VISION 20/20

How We Will Use This Study
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The I-20 Safety Study is comprised of two primary components:

1. I-20 data generated from the existing conditions such as roadway geometry, pavement analysis, truck percentages, traffic counts, crash data, and
2. Extensive public participation to determine which safety improvements would receive community support. Both components are equally vital to the success of this study and will be equally weighted during design.

This document is a reference guide for engineers to use as individual segments of I-20 are improved and this report provides a foundation on which the project team will base schematic designs. Information provided does not replace the need for further re-examination of these components by the designer during the environmental process. Individual projects will vary by benefits, construction costs, categorical funding, and engineering judgement, and scheduling will be accelerated or delayed due to resource availability. As the construction work program progresses over the next decade, the schematic described in chapter five will become reality. This study will determine which portions of I-20 need major redesign and which can be slightly adjusted for minor geometric revisions, and the Abilene District will prioritize safety improvements through a variety of projects until the mission statement is realized. I-20 data described above as component 1 was researched or produced by the Abilene District. Most of the researched data is in this Chapter’s “Focus on Freight” section. The data that was produced by the district is composed of major appendices which will be referenced by designers when planning future projects:

Appendix A—Public Participation Results. This section contains the exact responses and comments from almost 600 citizens that completed the I-20 Safety Study. Since the data was taken across a 160 mile corridor the responses were divided by county for the project team to review and each community had distinct options about what improvements are needed and which are most important.

Appendix B—Geometric Data. This section evaluates eastbound and westbound horizontal curves, existing crossfall, and 6 percent/8 percent super-elevation rates. Gathered data can be used to determine if the roadway is adequate for the functional class and design speed. Preventative Maintenance projects may require milling the existing roadway, then overlaying the roadway to achieve proper super-elevation transition, or projects could require overbuilding at a proper transition rate, then overlaying the project.

Appendix C—Structures and Ramps. This section examines I-20 bridges and entrance/exit ramps for the following criteria: location, NBI #, CSJ, highway crossing, Average Daily Traffic, vertical clearance, lane width, shoulder width, ramp mile marker, ramp length, and whether ramps intersect frontage roads at one-way or two-way traffic conditions. This data can be analyzed during project design along with accident data and input from District Maintenance. I-20 ramps will be improved, relocated, or lengthened to enhance safety for the traveling public.
Appendix D—Bridge Reports. This is a reference guide for I-20 bridge maintenance across the 160 mile Abilene District and includes general reports on bridge superstructure, bridge substructure, bridge deck, and nonstandard bridge rails. The design team will examine the actual BMIP reports in detail during project development.