

PwC Consulting

ABM and Microsimulation Projects



• Client Need

- The Clean Air Act, the Intermodal Surface Transportation Efficiency Act, and other regulations have led to a need for new transportation and air quality forecasting models.

• PwC Solution

- The U.S. Department of Transportation, through the Los Alamos National Laboratory (LANL), contracted PwC to develop and market a commercial version of LANL's Transportation Analysis and Simulation System (TRANSIMS). TRANSIMS creates a virtual metropolitan region with a complete representation of residents, jobs, daily activities, and transportation infrastructure. Virtual individuals make trips to selected locations generating the trips that simulate every vehicle on the transportation network. TRANSIMS simulates multiple modes, including cars, buses, rail, and walking, on a second-by-second basis.

• Benefits to Client

- TRANSIMS provides transportation planners a comprehensive simulation of traffic, congestion, and pollution.
- TRANSIMS is a laboratory where the impact of changes in transportation policy or infrastructure can be measured.
- Simulates realistic traffic dynamics from which analysts can estimate emissions and judge transportation system performance.