VISION ZERO SUCCESS STORY — INFRASTRUCTURE

Fletcher Avenue Complete Streets Redesign — Hillsborough County, Florida

Key Successes

A redesign of Fletcher Avenue in Tampa, Florida resulted in the following trends:

A decrease in average speed along the corridor.

A decrease in travel time for the eastbound direction during the AM period, and only a minimal increase in travel time for the corridor overall.

An increase in pedestrian and bicyclist volumes, reflecting improved accommodations for such transportation system users.

A reduction in the total number of vehicle crashes and crash severity.

A reduction in the severity of pedestrian and bicyclist crashes.

Crash Data

The Fletcher Avenue Complete Streets improvements addressed transportation safety:

Three-Years Prior:

- 73 non-incapacitating injuries.
- 37 incapacitating injuries.
- 5 fatalities.

Three-Years After:

- 46 non-incapacitating injuries (37% reduction).
- 20 incapacitating injuries (46% reduction).
- 2 fatalities (60% reduction).

Background

The Hillsborough County Metropolitan Planning Organization (MPO), in the Tampa, Florida region, identified several corridors in the roadway transportation network that would benefit from infrastructure enhancements to improve the safety, mobility, and accessibility of all users, particularly pedestrians and bicyclists. Through early crash analysis, the MPO identified the top 20 severe crash corridors, later adopted in its Vision Zero Action Plan¹. The MPO Board supported prioritizing funding in the Transportation Improvement Program for redesigns that included safety for all modes.

Fletcher Avenue, near the University of South Florida (USF), was one of the targeted corridors. From 2011-2013, the section of Fletcher Avenue from Nebraska Avenue to Bruce B. Downs Boulevard averaged over 1,100 total daily pedestrian crossings. Additionally, the corridor had a high pedestrian crash rate with 31 pedestrian crashes.

Implementation

In 2014, the Hillsborough County Public Works Department implemented a redesign of the roadway to address the identified issues on Fletcher Avenue. The redesign, completed in 2015, included upgraded pedestrian crossings, light-emitting diode (LED) lighting at pedestrian crossings, raised pedestrian refuge islands and traffic separators, new bicycle lanes on both

¹ http://www.planhillsborough.org/vision-zero/







Figure 1. Upgraded pedestrian crossings on Fletcher Avenue.

directions of the road, speed limit reduction from 45 miles per hour (mph) to 35 mph, and high visibility enforcement in the corridor.

Outcomes

The Hillsborough County Public Works
Department reviewed the effectiveness of the redesign and installed countermeasures by comparing traffic and crash data for three years prior and three years immediately following construction. The Public Works Department used engineering consultants and The USF Center for Urban Transportation Research documented behavioral observations to conduct analyses on operational, safety, and behavioral changes.

The MPO documented behavioral observations of pedestrians, bicyclists, and motorists along Fletcher Avenue. The study included identifying how crosswalks were used, the willingness of individuals to properly use crosswalks, opinions regarding the use or improper use of crosswalks, and barriers the individuals experienced related to the improper use of crosswalks. The observations showed an increase in crosswalk and push button use after completion of the infrastructure improvements and a reduction of individuals bicycling on the sidewalk.

To expand on the prior crash analysis, the MPO assessed crash data for four years, instead of three, prior to and after the corridor improvements. This data showed from 2010-2013 there were 93 fatal and serious injury crashes on the 3.02-mile segment of Fletcher Avenue, and from 2015-2018 that number reduced to 38 fatal and serious injury crashes.

Funding

The cost of the project was \$4.7 million, which included a \$2.5 million safety grant from the Florida Department of Transportation. The MPO has determined that funds from the transportation surtax will pay for 370 miles of Complete Streets projects, like the one on Fletcher Avenue, each year. Those projects along with street light improvements and filling in sidewalk gaps are projected to lead to a 35-percent reduction of injury and fatal crashes by 2045, with some corridors having significantly higher reductions from the cumulative effect of the Complete Street treatments.

POINT OF CONTACT

GENA TORRES

EXECUTIVE PLANNER
HILLSBOROUGH COUNTY MPO
813.273.3374 X357 | TORRESG@PLANCOM.ORG