Project Summary

Texas Department of Transportation

0-6627: Mega-Region Freight Issues in Texas: A Synopsis

Background

Demographic growth is now concentrating both population and economic performance into multi-city boundaries termed *megaregions*, which challenge traditional systems of transportation planning when the needs through 2040 are considered. The typical focus of urban transportation planning in the last two decades has been to facilitate mobility—the efficient movement of people. Freight, for a variety of reasons, has been largely ignored. This report seeks to examine the role of *freight* in megaregional research and to make recommendations to the Texas Department of Transportation (TxDOT) as to whether statewide freight planning can be enhanced through a megaregional approach.

Texas utilizes a system for future transportation needs that includes input from multiple metropolitan planning organizations (MPOs), councils of government (COGs), and local planning authorities to aggregate and update a series of long-range statewide plans, one of which specifically addresses transportation. Though this system has worked reasonably well in the past, corridors of statewide or national importance are under increasing pressure from both types of users in the form of increased demand and encroachment on right-of-way (ROW), which limits opportunities for corridor enhancement. Corridor preservation and management is critical for both freight users and the general population who benefit from efficient transportation in many ways, particularly job creation and competitive consumer prices.

A major benefit from megaregional planning is the improvement it affords local and metropolitan planning. It offers a comprehensive planning horizon to Metropolitan Planning Organizations (MPOs), Councils of Governments (COGs), and local and state entities for a variety of public benefits, not only including transportation but also areas such as water planning, electricity provision, and emergency evacuation procedures—all critical to Texas. Planning on a larger scale than that currently undertaken by MPOs improves efficiency by supporting a programmatic system of information sharing that all MPOs can access or by determining the link between a transportation corridor and the economic efficiency of the jurisdictions it serves.

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What the Researchers Did

This one-year exploratory study, sponsored by the Texas Department of Transportation, aimed to determine the areas, primarily within the freight-planning sector, that could be strengthened by adding a megaregional component exploring the governance, delineation, benefits, and disincentives to megaregional freight and corridor planning.

This study was primarily qualitative and conducted interviews and workshops with stakeholders from a variety of public and private sector entities in Texas. The actual implementation of megaregional planning will be addressed in future studies.

What They Found

This report finds overwhelming evidence to support a level of megaregional integration into current state transportation planning activities. The strong growth in state population since 2000 — which is predicted to continue to grow to 2030 and beyond — is a key driver for this conclusion, as the majority of the state population will reside within the area east of Interstate 35 and along the U.S-Mexico border.

The recommendations include:

1. Define the megaregion using the quality, quantity, or capacity of modal freight systems serving as the primary criterion.
2. Position megaregional planning to promote corridor protection, preservation, and expansion while bridging inconsistencies between statewide plans and local and MPO plans.
3. Explore the concept of load-centering freight within metropolitan areas via intermodal ports, utilizing megaregional criteria to determine optimum terminal locations.
4. Create, via TxDOT and/or the Association of Texas MPOs (TEMPO), a standing megaregional committee with a goal of identifying projects or initiatives essential to freight mobility that will benefit multiple MPOs.
5. Utilize findings from the legal review to determine megaregional initiatives that can be pursued within the current frameworks of both current state and federal codes, as well as identify changes in these codes that can be made to explicitly give local jurisdictions the power to plan and procure funding for megaregional projects.
6. Determine the viability of achieving benefits beyond those gained solely within the freight sector, based on synergistic megaregional interdisciplinary planning issues.

What This Means

The work reported is the product of a detailed synopsis of the current state of megaregional planning, particularly in the United States and, most importantly, the feedback and participation of a large group of stakeholders who debated aspects of the subject, especially those elements that impacted TxDOT and MPO freight planning. This work, together with ongoing Volpe Center work for FHWA on multi-state megaregional planning which will determine a step by step megaregional frame work, strongly argues that TxDOT should include elements of this subject in future statewide multimodal planning studies.

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