

2011 ANNUAL CRASH DATA BULLETIN FOR THE DELAWARE VALLEY

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



SPOTLIGHT ON PEDESTRIAN CRASHES

In 2011 the Delaware Valley recorded a decrease in total crashes (-1.4 percent) and people injured (-0.3 percent), but **fatalities increased by 10 percent climbing to 388**, up from 351 in 2010. Over 200,000 people were directly involved in crashes during 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.

Inside:

National and Regional Crash Update	2
Motorcycle Safety	3
County Statistics: Spotlight on Pedestrian Crashes	4/5
Pedestrian Safety	6
Bicyclist Safety	7

2011 in the Delaware Valley

Deaths and Injuries Occurred Daily

- **1 traffic death** occurred on average **every 23 hours**.
- **123 persons** were **injured** in crashes **per day** (about 5 injuries every hour).
- **1 out of every 126 people** in the region was **injured** in a crash.
- **232 traffic crashes** occurred **per day** (about 10 crashes every hour).
- **388 traffic fatalities** occurred in 2011, **up from 351 in 2010**.

PA

In 2011, Pennsylvania's **125,395 crashes** claimed the lives of **1,286 people** and **injured another 87,839**.^{*} Crashes from DVRPC's five Pennsylvania counties were 27% of the state's total. **Twenty percent (253) of the state's fatalities occurred in the Delaware Valley, which is home to 32% of the state's residents.**

In Pennsylvania:

- **1 person** was **killed every 7 hours**, on average.
- 2011 vs. 2010: **crashes increased (3%)**, **fatalities decreased (-3%)**.

NJ

In 2011, New Jersey's **294,851 crashes** claimed the lives of **627^{**} people** and **injured another 87,377**. Crashes from DVRPC's four New Jersey counties were 20% of the state's total. **Twenty two percent (135) of the state's fatalities occurred in the Delaware Valley, which is home to 18.4% of New Jersey's residents.**

In New Jersey:

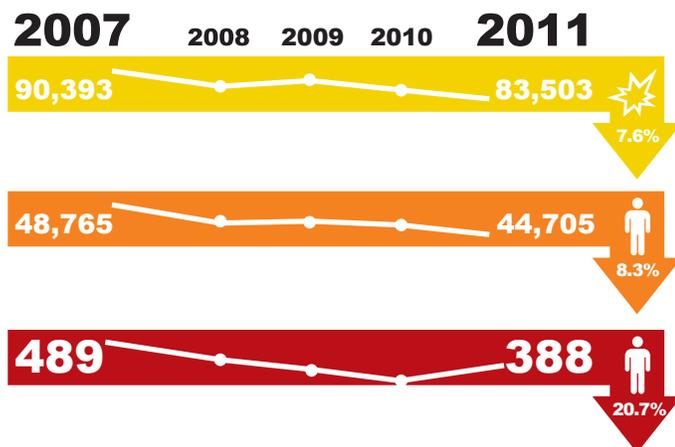
- **1 person** was **killed** in a traffic crash **every 14 hours**, on average.
- 2010 vs. 2011: **crashes increased (16%)**, and **fatalities increased (13%)**.

FATALITIES CONTINUE TO FALL ACROSS THE NATION IN 2011

According to the National Highway Traffic Safety Administration (NHTSA) traffic fatalities fell to 32,367 in 2011, a 1.9 percent decrease from 2010. This is the lowest level since 1949 and the lowest fatality rate ever recorded, with 1.10 deaths per 100 million vehicle miles traveled in 2011, down slightly from 1.11 deaths per 100 million vehicle miles traveled (VMT)¹ in 2010. According to NHTSA's December 10, 2012 press release: **"While Americans drove fewer miles in 2011 than in 2010, the nearly two percent drop in roadway deaths significantly outpaced the corresponding 1.2 percent decrease in vehicle miles traveled."**² Regionally speaking, the Delaware Valley's decline in fatalities has been consistent with the national trend since 2007, though in **2011 regional fatalities increased to 388 from 351 during 2010**. Preliminary numbers indicate a fatalities increase in 2012; numbers will be finalized in 2013.

