

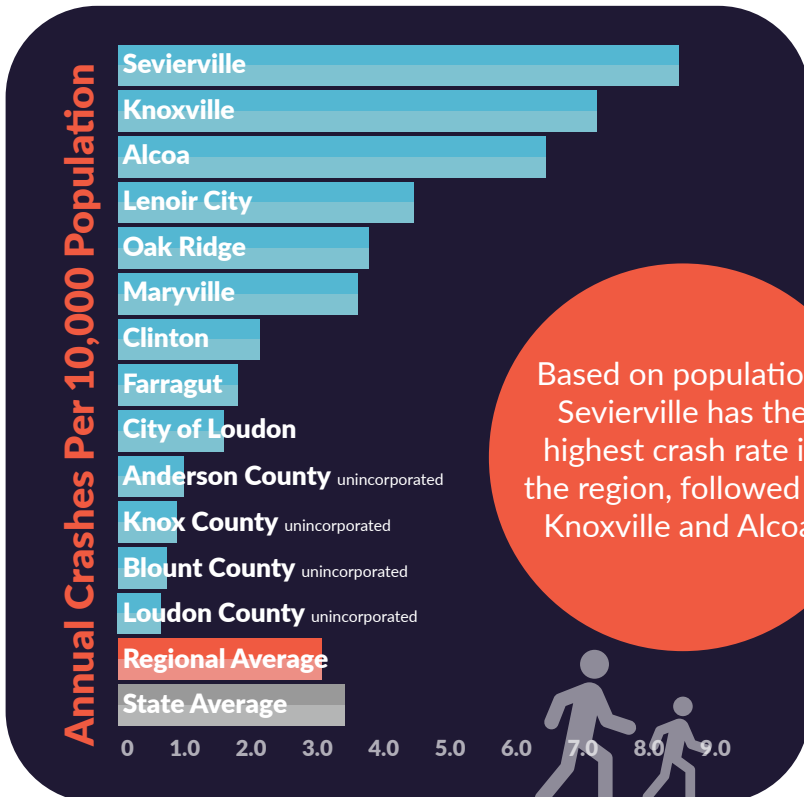
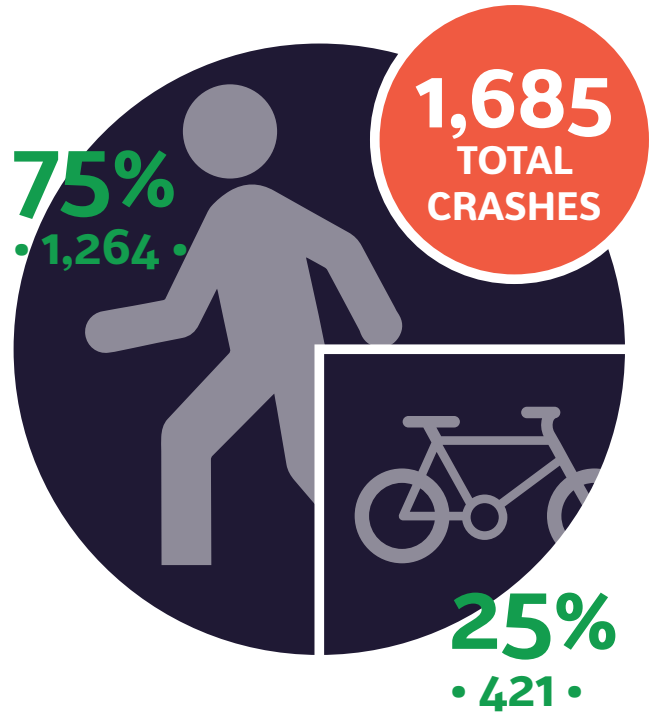
PEDESTRIAN & BICYCLIST CRASH FACTS

Regional Overview

The Knoxville region averages **19** crashes involving pedestrians or bicyclists **every month**

Between January 2012 and June of 2019, there were **1,685** crashes involving pedestrians and bicyclists in the Knoxville region.

91% involved injury or death of a person walking or bicycling. **1,440** crashes involved injuries only. **96** people were killed in these crashes: 88 people were walking, 8 riding bicycles.



