



City Council Report

Date: May 6th, 2019
To: City Council
Through: Karolyn Kent, Assistant City Manager
From: RJ Zeder, Transportation Department Director
Sabine Ellis, City Traffic Engineer
Subject: Modify Speed Limit – Main Street, Mesa Drive to Gilbert Road, Council District 4

Purpose and Recommendation

As part of the Gilbert Road Light Rail Extension Project (GRE), the Main Street cross section is being reduced from two lanes per direction with designated bike lanes and parking lanes to a single traffic lane per direction with designated bike lanes.

To align with the design speed for the GRE improvements and be consistent with the adjacent section of Main Street where light rail exists, staff recommends modifying the boundaries of the current 35 mph speed limit on Main Street to encompass the GRE limits. See Figure 1 for a location map.

Additionally, existing speed limit boundaries along Main Street between Mesa Drive and Gilbert Road, as defined in Mesa City Code, cite specific distances from intersections as opposed to citing the intersecting street itself as the boundary.

To align with current practice, which is to establish intersections as the segment boundaries, staff recommends modifying the boundaries of the existing speed limits for Main Street between Mesa Drive and Gilbert Road in Mesa City Code. See Figure 1 for a location map.

Background and Discussion

The GRE street cross section design aligns with the adjacent section of Main Street, west of Ashland, where the previous Mesa light rail extension terminated, and the posted speed limit is 35 mph. The reduced cross section, which includes a single thru-traffic lane per direction with designated bike lanes, will extend to a point near the eastern terminus of GRE. At a point approximately 525 feet west of Gilbert Road, the Main Street cross section will widen from a single lane per direction with designated bike lanes to two lanes per direction with designated bike lanes. Due to the proximity to Gilbert Road, it is recommended that Gilbert Road mark the proposed boundaries of the 35-mph posted speed limit.

Speeds of 35 mph and 40 mph are covered in Sections 10-4-5 and 10-4-4 of the Mesa City Code, respectively. Thus, the speed limit reduction will require modification of the limits detailed in both sections of Mesa City Code.

Mesa City Code Title 10, Chapter 4 covers the permitted vehicular speeds on certain Mesa streets. The streets listed under each section of Chapter 4 cite boundaries as to which the respective speed limit applies. Current practice in establishing speed limits is to set the boundaries at intersections rather than give an arbitrary distance from an intersection, if possible. Historically, some of the said boundaries were based off where the speed limit sign was in the field. This creates segment limits that are subject to speed limit sign relocations and can create confusion as to where the speed limit change occurs.

Main Street has established speed limits of 45, 40, 35, and 30 mph specified in Mesa City Code Title 10, Chapter 4. Thus, modifying the speed limit boundaries will require adjustment of the limits detailed in Sections 10-4-3, 10-4-4, 10-4-5, and 10-4-6.

Coordination

The Transportation Advisory Board has reviewed the proposed speed limit modifications and concurred with staff's recommendation to establish a speed limit of 35 mph on Main Street from Mesa Drive to Gilbert Road and amend the cited speed limit boundaries at their March 19, 2019 meeting.

Alternatives

As an alternative, a speed limit other than the recommended 35 mph could be established. However, considering the roadway geometrics of this segment of Main Street and the adjacent land uses, the recommended speed limit is most appropriate and reasonable.

As an alternative to modifying the Main Street segment limits in Mesa City Code Title 10, Chapter 4, the established limits can remain as-is. However, this keeps limits that may create confusion and are subject to speed limit sign relocations.

Fiscal Impact

No signing changes will be needed resulting in no fiscal impact. The GRE project will install 35 mph speed limit signs.

Figure 1