Regional Crash Safety: Then and Now

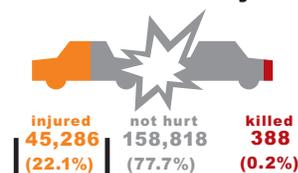
In 2011 the downward trend in crashes and injuries continued. Total **crashes** [💥] in the Delaware Valley declined from 90,393 to 83,503 between 2007 and 2011, a 7.6 percent drop. **Injuries** [👤] were also down by 8.3 percent. Regarding **people killed** [👤], despite the 2011 increase, fatalities were down 20.7 percent from the high watermark in 2007.



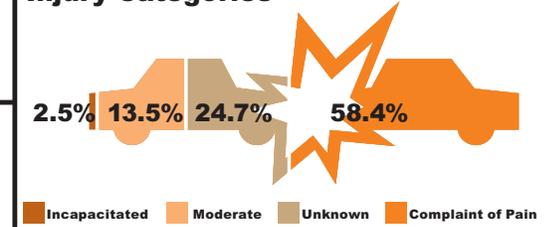
Regional Crash Severity at a Glance

As a result of the 83,503 crashes in the region, 388 people died, 44,705 people were injured, and 158,818 people involved in crashes were not hurt. Among those **injured** [👤], complaint of pain was the most common injury type accounting for over 58% percent of all injuries.

2011 Crashes by Severity



Injury Categories



^{*}2011 Pennsylvania Crash Facts and Statistics
^{**}New Jersey State Police Fatal Accident Investigation Unit

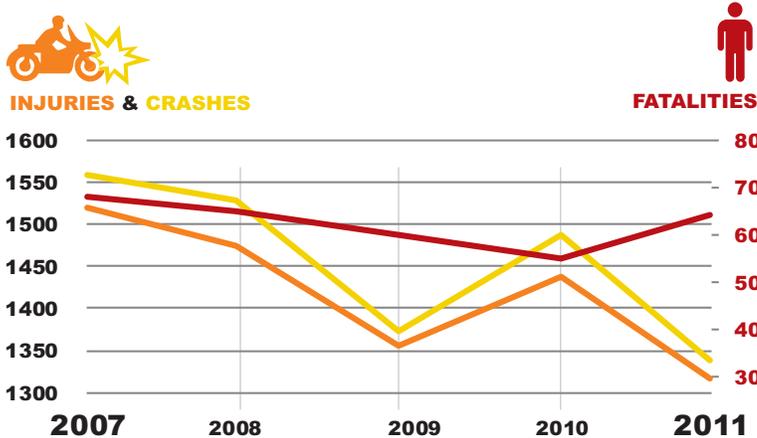
¹Vehicle Miles Traveled (VMT): Total number of miles driven by all vehicles within a given time period & geographic area. ² www-nrd.nhtsa.dot.gov/Pubs/811701.pdf



MOTORCYCLE SAFETY IN THE NATION AND THE REGION

Motorcyclists were about 30 times more likely to die in a traffic crash than passenger car occupants, and five times more likely to be injured per vehicle miles traveled in 2010, according to NHTSA.¹ Nationally, there were 4,502 motorcyclist deaths in 2010 accounting for 14 percent of the fatality total, a slight increase over the 2009 total.² The number of motorcyclist deaths climbed again in 2011 for an increase of 2.1 percent. **Regionwide from 2007 to 2011, motorcyclist crashes and related injuries declined by over 13 percent, and fatalities declined by six percent, though they are on the rise from the five-year low of 55 in 2010, to 64 in 2011, a 16 percent increase.**³

Motorcyclist Crash Trends in the DVRPC Region



Helmet Use and Helmet Laws

According to a recent study by the U.S. Government Accountability Office (GAO), lack of helmet use does not affect the likelihood of a crash, but does increase the risk of a fatality when a motorcyclist does crash. The latest research from NHTSA shows that:

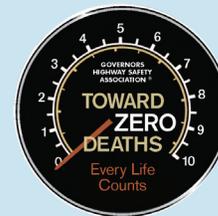
- ▶ Motorcycle helmet use increased from 48% in 2005 to 67% in 2009.
- ▶ Motorcycle helmets saved 1,550 motorcyclists' lives in 2010.
- ▶ All motorcycle helmets sold in the U.S. must meet Federal Motor Vehicle Safety Standard 218.

