



Summary – HWY 91/State Street STEP Crossing

STEP Study Overview

In 2017, the Northeast Arkansas Regional Transportation Planning Commission (N.A.R.T.P.C.) received federal funding through the Statewide Transportation Innovation Council (STIC) to conduct a STEP (Safe Transportation for Every Pedestrian) study to help identify safety countermeasures for dangerous mid-block crossings at pre-selected locations within the region. The study encompassed the following locations: **(1) the intersection of Highway 91/E. Johnson Ave. and State Street** and **(2) Highway 141/N. Church St. (corridor between Allen Ave. to Alpine St.)**. This study was conducted by Garver USA in collaboration with the N.A.R.T.P.C. and the Arkansas Department of Transportation, and concluded in July 2020.

Critical Safety Issues Observed at HWY 91/State Street Temporary Crossing

The following critical issues for the location were identified:

- ❖ **Conflicts at Crossing Location**
- ❖ **Excessive Vehicle Speeds**
- ❖ **Inadequate Conspicuity/Visibility**
- ❖ **Drivers Not Yielding to Pedestrians Crossing (Even While Within Crosswalk with Lights Activated)**

Recommendations

- ❖ **Speed Reduction of Vehicles in the Area**
 - Utilize raised medians, landscaping, and speed-monitoring trailers
- ❖ **Enforcement of Existing Traffic Laws** (ref: aggressive driver behavior towards non-motorists)
- ❖ **Install Full Traffic Signal with Pedestrian Signal Heads - (Option 1)**
 - With ADA compliant wheelchair ramps, advance warning signs and high-visibility crosswalk markings
 - Challenges: Expected increase in traffic delay
 - FHWA Justification: Meets MUTCD Guideline Warrant 7 due to crash experience in the area
- ❖ **Install Pedestrian Hybrid Beacon (PHB) - (Option 2)**
 - With ADA compliant wheelchair ramps, high-visibility crosswalk markings, stop bars, in-street pedestrian crossing signs
 - Challenges: Inadequate required spacing from driveways and cross streets, Disregard of vehicular traffic with the temporary crossing, and Potential inconvenience to pedestrians

Estimated Cost & Delay

The estimated construction cost for the recommended improvements is approximately \$60,000 for the PHB and \$190,000 for the full traffic signal. The PHB is projected to add an average of 3.8 seconds of delay for each vehicle traveling within the area (**only when signal activated**). The full traffic signal would add as much as 8.7 seconds of delay per vehicle.