TRANSPORT FLOW OPTIMIZATION



Planning the effective movement of products from supply points to demand points throughout the supply chain is demanding work. An organization must make critical transportation decisions based on customer requirements, inventory levels, re-order points, and product values, among other factors.

Using weighted performance drivers and constraints to guide their work, the Network Solutions team designs optimal transportation flow models for goods moving between physical nodes in our customers' global networks. This is accomplished by modeling historical transportation activity then running simulations that compare possible scenarios to the current state. The goal is to strike the perfect balance between the competing tradeoffs of cost, speed and reliability in support of our customers' unique supply chain goals.

Improvements can be realized by addressing one or more of the following areas in the design:

- Mode of transportation
- Service level
- Consolidation opportunities
- Consolidation / deconsolidation locations
- Departure frequency
- · Container / truckload utilization
- Routing options
- Carrier choices
- Equipment
- · Cross-dock or pool point insertion

In addition to goals focused on balancing cost, speed and reliability, we target ways to reduce variability. As any inventory planner or materials manager knows, variability can wreak havoc on planning, causing excess inventory on one end of the spectrum, or stock-out / line-down situations at the other extreme. In situations where variability is a significant driver of transportation decisions, we conduct thorough analyses and add this dimension to our deliverable.

Over the course of our 10+ years completing hundreds of transportation projects, we've identified tremendous opportunities for our customers to raise performance in the areas most important to them, typically reducing cost. Transportation should be considered a critical input to planning decisions and Expeditors Network Solutions can help make that a reality with exceptional results.

