20 A CRASH DATA BULLETIN FOR THE DELAWARE VALLEY

See the easy-to-use center spread for county statistics and the

SAFE SENIOR MOBILITY

In 2012, the Delaware Valley recorded a decrease in total crashes (-3 percent) and people injured (-0.6 percent), but fatalities increased by 3.6 percent climbing to 402, up from 388 in 2011.

This bulletin provides a snapshot of road safety in the Delaware Valley by highlighting and comparing trends at the national, state, regional, and county levels, while promoting crash safety awareness and best practices.

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2012 Crashes by the Numbers in the Nine-County Region

Per Day (on average):

- 1 person died every 21 hours
- 121 people were injured
- 221 crashes occurred

One out of every 126 people in the region was **injured in a crash** during 2012.

PA

In 2012, Pennsylvania's **124,092** crashes claimed the lives of **1,310** people and injured another **87,846**¹. Crashes in DVRPC's five Pennsylvania counties account for 27% of the total crashes recorded in the state's 67 counties. Twenty-one percent (275) of the state's fatalities occurred in the DVRPC region's five counties which are home to 32 percent of the state's residents.

In Pennsylvania (statewide):

- 1 person was killed in a crash every 7 hours (on average)
- 2011 vs. 2012: crashes decreased (-1%), fatalities increased (1.9%)

NJ

In 2012, New Jersey's **276,923** crashes claimed the lives of 589² people and injured another 86,126. DVRPC's four New Jersey counties account for 17 percent of the total crashes recorded in the state's 21 counties. Twenty-two percent (127)

of the state's fatalities occurred in the DVRPC region's four counties which are home to 18.4 percent of New Jersey's residents.

In New Jersey (statewide):

- 1 person was killed in a traffic crash every 14 hours, on average
- 2011 vs. 2012: crashes decreased (-6%), and fatalities decreased (-6%)

^{1.}2012 Pennsylvania Crash Facts and Statistics (PennDot, 2013)

^{2.}New Jersey State Police Fatal Accident Investigation Unit (http://www.njsp.org/info/fatalacc/index.html)

U.S. CRASH FATALITIES INCREASED IN 2012 AFTER SIX YEARS OF DECLINE

According to the National Highway Traffic Safety Administration (NHTSA), traffic fatalities increased by 3.3 percent to 33,561

in 2012; a loss of an additional 1,082 lives over 2011³. This increase overshadows the 0.3 percent rise in vehicle miles traveled (VMT)⁴. Despite the downward trend in total crashes in recent years, pedestrian and motorcycle crashes have trended upward with increases of seven and six percent respectively in 2012. The fatality rate also increased slightly to 1.14 deaths per 100 million VMT up from 1.11 in 2011. Despite 2012's disappointing increase, highway deaths are still at the level of 1950. Regionally speaking, the Delaware Valley's 3.6 percent increase in fatalities is consistent with the national increase. Early estimates of 2013 data indicate a fatal crash increase for the Delaware Valley, though definitive information will not be available until the spring of 2014.

Regional Crash Safety: Five-Year Trends

The Delaware Valley's five-year downward trend in crashes and injuries continued in 2012 with a 5.3 percent drop in total **crashes** [\checkmark], and a 1.3 percent drop in **injuries** [\uparrow]. Unfortunately, **fatalities** [\uparrow] continued to rise for the second year in a row since the low of 351 in 2010, marking an increase of 1.5 percent between 2008 and 2012.



Regional Crash Severity at a Glance

As a result of the 80,971 crashes in the region, 402 people died, 44,421 people were injured, and 154,489 people involved reported no injury. Among those **injured** [**^**], complaint of pain was the most common injury type accounting for over 59% percent of all injuries.

2012 Crashes by Severity



^{3.}http://www-nrd.nhtsa.dot.gov/Pubs/811856.pdf

⁴. Vehicle Miles Traveled (VMT): Total number of miles driven by all vehicles within a given time period and location.



FUNDING SAFETY IMPROVEMENTS WITH FEDERAL DOLLARS: STRATEGIC HIGHWAY SAFETY PLANS

A Strategic Highway Safety Plan (SHSP) is a major component and requirement of the Highway Safety Improvement Program (HSIP), the safety funding component of the federal transportation legislation. Each state must prepare and submit an SHSP to the Federal Highway Administration (FHWA) in order to secure safety funding through the HSIP. With the goal of reducing fatalities and injuries on all public roads, an SHSP identifies a state's key safety needs and guides investment.



