

FUELING *FLIGHT*

The Hidden Impact of Jet Fuel Constraints on Consumers

INTRODUCTION

Americans love to fly, and the numbers are telling. Each day, America's airlines safely carry about 2.7 million consumers on domestic and international flights. America's airlines also transport more than just people; they move over [61,000 tons](#) of cargo daily – delivering necessities and providing that intermediate leg in the journey from an online purchase to your doorstep. However, none of this is possible without the jet fuel pipeline and distribution system.

The jet fuel pipeline distribution system provides crucial support to civil and military aviation and disaster relief efforts. Yet, because the system operates effectively today, there is a lack of insight into how jet fuel moves from well pad to wingtip, which is leading to jet fuel supply constraints at many airports across the nation today and inadequate supplies tomorrow. These constraints can inconvenience consumers due to fewer flight options, higher cancellation rates or, higher airfares. Unconstrained pipeline capacity and a well-maintained transport system are imperative for reliability and growth.

In 2024, according to the U.S. Energy Information Administration (EIA), nearly [1.7 million barrels](#) of jet fuel per day were supplied to U.S. markets. That figure is expected to exceed 1.7 million barrels per day in 2025. While U.S. and foreign-flag airlines are by far the largest end users of jet fuel, a substantial amount is delivered to business aviation, civilian government, the military and others. Given the seasonality of air-travel demand, volumes can vary significantly from month to month. For example, in 2024, they rose from 1.5 million barrels per day in January to 1.8 million barrels per day in July.

Efficient and timely delivery via pipeline is essential to the success of today's aviation system and our modern, connected economy.

America's Aviation Economy Runs on Reliable Fuel

ECONOMIC LIFTOFF

U.S. airlines support 10 million jobs and contribute 5% to national GDP. A reliable jet fuel delivery system is essential to sustaining this economic engine.

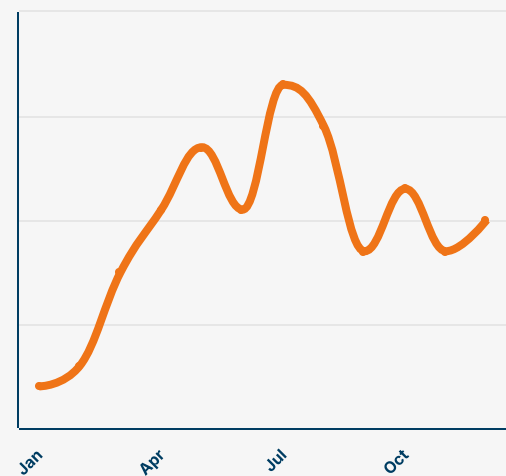
DAILY REACH, GLOBAL IMPACT

In 2024, U.S. airlines operated 27,000 flights a day, carrying 2.7 million passengers and 61,000 tons of cargo. None of it moves without affordable, dependable jet fuel access.

INFRASTRUCTURE AT A CROSSROADS

Airports face growing jet fuel shortages due to limited pipeline capacity. Without action, flight delays, higher consumer costs, and economic losses will follow.

Jet Fuel Demand Peaks in Summer Travel Months (2024)



THE JET FUEL SUPPLY CHAIN

Jet fuel is supplied to U.S. airports for cargo, passenger and general aviation, as well as military and disaster-relief aircraft through two principal means:

Pipelines

Large and medium-sized U.S. airports [receive](#) jet fuel through hundreds of miles of multiproduct pipelines. These pipelines are essential to meet the fuel volume required for major airport operations. For example, without access to a pipeline, 300 trucks would need to travel more than 500 miles from Gulf Coast refineries to supply Hartsfield-Jackson Atlanta International Airport (ATL) every day! Trucking costs are ten times greater than pipeline delivery and would significantly increase emissions and environmental spill risk while decreasing highway safety. Those concerns aside, airport infrastructure is simply not designed to receive that much jet fuel by truck. Moreover, space constraints severely limit the ability to store extra jet fuel at the airport. Efficient and timely delivery via pipelines is essential to the success of today's aviation system and our modern, connected economy.

Trucking

In instances where pipelines don't directly connect to an airport, they still play a leading role in the supply chain by offloading fuel at a regional terminal, where it is stored until ready to be loaded onto trucks headed to an airport's storage tanks. These trucks can typically carry 7,500 gallons of fuel per delivery; enough to supply small size airports like Long Beach Airport (LGB) which uses an average of 70,000 gallons of jet fuel per day but is wholly inadequate for an airport like Los Angeles International Airport (LAX) which uses 4.5 million gallons per day.

