contribute to the overall crash performance on urban streets. In 2015, Portland experienced an increase in fatalities for people in cars and trucks. There are three factors that may be contributing to this.

First, Portland is a growing city, with many people moving to here from around the country and the world. Our new residents bring their driving habits with them and must relearn how to drive safely in a city that likely has far more pedestrians, bicycles, and transit vehicles than they are used to. As a community, it is important for us to share our culture of safety by encouraging everyone to slow down, drive sober, and follow the rules of the road.

Second, our economy is improving. A stronger economy means more travel occurring on our roads. In 2014 and 2015, Portland traffic increased back to levels not seen since before the Great Recession in 2008. In addition to the marking the start of the recession, 2008 was noteworthy because of a major spike in gas prices. 2008 was also the year with the lowest number of total traffic fatalities in Portland since the advent of the motor vehicle.

Finally, the variety of distractions affecting people's ability to drive, walk and bike is continuing to climb. Statewide, there has been an upward trend in crashes where single vehicles depart their lane or the roadway. Data collection for in-vehicle distraction has not kept pace and we do not have adequate information for significant analysis. However, the traffic safety profession has a growing concern about the increase in these distractions coinciding with departure crash types.

How We Gauge Our Progress

PBOT measures our safety progress on safety rates compared to population. We do this because it answers the question, "Given the way we live our lives, what's the likelihood that one of these tragedies could happen to me, a family member, neighbor, or friend?" Many communities still measure safety performance based on the miles driven in the city. Measures that relate to miles driven can mask serious safety issues as driving increases. Vision Zero holds that every serious traffic injury and death is unacceptable. As such, we should measure the real impact on people instead of a measure based on how much we drive.

About Crash Data

Every day, people travel more than 20 million miles in Portland by motor vehicle, motorcycle, bicycle or by foot. This translates into hundreds of millions of human interactions each day. Portland uses crash data from two main sources, the Oregon Department of Transportation and the Portland Police Bureau. The official crash record for the State of Oregon is compiled by the Oregon Department of Transportation. There are typically between 10,000 and 12,000 reported crashes in Portland each year. Portland receives the complete official crash record approximately ten months after the end of the year reported. For example, 2013 crash data was made available in November of 2014. This official record is made of two parts, self-reported crashes and police crash investigations.

In Oregon, crash participants are required to submit the Oregon Accident and Insurance Report form if the event involves direct contact with a motor vehicle and there is an injury or at least \$1,500 in property damage. These forms are the source for a large majority of the crashes in the official record. The second source are police crash investigations. Due to resource constraints, only the most serious crashes are investigated by police. Portland Police will investigate a crash involving a pedestrian or bicycle rider if that vulnerable traveler is transported in an ambulance. If there is not a vulnerable traveler involved, they will investigate a crash if a crash participant is entered into the trauma system by an emergency responder while on-scene.

For fatal crash data, PBOT utilizes information provided by the Portland Police Bureau. Using Police data allows for more up-to-date information about traffic fatalities.

For national comparisons, PBOT uses data from the Federal Highway Administration (FHWA). The FHWA compiles records from official crash records from around the nation. The national record has a longer lag between the end of the reported year and when data is available. As of this report, national fatality and injury data is available through 2012.