



TRANSPORTATION OUTLOOK

2023





Table of Contents

Introduction	1
Industry Challenges	2,3
Technology Trends	4,5
Air	6
Water	7
Road	8
Rail	9
Freight Forwarding	10
Kansas City Region	11
Forecast	12

The transportation industry is becoming more complex as technology advances and companies further their resiliency to disruptions in their supply chains. Following economic turbulence stemming from the COVID-19 pandemic, all areas of business will continue to see residual effects of the virus and adjust to meet consumer needs.

2022 has underscored that changes in the transportation industry are directly correlated with economic, political and social developments. In forecasting what 2023 may hold for transportation, it is vital to analyze global and local trends that have the potential to impact this sector. The 2023 Transportation Outlook provides an overview of key external factors, examines major modes of transportation and forecasts what to expect in the year ahead. **2023 shows promising signs of course correction and regaining stability within supply chains as the global economy continues in its recovery.**

Industry Challenges



High consumer demand, rising inflation and persistent volatility have all defined the freight industry in 2022. These increases culminate into higher costs to ship, an increase in delays and a scarcity of available labor. We have faced many unexpected challenges in the first half of the year and will continue to as companies navigate the uncertainty left in the wake of events like the invasion of Ukraine, subsequent rising fuel costs and rate increases from the U.S. Federal Reserve.

Despite the desire for a return to what is considered “normalcy,” supply chain professionals are still vulnerable to persistently rising costs at nearly all levels of operation. In 2021, business inventories fell to historic lows while the costs to manage them and consumer demand remained high. Transportation growth is reliant upon this consistent demand, but the capacity of suppliers to meet demand remains out of reach. Logistical bottlenecks are commonplace this year as shippers pull orders forward to meet anticipated demand, further perpetuating the gap.



Industry Challenges



The recent supply chain challenges spurred many companies to consider reshoring and nearshoring options. Bringing operations closer to the majority of their end-consumers can minimize delays, decrease transportation costs and reestablish a sense of stability. ABB research found that 37 percent of businesses in the U.S. are planning to bring production back home and 33 percent are investigating nearshoring efforts to condense their operations to a smaller geographic area.

Last-mile delivery makes up 53 percent of overall shipping costs, according to research done by Insider Intelligence. With companies like Amazon influencing online purchasing experiences, individuals have grown accustomed to free shipping and are often averse to paying those costs. While this may create a more enjoyable shopping experience for consumers, it presents a substantial incurred cost for companies. This high percentage, coupled with rising inflation and limited supply, leaves the sector in an even deeper operational financing crisis.

Sustainability initiatives have added another layer of complexity to supply chain decisions. **Electric vehicles and other automation advancements are contributing to sustainability efforts, but 93 percent of American transportation still depends on petroleum,** making it more oil-reliant than any other U.S. economic sector, according to research done by George Washington University.



Thanks to the growth of e-commerce, the transportation industry is more visible and significant to end consumers. Today, increased costs and wait times have a far greater impact, with a rising demand for goods on a more immediate timeline.

With elevated costs in all modes of transportation and significant logistical delays, there is a present need for innovative technology that can help sectors work more efficiently and react flexibly to real-time changes in conditions.

Many large companies with robust inventories are pursuing efforts to increase efficiency and improve inventory management techniques. Blockchain technology has the ability to heighten the regulation and reliability of data management while simultaneously enhancing operational efficiency. Logistics companies are also eager to reduce the need for human labor by integrating machine learning and artificial intelligence (AI) to their systems. Due to the relative newness of these technologies, we cannot yet fully realize all of the implications they could have on the industry.

Electric vehicles made their way to consumers many years ago, but we're beginning to see them appear in trucking and construction equipment, as well. This advancement proves to be less motivated by environmental sustainability and more so by the potential to improve operational performance and reduce time waste. Electrification is here to stay and there will likely be significant growth in this technology throughout 2023.

During the height of logistical bottlenecks, ocean capacity struggled to handle large demand volumes, so shippers made efforts to increase their air capacity. Revenues from air cargo increased by 36 percent from 2020 to 2021. Air carriers are able to demand a premium rate for their services due to the significant constraints in other modes of transportation.

Many planes converted into cargo carriers, and while there is slight congestion at air freight hubs, the air sector is experiencing success in comparison to other overworked transit modes. The higher cargo revenues have provided support to air carriers recovering financially from a loss of passenger revenues, high fuel prices and a shortage of labor.

Air cargo will remain a portion of companies' transportation mix and premium prices will persist as shipping backlogs and port congestion are still very present. With this shift, freight forwarders are now more receptive to long-term contracts in hopes of securing elusive freight capacity. Despite seeing consumer demand begin to taper off, air cargo demand and prices are expected to remain high as we move into 2023.



Ocean carriers in the U.S. earned more profit in 2021 than in the last 20 years combined, as water shipment costs soared to historic highs. Shippers that relied on ocean transportation became increasingly frustrated at the backlogs and price hikes, frequently turning to private fleets in hopes of minimizing delays. When congestion reached an all-time high, many onlookers speculated that increasing the number of ships would ease the backlog, but with such significant port congestion, it is unlikely that expanding fleet sizes would have helped.

While ocean carriers find themselves at the highest profit levels in decades, shippers grow in their frustration. Prices will remain high for ocean shipping while demand outweighs container capacity and port availability is found to be scarce. One factor that threatens to reduce demand for carriers is the present alternative of reshoring and nearshoring. **Carriers may hold the advantage for the time being, but the longer prices for ocean shipping remain high, the more motivated companies will become to pursue multi-shoring options.** When shippers have the ability to bring their business closer to home, they could create a diminished demand for ocean carriers.



