Between January 2012 and March of 2018, there were **1,256 crashes involving pedestrians and bicyclists** in the Knoxville region.

91% involved injury or death of a person walking or bicycling. **1,084 crashes involved injuries** only. **60 people were killed in these crashes:** 57 people were walking, 3 riding bicycles.

The Knoxville region averages **17 crashes involving pedestrians or bicyclists every month**

Based on population, Sevierville has the highest crash rate in the region, followed by Knoxville and Alcoa.

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

Knoxville Regional Transportation Planning Organization

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

**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.

**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

- **15 deaths** resulted from pedestrian or bicycle crashes on major arterials (between 2007 and 2017).

- **29%** of all pedestrian/bicycle crashes

- **39%** of all fatalities resulting from pedestrian or bicycle crashes

- **6%** of surface street miles

**FAILURE TO YIELD**

by drivers when making a turn is the most common crash factor on major arterials (51%). More than half of those are left turns.

**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%.

[ tinyurl.com/KnoxAreaCrashes ]
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.

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.

- 82% INJURY or FATALITY
- 18% 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.

tinyurl.com/KnoxAreaCrashes
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.

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

<table>
<thead>
<tr>
<th>Speed (MPH)</th>
<th>Pedestrians Surviving</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>9 out of 10</td>
</tr>
<tr>
<td>30</td>
<td>5 out of 10</td>
</tr>
<tr>
<td>40</td>
<td>1 out of 10</td>
</tr>
</tbody>
</table>

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.

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

- Anderson County: 40%
- Blount County: 53%
- Knox County: 34%
- Loudon County: 50%

tinyurl.com/KnoxAreaCrashes
PEDESTRIAN & BICYCLIST CRASH FACTS
How Our Region Compares

Knox vs. Other Counties
Annual Crashes Per 10,000 Population
- Pinellas County, FL (St. Petersburg)
- Davidson County, TN (Nashville)
- Dane County, WI (Madison)
- Shelby County, TN (Memphis)
- Volusia County, FL (Daytona Beach)
- Hamilton County, TN (Chattanooga)
- Knox County
- Montgomery County, TN (Clarksville)

Knoxville vs. Other Cities
Annual Crashes Per 10,000 Population
- Tempe, AZ
- San Antonio, TX
- Charlotte, NC
- Eugene, OR
- Knoxville
- Fayetteville, NC
- Winston-Salem, NC

Knox vs. Other Counties
Annual Crashes Per 10,000 Population

Knoxville vs. Other Cities
Annual Crashes Per 10,000 Population

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

1. Florida
2. Alabama
12. Tennessee
3. Delaware
4. Louisiana
5. Mississippi
6. Georgia
7. New Mexico
8. Texas
9. Arizona
10. South Carolina
11. Nevada
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.

tinyurl.com/KnoxAreaCrashes