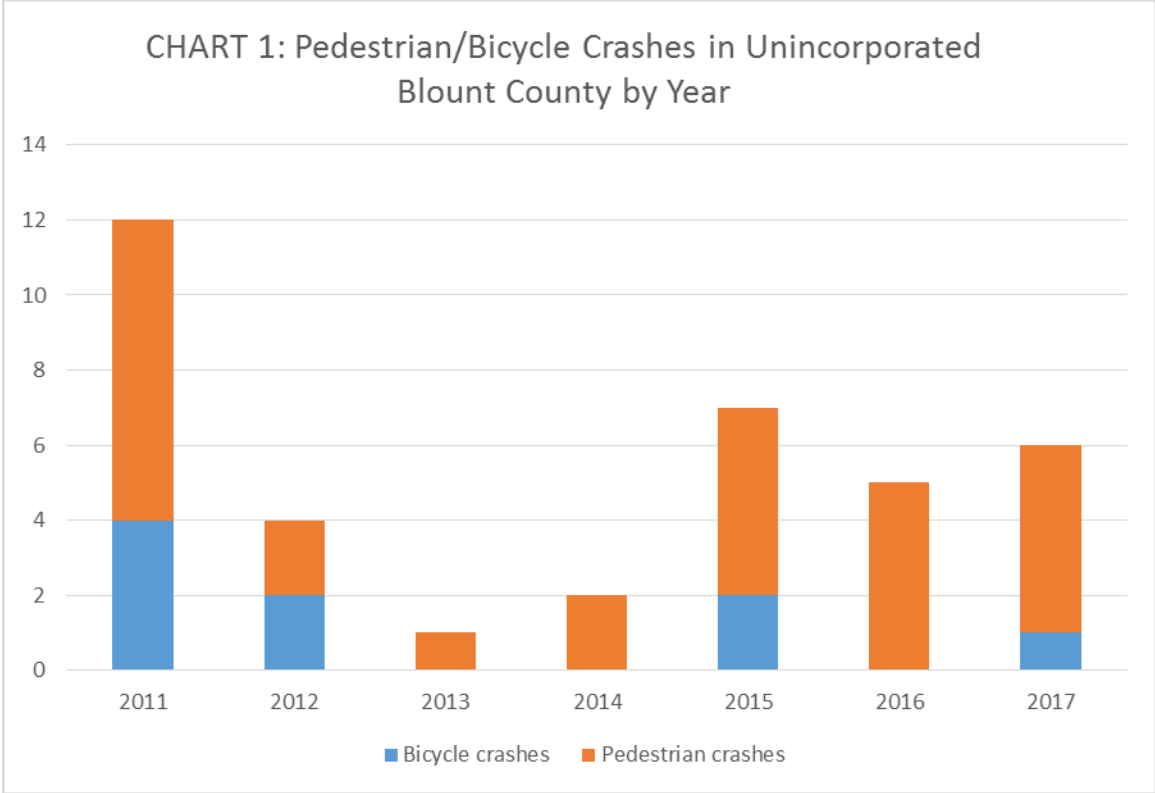


Blount County ped/bike crashes: Sept. 2010-March 2018

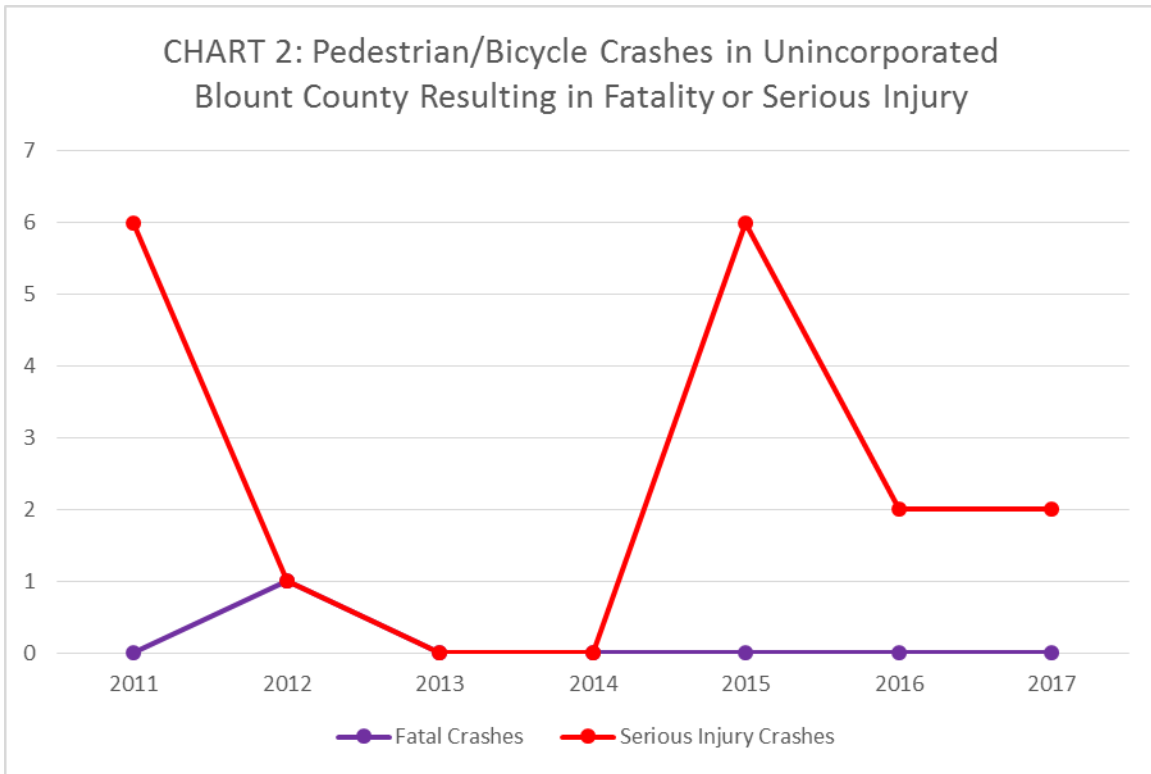
Overview

- Between September of 2010 and March of 2018, there were 41 crashes involving either pedestrians or bicyclists. This results in a rate of 0.45 crashes per month, 5 crashes per year.
- 31 crashes (76 percent) involved pedestrians, and 10 involved bicyclists.
- Most of the crashes (98 percent) involved the injury or death of a person walking or bicycling.
 - 38 crashes involved injuries only, and another 2 involved a fatality. Of the 2 fatalities, both were killed while walking.
 - 45 percent of injury-only crashes involved serious injuries.¹
- Chart 1 shows the number of crashes by year. Chart 2 shows the number of fatal and serious injury crashes by year.



Ped	8	2	1	2	5	5	5
Bike	4	2	0	0	2	0	1
Total	12	4	1	2	7	5	6

¹ Crash reports rank the severity of crashes as either fatal, suspected serious injury, suspected minor injury, possible injury, or no injury. Suspected serious injury crashes used to be reported as “incapacitating,” and suspected minor injury were reported as “non-incapacitating.” For this report, suspected serious and incapacitating crashes are combined as “serious injury” crashes.



- 7 of the 41 crashes (17%) occurred on major arterials. 3 of the 7 major arterial crashes involved people walking, while 4 involved bicyclists. None of those were fatal crashes, but 3 of the 7 involved serious injuries.
- 4 of the major arterial crashes occurred on U.S. 321. 2 took place on U.S. 411, with one more on U.S. 129

Types of crashes analyzed in this report

This report analyzes certain crash factors. It focuses on identifying locations and behaviors where interventions – in the form of design changes, education, or enforcement – may help to prevent future crashes. 19 (46 percent) of the 41 total crashes fit into one of these categories. Categories of crashes analyzed in this report are:

