Traffic Safety: Design and Education



Objective

Is the City promoting traffic safety by effectively designing City streets and intersections and educating the public about traffic safety?

Background

In 2016, the City adopted Vision Zero with a goal of eliminating traffic deaths and serious injuries. Since then, the City has done many things to promote traffic safety.

The Austin Transportation
Department has led many of the
City's efforts. Actions include traffic
safety improvements to intersections
and streets, educating the public, and
advancing the use of new mobility
technologies.

Other actions include development of the Pedestrian Safety Action Plan in 2018 and adoption of the Austin Strategic Mobility Plan in 2019.

Voters also approved transportation bonds in 2016 and 2018 that provided \$30 million for intersection infrastruction improvements and other traffic safety projects.

What We Found

The Austin Transportation Department supports traffic safety by improving intersections with a high number of crashes, but could better align these efforts with the City's goal to reduce fatal and serious injury crashes.

ATD has improved nine intersections since 2015 and preliminary data suggests fewer crashes at these locations as a result. However, these intersections appeared to have few fatal or serious injury crashes prior to the improvements, so it is unclear if these improvements helped the City reduce these types of crashes. ATD recently created a list of dangerous intersections based on crash frequency. While ATD considered crash severity later in the process, five intersections with a relatively high number of serious crashes were not included on the initial list. ATD has already taken steps to improve how they identify dangerous intersections.

The Austin Transportation Department previously lacked some data that would help determine where and how to make City streets safer, and decisions related to intersection design improvements were not well documented.

ATD used data from law enforcement crash reports to determine where and what improvements to make. However, the data was not always complete or accurate. For example, data used to map dangerous locations was not available for approximately 10% of crashes in Austin. In addition, 7% of sampled crash reports had incorrect data about the crash location. ATD is trying to improve crash by working with the Austin Police Department and the Texas Department of Transportation.

Some documentation to support intersection improvement decisions contained inconsistent information. Also, although staff said they considered various factors when identifying crash causes, there was limited evidence of this in these documents. Finally, the methodology used to identify dangerous intersections was not formally documented making it difficult to review and potentially revise the process.

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What We Found, Continued

The City uses various ways to educate the public about traffic safety, but these efforts could be better targeted to address the dangerous behaviors that frequently result in serious crashes.

ATD and its partners used social media, print and digital materials, radio and tv advertisements to educate the public about traffic safety. However, ATD did not have targeted education campaigns to address specific dangerous behaviors that are frequently cited as causes of serious and fatal injury crashes in Austin. The need for more targeted education was identified in the Austin Strategic Mobility Plan. Education efforts in some peer cities, including Philadelphia and New York, may serve as models for Austin.

Dangerous Behaviors Frequently Cited as Causes of Crashes in Austin



Additional Observation: The City and the Austin Transportation Department have worked to promote traffic safety, but the City ability to address some of the conditions related to traffic deaths and serious injuries is limited. This makes it unlikely the City will be able to eliminate these types of crashes.

Many of Austin's fatal and serious injury crashes occur on roads not controlled by the City, such as Interstate 35. In addition, state laws limit the City's ability to promote traffic safety by making it difficult to reduce speed limits and prohibiting the use of red-light cameras. Also, some vulnerable populations, like people experiencing homelessness, are more at-risk than others for being seriously injured or killed in a crash. While a goal of zero traffic deaths and injuries is an appropriate vision for Austin, these issues make it unlikely the City will eliminate these types of crashes.

What We Recommend

The Austin Transportation Director should:

- ensure the severity of crashes is considered at all stages of analysis in future decisions related to improving safety on City streets;
- improve data related to traffic crashes by working with the Austin Police Department and other relevant parties to identify ways to improve and collect key data;
- ensure decisions related to all roadway improvements are appropriately documented including methodologies, data analysis, and improvement recommendations; and
- expand traffic safety education efforts by developing and implementing strategies to specifically target dangerous behaviors.