

DATA COLLECTION

Data collection and field observations were two large components of this study. All study intersections were inventoried for lane configurations, existing traffic control, and observed operations. Additionally, AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak period turning movement counts were taken at each study intersection, as well as 24-hour traffic volume counts at six locations.

To perform this study, the following information was obtained:

- Digital aerial photography of the study corridor;
- City of Odessa Thoroughfare Plan and design standards;
- City of Midland Thoroughfare Plan and Land Use Plan;
- Conducted field visit to the corridor to observe traffic operations, identify major traffic generators, and document existing control;
- Traffic count data along the corridor, including:
 - AM and PM peak hour turning movement counts at the following 32 locations
 - Signalized Intersections (17):
 - 8th Street at BI 20 Mainlanes
 - JBS Parkway at BI 20 Mainlanes
 - JBS Parkway at BI 20 Frontage Road
 - Loop 338 (west ramp) at BI 20 Mainlanes
 - Loop 338 (west ramp) at BI 20 Frontage Road
 - Loop 338 (east ramp) at BI 20 Mainlanes
 - Loop 338 (east ramp) at BI 20 Frontage Road
 - Coors at BI 20 Mainlanes
 - Loop 250 (west ramp) at BI 20 Mainlanes
 - Loop 250 (west ramp) at BI 20 Frontage Road
 - Loop 250 (east ramp) at BI 20 Mainlanes
 - Loop 250 (east ramp) at BI 20 Frontage Road
 - Eisenhower at BI 20 Mainlanes
 - Eisenhower at BI 20 Frontage Road
 - Thomason at BI 20 Mainlanes
 - Thomason at BI 20 Frontage Road
 - Midkiff at BI 20 Mainlanes
 - Unsignalized Intersections (15):
 - 8th Street at BI 20 Frontage Road
 - Newell at BI 20 Mainlanes
 - Newell at BI 20 Frontage Road
 - Club Drive at BI 20 Mainlanes
 - Club Drive at BI 20 Frontage Road
 - FM 588 / Faudree at BI 20 Mainlanes

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- CR 1308 at BI 20 Mainlanes
- CR 1308 at BI 20 Frontage Road
- FM 1788 at BI 20 North Frontage Road
- LaForce at BI 20 North Frontage Road
- LaForce at BI 20 South Frontage Road
- CR 1246 at BI 20 Mainlanes
- CR 1246 at BI 20 Frontage Road
- Midkiff at BI 20 Frontage Road
- 24-hour counts at six locations on the BI 20 mainlanes and frontage road:
 - Between 8th Street and JBS Parkway
 - East of Loop 338
 - Between Coors and FM 1788
 - East of LaForce (mainlanes only)
 - West of Loop 250
 - West of Thomason
- 7-day counts at one location
 - BI 20 mainlanes and frontage road east of Loop 338
- Traffic crash data from TxDOT, the City of Midland, and the City of Odessa;
- Data on planned developments and future land use plans along the Odessa portion of the corridor; and
- City of Midland ROW and pavement cross section standards.

This information was used in modeling the existing conditions of the traffic operations along the corridor and evaluating the short-term and long-term recommendations identified in this document. The analysis of existing conditions on the BI 20 corridor is presented in the following section of the report.