- **Drivers failing to yield while turning.** These are crashes where the report indicates that the pedestrian or bicyclist was behaving properly while traveling along or across a street, and the driver failed to yield while making a turn. These crashes suggest the need for changes to the geometry of the intersections and/or to the function of the traffic signals to prevent future crashes. Education and traffic enforcement can also help prevent these types of crashes.
- **People struck by cars while walking in locations without sidewalks.** These are crashes where the report indicates the pedestrian was walking along a street without sidewalks and was struck by a car. These crashes indicate the need for sidewalks to be installed.
- **Drivers failing to yield while going straight.** These are crashes where the report indicates that the pedestrian or cyclist was crossing the street in a legal crosswalk², either marked or unmarked, and was struck by a driver. These crashes indicate the need for better design of crossing locations, which may include reducing crossing distances and the addition of signs, beacons, or signals. Education and traffic enforcement can also help prevent this type of crash.
- **Bicyclists riding in locations without safe facilities.** These are crashes where the report indicates a bicyclist was struck from behind or while riding on the sidewalk.³ These crashes indicate the need for a safe bicycle facility along a corridor.
- **People struck by cars while crossing a street outside of an intersection or marked midblock crossing.** These are crashes where the report indicates a pedestrian was struck while crossing a street at a location other than an intersection or a marked midblock crossing. These crashes suggest the need for additional crossings, as the existing crossings may be dangerous or inconvenient. Education of pedestrians can also help prevent this type of crash.
- **Bicyclists riding in an unsafe manner or location.** These are crashes where the report indicates that the bicyclist was either riding on the street against traffic, or riding at night with no lights. These crashes suggest the need for better education of bicyclists.

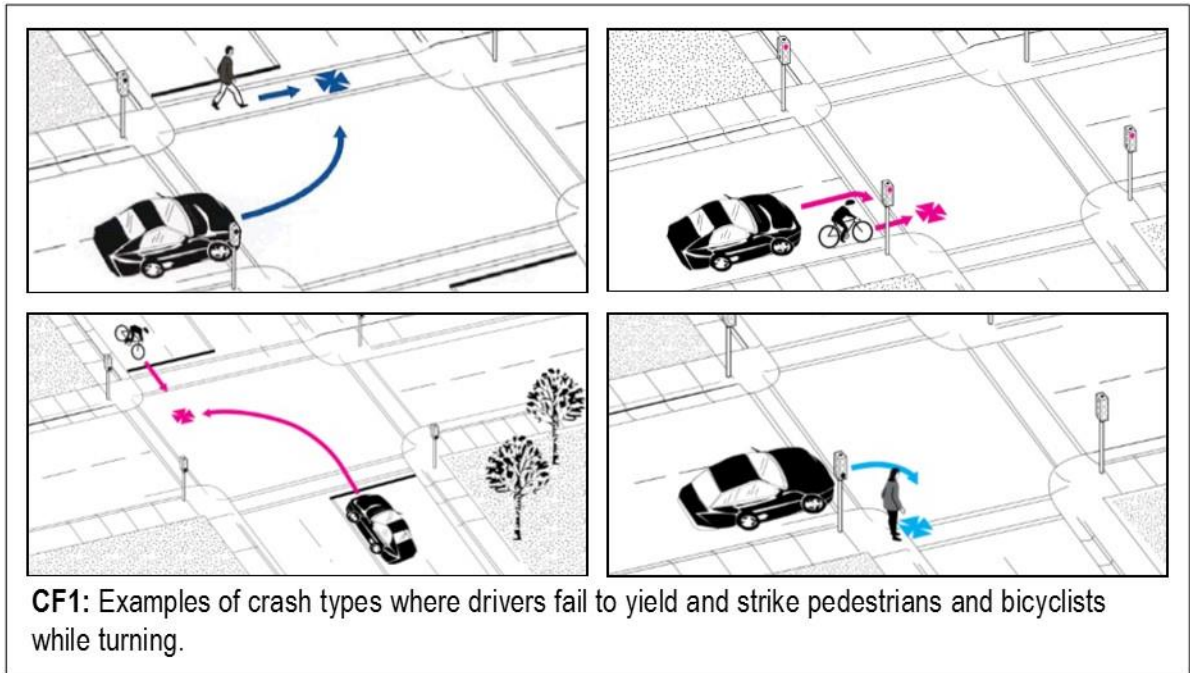
² Tennessee Code Annotated 55-8-101 (11) defines “crosswalk” as “(A) That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway; or (B) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.”

