



NORTHERN LIGHTS
TECHNOLOGY DEVELOPMENT

2025 TRANSPORTATION INDUSTRY UPDATE

Current state, common pain
points and possible solutions



Transportation in the U.S.

The transportation industry is the often-overlooked force that impacts nearly every facet of our lives each day. Whether it's the food you eat, the clothes you wear or the endless array of consumer products you rely on, the transportation sector was likely involved in moving them from Point A to Point B. You are even the "product" that is moved from place to place anytime you ride on a bus, train, boat or airplane.

This white paper will explore the current state of the transportation industry in the U.S., review the various headwinds and challenges now facing the industry, and touch on some of the solutions being implemented to overcome these challenges.

Industry Size

The latest data from Statista pegs the transportation and warehousing industry at a 3.5% share of total U.S. gross domestic product (GDP).¹ For context, that figure is comparable to the construction industry (4.4%) and dwarfs the impact of utilities (1.6%), mining (1.4%) and agriculture (.9%) on the U.S. economy.

The true scale becomes even more apparent when looked at in monetary and human terms. IBISWorld's report, *Transportation and Warehousing in the U.S.* (March 2025) estimates total annual revenues of \$1.2 trillion for the industry as a whole.² Roughly three million businesses nationwide, with approximately 10 million employees, are currently engaged in the movement of passengers or cargo. Few industries create a footprint that large in the U.S. economy.

Industry Segments

The picture becomes clearer when the industry is broken into its component parts. IBISWorld has estimated the annual revenue of each segment of the industry as follows:



TRUCK TRANSPORTATION

\$353.8 billion



AIR TRANSPORTATION

\$203.2 billion



POSTAL SERVICES, COURIERS AND MESSENGERS

\$162.3 billion



RAIL, TRANSIT AND GROUND PASSENGER TRANSPORT

\$179.8 billion



SUPPORT ACTIVITIES

\$141.3 billion



PIPELINE TRANSPORTATION

\$47.9 billion



WAREHOUSING, STORAGE AND OTHER SERVICES

\$162.3 billion



WATER TRANSPORTATION

\$36.2 billion

Pain Points

The transportation industry in North America is both massive and intensely competitive. At last count, more than 715,000 trucking and freight companies were registered in the U.S. and Canada.³ Those trucking companies, in turn, move goods between an estimated 22,000 warehouses⁴ comprising nearly 15 billion square feet of space.⁵

LABOR SHORTAGES

The transportation and warehousing industry has been hampered by a labor shortage for several years running and the problem is getting worse. The nation's trucking industry offers a timely example.

According to TransPlus, the nationwide shortage of truck drivers reached 80,000 drivers in 2023.⁶ Driver retention is now a top priority for trucking firms as they use a combination of higher wages, improved working conditions and richer benefit packages to attract and retain qualified drivers.

The same trends are being observed in the warehousing and fulfillment sector. Nationwide, employment in warehousing and storage was 34% higher in June 2024 than in February 2020, immediately prior to the COVID-19 pandemic.⁷ This indicates a striking increase in demand for warehouse workers. Wages are rising industry-wide to keep pace.

Transportation and warehousing companies run on data, which means the ongoing shortage of skilled IT talent is causing the industry pain as well. The latest data shows that 42% of IT professionals are actively or passively seeking new roles.⁸ Skill gaps related to the proliferation of artificial intelligence (AI) tools, heightened demand for those AI skills, and the desire for more flexibility and work-life balance are driving this upheaval among IT professionals nationwide.

KEY TAKEAWAY:

Transportation and warehousing companies must seek alternative methods of sourcing the talent needed to run the business.

FUEL COSTS

Whether it's a trucking firm, airline, railroad or some other service provider, fuel costs have dramatically changed the economics of transportation. In the trucking segment, fuel costs are second only to driver salaries as a component of total cost structure. The American Transportation Research Institute (ATRI) estimates that fuel costs account for 24% of total operational costs for trucking companies in the U.S.⁹

The same pattern holds in other transportation segments. For example, fuel costs currently account for 22% of total operating expenses for airlines.¹⁰ While comparatively more fuel efficient overall, fuel costs nonetheless comprise 14% of total operating costs for U.S. freight railways.¹¹

KEY TAKEAWAY:

Companies in all segments of the transportation industry must aggressively seek ways to reduce fuel consumption as a way of boosting the bottom line.