Considering helmet laws across the country, Washington D.C. and Puerto Rico:

- ▶ 22 states have universal laws covering all riders (New Jersey)
- ▶ 27 states have age-specific laws (Pennsylvania)
- ▶ 3 have no helmet law (Illinois, Iowa, & New Hampshire)

New Jersey requires all riders and passengers to wear an NJDOT-approved helmet with eye protection. In Pennsylvania, those 21 or older who completed a rider safety course, or who have two years of riding experience are not required to wear a helmet. According to the GAO, "laws requiring all motorcyclists to wear helmets are the only strategy proven to be effective in reducing motorcyclist fatalities".

Toward Zero Deaths: A National Strategy on Highway Safety



This logo is for the 10-point plan of the Governor's Highway Safety Association focused on driver behavior and vulnerable road users supporting reauthorization of the federal transportation legislation.

TZD is an approach based on the **belief that even one traffic-related death on our roads is unacceptable.** "Zero Deaths" was first adopted in Sweden in 1997 as "Vision Zero" and is now endorsed by the Federal Highway Administration (FHWA), and has been adopted by many states.

This data-driven effort focuses on identifying and creating opportunities for changing American culture regarding highway safety by developing strong organizational leadership to directly impact highway safety, in addition to using the "4Es": Education, Enforcement, Engineering, and Emergency Services. **Although TZD has a very ambitious goal, the backing principle is indisputable: every life is valuable.**

To learn more about the TZD approach, please visit <http://safety.fhwa.dot.gov/tzd>.



Source: DVRPC

¹MOTORCYCLE SAFETY - Increasing Federal Funding Flexibility and Identifying Research Priorities Would Help Support States' Safety Efforts <http://gao.gov/products/GAO-13-42>

