0-5985: Evaluating Mexican Transportation Planning Processes and Implications for Texas Transportation Assets

Background

Mexico is Texas' largest trading partner, and consequently they share an interest in increasing trade volumes across their 1,254 mile border. Mexico's recent attention to transportation infrastructure and announcement of its five-year National Infrastructure Plan (NIP), are expected to have an impact on trade and transportation flows into Texas and impact TxDOT planning decisions. Project 0-5985 was designed and intended to assist TxDOT to understand the legal basis, protocols, and strategies used by Mexico in planning, developing, financing, and maintaining its transportation system.

What the Researchers Did

Researchers examined the legal, institutional, and economic underpinnings of Mexican transportation planning, and reviewed its $196 billion NIP announced by President Calderon during 2007. Twelve multimodal case studies were performed to demonstrate how these institutional factors functioned in real world examples and assess how various institutions contributed to their development. CTR utilized the LBJ School of Public Affairs Policy Research Project (PRP) to accomplish case study development. The PRP focused on planning, finance and feasibility analysis, bidding and tendering processes, right-of-way acquisition, environmental assessment, coordination among entities and citizen involvement. Researchers reviewed current and future trends in commodity flows; analyzed the current extent of Texas-Mexico coordination; and, identified differences between infrastructure plans from both sides of the border, to identify required planning and coordination changes.

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What They Found

Historically, transportation within Mexico was developed independently and attention to network interconnections, either between or within modes, was lacking. Several recent administrations sought to improve the network; yet financial constraints – i.e., Mexico's budget is financed with fluctuating oil revenues from the state run oil company PEMEX – hindered Mexico's ability to make long-term infrastructure investments.

The implementation of constitutional and legislative changes regarding development planning and financing throughout the late 1990s and early 2000s and tax and budget reforms during 2006 changed this dynamic and established the groundwork for better transportation development.

As a consequence, Mexico is shifting to a new paradigm in how it manages and develops its transportation system. Since the late 1990s Mexico began to decentralize responsibility for planning from the Secretariat of Communications and Transportation (SCT) to the states, and the responsibility for much of the financing and construction of projects to the private sector and autonomous public sector entities. SCT strengthened its internal process mechanisms and analytical capability and formalized a structured planning process. The use of two new infrastructure funds FARAC and FONADIN capitalized through Concessions and Public Private Partnerships (PPP) have also provided new finance mechanisms.

What This Means

- Mexico and the U.S. are at different positions in their network lifecycles. Mexico is focused on completion of its network and integrating modes, while the U.S. is focused on maintenance of an aging system. This may lead to differing objectives for any proposed projects.
- Mexico and the U.S. are facing challenges in financing their transportation systems. Mexico's PEMEX-reliant budget means transportation competes with other policy objectives. While private financing relieved pressure on the Mexican government, it requires a robust global financial market. In the U.S. gasoline taxes have been eroded by inflationary effects because they have not been raised in over 15 years. The U.S. has utilized PPPs but there has been a backlash against them in some states. Transportation planners in states that border Mexico should be aware of the issues surrounding the underlying financing of projects initiated.
- Notwithstanding decentralization moves, Mexico is still a federally centered system that revolves around the presidential election every six years. Mexico's strict term limits for public officials also play a role in the continuum of planning across multiple funding years/administrations occurring. Transportation planners should be aware of these dynamics, monitoring Mexico's political/fiscal arena and long-term transportation infrastructure plans which impact trade corridors into the U.S.
- Many of the projects in this study encountered environmental challenges as they were being planned and constructed. Projects in Mexico also faced issues surrounding the acquisition of communal ejido lands. The timing of the environmental review, after ROW has been acquired, may also be problematic for U.S. parties collaborating on projects leading to unforeseen costs and change orders. Contracts should be structured to provide mechanisms for such eventualities.

The transportation systems of both countries have a long legacy of developments that took different courses yet arrived at remarkably similar destinations. This congruity underscores that the needs of the Mexican and U.S. populations from their transportation systems are similar and interdependent. Further integration of the transportation networks beyond the border zone is a necessity for improving the performance of both systems and their ultimate value to the population. Therefore continued and better cross-border planning is recommended to ensure enhanced network connectivity between the two countries.

For More Information:
0-5985-1 An Evaluation of Mexican Transportation Planning, Finance, Implementation, and Construction Processes

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