THE LAST MILE

The "last mile" delivery segment, which involves the final step of transporting goods to the customer's doorstep, presents a significant challenge all its own. It is the most cost-intensive part of the transportation process, accounting for up to 53% of total shipping costs by some estimates.¹²

Transportation and logistics companies are exploring a range of strategies to drive down the cost of the last mile. AI-driven predictive analytics are being used to optimize delivery routes. Localized micro-fulfillment centers are being placed closer to population centers to speed delivery. And, businesses are exploring innovative partnerships and shared delivery networks to maximize efficiency and minimize cost.¹³

KEY TAKEAWAY:

Transportation companies must embrace new data analytics tools, different real estate strategies and creative business models if they want to reduce costs in the last mile.

ADOPTING NEW TECHNOLOGY

As described previously, success in the transportation and warehousing industry is all about efficiency. Whoever is able to drive operating costs down the most year over year can offer the most aggressive pricing to customers. In a highly competitive industry such as this, the best price generally wins the business.

On the positive side, the Internet of Things (IoT) has made extraordinary volumes of data available to transportation companies to enhance efficiency. In addition to the usual fuel consumption measurements, capacity utilization rates and calculations of revenue per mile/passenger/ton, transportation companies suddenly have additional types of data to work with. For example, a trucking company can now monitor:

- The temperature, humidity and shock/bump conditions for a specific load of cargo.
- The location and status of the shipment in real time, 24/7.
- Traffic patterns and road closures that may slow delivery, and much more.

Artificial intelligence can unlock the hidden stories in these newfound sources of data. However, that requires the transportation company to adopt new software technologies, new analytics techniques and new reporting formats – and to source, manage and retain the talent necessary to do all of the above.

With the advent of IoT data sources and AI, transportation companies have become data companies that happen to operate large fleets of equipment.

KEY TAKEAWAY:

To maximize operational efficiency for long-term competitive advantage, transportation companies must adopt the technology and talent necessary to leverage the power of data analytics and AI.



Northern Lights: Solutions for the Transportation Industry

Northern Lights Technology Development, a Taylor Corporation company, is a global technology firm that provides IT and Business Process Outsourcing (BPO) services to clients in a wide range of industries. We offer strategic solutions that directly address the pain points and challenges faced by the transportation industry today.



SOFTWARE INTEGRATION

Northern Lights specializes in integrating supply chain systems into a unified ecosystem. We create connections between TMS, WMS, ERP and other platforms using APIs and middleware for real-time communication.



STAFF AUGMENTATION

Whether for a short period of time or the long haul, Northern Lights has hundreds of highly skilled employees on staff — both developers and customer service professionals — who can function as a seamless extension of your team.



LEGACY SYSTEM MIGRATIONS

We possess the skills in-house to migrate legacy systems to modern, cloud-based environments that maximize flexibility, scalability and cost-efficiency.

IMAGINE THE POSSIBILITIES

- Data warehousing systems that capture the many forms of data available to you through IoT technologies.
- Custom AI applications that mine your data to forecast demand, optimize routes, reduce fuel consumption, minimize labor costs and more.
- Custom reporting tools that enable you to make informed business decisions in the moment.
- An IT support team that can scale up, scale down and provide the diverse range of skillsets you need to adopt an industry-leading technology stack.
- A customer service team that “follows the sun” to provide 24/7/365 support to your employees and customers via chat and email.

Learn More

See how Northern Lights helps transportation and warehousing companies adapt to the age of data. Go to NLTD.com to learn more. To schedule a consultation, contact Stephanie Sharp at Stephanie.Sharp2@taylor.com or 612.730.6440.

Sources

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