²Traffic Safety Facts 2010 Data, National Highway Traffic Safety Administration

³www.gao.gov/products/GAO-13-42

COUNTY STATISTICS

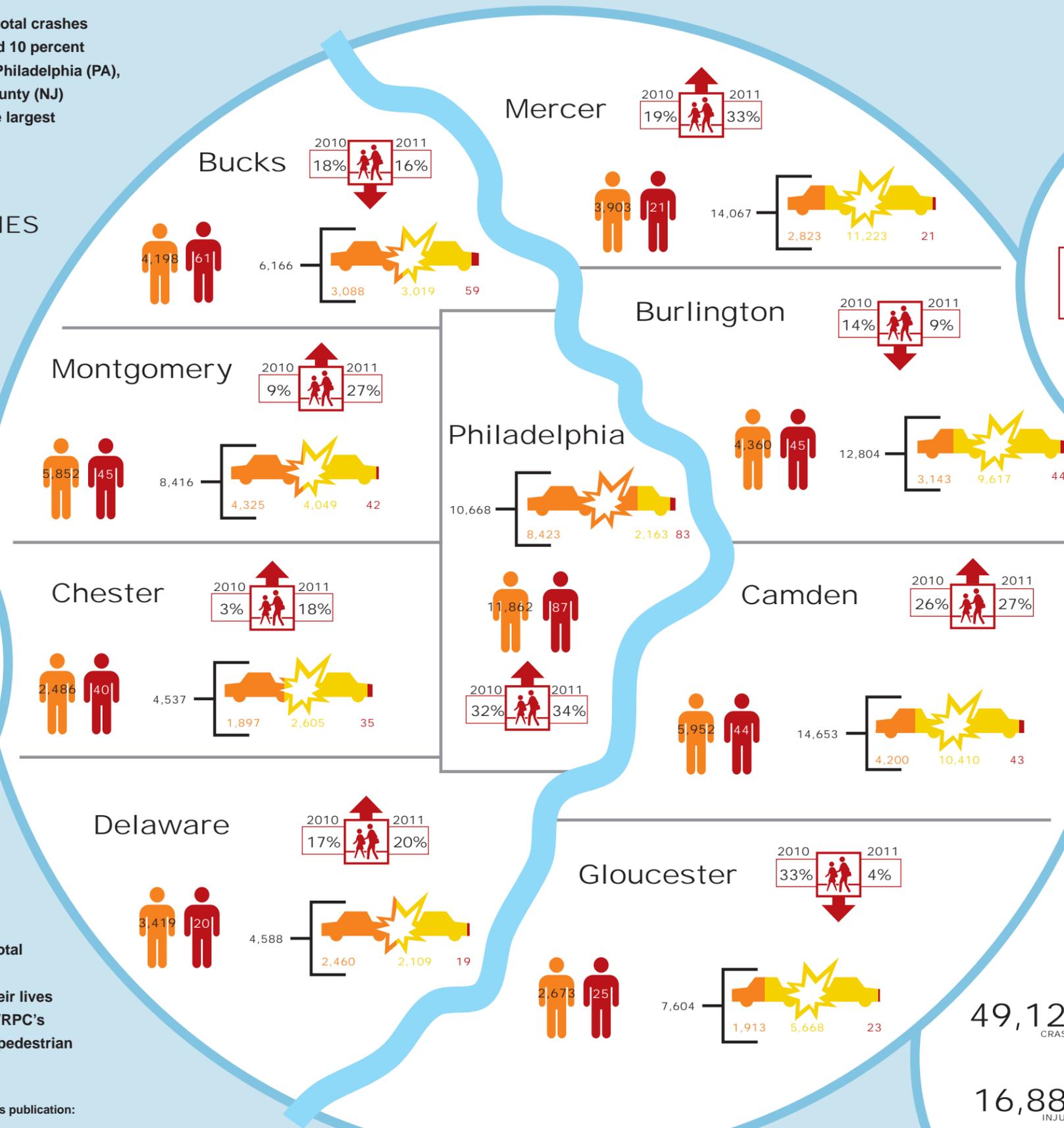
Compared to 2010, the region experienced a slight decline in total crashes and injuries in 2011, but not in fatalities. The death toll climbed 10 percent from 351 in 2010 to 388 in 2011. Fatalities dropped slightly in Philadelphia (PA), Delaware (PA), and Gloucester (NJ) counties, while Mercer County (NJ) remained at 21. Bucks and Montgomery Counties (PA) had the largest percentage increases at over 35% each.

2011

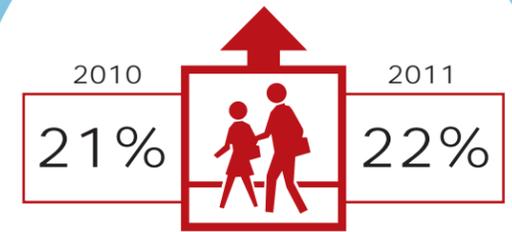
SPOTLIGHT: PEDESTRIAN CRASHES



According to the FHWA, approximately 4,000 pedestrians die on U.S. roadways each year, representing about 12 percent of all traffic fatalities. Featured here are pedestrian fatalities in the Delaware Valley as a percentage of all crash deaths by county, for 2010 and 2011. As a whole, the region experienced a slight increase of one percent in pedestrian fatalities from 2010 to 2011.



