Beyond the 5Es: Adding equity to traffic safety

Vision Zero Conference
March 11, 2016
Austin traffic deaths

3-year rolling avg.
Who’s Affected?
People walking, biking, & riding motorcycles

- 6.5% of commute travel in Austin

but over half of all traffic deaths

Source: APD and Census 2013 5-year ACS Journey to work
Who’s Affected?

Black & Hispanic Austinites

Percent of population: 49%
Percent of killed or incapacitating injury: 42%

Source: TXDOT and Census 2010
Who’s Affected?

People experiencing homelessness

*102 people died in traffic in 2015 (29%)*

*almost 40% of people killed while walking in 2015 were believed to be experiencing homelessness*

Source: APD
Land use & urban design directly affect safety. Cities that have compact and connected urban form reduce driving deaths.
Fatality rate per 100K

Source: NHTSA, 2013
Fatality rate per 100K

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Fatality rate per 100K

Source: NHTSA, 2013
City form affects exposure

Traffic death rates in Austin declined slightly as VMT per capita also decreased slightly.
Walking deaths tend to be further from downtown & along higher-speed roads.
40% of Ped FTY crashes occurred on streets lacking sidewalks.
Ped FTY vs. Speed Limits

20 mph or less

50 mph or greater

45 mph

40 mph

35 mph

30 mph

25 mph

15

12

9

6

3
Many of the people walking were hit near bus stops.
30% of the most dangerous road segments are in Census tracts where 25+% of the population is Black or Hispanic.
63% of Ped FTY crashes were in Census tracts with 30+% of people living in poverty.
Ped FTY crashes are more common in Census tracts with greater poverty.
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Design Solutions

- bulbouts
- medians
- closed slip lane
- traffic circles
- tighter corner radii
- chicane
- neckdown with mid-block crosswalk
- signal progression
- diverter
- speed humps
- two-way streets
- buildings with minimal setbacks
- shorter vs. longer blocks
People Solutions

1. Engineering: Distribute resources equitably.

2. Enforcement: Make sure we don’t target behavior when design is the culprit. Don’t blame the victim.

3 - 4. Education & Encouragement: Work with vulnerable populations to educate and encourage, but also better understand needs & barriers.

5. Evaluation: Are improving safety for vulnerable groups & in all parts of the city?

6. Equity: Make sure it’s not just the usual players at the table. Include & focus on vulnerable pops.