THE RIGHT SOLUTION FOR COMPLEX LOGISTICS NETWORKS

“Partnering with Manhattan gave us the capability to move to a much more efficient, sustainable, holistic transportation model, which allowed us to gain greater efficiencies across our entire supply chain.”

GIANT EAGLE

ACTIVE, OPTIMIZED TRANSPORTATION MANAGEMENT

Logistics complexities and service-level expectations have increased dramatically in today’s world. Supply chains must be nimbler and more frugal than ever before. Adaptability is essential as companies try to predict and respond to uncertainties. Network changes, rising rates, reduced capacity, escalating supplier and consumer demands, and natural disasters have the potential to create supply chain failures that wreak havoc on both brand image and the bottom line.

As risk and volatility escalate, and global transportation options continue to evolve, a sophisticated transportation management system (TMS) is no longer an option – it’s a necessity. With advancements in technology, capability and deployment methods, companies of all sizes and across all industries and geographies can begin to take back control of their supply chain with optimized transportation management.

A leader in the 2020 Gartner Magic Quadrant for Transportation Management Systems, Manhattan TMS offers end-to-end business process support for all transportation functions, across all modes, and the entire logistics network, including private fleet and common carrier management. From strategic analysis, procurement, operational planning and execution to visibility, freight payment and claims, Manhattan TMS reduces costs, improves service levels, automates processes, streamlines execution and lowers operational risk. Recognized as a leader in usability and user experience, our solution simplifies even the most-complex logistics operations, giving users the ability to expedite tasks and manage by exception.

With Manhattan TMS, you can:
- Reduce transportation and logistics costs
- Improve service levels and visibility
- Automate and standardize processes across logistics functions
- Lower administrative costs
- Track and manage key performance indicators and operational metrics
- Better prepare for and adapt to changes in the supply chain
SOLUTION COMPONENTS

Manhattan TMS provides a single, comprehensive logistics solution suite designed to support the entirety of an organization’s shipping needs — regardless of mode, geography or channel.

TRANSPORTATION PLANNING AND EXECUTION

PLAN PROACTIVELY ACROSS MODES AND LOCATIONS
Optimize inbound, outbound and intercompany shipments in real time — whether domestic or international — using Manhattan Transportation Planning and Execution. No matter the size or complexity of your network, you can secure capacity for shipments across all modes and locations when using any combination of common carriers or fleets. By systemically identifying optimal modes, carriers, service levels, rates and routes, companies can analyze shipments, rates, carrier contracts and other variables/constraints.

This results in load plans and routing efficiencies that boost service, improve asset utilization and reduce overall freight costs and carbon footprint.

While planning and optimization lay the groundwork for significant savings and efficiency gains, even the best plans need to be proactively managed and executed, with visibility and event management across the transportation lifecycle. Automated and informative control tower visibility — combined with the benefits of an optimized plan — help elevate overall supply chain effectiveness.
**OPTIMIZE DYNAMICALLY AND REDUCE COSTS**

Manhattan TMS provides both operational and strategic planning capabilities. Operational planning enables dynamic optimization for today’s supply chain, while strategic modeling allows you to proactively and reactively test for changes that might take place in the future — allowing for true control of the logistics function. The solution provides:

- Simultaneous optimization across inbound and outbound logistics, including carrier vs. fleet
- Load optimization and mode consolidation/conversion (i.e., LTL to multi-stop TL)
- Both static and dynamic routing
- Multi-leg optimization, including use of cross-docks
- Overall reduction of routes, miles and fuel costs
- Efficient appointment scheduling
- Reduction of detention and other accessorial fees
- Better strategic analysis of pooling or cross docking options, pickup and delivery schedules, sourcing decisions, and more
- Analytics for transportation procurement

**Features + Functions**

- Consolidate orders to build efficient shipments
- Optimize all modes of transportation, including ocean, rail, intermodal, truck, air and parcel based on rates, asset availability and other business constraints
- Execute dynamic or static routing requirements
- Manage continuous moves, backhauls and cross-docks
- Support carrier and supplier compliance programs and guidelines
- Enhance trading partner collaboration and communication
- Accommodate visibility, alerting and exception management needs, including temperature tracking
- Manage internal and external appointment scheduling
- Mobile carrier communication
- Provide granular visibility and task-based control of yard operations
Global supply chains are in constant flux. An optimally configured transportation solution today isn’t necessarily the optimal solution tomorrow.

