



DEMAND FOR HIGH SPEED RAIL IN THE TEXAS TRIANGLE & BEYOND

Existing studies on high-speed rail (HSR) demand analysis in the United States mostly rely on the conventional procedure of four-step travel demand modeling with data assembled from constituent MPOs along the proposed HSR routes. This approach likely produces forecasting outcomes favored towards business-as-usual, car-dominated trends given that HSR has never existed in modern times in US megaregions.

The proposed project explores an alternative approach to analyzing aggregate mobility demand for high-speed travel in the Texas Triangle megaregion, simulating shares of HSR modes under different transportation policy assumptions, and drawing implications for long term strategic infrastructure investments in the Texas Triangle.

The project plans to carry out five tasks. Task 1 reviews the literature related to HSR studies and travel demand analyses for non-existent travel options. Literature on modal competition and complementarity among air, HSR, and telecommunications will also be reviewed. Task 2 assembles data on 1) inter-metropolitan travel by air and surface transportation from such sources as Bureau of Transportation Statistics and National Household Travel Surveys, and 2) projections of population growth and economy/income changes for up to the year of 2050 at the county-level in the Texas Triangle. Task 3 calibrates an aggregate model of mobility demand as a function of population, economy, income, and travel time-/travel-money budgets. Task 4 estimates future mobility demand in terms of total person-miles of travel (PMT) as well as HSR shares under different policy scenarios. Task 5 reports analysis results, compares outcomes of different scenarios, and draws implications for long-range infrastructure investments in the Texas Triangle.

An Alternative Approach to
Analyzing Demand Potential for
Travel by High Speed Rail in the
Texas Triangle (#CM2-41)

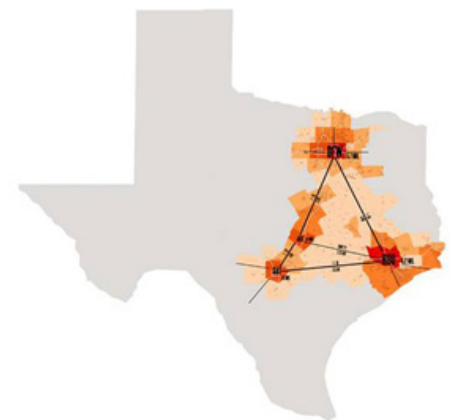
Dr. Ming Zhang,
University of Texas at Austin

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Project Information Form:
<http://sites.utexas.edu/cm2/files/2018/06/Year-3-Ming-Zhang-Analyzing-Demand-Potential-for-Travel-by-High-Speed-Rail.pdf>



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The Texas Triangle (source: America 2050)

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