Gathering data & putting it to use

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Background on region

Knoxville population: 187,603
Knox County population: 470,313
MPO region population: ~700,000
75% of pedestrian/bicycle crashes in the Knoxville region involve pedestrians.

91% of the pedestrian/bicycle crashes involved the injury or death of a person walking or bicycling. There are 113 fatal crashes mapped here, with a total of 115 fatalities. 107 people were killed while walking, 8 while bicycling.

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

47 out of 1,000 crashes involving a person walking or bicycling result in a fatality.

4 out of 1,000 car-only crashes result in a fatality.
28% of pedestrian crashes in Knoxville happen along major arterials, even though these streets account for only 6 percent of the surface street mileage within Knoxville. The major arterials with the most pedestrian crashes in Knoxville are Broadway, Cumberland Avenue, and Magnolia Ave.

4 major arterials in Knoxville have seen three fatal pedestrian crashes each: Broadway (5 fatal pedestrian crashes), Clinton Highway (4), Kingston Pike (4), and Chapman Highway (3).
Pedestrian & Bike Crashes
Knoxville Region: January 2012 – June 2019

OVERVIEW
- Between January of 2012 and June of 2019, there were 1,685 crashes involving either pedestrians or bicyclists in the Knoxville Region. This results in a rate of 18.7 crashes per month, 225 crashes per year.
- 1,264 crashes (75 percent) Involved pedestrians, while 421 involved bicyclists.
- Almost all of the crashes (1,153, or 91 percent) involved the injury or death of a person walking or bicycling.
  - 1,440 crashes involved injuries only, and another 94 involved a fatality. Two crashes resulted in 2 fatalities, for a total of 96 people killed while walking or bicycling. Of the 96 total fatalities, 80 were killed while walking, the other 8 while bicycling.
  - Between January 2015 and June 2019, 24 percent of injury-only crashes involved serious injuries.

Chart 1 shows the number of crashes by year. Chart 2 shows the number of fatal and serious injury crashes by year.

For the purposes of this report, the Knoxville Region includes all of Knox, Blount and Loudon counties; Anderson County excluding Rocky Top, the portion of Oak Ridge within Roane County, and the City of Sevierville. This geography was chosen because it encompasses the cities and counties in the Knoxville Regional TPO’s Planning Area, as well as the remainder of cities that are only partially within the Planning Area.

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. Regional crash reports began to include reliable information about the severity of injuries in 2015.
We’ve identified 3 needs

• Make use of the data
• Supplement the data
• Improve future data
90% reduction in ped/bike crashes
44% reduction in all crashes
Limitations of crash data

• Crashes reported to police are just the tip of the iceberg
• We’re working on adding to it
Adding to the data

• Online survey on crashes and near misses
  • For every 1 crash reported to police, we found:

  1 unreported crash

  30 near-miss incidents
Adding to the data

• TN Department of Health analysis of hospital records
  • An estimated 160 crashes per year missing from the regional database
  • Making these matches proved difficult
Getting better data through training

- Trainer provided by FHWA
- Law enforcement agencies, plus engineers, public health staff, & advocates
Getting better data through engagement

• Joint review of fatal crashes with law enforcement, engineers, public health, & planning

• After 3 rounds, we’ve learned more about:
  • Who repairs what, and how to report it
  • The importance of good location data to engineers & planners
  • How about DUIs gets onto crash reports – or doesn’t
Questions/Comments?

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