Regional Safety Action Plan

DVRPC's current 2012 Transportation Safety Action Plan: Improving Transportation Safety in the Delaware Valley is being updated and will be published in late 2014, making it the fourth edition. Each plan is the result of a data-driven process following AASHTO¹ guidelines designed to identify the emphasis areas that contribute most to crash

fatalities and injuries. The plan is then shaped by DVRPC's Regional Safety Task Force—a multidisciplinary group in existence since 2005—to be consistent with the SHSPs of both New Jersey and Pennsylvania, which also follow AASHTO guidelines.

The 2012 plan process identified **seven emphasis areas** that **contributed to 95 percent** of the **crash fatalities** in the Delaware Valley:

- 1. Curb Aggressive Driving
- 2. Keep Vehicles on the Roadway and Minimize the

Consequences of Leaving the Roadway

- 3. Improve the Design and Operation of Intersections
- 4. Reduce Impaired and Distracted Driving
- 5. Increase Seat Belt Usage
- 6. Ensure Pedestrian Safety
- 7. Sustain Safe Senior Mobility



Pennsylvania's current SHSP includes a media and education campaign called **Just Drive PA** focusing on simple and clear messaging.

FHWA's Nine Proven Safety Countermeasures

To promote data-driven safety improvements, the FHWA is advancing a group of safety countermeasures that are research-proven. Pedestrian safety is featured here.



#7. Medians and Pedestrian Crossing Islands in Urban and Suburban Areas

Pedestrian crossing islands, also known as median refuge areas, separate crossing pedestrians from traffic. According to the FHWA, "mid-block locations account for more than 70 percent of pedestrian fatalities."



Source: DVRPC

A well-designed crossing island placed in an urban or suburban location may reduce pedestrian crashes by 46 percent. For more information see http://safety.fhwa.dot. gov/provencountermeasures/fhwa_ sa_12_011.htm

^{1.} American Association of State Highway Transportation Officials

GENERAL SAFETY STATISTICS BY COUNTY

Compared to 2011, the region experienced a slight decline in total crashes and injuries in 2012, but not in fatalities. The death toll climbed 3.6 percent from 388 in 2011 to 402 in 2012. Fatalities dropped in Chester (PA), Mongomery (PA), and Camden (NJ) counties. The remaining six counties all experienced modest increases. The infographic on this page shows crashes, injuries, and fatalities by county.

SPOTLIGHT: SAFE SENIOR

MOBILITY (drivers aged 65 and older) As life expectancy increases, people will likely be driving later in life. According to NHTSA, there were 32.2 million senior drivers nationally in 2008, and that number is expected to rise to 40 million by 2020. Featured here are senior driver-related fatalities by county in the DVRPC region for 2011 and 2012, which declined from 21% to 15% over the period. This data represents people of all ages who died in crashes when a senior driver was involved, but does not indicate that the senior driver was at fault.



SENIOR DRIVER SAFETY IN PA:

In 2012, the percentage of senior driver-related fatalities decreased, but the total number of fatalities increased: 37 people died in 2012 representing 13% of DVRPC's PA-county fatalities, and 28 died in 2011 representing 15% of fatalities. Only Chester County experienced an increase; climbing from 15% of all fatalities in 2011 to 23% in 2012. The other counties remained the same or saw slight decreases in this category.

More statistics can be found in the 2012 Pennsylvania Crash Facts and Statistics publication: www.dot.state.pa.us/Internet/Bureaus/pdBHSTE.nsf/InfoFb10?OpenForm

total

PEOPLE

KILLED

PEOPLE

people:

PERCENT of











crashes led to 60 deaths

SENIOR DRIVER SAFETY

In 2012, senior driver-related fatalities were 18% of all people killed in DVRPC's four New Jersey counties, claiming the lives of 23 people. This is a notable decrease from 2011 when 31% of the fatalities were senior driver-related. Each New Jersey county experienced significant decreases in this category, with Gloucester County showing the biggest decrease from

More statistics can be found in the 2012 Statewide Fatal Crash Statistics report: www.state.ni.us/nisp/info/ fatalacc/pdf/swfcs2 12.pdf

> 1. Property Damage Only (PDO): A crash where no one was killed or injured, but damage occurred to a vehicle or other property.

Safe Driving Consideration for Seniors

Changes that accompany aging can affect a person's ability to drive safely. By tracking changes in eyesight, physical fitness and reflexes, seniors may be able to adjust driving habits to stay safe on the road.