PEDESTRIANS FATALITIES



86 pedestrians were killed in crashes in the DVRPC region in 2011

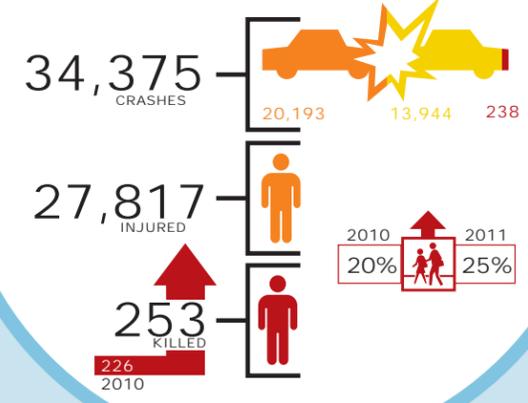
PEDESTRIAN SAFETY IN NJ:

In 2011, pedestrian crashes represented 2% of the total reported traffic crashes and 22% of all traffic crash deaths in New Jersey statewide. During the year, 143 people lost their lives while walking in New Jersey, up from 141 during 2010. In the DVRPC's NJ subregion, Burlington and Gloucester counties experienced a reduction in pedestrian fatalities between years. Camden increased by one percent, while Mercer County more than doubled with seven pedestrian fatalities, up from three in 2010.

More statistics can be found in the 2011 Statewide Fatal Crash Statistics report:
www.state.nj.us/njsp/info/fatalacc/pdf/swfcs2_11.pdf

TOTALS* PA

[DVRPC 5 counties]



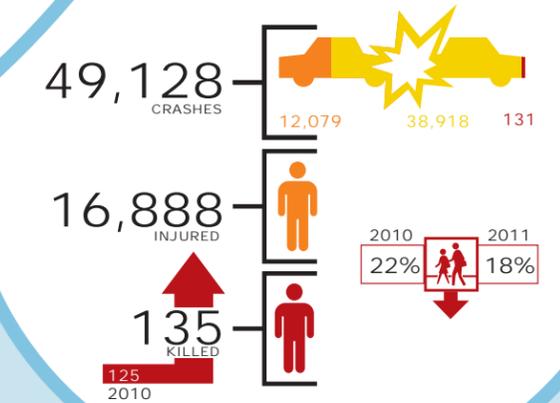
PEDESTRIAN SAFETY IN PA:

In 2011, pedestrian crashes represented 3.6% of the total reported traffic crashes and 11.6% of all traffic crash deaths in Pennsylvania statewide. During the year, 149 people lost their lives while walking in Pennsylvania, up from 148 during 2010. In DVRPC's PA subregion, only Bucks County experienced a reduction in pedestrian fatalities between years, and all others saw an increase.

More statistics can be found in the 2011 Pennsylvania Crash Facts and Statistics publication:
www.dot.state.pa.us/Internet/Bureaus/pdBHSTE.nsf/InfoFb10?OpenForm

TOTALS* NJ

[DVRPC 4 counties]



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

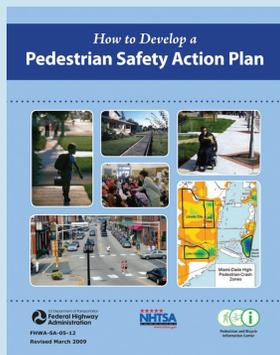
* New Jersey's total crash numbers are disproportionately higher than Pennsylvania's totals due to New Jersey's reportable crash definition: property damage of \$500 or more. Pennsylvania's minimum threshold for a reportable crash is if a vehicle requires towing from the scene. All injury and fatal crashes are reportable in both states.

FHWA Pedestrian Safety Resources

Safer Pedestrian Crossings

FHWA's Proven Safety Countermeasures are a set of best practices that have proven results in reducing the frequency and/or severity of crashes. The countermeasure called **Medians and Pedestrian Crossing Islands in Urban and Suburban Areas** may reduce pedestrian crashes by 46 percent and motor vehicle crashes by up to 39 percent. Go to: <http://safety.fhwa.dot.gov/provencountermeasures>.

Pedestrian Safety Action Plan



This FHWA guide, geared to assist state and local agencies, considers all aspects of pedestrian safety and accessibility needed for developing a safety action plan. Visit http://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwa0512.pdf.

FHWA's Pedestrian Focus States and Cities

Cities exceeding the national annual average of 20 fatalities per year or having a pedestrian fatality rate greater than 2.33 per 100,000 population, qualify as focus cities. The City of Philadelphia and the State of New Jersey are both "focus areas." See http://safety.fhwa.dot.gov/ped_bike/ped_focus/.

