THE NORTHEAST MEGAREGION TRAVEL DEMAND AND INVESTMENT MODEL: FINAL REPORT AND USER'S MANUAL

The thirteen-state Northeast Megaregion (NEMR) extends along the I-95 corridor from Portland, Maine to Richmond Virginia, and includes more than 15% of the country's residents and 14% of its jobs. This makes it America's largest and most productive megaregion by far. It also includes 38 Metropolitan Planning Organizations, or MPOs, each of which is responsible for coordinating transportation planning and investment activities in its metropolitan area.

This plethora of MPOs, and the resulting fragmentation of transportation investment decision-making has compromised the NEMR's ability to undertake needed transportation investments within and across modal categories, generating productivity and quality-of-life bottlenecks across the region.

The purpose of this three-year applied research project is to develop and test a robust travel demand and facility planning and evaluation model capable of simulating the costs and benefits of various multi-modal transportation investments as undertaken at the megaregional scale within the NEMR. Such investments might include high-speed, inter-city high-speed rail service, intra-regional bus rapid transit service, dedicated (and automated) freight movement facilities, new bridge and tunnel facilities, high-speed airport-city transit lines, and other projects to be determined. The proposed modeling procedures and datasets will be developed and implemented in TransCAD, a state-of-the-art modeling platform already in wide use across the United States.

NEMR Transportation Investment Model Highway Network