³ Riding a bicycle on the sidewalk is legal. Bicycle safety educators generally warn against it, because of the danger from turning motor vehicles.

TABLE 1: Crash Factors		Number of Crashes	Percent of Crashes*
1. Drivers failing to yield while turning (3 total crashes)	Turning left	3	16
	Turning right (not right on red)	0	0
	Turning right on red light	0	0
	Direction of turn unclear	0	0
2. Pedestrian struck while walking along corridor without sidewalks		10	53
3. Driver failing to yield while going straight		0	0
4. Bicyclist riding on sidewalk		0	0
5. Pedestrian crossing street outside of an intersection or marked crosswalk		3	16
6. Bicyclist riding against traffic		1	5
7. Driver striking bicyclist from behind		2	10
8. Bicyclist riding at night with no lights		0	0

*Percentages do not total to 100 due to rounding

Crash Factor 1: Drivers failing to yield while turning



- Of the crashes where a crash factor has been identified, 3 (16 percent) involved a pedestrian or bicyclist hit by a car whose driver failed to yield properly when turning.⁴ All 3 crashes involved drivers turning left.
- All of these crashes involved injuries, with no fatalities.
- All of these cases involved bicyclists.
- The crashes occurred in the following locations:

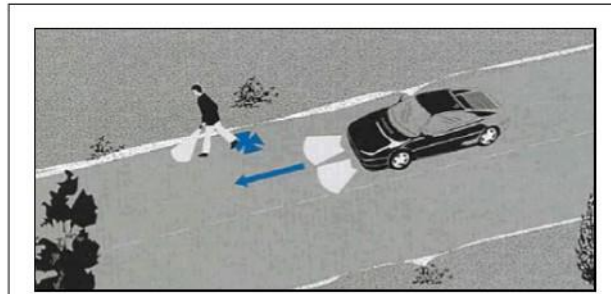
Corridor	Cross street	Left turns	Right turn (not on red)	Right turn on red	Turn direction unclear
Black Oak Ridge Rd	W Macon Lane	1			
U.S. 129	Brick Mill Rd	1			
U.S. 321	Heritage High School driveway	1			

Number in red indicates that crashes involved a bicyclist.

⁴ This crash factor is identified only where the bicyclist or pedestrian involved was traveling safely and within the law and the driver failed to yield.

Crash Factor 2: People struck by cars while walking in locations without sidewalks

In 10 (53 percent) crashes, a person walking along a street without a sidewalk was hit by a driver.⁵ 9 of these crashes involved injuries, with no fatalities. The crashes occurred in the following locations:



CF2: A frequent crash type in rural & suburban areas is pedestrians being struck while walking in locations lacking sidewalks.

TABLE 3: Locations of people being struck while walking along streets without sidewalks	
Crash occurred on this street	Near the intersection with this street
Alnwick Blvd	Big Springs Rd
Burnett Station Rd	Hinkle Rd
Cecelia Ave	Webster Court
Montvale Rd	Patty Rd
Sevierville Rd	Davis Ford Rd
Sevierville Rd	Hinkle Rd
Sevierville Rd	Keeble Rd
Summer Dr	Pendleton Dr
Topside Rd	Alcoa Highway
Vinegar Valley Rd	Finn Long Rd

