

GAO Highlights

Highlights of [GAO-14-331](#), a report to congressional committees

Why GAO Did This Study

The aviation industry is vital to the U.S. economy. Passenger airlines directly generate billions of dollars in revenues each year and communities depend on passenger airlines to help connect them to the national transportation system. Between 2002 and 2013, jet fuel prices more than quadrupled from \$0.72 to \$2.98 per gallon and general aviation gasoline prices more than tripled from \$1.29 to \$3.93 per gallon in nominal terms. The Airport and Airway Trust Fund (trust fund) is funded principally by excise taxes on ticket purchases, aviation fuel, and cargo shipments as well as interest revenue. Section 808 of the FAA Modernization and Reform Act of 2012 required GAO to study the impact of increases in aviation fuel prices on the trust fund and the aviation industry in general.

This report discusses (1) the impact of increases in fuel prices from 2002 to 2013 on commercial passenger aviation, (2) the impact of increases in fuel prices from 2002 to 2012 on general aviation, and (3) the results of GAO's analysis of how future increases in fuel prices could impact the trust fund. GAO reviewed studies and other literature on the impact of fuel price increases. GAO conducted an analysis that included scenarios with increases in fuel prices up to 200 percent (as mandated by Section 808) through 2024. GAO also interviewed government officials and aviation associations. GAO is not making any recommendations in this report.

View [GAO-14-331](#). For more information, contact Gerald L. Dillingham, Ph.D. at (202) 512-2834 or dillinghamg@gao.gov.

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AVIATION

Impact of Fuel Price Increases on the Aviation Industry

What GAO Found

Commercial passenger airlines have taken a number of steps aimed at mitigating the financial impact of the increases in fuel prices since 2002, according to aviation associations and government officials. Some airlines restrained the growth of their domestic seat capacity, others have reconfigured their fleets to make them more fuel efficient, conducted flight and ground operations more efficiently, improved aerodynamics, and reduced weight of items on-board aircraft. Airlines have also used fuel hedging, in which they enter into contracts that are designed to provide more certainty over the future price of fuel. Partly in response to financial pressures from increases in fuel prices, some airlines have merged or entered into route-sharing deals with other airlines. While these efforts coincided with increased fuel prices, an airline trade association identified other factors that contributed to these changes, such as a weak economy.

According to aviation associations and government officials, fuel price increases have contributed to a decline in general aviation activity (which is all non-scheduled air service), including the hours flown in general aviation aircraft. This decline in activity adversely affected general aviation airports and the services provided at these airports (such as reductions in flight training and refueling). For these activities and services, the price of fuel is not the only factor that contributed to this decline. According to associations that represent general aviation interests, a weak economy and other factors, such as increased security requirements, also contributed to the decline.

GAO's analysis shows that Airport and Airway Trust Fund revenues would grow marginally higher if fuel prices increased 200 percent from 2010–2024 compared to the growth under currently forecast fuel price increases because the projected increase in per-ticket revenue would outweigh the projected decrease in the number of tickets sold. However, the models for this analysis are limited and have greater uncertainty for later years. GAO contracted with IHS Global Insight to produce a model of macroeconomic variables, such as real gross domestic product (GDP), if fuel prices increased by 200 percent from 2010–2024 and GAO provided these outputs to FAA. FAA used the results and the rise in fuel prices to produce an alternative forecast of passenger traffic, which GAO then used to simulate annual trust fund revenues from 2010 through 2024 if fuel prices increased by 200 percent over that time. While this analysis allowed GAO to estimate how a hypothetical increase in fuel prices may affect growth in the trust fund, it is not a prediction of how the trust fund will actually grow in the next 10 years.

Refueling Commercial and General Aviation Aircraft



Sources: Multiflight (left) and National Air Transportation Association (right). | GAO-14-331