It is **11x more likely** for a pedestrian or bicyclist to be killed in a traffic crash compared to a motorist

4 out of **1,000**
car-only traffic crashes
result in death

47 out of **1,000**
traffic crashes involving a person
walking or riding a bicycle
result in death

PEDESTRIAN & BICYCLIST CRASH FACTS

Knoxville's High-Crash Streets

Major arterial roadways are surface streets and roads that carry much of the traffic in Knoxville, often at high speeds. These roadways are **disproportionately dangerous for pedestrians and bicyclists.**

Major arterials make up a **small percentage of street mileage**, but account for a **BIG percentage of pedestrian & bicyclist crashes & fatalities.**

KNOXVILLE MAJOR ARTERIALS

89% of the crashes that involved people walking or riding bicycles on major arterials occurred on six streets:

BROADWAY

CHAPMAN HIGHWAY

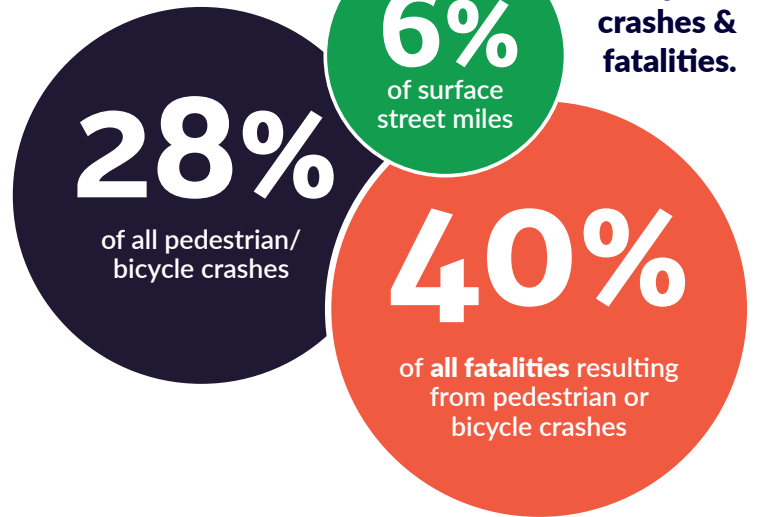
CUMBERLAND AVENUE

KINGSTON PIKE

MAGNOLIA AVENUE

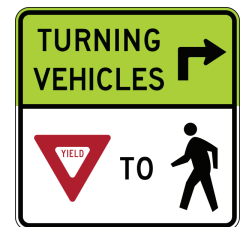
WESTERN AVENUE

22 deaths resulted from pedestrian or bicycle crashes on major arterials (between January 2007 and June 2019).



FAILURE TO YIELD

by drivers when making a turn is the most common crash factor on major arterials (**48%**). Left turns are the most common.



WHAT CAN WE DO?

Adding a **Leading Pedestrian Interval (LPI)** to a traffic signal gives the pedestrian the WALK signal 3-7 seconds before motorists get the green light to proceed through the intersection. **This head start gives pedestrians time to establish their presence in the crosswalk before motorists can start turning.** LPIs have been shown to reduce pedestrian-related crashes by **59%**.



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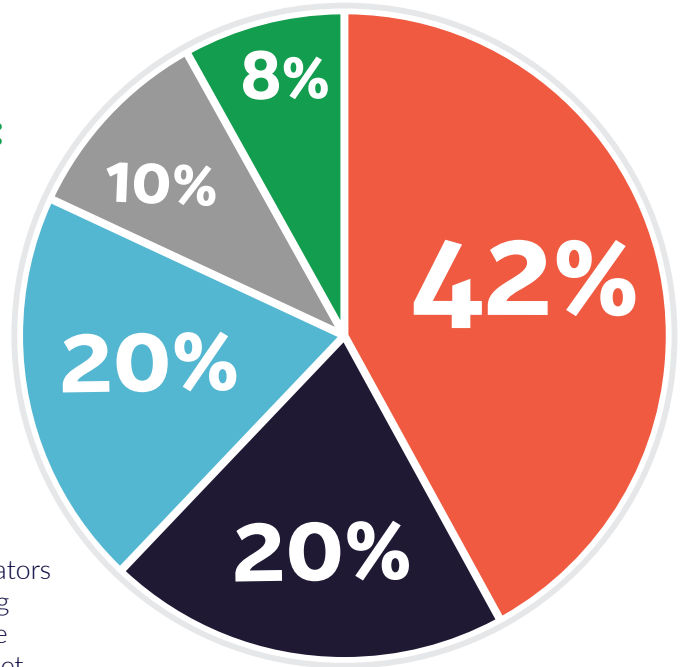
PEDESTRIAN & BICYCLIST CRASH FACTS

Traffic Crashes Involving Bicyclists

MAIN FACTORS IN TRAFFIC CRASHES INVOLVING BICYCLISTS:

- Drivers failing to yield while turning
- Bicyclist riding on sidewalk*
- Driver striking bicyclist from behind
- Bicyclist riding facing traffic
- Other factors

*Riding a bicycle on the sidewalk is legal. Bicycle safety educators generally warn against it, because of the danger from turning motor vehicles. However, in most cases bicyclists ride on the sidewalk because there aren't good places to ride in the street.



Most crashes result in injury to the bicyclist.

83% INJURY or FATALITY **17%** NO INJURY

WHAT CAN WE DO?