BENEFITS OF USING PIPELINES

Pipeline Safety

By far, pipelines are the safest, most efficient and cost-effective means to transport jet fuel to airports around the country. As noted by the Liquid Energy Pipeline Association, 99.999% of crude oil and petroleum products [delivered](#) by pipeline reach their destination safely.

Savings to Airlines & the Flying Public

Using alternative delivery methods (i.e., truck and rail) increases jet-fuel transportation costs and, ultimately, the cost of doing business at an airport. Every penny-per-gallon of additional cost to transport jet fuel domestically equates to an estimated \$150 million in operating expenses. Therefore, the opportunity cost to both airlines and consumers can be impactful if other shipping methods are utilized.

Comparative Emissions: Pipeline vs. Trucking

Liquid pipelines are powered primarily by electric pumps that do not directly produce greenhouse gas (GHG) emissions, while diesel-powered trucks emit GHGs and conventional air pollutants as they travel from community to community.

Government reviews have shown that pipelines emit 42% less emissions on average than rail cars and 467% [lower](#) emissions than trucks.

FUEL SUPPLY CHAIN RESILIENCY

While passengers and shippers depend on the airline industry for global connectivity, airlines depend on a complex series of pipelines and storage tanks that lack adequate capacity and can be vulnerable to disruption. When disruptions occur, this prohibits the on-time delivery of high-quality fuel.

What It Takes to Fuel ATL Without Pipelines

Hartsfield-Jackson Atlanta International
Airport (ATL) would require:

300 TRUCKS Per Day

500+ MILE Trip from Gulf Coast Refineries

10X MORE In Costs than Pipeline Delivery

Some examples of disruptions over the past decade include:

Pipeline Cybersecurity Attack (May 2021)

A cyber-attack shut down the largest refined oil products pipeline in the U.S. The pipeline was shut down for six days, but it took several more days for normal operations to resume. Drivers were stuck in hours-long lines waiting for gasoline and diesel before supplies eventually ran out. Airlines took extreme action along the entire Eastern Seaboard to minimize disruption to cargo and passenger traffic.

San Diego Pipeline Shutdown (Dec. 2022)

A leak in the line supplying fuel to San Diego caused a two-week shutdown over the Christmas and New Year holidays. Crews worked around the clock to fix the leak, but conditions complicated the repairs and delayed the return to service. The San Diego International Airport was forced to implement jet fuel rationing until January 6 when the airport finally received a batch of jet fuel after 16 days.

While some examples are extraordinary and newsworthy, commonly occurring fuel delivery delays rarely make the news. However, whether extraordinary or common, any disruptions make scheduled air service less reliable and hinder the growth of air travel.

When adequate quantities of jet fuel cannot be supplied, airlines can:

- Add an extra stop to a flight at an intermediate airport for refueling purposes only;
- Carry fewer passengers or cargo containers out of the affected airport to reduce fuel duplifts or;
- Cancel flights.

Both airlines and pipeline companies are focused on supply chain resilience, ensuring disruptions don't occur. However, effectively defending against threats, especially with foreign-state bad actors, requires constructive partnerships with state and federal agencies.

EMPOWERING ECONOMIC GROWTH

The U.S. passenger and cargo airlines directly employ more than a million workers across the globe. In 2024, U.S. airlines operated 27,000 flights per day, transporting 2.7 million passengers daily from 80 countries and 61,000 tons of cargo from over 220 countries around the world. Together, U.S. commercial aviation drives 5% of U.S. GDP and supports 10 million U.S. jobs. None of this is possible without a robust and reliable jet fuel distribution system.

We expect U.S. airports to face an increasing frequency of jet fuel supply shortages due to inadequate pipeline capacity and resiliency challenges. The adverse impacts on airline operations, especially flight cancellations and delays, are increasing consumer costs and decreasing the industry's ability to continue supporting local and regional economies. The goal is not merely to avoid disruption; it is to foster economic growth through air-service growth.

Yet, the current jet fuel distribution system lacks government support for improvements, upgrades and expansion – making it increasingly unable to meet current demand. With the Federal Aviation Administration projecting passenger demand to grow 29% at large hubs and 27% at medium hubs over the next decade, urgent action is needed for our jet fuel infrastructure to keep pace.

Adequate pipeline capacity and a well-maintained liquid fuels pipeline system are imperative for a smooth passenger experience and for the economic growth of the communities that depend on their local and regional airports. Similarly, an effective partnership with state and federal governments to ensure the infrastructure resilience from cyber or physical security threats is essential.

U.S. pipeline companies have worked tirelessly to support commercial, military and general aviation. However, government support, along with shared confidence in demand projections, is needed to encourage additional private sector investment. This will help maintain the U.S. position as the global leader in aviation and empower our 21st century economy.