Taken from the NHTSA publication **Safety In Numbers**¹, several pre-crash actions were identified as being common for senior drivers, and three involve intersections: turning left at an intersection with a stop sign, turning left on a green light without a green turn-arrow, and turning right at a yield sign to merge with traffic at speeds of 40 to 45 mph.

NHTSA's data also identified these four errors commonly made by seniors at intersections:

- **1.** Moving or stopping the vehicle too slowly
- **2**. Not noticing potential conflicts or traffic signs and signals
- **3**. Misjudging gaps when crossing traffic
- 4. Conducting a poor visual search before proceeding



Minimize Risks!

Senior drivers can minimize the risk of a crash by traveling at times of day when traffic is light, choosing routes with less traffic, scheduling trips during the daytime, and **avoiding left turns** where possible!

SAFE SENIOR MOBILITY



According to NHTSA, the 43.1 million Americans who were 65 or older in 2012 were only 14 percent of the population, but accounted for 17 percent of traffic fatalities, and 9 percent of all people injured in traffic crashes: **5,560 people aged 65** and over died, and **214,000 were injured in traffic**

crashes in 2012². Regardless of whether they are driving, walking, biking, or just along for the ride, seniors are especially vulnerable users of the system. Even in low-severity crashes, seniors typically sustain injuries more easily, and are more likely to die in crashes than younger people.

Regional Senior Crash Trend: 2009 to 2012

(Includes senior drivers, occupants, pedestrians, and bicyclists.)



Seniors: Four-Year Totals

53,017 crashes [] involving a senior resulted in 15,437 seniors injured [], and claimed the lives [] of 304 seniors in the four years from 2009 to 2012.

Senior Crash Deaths in 2012 in the DVRPC Region

Seventy-three seniors lost their lives in crashes during 2012 in the region. In DVRPC's Pennsylvania counties, of the seniors who lost their lives in crashes, most were behind the wheel at the time: 49 percent were listed as drivers, 36 percent were pedestrians, 15 percent were vehicle occupants, and none were bicyclists. In our four New Jersey counties, proportions were similar: 42 percent were drivers, 39 percent were pedestrians, 15 percent were vehicle occupants, and 3 percent were bicyclists.

By percentage, most seniors killed in crashes last year were driving at the time:



^{2.} Safety In Numbers, NHTSA 2012 (Safety_In_Numbers_Older_Drivers_811864-2.pdf)

^{1.}http://www.nhtsa.gov/nhtsa/SafetyInNum3ers (Volume 1, Issue 8, November/December 2013)

SENIOR-INVOLVED CRASHES NEAR SENIOR FACILITIES

This map shows the density of senior-involved (65+) crashes on all roads in the DVRPC region over a three-year period from 2010 to 2012. The color gradient of light to dark represents medium to high densities of senior-involved crashes. This data helps safety professionals target locations where safe-senior mobility programs would be most effective. Note that a senior-involved crash does not indicate that the senior was at fault.



heavy volumes are common there.

Source: PennDOT, NJDOT, PA Depatment of Health, NJ Depatment of Health Be sure to check out the 2012 COUNTY CRASH DATA BULLETINS: http://www.dvrpc.org/ asp/publicationsearch/



Safety Planning at DVRPC

Safety matters to everyone, so DVRPC pursues an active, wide-ranging approach to improve safety in the Delaware Valley. Safety is incorporated in many of DVRPC's Work Program efforts, in addition to the projects managed by the Office of Safety and Congestion Management. For more information, visit www.dvrpc.org/ Transportation/Safety.

Abstract:

DVRPC's Annual Safety Bulletin provides a snapshot of road safety and crash trends in the nine counties of the Delaware Valley region and the nation. It highlights select emphasis areas from DVRPC's *Transportation Safety Action Plan*. The goal of the bulletin is to raise awareness of traffic crashes, discuss causal factors, and promote programs and agencies working toward improving safety.

For more information please contact:

Kevin Murphy Principal Transportation Planner kmurphy@dvrpc.org

Regina Moore Transportation Engineer rmoore@dvrpc.org DELAWARE VALLEY REGIONAL PLANNING COMMISSION

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190 N Independence Mall West Philadelphia, PA 19106 215-592-1800 www.dvrpc.org

The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website (www.dvrpc.org) may be translated into multiple languages. Publications and other public documents can be made available in alternative languages and formats, if requested. For more information, please call (215) 238-2871.

Analysis in this document was derived from the NJDOT and PennDOT crash databases, unless otherwise noted.

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