

Texas Performance-based Investment Tool



Client

Facts

Period 2022

Project Country United States

EBP worked with High Street Consulting and WRA to construct a new performance-based programming tool that helps the Texas Department of Transportation (TxDOT) explore both programmatic and major project investment strategies’ effects on performance goals using performance-investment trade-off curves. The tool provides TxDOT with new insights as to whether investment strategies are likely to be robust under uncertain future technology and economic conditions as well as the economic and transportation performance returns possible from different investment strategies under uncertainty.

EBP established investment-performance trade-off curves for economic metrics as well as advising the team on metrics like reliability and delay savings. These curves simplified risk-based planning and enabled exploratory investment scenarios. Each curve is based on detailed modeling of the outcomes of specific scenarios. The decision space was then expanded from these potential choice-situation pairs to allow analysis of a wide range of futures. The analysis considered urban highway capacity, rural highway connectivity, safety, bridge, and pavement investments across a range of technology and freight volume futures.

This project evolved from work done for the [Texas Transportation Plan 2050](#).

Contact Persons



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