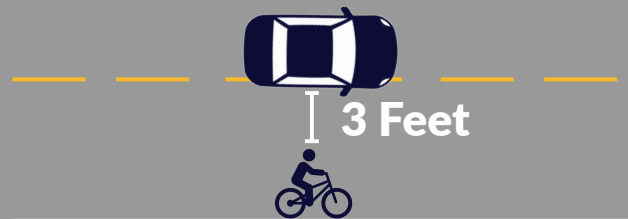
- Design intersections to slow turning vehicles
- Educate drivers and bicyclists about operating safely
- Enforce the **3-foot law** for safe passing of bicyclists



Police use this specially equipped bicycle to enforce the **3-foot law**, educating drivers at the same time.

The Knoxville Police Department has this equipment and regularly enforces the 3-foot law.

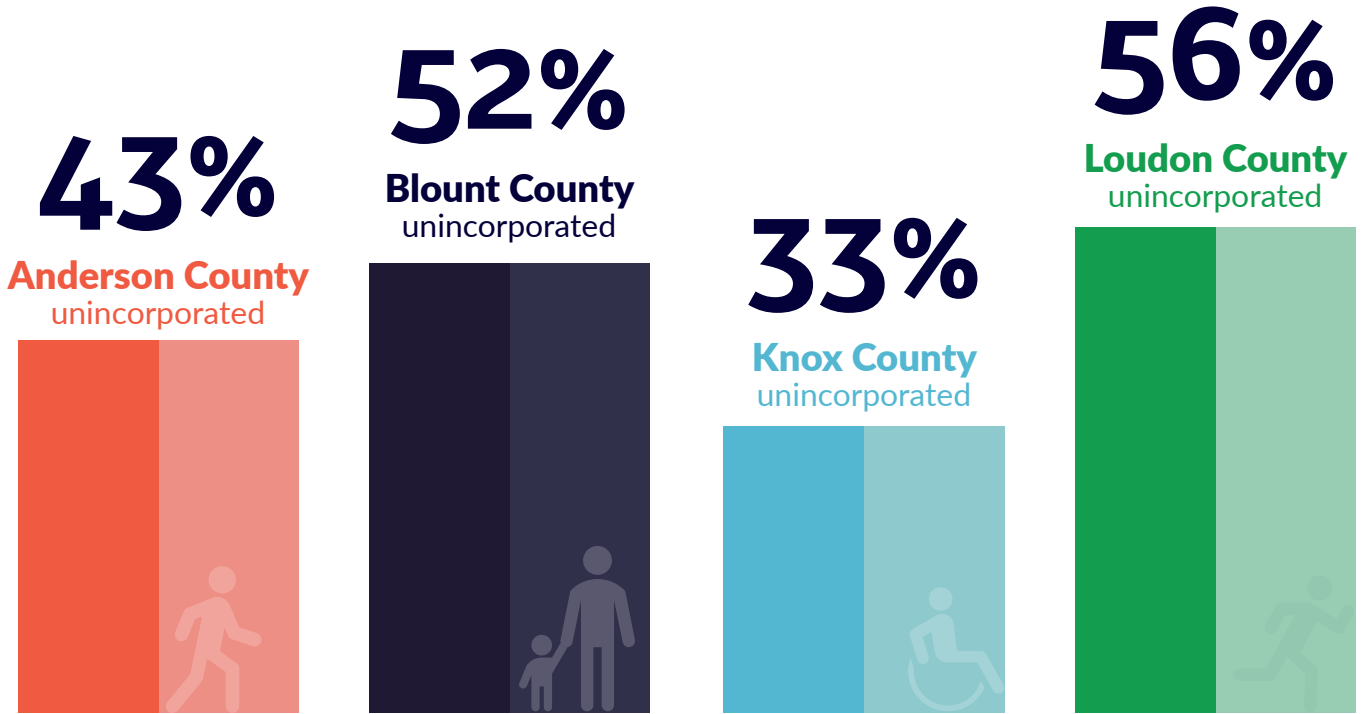
The bike measures the distance of passing vehicles and records each pass.



PEDESTRIAN & BICYCLIST CRASH FACTS

Rural Road Traffic Crashes

Lack of dedicated space for people walking is the most common factor in crashes on rural roads.