To stay ahead, transportation professionals need a solution that can “think” strategically, as well as execute optimally, to ensure the entire network is always operating at the lowest cost and highest service levels.

With Manhattan Transportation Modeling, you can:
- Find innovative savings opportunities proactively
- Make the best transportation policy decisions
- Measure the service and cost impact of various options
- Reduce costs
- Improve service levels
- Optimize the network continuously

Manhattan Transportation Modeling empowers you to challenge assumptions and test new ideas on transportation policies, while simultaneously seeing the impact on operations. Logistics professionals can run what-if scenarios, propose network configuration changes, test different routing options, and see the effect that different constraints and paths will have on operations.

Our technology utilizes proprietary algorithms and scenario-planning tools that remove complexity while providing great flexibility. With sophisticated simulations that use historic and forecasted data, the solution validates and optimizes a multitude of scenarios.

Responding to volatility and implementing change becomes a task as common as tendering freight, with easily justified decisions and minimal impact to the business. Manhattan Transportation Modeling enables planners to leave the day-to-day mayhem of troubleshooting and move into the realm of strategic and tactical planning. The result is optimal execution, today and tomorrow.

### MAKE BETTER BUSINESS DECISIONS

Changes and fluctuations in customer locations, carrier and driver capacity restrictions, erratic fuel costs, hours of service changes, and shifting third-party transportation rates all impact the bottom line. Using “averages” alone for modeling falls short in projecting the effects that changing a policy has on complex transportation networks. When you start to reach network capacity, how should you align resources? Where should you add a distribution center to get the most benefit? Manhattan Transportation Modeling provides scenario-based optimization capabilities that analyze specific supply chain and network design options.

### Features + Functions
- Create an unlimited number of scenarios for alternative network configurations and transportation policies
- Analyze your real-world, historical data and quantify the overall impact of change with the help of realistic simulations
- Compare scenarios side by side
- Adjust a range of variables so you can arrive at the best outcome
- Consider plans for opening and closing distribution centers and store locations and for disruptions, demand surges and holiday seasons while fine-tuning service policies

### PLAN TACTICALLY, EXECUTE OPTIMOALLY

Manhattan Transportation Modeling enables organizations to step outside the typical, reactionary focus of execution and empowers planners to be proactive. It allows companies to search for ways to improve operations, quickly react to changes in the supply chain, make more optimal decisions, find hidden savings opportunities, and implement changes that positively impact profitability.
TRANSPORTATION PROCUOREMENT

BE PREPARED: CHANGES AHEAD
Selecting the right carriers for your business has a direct impact on profitability and customer satisfaction. With the dynamic nature of supply chains, however, the best combination of carriers today may be different tomorrow. Manhattan Transportation Procurement allows you to determine the ideal combination of carriers, and balance price against other factors such as capacity, service and quality. Dynamic supply chains require a powerful and reliable solution that streamlines sourcing and strategic procurement processes and responds to changes in such aspects as:
- New vendors, distribution centers, stores and customers
- Customer demands and service requirements
- Varying shipment volumes
- Carrier mergers and acquisitions
- New regulations
- Contract expiration
- Fuel prices

Transportation expenses are the largest element of total logistics costs; that’s why it’s important for companies to have a clear visibility of total spend. The ability to evaluate costs, services and other factors when selecting carriers is vital – especially since the best carrier isn’t always the least-expensive one. And shippers simply can’t afford to run operations with stale rates. Manhattan Transportation Procurement provides the power to respond quickly to changes while minimizing costs.

