STATE ROUTE 377 ROAD SAFETY ASSESSMENT
EXECUTIVE SUMMARY

A Road Safety Assessment (RSAs) is a formal study of an existing or future roadway or intersection, which identifies potential road-safety issues as well as opportunities for improvements in safety for all road users.

ADOT's RSA program was developed based on Federal Highway Administration (FHWA) program guidelines. The State Route 377 RSA was funded by the Arizona State Senate through Senate Bill 1820 as a response to residents expressing concerns about the safety of the SR 377 corridor.

SR 377 is a 34-mile rural, undivided, two-lane highway connecting the communities of Holbrook and Joseph City to Heber-Overgaard. Average daily traffic volumes (ADT) on SR 377 are approximately 3,900 vehicles on weekdays and approximately 4,400 on weekend days. 14% of the traffic on the roadway is classified as heavy vehicles/trucks.

Previous Improvements: Prior to the RSA, ADOT made improvements in 2019 to 10 horizontal curves along the corridor and the shoulder by adding millings between the pavement and the surrounding right of way to assist in recovery for vehicles that leave the paved portion of the road. In addition, roadway signing, and striping are upgraded on a periodic basis.

Crash Data: 170 total crashes were reported from Jan. 1, 2017, to May 31, 2022.Five were fatal and 22 were serious injury collisions. 68% percent were single-vehicle collisions. No portion of SR377 has appeared on the statewide annual network screening of high-crash locations since screening began.

Resident Survey Findings: ADOT conducted a community survey in conjunction with the RSA on SR 377. The purpose of the survey was to provide area residents and roadway users the opportunity to share their concerns about traffic safety on the roadway. More than 1,200 surveys, which were mailed to area households and made available online, were received. More than 30% of survey respondents indicate this corridor is very unsafe with the highest safety concerns reported as speeding, unsafe passing, narrow road, not enough passing lanes and lack of shoulders. The highest-rated solutions were to construct shoulders, widen the roadway and add more passing lanes/extend the length of existing passing lanes.

Field Observations: The RSA team conducted a field review of the project corridor to observe existing roadway conditions and current driver behaviors. Field observations spanned multiple days and included various times of day. Following the field review, the RSA team evaluated the findings and reviewed possible countermeasures to the observed conditions.

<u>Safety Improvement Recommendations:</u>

Possible countermeasures to improve safety and driving conditions on SR 377 range from low-cost relatively quick-turn around to higher cost and long lead time improvements. These possible countermeasures include:

Low Cost - Pavement marking improvements

- o Upgrade existing deteriorated pavement markings to new retro-reflective conditions
- o Install centerline rumble strips

High Cost - Improve and widen shoulders

- o Install rumble strips at edge of roadway
- o Construct pavement safety edge treatment

High Costs - Improve passing lanes

- o Construct four 1.5-mile-long passing lanes in each direction
- o Widen shoulders, install edge line rumble strips, and construct safety edge at the passing lane improvements

Future Plans

While the above countermeasures were identified as possible improvements to road safety, none of these projects have been programmed and there remains no identified funding for any of the proposed countermeasures.