

## Navigating transportation efficiency with Route Optimization

Transportation is a central focus for many industries seeking timely, cost-efficient, and environmentally sustainable deliveries. Fuel expenses alone can account for up to 30% of operating costs.<sup>1</sup> Route optimization minimizes mileage to reduce operating costs by finding the most direct travel paths.

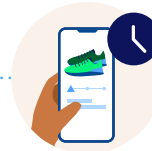


### Common transportation challenges



**Inefficient route schedules** which increases fuel and labor costs

**Driving empty miles** increases overall transportation expenses



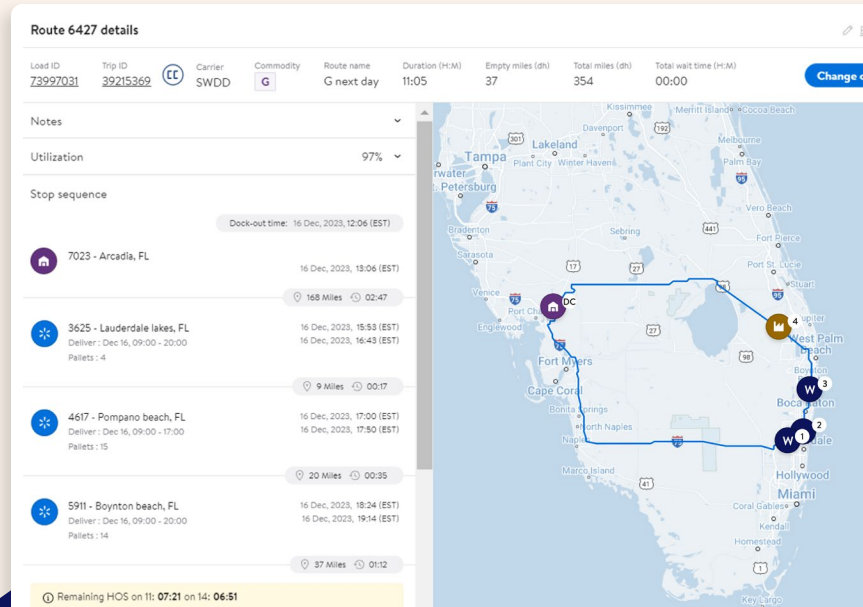
**Untimely deliveries** results in dissatisfied customers and lower brand loyalty

**Neglect of cold chain integrity** jeopardizes product quality and regulation compliance



### Boost profits with advanced Route Optimization including:

- Advanced algorithms using Artificial Intelligence (AI) and Machine Learning (ML) for zero touch, error-free routing
- Reduce empty miles for higher cost savings and greener footprint
- Enhance customer services with timely deliveries and tracking
- Facilitate strategic planning with simulation tools
- Real-time response to rapidly address disruptions
- Data analytics for informed decision-making
- Stacking rules for perishables to prevent waste in transit



<sup>1</sup> American Transportation Research Institute. "An Analysis of the Operational Costs of Trucking: 2023 Update." June 2023

A success story

## Franz Edelman Award

With Route Optimization, Walmart avoided 94 million pounds of CO<sup>2</sup> by eliminating 30 million unnecessary miles driven and optimized routes to bypass 110,000 inefficient paths.\* In 2023, Walmart was recognized for Operations Research excellence through the Franz Edelman Award for Route Optimization.



## Unpacking the benefits of Route Optimization



### Optimize trailer loading

Efficiently load trailers based on delivery stops to maximize space, comply with cold chain grocery regulations, and preserve product quality



### Streamline backhaul scheduling

Intelligently plan return trips and optimize resource utilization for enhanced logistics so your trailer is never empty



### Minimize disruption impacts

Manage unforeseen events, ensuring minimal disruptions and maintaining operational continuity



### Reporting at a glance

Comprehensive insights, including detailed analyses of trailer utilization for efficient logistics oversight and decision-making



### Enable multi stop route mapping

Optimizes efficiency with automated route mapping for multiple stop deliveries considering time, location and other constraints



### Maximize cost reductions

Leverage optimal routes, eliminating empty trailers, and optimizing miles traveled to help reduce impact on the bottom line and boost environmental sustainability



LEARN MORE

## The power of zero-touch logistics

Route Optimization, powered by AI and ML, is your zero-touch companion in transportation logistics, ensuring efficiency, cost-effectiveness, and adaptability for a seamless network.

- Automated route planning without human intervention
- Optimized trailer utilization and exception management
- Scalable and adaptable to changing demands

\*Sustainability impacts estimated over fiscal year 2023.