"All truly great thoughts are conceived while walking."
— Friedrich Nietzsche, *Twilight of the Idols*

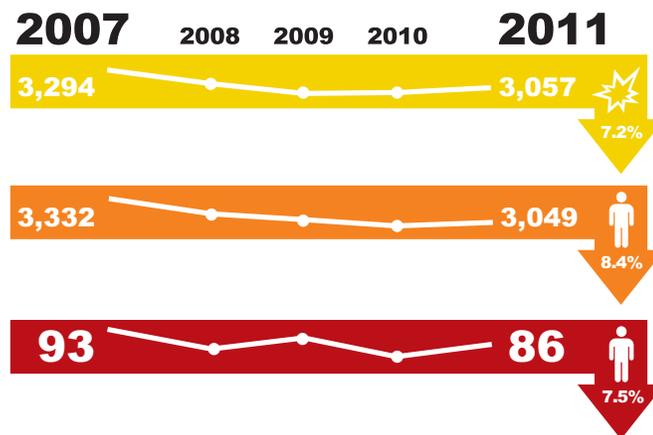


PEDESTRIAN SAFETY



In 2011 pedestrian fatalities increased (3 percent), while pedestrian injuries decreased (1.4 percent) across the country according to NHTSA. Walking is the oldest form of transportation, though today it constitutes only 11% of all trips both nationally¹ and in the Delaware Valley. On average, pedestrian deaths were 22% of all fatalities in the PA subregion, and 20% in the NJ subregion between 2007 and 2011. In 2011, pedestrian fatalities were 22% of all crash deaths, up from 21% in 2010 in the DVRPC region. Pedestrians are the most vulnerable users of the transportation system, especially in places where automobile travel dominates.

Pedestrian Crash Trend: 2007 to 2011

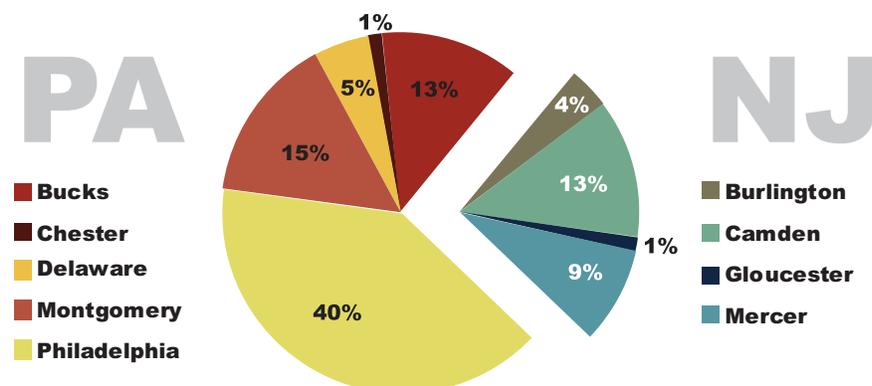


Five-Year Totals

► **15,440** pedestrian crashes [🌟] resulted in **15,547** injuries [👤], and **claimed the lives** [👤] of **428** people in the five years from 2007 to 2011.

Pedestrian Fatalities by County in 2011

Philadelphia had the largest share of pedestrian fatalities among the region's nine counties, which is to be expected given the higher number of pedestrian trips. According to the 2010 U.S. census, one-third of Philadelphia's households are considered zero-car households, which makes walking a primary mode for many residents. For the remaining counties, the distribution shows more pedestrian fatalities in those counties that have large urban areas, like the City of Camden and adjacent communities in Camden County.



