



## Transportation Advisory Board Report

**Date:** June 21, 2016  
**To:** Transportation Advisory Board  
**From:** Dave Barrier, Traffic Studies Analyst  
**Subject:** Speed Limit Change – Sossaman Road from Pecos Road to a point 2,800 feet north of Pecos Road

### Purpose and Recommendation

In response to the Deputy Transportation Director's request, a speed study was conducted on Sossaman Road north of Pecos Road.

As a result of this study, staff recommends increasing the speed limit from 35 mph to 45 mph on Sossaman Road from Pecos Road to a point 2,800 feet north of Pecos Road. See Figure 1.

### Background

Mesa City Council establishes speed limits that are greater than 25 mph via ordinance.

Speed limits are set by taking into consideration a number of factors: some technical, some not. For this reason, the Transportation Advisory Board makes recommendations and the City Council decides what speed limits to establish after considering staff's input and recommendations.

Arterial street speed limits are normally set on the basis of speed studies so that the speed limit is based upon what most motorists find reasonable and prudent. Traffic laws that are a reflection of the majority of motorists are found to be successful, while laws that arbitrarily restrict the majority of drivers encourage wholesale violations, lack public support, and usually fail to bring about a desirable change in driving behavior. Posting speed limits lower than these reasonable limits can result in enforcement difficulties and may actually create traffic hazards.

Typically speed limits are set at or near the 85th percentile speed. This is the speed at or below which 85 percent of drivers are traveling. This speed is subject to downward revision based upon a number of factors including the adjacent land uses, proximity of schools, levels of activity, adjacent speed limits, traffic volumes, roadway function, and roadway geometrics.

## **Discussion**

Sossaman Road runs north-south, and is classified as an arterial street. From Pecos Road to a point 2,800 feet north of Pecos Road it has one traffic and one bike lane in each direction and no curb, gutter or sidewalks. At this point northward, Sossaman Road widens to a fully developed arterial roadway with two traffic lanes in each direction, a center raised median, bike lanes in both directions, and sidewalks on both sides. The speed limit, per City Code, is 35 mph from Pecos Road to Ray Road. Sossaman Road, south of Pecos Road is a two lane roadway with a posted speed limit of 45 mph.

Sossaman Road from Ray Road to 2,800 feet north of Pecos Road is located within the Phoenix-Mesa Gateway Airport. Land uses adjacent to this segment are commercial and industrial. Land uses adjacent to the segment from Pecos Road to a point 2,800 feet north of Pecos Road is agricultural.

Speed counts were conducted in May 2016. The data showed that the 85th percentile speed was 49.3 mph, well over the posted speed limit of 35 mph. This is an indicator that the current speed limit does not match the traveling speed at which the majority of drivers feel comfortable and safe.

Raising the speed limit is not expected to significantly increase driver speeds since drivers generally do not travel outside of their speed comfort zones.

In an effort to increase driver compliance, it is recommended to raise the speed limit on Sossaman Road from 35 mph to 45 mph from Pecos Road to a point 2,800 feet north of Pecos Road. This is a typical speed limit for similar streets. The speed limit on Sossaman Road from Ray Road to 2,800 feet north of Pecos Road is recommended to be maintained at 35 mph in consideration of the higher traffic volumes and pedestrian activity near Phoenix-Mesa Gateway Airport and surrounding businesses, and the curving nature of this segment of Sossaman Rd.

## **Alternatives**

One alternative is to make no changes to the posted speed limit of 35 mph. However, the lower speed limit is not only causing unnecessary delay to drivers using this section of Sossaman Road, but it is also creating potential traffic hazards due to the large variation in traffic speeds.

Another alternative is to implement a speed limit of 40 mph, which is closer to the recorded 85th percentile speeds than the current speed limit of 35 mph but still well below the traveling speed.

**Coordination**

The Phoenix-Mesa Gateway Airport Authority has been informed of the proposed speed limit change and concurred with staff's recommendation.

**Fiscal Impact**

The fiscal impact of making any changes discussed in this report is estimated to be less than \$1,000, which would come from the existing traffic operations budget.

Fiscal impact is not a consideration in making a recommendation in this instance.

