

Addendum to the Summary of Data Collection, Travel Demand Forecasting Model Development, and Traffic Results for the U.S. 287 at Lamar Project memo dated May 8, 2003

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Introduction

The purpose of this technical memorandum addendum is to update the previously presented traffic volumes to the 2035 design year currently being evaluated in the U.S. 287 at Lamar Environmental Assessment (EA). It is not the intent of this memo to recreate all data previously presented or to reanalyze traffic operations; the expected growth in traffic volume from 2025, as analyzed in the original 2003 traffic technical memorandum, to 2035 is not expected to degrade levels of service to unacceptable levels, and the change in traffic volumes does not change the conclusions from the original 2003 traffic technical memorandum.

Traffic Volume Update

Two previously completed traffic memorandum addenda conducted in 2007 and 2009 used average annual traffic growth rates to extrapolate the modeled 2025 traffic volumes from the 2003 technical memorandum to 2035. This was completed for the roadway links of interest and was not implemented on a region-wide basis. The volumes prepared for this 2012 technical memorandum addendum utilize the origin-destination survey data, census population, and census employment information from the original 2003 traffic technical memorandum and combine them with 2010 traffic counts to update the spreadsheet travel model developed as part of the EA.

Based on the recent traffic count growth trends, the traffic model developed in 2003 was used to forecast 2010 and 2035 traffic conditions for the more than 80 roadway links in the network. The model was recalibrated to 2010 traffic volume counts, and in all cases the modeled volumes for 2010 varied less than 10% from the actual 2010 traffic volume counts, which is consistent with FHWA guidelines for travel model reasonableness. This methodology takes into account the latest traffic information and leverages the previously developed traffic model to provide a better estimate of future 2035 traffic conditions than linear extrapolation alone. Furthermore, region wide vehicle miles traveled (VMT) and vehicle hours traveled (VHT) estimates were prepared. The revised traffic estimates, VMT, and VHT are presented in Tables 8, 9, and 10.

Revised Table 8: Two-way Daily Traffic Volume on U.S. 287 and U.S. 50

Location	2010 Counts	Trucks			Modeled Existing (2010)	Modeled Future (2035) No-Build	Modeled Future (2035) with Alternate Route
		Single Unit	Combination	Percent			
U.S. 287 s/o CO 196 (North Stn)	13,000	350	1,200	12.1%	13,000	17,950	17,950
U.S. 287 s/o Arkansas River	16,000	420	1,200	10.3%	14,750	19,050	16,250
U.S. 287 n/o U.S. 50	17,000	400	1,150	9.0%	16,000	19,750	16,900
U.S. 287 s/o U.S. 50	15,000	160	1,150	8.7%	14,650	16,100	14,350
U.S. 287 s/o Alt Route (South Stn)	2,900	100	1,300	47.7%	2,900	4,000	4,000
U.S. 50 e/o U.S. 287	5,600	490	180	12.0%	5,900	6,700	5,650
U.S. 50 e/o Alt Route (East Stn)	2,600	130	300	16.4%	2,600	3,600	3,600

Revised Table 9: Two-way Daily Traffic Volume on U.S. 287/U.S. 50 Reliever Route

Section	Modeled Future (2035)
Northern	2,800
Southern	1,800

Revised Table 10: Daily System Wide Summary

System Performance	Vehicle Miles Traveled			Vehicle Hours Traveled		
	Local Roads	Alternate Route	System Wide	Local Roads	Alternate Route	System Wide
Modeled Existing (2010)	81,900	N/A	81,900	2,500	N/A	2,500
Modeled Future (2035) No-Build	96,200	N/A	96,200	2,800	N/A	2,800
Modeled Future (2035) with Alternate Route	80,000	18,200	98,200	2,500	200	2,700

Conclusion

The segment of U.S. 287 north of U.S. 50 has seen the highest increase in traffic between 1998 and 2010 and is forecast to carry nearly 20,000 vehicles daily in 2035 without the reliever route. The traffic volume would not, on its own, create significant additional congestion on U.S. 287/Main Street, but the continued mix of local and through-traffic and heavy trucks would perpetuate existing safety and mobility problems.

The reliever route would carry through-traffic that is not destined for Lamar – trucks and cars that presently travel through the city without stopping – and would divert those vehicles from Main Street and Olive Street to the reliever route. As designed, the Proposed Action interchange and roadway configurations provide ample capacity to accommodate existing and expected future traffic volumes on the reliever route in 2035.

Traffic volumes are relatively low throughout the local and regional roadway system when compared to available capacity of the roadway system. The change in traffic volumes from the modeled 2025 volumes (presented in the 2003 traffic technical memorandum) to the modeled 2035 volumes (presented in this 2012 technical memorandum addendum) is not anticipated to result in unacceptable levels of service within the local or regional roadway system nor change any mobility conclusions drawn from the original analyses in the 2003 traffic technical memorandum.