

## TRIP Issues New Report on U.S. Freight System Challenges

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The nonprofit research group TRIP recently issued a new report that examines the reliability, capacity, sustainability, and safety of the U.S. freight transportation system; factors that TRIP argues will be “critical” to nation’s ability to provide a supply chain that will meet the growing need for timely and safe movement of goods.

[Photo by the Ohio DOT]

TRIP’s report – entitled “[America’s Rolling Warehouses: Opportunities and Challenges with the Nation’s Freight Delivery System](#)” – looks at the current and projected levels of freight movement in the U.S., large truck safety, and trends impacting overall freight movement within the United States.

“The delivery of freight – merchandise or commodities that are moved by a mode of transportation either for a fee or by

a private fleet – is expected to increase rapidly as a result of economic growth, increasing demand, changing business and retail models, and a significantly increased reliance on ecommerce by businesses and households,” TRIP noted in its report. “U.S. logistics costs as a share of GDP reached the highest level on record in 2022; some \$2.3 trillion in 2022, representing 9.1 percent of U.S. GDP, which is the highest share ever.”

TRIP said that, in 2022 the U.S. freight system moved approximately 19.7 billion tons of freight, valued at approximately \$18.8 trillion – a daily average of approximately 54 million tons of freight valued at approximately \$52 billion. Overall, trucking accounted for the largest modal share of freight movement in 2022, carrying 72 percent of freight by value and 64 percent by weight, TRIP noted.

The organization noted that key trends affecting the U.S. freight transportation sector now and in the future include:

- The major growth in e-commerce. In the last decade, U.S. retail e-commerce sales increased nearly four and a half times, from \$64 billion in the second quarter of 2013 to \$278 billion in the second quarter of 2023. The COVID-19 pandemic rapidly accelerated the growth in retail e-commerce, with U.S. e-commerce sales increasing from \$160 billion in the first quarter of 2020 to \$278 billion in the second quarter of 2023 – a 73 percent increase.
- The use of drones for last-mile deliveries is a potential innovation for what can be the most difficult and expensive aspect of the supply chain. While the use of drones for last-mile delivery will still need to clear several hurdles, including Federal Aviation Administration regulations, public perception, and the technology itself, many companies have been testing drone deliveries.
- With medium and heavy-duty trucks accounting for nearly a quarter (23 percent) of U.S. transportation greenhouse gas emissions in 2021, a transition to lower carbon transportation fuels – including electric, biofuels, renewable natural gas, and hydrogen – will be critical in reducing the nation’s greenhouse gas emissions.

“The transition to greater large truck autonomy and lower-carbon transportation fuels should improve the safety and sustainability of freight movement, but must be implemented in a way that does not reduce freight efficiency and minimizes economic disruption,” TRIP said in its report.

“Improving freight network safety will require additional improvements in roadway safety, particularly along highways and at major intersections,” the group added. “It will also require the provision of additional truck parking spaces to insure safe, adequate and timely rest for drivers.”