BETTER VISIBILITY, OPTIMAL RESULTS
Widely recognized as one of the most powerful logistics procurement systems for managing transportation bids and contract sourcing, our procurement solution automates best practices and standardizes the entire bid process, from request for proposal to final contract. With Manhattan Transportation Procurement, your team can:
- Standardize and simplify the bid collection and optimization process
- Improve carrier communication and collaboration
- Leverage historic and forecast data to better prepare carriers for bidding
- Benchmark and track rates and service, over time
- Determine multiple awarding scenarios based on cost, service and other rules
- Understand the true cost impact of sourcing decisions
- Improve spend visibility
- Increase accountability
- Create a repeatable and automated bid and award process

By optimizing the strategic sourcing process across modes, Manhattan Transportation Procurement lets you match your lanes and demand with carrier offerings that ensure the best rates and capacity available.

Features + Functions
- Automate contract management and reduce transportation costs for all modes of transportation
- Allow alternative pricing, using ad hoc or prescribed bundles
- Evaluate bid responses, using benchmark data
- Optimize contract award combinations with what-if scenario management
- Execute incremental (mini) bids quickly to secure capacity outside existing contracts due to dynamic network changes
- Generate and activate awards seamlessly within the solution
FLEET MANAGEMENT AND DISPATCH

Manage dedicated and private fleet resources by automatically recommending routes, drivers and assets with Manhattan Fleet Management and Dispatch. You can minimize your company’s miles while optimizing hours of service, availability, compliance, seniority and service needs.

Features + Functions
– Optimize all assets, including drivers, tractors and trailers
– Balance loads across shifts and resources
– Provide driver support with dispatch and kiosk support
– Support long-haul and store-delivery routing needs
– Ensure compliance with federal regulations
– Enable real-time visibility of inventory in motion
– Provide proof-of-delivery visibility
– Execute more efficiently and quickly adapt to changes

FREIGHT AUDIT, PAYMENT AND CLAIMS

Modernize and streamline antiquated freight settlement processes by managing invoices by exception, reducing excessive and incorrect charges, and filing claims quickly and efficiently. The case for automating freight audits and payments is a compelling one. Global shipping operations simply generate too much data, detail and variance for manual processes to absorb. By systemically automating communications and processes that reduce overhead and costly errors and improving pre/post audit carrier contract compliance, freight audit and payment solutions can help offset your entire TMS investment. Even with third-party FAP providers, shippers still have to manage carrier relationships, update contracts, resolve discrepancies and more. The best practice is to manage this process inhouse through a leading TMS.

Features + Functions
– Institute match or auto-payment processes with carriers
– Support audit on accessorial and linehaul charges via defined tolerances
– Enable payment to financial systems
– Manage invoicing and reconciliation through a carrier portal or electronic communication
– Support claims management and settlement
– Freight cost allocation
TMS MOBILE

Improve collaboration, connectivity and real-time visibility with service providers and fleets via one intuitive mobile app.

Manhattan TMS Mobile enables an array of business processes, including carrier registration; tender/accept; real-time, in-transit visibility; pickup and delivery confirmation, photo and signature capture; and more. Using this app, shippers can interface directly and more effectively with service providers to improve execution. Dispatchers can utilize it for driver assignment and monitoring, as well.

Tapping into the ubiquity of smartphones and geofencing technology, Manhattan TMS Mobile gives small- and medium-sized carriers advanced visibility and communication. It levels the playing field for small carriers and owner-operators, allowing them to meet compliance requirements with no additional cost. And it provides drivers the ability to communicate directly with Manhattan TMS from the cab of a truck.

The result? Improved service, increased compliance and better reporting.

To learn more about Manhattan Transportation solutions visit manh.com/tms