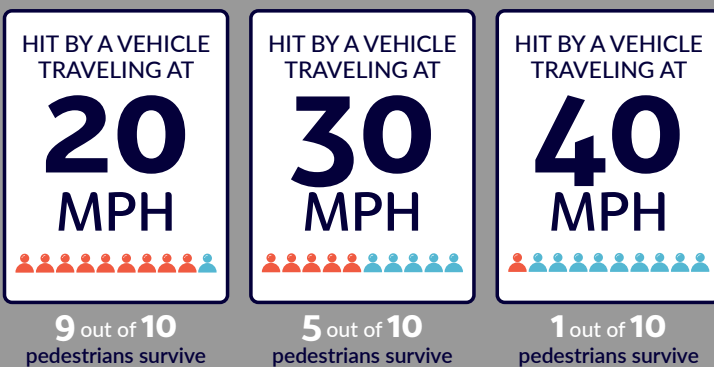
PERCENT OF CRASHES DUE TO LACK OF DEDICATED SPACE FOR PEOPLE WALKING

WHAT CAN WE DO?

Keep speeds safe.

Small increases in motor vehicle speeds can create huge risks for people walking and bicycling. Traffic calming on low-volume rural residential roads helps create spaces where drivers, walkers, and bicyclists can safely share the road.

Lower Speeds = Lower Risk of Fatal Crashes



Create more trails and sidewalks.

Even in rural areas, people want to walk or bicycle for transportation and recreation. Dedicated space for people walking (or bicycling) along rural roads greatly reduces the chance they will be hit by a car.

Add wide shoulders to rural roads.

In places where walkers and bicyclists are less common, wide shoulders can provide enough space to keep them safe and out of the way of motor vehicles. Bicycle-friendly rumble strips between the travel lane and shoulder provide further protection to people walking and bicycling, and help prevent motor vehicle crashes too.



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PEDESTRIAN & BICYCLIST CRASH FACTS

How Our Region Compares

Knox vs. Other Counties

Annual Crashes Per 10,000 Population

Pinellas County, FL (St. Petersburg)

Volusia County, FL (Daytona Beach)

Davidson County, TN (Nashville)

Shelby County, TN (Memphis)

Dane County, WI (Madison)

Hamilton County, TN (Chattanooga)

Knox County

Montgomery County, TN (Clarksville)

0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0



Knoxville vs. Other Cities

Annual Crashes Per 10,000 Population

Tempe, AZ

Richmond, VA

Charlotte, NC

Knoxville

Fayetteville, NC

Winston-Salem, NC

0 2.0 4.0 6.0 8.0 10.0 12.0



Tennessee is ranked #12 in the top 20 most dangerous states for pedestrians

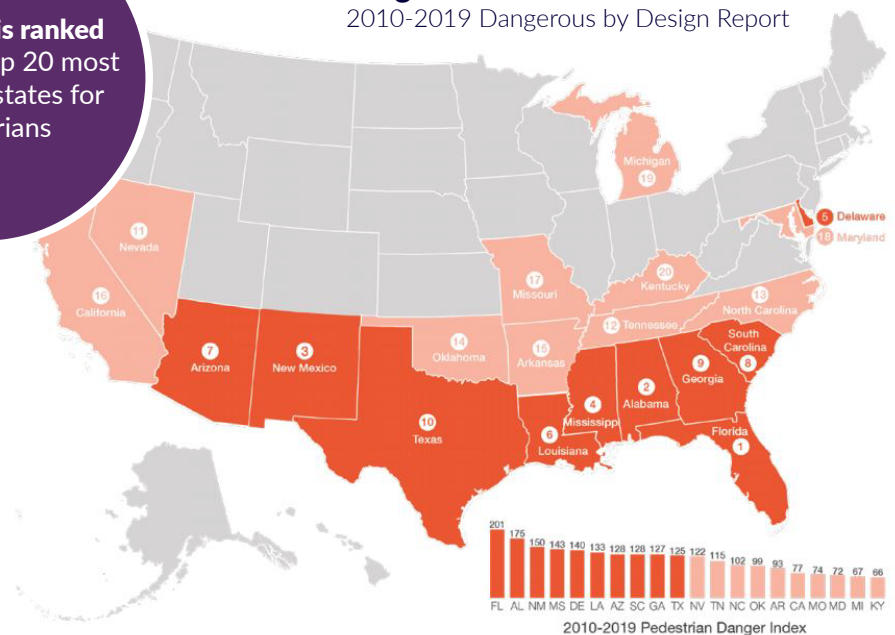
THE TOP 20

Most Dangerous States for Pedestrians

2010-2019 Dangerous by Design Report



1. Florida
2. Alabama
3. New Mexico
4. Mississippi
5. Delaware
6. Louisiana
7. Arizona
8. South Carolina
9. Georgia
10. Texas
11. Nevada
12. Tennessee
13. North Carolina
14. Oklahoma
15. Arkansas
16. California
17. Missouri
18. Maryland
19. Michigan
20. Kentucky



WHAT CAN WE DO?

We can learn a lot from what other places are doing to promote traffic safety. The **Road to Zero Coalition** and the **Vision Zero Network** are two national groups that share resources on reducing traffic-related deaths and serious injuries.



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