



Project Summary

Texas Department of Transportation

0-5652: Transportation, Economic and Social Impacts of Light and Commuter Rail in Metropolitan Areas

Background

The Texas population is projected to continue growing at a rate faster than the United States' average growth rate. The U.S. Bureau of Census estimated the population of Texas as approximately 22,860,000 in 2005, making it the second most populous state (behind California). By 2040, that population is projected to grow to 51,700,000.

TxDOT is challenged with meeting the mobility needs of the growing population. This will require maximizing the mobility benefit for every dollar the state invests in transportation infrastructure. TxDOT has historically been at the forefront of innovative approaches to enhance the productivity of their transportation system. They pioneered the creation of High Occupancy Vehicle lanes in freeway corridors to increase that corridor's person-carrying capacity.

What the Researchers Did

The purpose of this research was to provide information regarding another approach to moving people efficiently—rail transit. Specifically, this project examined the variety of impacts of light rail and commuter rail projects. Further, the research team documented the role(s) that other states have played in planning, designing, developing, and operating light rail and commuter rail and examined current TxDOT policies associated with participation in such projects. Finally, the research effort linked potential impacts to TxDOT agency goals and identified any legislative or administrative changes that would be needed in order to permit TxDOT to participate in rail projects.

What They Found

While transportation impacts are often masked by heavy growth in corridor traffic and latent travel demand, modeling enables measuring the real transportation impacts of rail projects. Rail transit is both safe and environmentally friendly.

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Rail systems expand mobility and reduce household investment in transportation. However, as regions implement rail systems, they must take care to consider the full range of rider impacts so that environmental justice issues do not emerge.

The largest body of research relates to the economic impact of rail. These impacts are strongest in station areas, as access to rail increases the value on nearby property. The positive impact of rail on property values does not hold true for property directly adjacent to the rail line, however.

State departments of transportation (DOTs) have played a variety of roles in rail development, ranging from funding initial planning to operating services. TxDOT has authority to participate in rail development but no funding has been appropriated by the legislature. TxDOT could more actively participate in commuter rail projects if the agency is afforded greater flexibility in application of funds and the right to own rolling stock.

What This Means

Rail transit is another tool that DOTs throughout the nation have employed to increase mobility and enhance economic opportunity in their regions. DOTs have focused primarily on commuter and regional rail projects, like the Trinity Railway Express in the Dallas-Fort Worth metropolitan region (see Figure 1). These projects nationally have led to results that are consistent with TxDOT's goals.

TxDOT is already in a position to influence and participate in these kinds of projects. TxDOT has served as a catalyst in exploring regional rail in north Texas, the San Antonio-Austin corridor and the Houston metropolitan region. TxDOT's ability to assist in advancing these kinds of rail projects further would be enhanced through introducing increased flexibility in the use of financial resources and by providing TxDOT the ability to obtain rolling stock.



Figure 1. Trinity Railway Express, Dallas-Fort Worth Metropolitan Region.

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