Crash Factor 3: Driver failing to yield while going straight

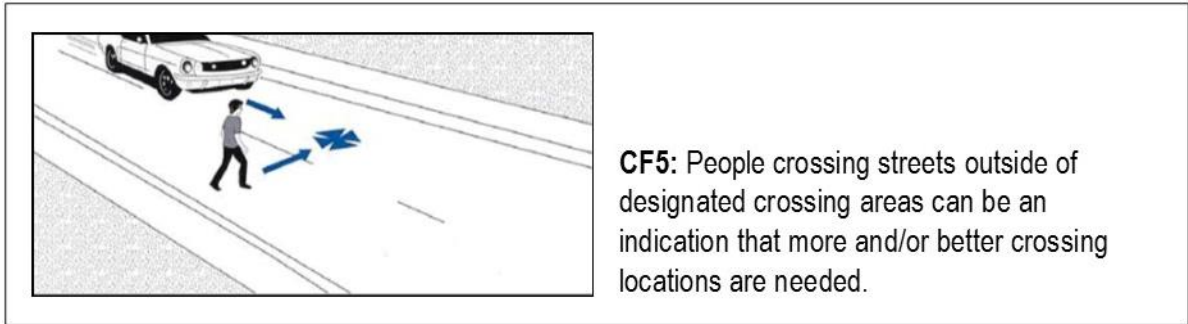
No crashes of this type were reported in unincorporated Blount County during the time analyzed in this report.

Crash Factor 4: Bicyclist riding on sidewalk

No crashes of this type were reported in unincorporated Blount County during the time analyzed in this report.

⁵ This crash factor is identified only where the crash report finds that the pedestrian was walking along the side of the road when the crash happened, not cases where pedestrians entered the road to cross.

Crash Factor 5: Pedestrian crossing street outside of an intersection or marked crosswalk



In 3 crashes (16 percent), pedestrians were crossing the street outside of an intersection or marked crosswalk. All 3 of these crashes involved injuries, with no fatalities. The crashes occurred in the following locations:

Crash occurred on this street	In this area
Mint Rd	west of Walker School Rd
Morganton Rd	east of Panorama Dr
U.S. 321	East of Garrett Lane

Crash Factor 6: Bicyclist riding against traffic

1 bicyclist was struck while riding against traffic. The crash involved an injury, and occurred along U.S. 411 near Big Z Drive.

Crash Factor 7: Driver striking bicyclist from behind

2 bicyclists were struck from behind by drivers. Both of these crashes involved injuries, with no fatalities. The crashes occurred in the following locations:

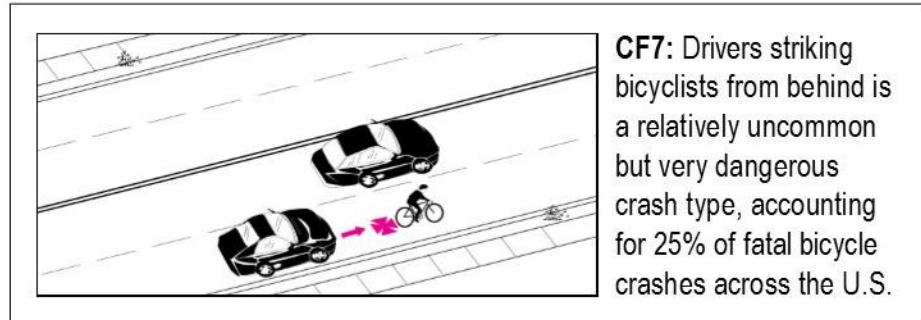


TABLE 5: Areas with bicyclists struck from behind by drivers	
Crash occurred on this street	In this area
Beatress Circle	east of Rockford Walker Court
U.S. 321	north of Old TN Highway 73

Crash Factor 8: Bicyclist riding at night with no lights

No crashes of this type were reported in unincorporated Blount County during the time analyzed in this report.

Methodology

Crash data were obtained directly from KPD (all crashes prior to June 2009) or downloaded from the TITAN database maintained by the State of Tennessee. Crashes were mapped in ArcMap GIS software based on latitude/longitude or closest intersection, where lat/long data were not available. TPO staff then reviewed the location of each crash to correct data errors. TPO staff assigned crash factors based on information obtained from individual crash reports, including crash narratives and information about citations issued.

Image credit

All crash type images are from the Pedestrian and Bicycle Crash Analysis Tool (PBCAT), which was developed by the Federal Highway Administration (FHWA), in cooperation with the National Highway Traffic Safety Administration (NHTSA). The purpose of the PBCAT is to assist with analysis of pedestrian/bicycle crashes with the goal of preventing them.