Trucking continues to be the biggest segment of expenditure in U.S. logistics and continued to grow in the wake of the pandemic. During the initial lockdown, the need for drivers increased but trucking companies continued to lose employees. This resulted in a 71,000-employee shortage by September of 2021. Many carriers had to cut their capacity during lockdown and have since made large investments to buy new trucks and attract new drivers.

The average age of truck drivers is 46, meaning they retire earlier than many other industries, resulting in more frequent turnover of labor. The long hours, lack of time at home and generally uncomfortable work conditions continue to turn prospective employees away, making it essential for employers to provide high compensation and incentives to combat the loss of labor.

New development in AI and machine learning continuously expands the capabilities of transportation technology, specifically electric vehicles in the trucking industry. **It will likely be some time before we see trucks that can operate fully autonomously, but as the shortage of drivers persists and technology further develops, the industry will continue to trend in the direction of electrification and automation.**

Similar to the congestion and labor shortages seen in other modes of transportation, rail speeds and service levels decreased over the last year. **The decreased capacity and increased costs in trucking contributed to an elevated volume of intermodal demand, leading intermodal costs and the operating income to rise as well.** Rail companies are not immune to the diminished labor availability, having encountered shortages on the railroads, in distribution centers and at warehouses.

Many efforts are being made to increase operational efficiency, though discrepancies remain on the most efficient ways to achieve it.

Precision scheduled railroading (PSR) is a logistical tactic that, in essence, strives to run freight trains on fixed schedules rather than departing once enough cars are loaded and ready. This is similar to passenger rail systems and is typically a positive tactic for operating ratios, but it faces scrutiny from customers who feel that railroads should prioritize growth over efficiency and cost reduction.

Some believe growth is best achieved through acquisitions, while others are concerned it would increase rail congestion. In December 2021, Canadian Pacific acquired Kansas City Southern, making reshoring efforts in North America a positive strategic move for many companies.



The freight forwarding market became integral for many supply chains as companies searched frantically for available capacity and were met with extensive port congestion. **Profit margins for forwarders sat high above previous levels at the height of consumer demand due to the surplus of shippers employing their services.** Supply chains are becoming increasingly complex as companies seek to develop multiple trade lines and strategic stability. This gives forwarders the difficult task of providing flexibility for connecting services as well as optionality for their shippers.

In 2022, a heavy emphasis was placed on offering tailored solutions to each company's challenges through value-added services and improved supply chain visibility. It is more feasible for forwarders that take this approach to build and maintain deeper relationships with shippers who want to be sure that their interests are safeguarded. Well-funded forwarders are also making large advancements in automation efforts within their operations. **Providers that accurately apply digitization and give strategic advice to shippers put themselves in the best position to create a competitive advantage and maintain high profit margins.**

The Kansas City economy mirrors many of the same trends seen throughout the United States. **Despite the economic uncertainty created by a multitude of global events, the Kansas City region is resilient and is seeing growth in many areas.**

Per capita, Kansas City ranks third in the country in terms of technology job growth. Technology is a driving factor in nearly every industry, making this growth a great asset for the region. The KC metro is a lower cost market with considerable real estate opportunities, a skilled workforce, and extensive rail and highway infrastructure that allows shippers to reach 85 percent of the U.S. population in two days or less. As an inland port, Kansas City is an attractive market for companies considering nearshoring their operations or expanding within the country.

In 2022, the Kansas City region also received global recognition as a FIFA 2026 World Cup host city. The market is also experiencing record investments. Most notably, a \$4 billion capital investment for a Panasonic EV battery manufacturing plant in De Soto, Kansas, and an \$800 million hyperscale datacenter for Meta. As more businesses seek to establish their operations in the area, the logistical landscape of the region will transform to accommodate a higher volume of freight and transportation needs.

Kansas City's low operating costs, available real estate, skilled and available workforce, and an abundant infrastructure network allowing for shippers to **reach 85% of the US population in two days or less.**

As economic challenges persist into 2023, opportunities to achieve more efficient stability are emerging. Multi-shoring efforts will continue as supply chains search for more organizational flexibility and competency. Efforts will be made to incorporate electric vehicles in order to increase logistical capacity. As workforce labor shortages and strong demand remain present, we'll likely see increased efforts into automation to compensate for the lack of workers.

We saw tremendous growth in goods consumption during the height of the COVID-19 pandemic, temporarily overwhelming supply chains. Overall, freight demand will reduce as consumers shift their consumption patterns, decreasing demand for durable goods. Individuals and companies will likely also begin delaying purchases in hopes that inflation will soon decrease and products will become more affordable. The anticipation of a decrease in future inflation will bite into current demand and allow possible relief for overworked and exacerbated supply chains.

Viewing the industry with a long-term lens gives hope that turbulence will settle and a sense of stability will return. Expansion of logistics management capabilities is boisterous and shows no signs of slowing. In the next year, the transportation industry can expect to work to maintain a robust and flexible supply to match volatile demand, as well as experience tremendous advancements that improve operational efficiencies. **We are cautiously optimistic as we look to 2023, knowing that as demand returns to a maintainable level, we will see balance restored in the logistics industry.**



TRANSPORTATION & LOGISTICS ACROSS THE KC REGION

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