North Tarrant Express project - Introduction:
• Features: 13.5-mile project dedicated to improve mobility along the IH 820 and SH 121/183 (Airport Freeway) corridor in Northeast Tarrant County.
• Scope: Complete reconstruction and upgrade of existing general purpose lanes, improving and expanding frontage roads to add capacity, adding managed toll lanes.

3-D and 4-D Models – Building the tool
3-D and 4-D models are being developed to support multiple engineering, construction and public relations objectives
• 3-D model for proposed new construction based on engineering plans and TCP
  • Pavements and bridges based on engineering plans
  • Terrain data from LIDAR data and .TIN data from TxDOT
• 4-D virtual construction model
  • Construction sequence visualization using latest CPM schedules from TxDOT
  • Simulation of vehicles and other roadway detail for augmented reality

Project Facts:
- Total Project Cost: $2.5 Billion
  - Operations and Maintenance Cost: $450 Million
- Comprehensive Development Agreement (CDA) executed: June 23, 2009
- Construction: $2.05 Billion ($573 Million TxDOT/Public Funds); NTEMP Equity, $426 Million; Private Activity Bonds (PABs), $400 Million; Transportation Infrastructure Finance and Innovation Act (TIFIA) loan, $650 Million
- Estimated Completion Date: Mid, 2015
- Status: 50% Construction Complete

Applications – Using the tool
• Accurate conceptualization of project for proposed conditions.
• Phase wise 4-D visualization of project using TCP plans.
• Detailed construction sequencing of the project in any segment or phase
• Use of advanced renderings and 4-D animation videos for public information during public meetings by TxDOT
• Analysis of schedule for constructability and sequencing errors