



## Transportation Advisory Board Report

**Date:** May 16, 2023  
**To:** Transportation Advisory Board  
**From:** Ryan Hudson, City Traffic Engineer  
**Subject:** Establish Speed Limit  
Williams Field Road, Ellsworth Road to Crismon Road  
Williams Field Road, Crismon Road to East City Limits

### Purpose and Recommendation

The intent of this report is to establish speed limits on Williams Field Road from Ellsworth Road to east City limits. This stretch of Williams Field Road is a mix of three existing, one recently annexed, and two newly constructed roadway segments, none of which currently have a speed limit that is established in Mesa City Code (City Code). Staff recommends the following:

- Establish a speed limit of 40 mph on Williams Field Road from Ellsworth Road to Crismon Road (Segment 1).
- Establish a speed limit of 45 mph on Williams Field Road from Crismon Road to east City limits (Segment 2).

See the attached **Figure 1** for a location map.

### Background and Discussion

#### Segment 1

Williams Field Road between Ellsworth Road and SR-24 is currently a partially built cross section that generally provides one lane in each direction. When the property located along the north side of Williams Field Road is developed, the roadway will become a 6-lane arterial with raised median. The existing land use along the south side of Williams Field Road on this segment is a large-scale sports complex known as Legacy Sports Park. Through the SR-24 interchange, Williams Field Road is built to accommodate the future 6-lane cross section, but the outermost travel lanes are currently striped out as large shoulders.

The roadway alignment between Ellsworth Road and Crismon Road includes three horizontal curves, one east and two west of SR-24, that exist to create a more

perpendicular intersection with the SR-24. The two curves west of SR-24 and the ultimate Williams Field Road alignment were established as part of a City of Mesa alignment study that was completed in 2019. This study considered roadway design criteria for horizontal curves, the SR-24 alignment, the adjacent street network, Phoenix Mesa Gateway Airport's development plans, future development along Williams Field Road, and area drainage conditions. The study determined that the preferred and chosen roadway curve geometry could accommodate a 50-mph design speed if Williams Field Road was designed to include superelevation. Without superelevation, as recommended by staff, the roadway curves meet criteria for a 45-mph design speed, as defined by the American Association of State Highway and Transportation Officials (AASHTO). Typically, speed limits are set at 5 mph below the design speed, and Williams Field Road was constructed without superelevation.

At its intersection with Ellsworth Road, Williams Field Road aligns with the future Gateway Boulevard alignment which lies west of Ellsworth Road. Gateway Boulevard will be a public street that serves as primary access to the Phoenix Mesa Gateway Airport (PMGA) future terminal and development area east of the existing runway. Gateway Boulevard will be a 4-lane arterial street with a planned, posted speed limit of 35 mph, based upon the roadway geometry, street character, and anticipated, adjacent land uses.

This segment of Williams Field Road between Ellsworth Road and Crismon Road currently has a posted speed limit of 45 mph and is not established in City Code. Given the roadway geometry, the existing and anticipated future land uses adjacent to this segment of Williams Field Road, and the plans for Gateway Boulevard, west of Ellsworth Road, a 40-mph speed limit is reasonable and most appropriate. The 40-mph speed limit must be established by means of Ordinance and amendment of Section 10-4-4 of City Code, which currently includes Williams Field Road from the west City limits to Innovation Way.

### Segment 2

Williams Field Road east of Crismon Road is currently a partially built cross section that generally provides one lane in each direction. There is active development along the south side of Williams Field Road between Crismon Road and Signal Butte Road and along both sides of Williams Field Road east of Signal Butte Road. The existing land use along the north side of Williams Field Road on this segment includes portions of the residential communities known as Cadence and Eastmark. The active developments along the corridor predominantly include multifamily and single-family residential communities with some mixed-use planned development located adjacent to Crismon Road and Signal Butte Road. East of Crismon Road, Williams Field Road will transition from a 6-lane to a 4-lane with raised median roadway cross section.

Historically, the segment east of 222<sup>nd</sup> Street was under Maricopa County (County) jurisdiction and had a posted speed limit of 45 mph up to Mountain Road. Williams

Field Road currently ends at Meridian Road and the segment between Mountain Road and Meridian Road has a posted speed limit of 35 mph. By means of an ordinance, the City annexed segments of Williams Field Road between 222<sup>nd</sup> Street and a point approximately 850 feet west of Mountain Road, and the respective annexations were recorded on April 19, 2021. Now that the City has annexed portions of Williams Field Road and there is a connection between 222<sup>nd</sup> Street and Crismon Road, the proposed 45-mph speed limit must be established by means of Ordinance and amendment of Section 10-4-3 of the City Code.

### **Alternatives**

As an alternative, a speed limit other than the recommended 40 mph (between Ellsworth Road and Crismon Road) and 45 mph (between Crismon Road and east City limits) could be established. However, considering the roadway geometrics of these segments of Williams Field Road, adjacent land uses, roadway classification, street character, and the posted speed limits on the adjacent street segments, the recommended speed limits are most appropriate and reasonable.

### **Fiscal Impact**

The existing 45-mph sign faces between Ellsworth Road and Crismon Road will need to be replaced with 40-mph sign faces resulting in a negligible fiscal impact. From Crismon Road to east City limits, the 45-mph speed limit signing is included in the maintenance efforts required per the annexation with the County and the construction of adjacent development offsite improvements, resulting in no fiscal impact.

