



Appendix E

Freight Analysis

Capital - Alamo Connections Study



MEMO

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Subject: Capital-Alamo Connections Study: Freight Analysis

The I-35 segment through the Capital-Alamo Connections Study (CACS) region is one of the most critical corridors for the movement of freight in the State, because it is part of the facility connecting the Mexican border in Laredo to the Upper Midwest. It is therefore imperative to understand freight movements in the region and specifically on I-35. For this purpose, two data sources were used, 1) TxDOT TRANSEARCH 2010 data to identify major commodity movements by truck and rail, and 2) StreetLight® data to study truck travel patterns and major origins and destinations of trucks traveling along the I-35 corridor.

Commodity Movements

For a better understanding of commodity flows in the region, the TRANSEARCH 2010 database was used to obtain aggregated data on number of trucks and rail tons originating and going to the study region. The following sections summarize the main observations obtained from this data.

General Observations

Trucks

- Approximately 9.1 Million trucks originate from the study area every year.
- The highest number of trucks originating from the region annually are from Bexar (42%) and Travis (23%) counties.
- Approximately 63% of trucks originating from the region stay in the region while 34% go to other areas in Texas. Similarly, the highest percent (62%) of trucks going to the region originate within the region and 32% come from other areas in Texas.
- Top destinations of trucks originating from the region and travelling outside the state are Oklahoma City and Little Rock.
- In terms of commodity groups, the top three commodity groups both originating and terminating in the region are shipping containers, nonmetallic minerals, and clay, concrete, glass or stone.
- The total number of through trucks in the region annually is 16.3 million, with approximately half of the trucks crossing from one Texas region to another, and 28% originating in Texas

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but travelling to other US States. Trucks to Mexico and from Mexico to Texas and other US States make up 11% of the total number of trucks passing through the region.

Rail

- Approximately 14.6 Million rail tons originate from the region every year.
- Approximately 92% of rail tons originating from the region go to other areas in Texas. Only 7% are destined to regions outside Texas, but most importantly only 1% remain within the study area.
- The top three counties in the region from which rail tons originate are Comal (52%), Bexar (24%), and Burnet (8%) counties.
- The top three commodities exported from the study region by rail are nonmetallic minerals, clay, concrete, glass, or stone, and transportation equipment. The top three commodities imported to the study region by rail are coal, transportation equipment, and chemicals or allied products.
- Approximately 10.6 Million tons of rail freight end up in the study region annually, with more than 88% destined to Bexar County.
- Approximately 95% of rail tons destined to the study region come from other states with only 4% coming from other Texas areas, and 1% originating from the study area itself.

Truck Travel Patterns and OD Analysis

Data obtained from StreetLight® for the month of September 2017 was used to determine travel patterns and major origins/destinations along I-35. The analysis was accomplished by placing analysis “gates” at the major interchanges along I-35 as well as on the main lanes. **Figures 1 and 2** present the results of this commercial truck OD analysis for the northbound and southbound trips respectively.

The results show that only 22% and 13% of trucks travel through the entire corridor without making a stop in the study area in both the northbound and southbound directions respectively. These long-distance trips are of importance due to their potential of being shifted to other modes such as rail. However, such a low percentage will not contribute to a large shift. Approximately 45% of trips peel off at I-410 in San Antonio in the northbound direction, possibly continuing to I-10 east. Similarly, in the southbound direction, a significant percentage (~ 37%) of trucks originating north of the corridor peel off at SH 130. These trips can potentially be served by alternate routes parallel to I-35, thus relieving congestion on some portions of the highway.

Figure 1: Northbound Commercial Truck Movement on I-35

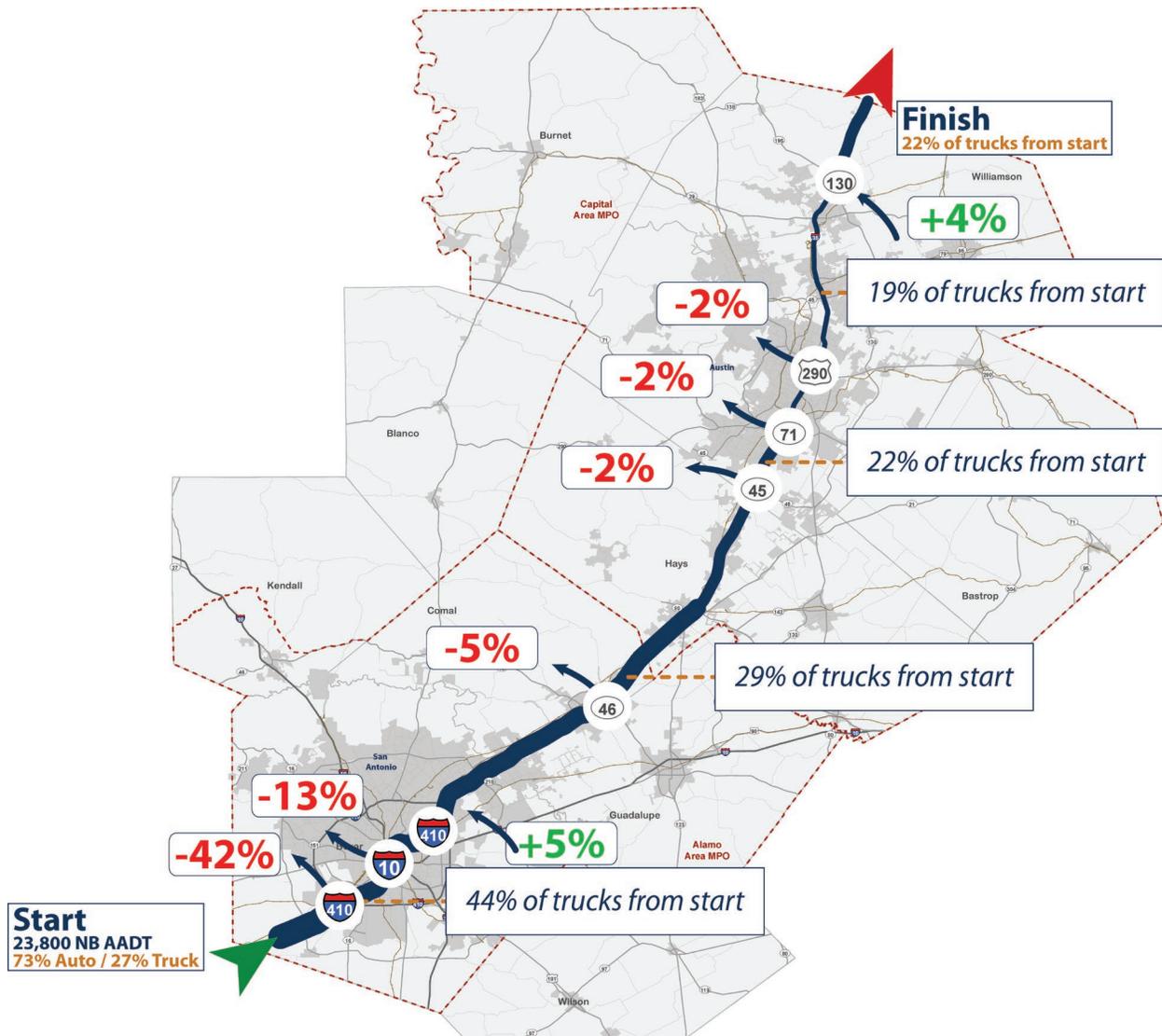


Figure 2: Southbound Commercial Truck Movement on I-35