¹ *Walking and Cycling in the United States, 2001–2009: Evidence From the National Household Travel Surveys (American Journal of Public Health | Supplement 1, 2011, Vol 101, No. S1)*

The Delaware Valley is a great place to walk or ride a bike. In fact, Philadelphia was ranked the 5th most walkable city in the country in 2011.¹ In the city and well beyond in any direction, you can walk and bike on the trails of The Circuit – 750 miles of bicycle and pedestrian trails connecting people and places in the region including the four New Jersey counties. Connecting the urban, suburban and rural communities of the fifth-largest metropolitan region in the U.S., The Circuit makes the region stronger by providing a place for healthy and safe transportation and recreation. **Check out the great interactive map at <http://connectthecircuit.org/network/branch/philadelphia>.**

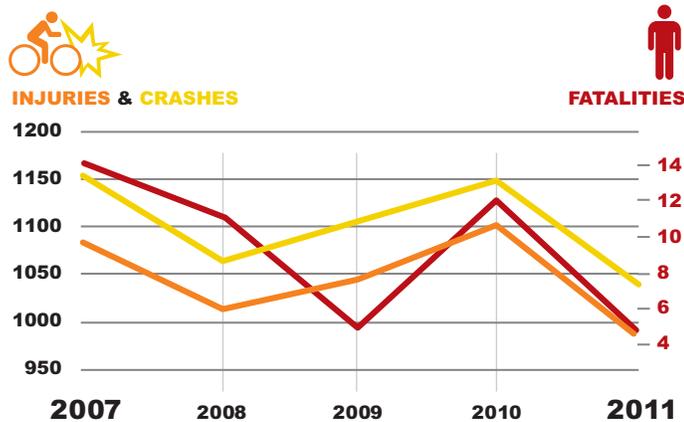


¹www.walkscore.com/rankings/

BICYCLIST SAFETY

Bicycling in the Delaware Valley is increasing. More riders than ever can be seen recreating, commuting, and running errands. Demand for new and improved bicycling facilities, combined with strong leadership in transportation planning has yielded more bicycling opportunities than ever: currently there are over 230 miles of existing bike lanes in the City of Philadelphia alone.

Regional Bicyclist Crash Experience 2007-2011



Fortunately, bicyclist fatalities and to a lesser extent, total crashes and injuries have been declining since 2007, though slightly. Nationally speaking, bicyclist fatalities increased by 8.7 percent in 2011.

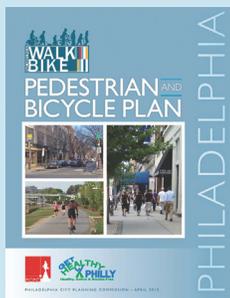
In the region during years 2007 to 2011 there were:

- ▶ **5,500** reported **bicycle crashes** (36% NJ, 64% PA)
- ▶ **5,232 bicyclists injured** (31% NJ, 69% PA)
- ▶ **47 bicyclists killed** (45% NJ, 55% PA)

DVRPC tracks bicycle and pedestrian projects, volumes, and safety, and keeps this information up to date on the Bicycle and Pedestrian Planning webpage: www.dvrpc.org/Transportation/BicyclePedestrian/.



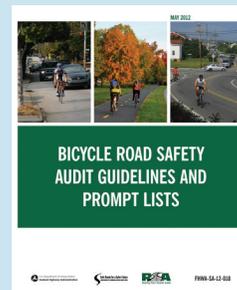
Philadelphia Pedestrian and Bicycle Plan



Adopted in June 2012, the Plan will be used by city departments in prioritizing pedestrian and bicycle improvements consistent with its five goals: Safety, Encouragement, Connectivity, the Public Realm, and Recognition. The Plan will also help guide implementation of Philadelphia's Complete

Streets policy: www.phila.gov/CityPlanning/plans/Pages/PedestrianandBicyclePlan.aspx.

Bicycle Road Safety Audit (RSA)



In May of 2012, FHWA published the Bicycle Road Safety Audit Guidelines and Prompt Lists. This bicyclist-specific RSA tool is designed to give RSA teams a view of road safety from a cyclist's perspective. It highlights design best practices, discusses basic principles of bicyclist safety,

and covers crash data considerations specific to bicyclist crashes: http://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa12018/

**Be sure to
check out the
2011 COUNTY
CRASH DATA
BULLETINS.**



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.

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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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