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# Highlights

Highlights of [GAO-06-571](#), a report to Chairman, Subcommittee on Aviation, Committee on Transportation and Infrastructure

## Why GAO Did This Study

Airbus S.A.S (Airbus), a European aircraft manufacturer, introduced a new aircraft, the A380 that will be the largest passenger aircraft in the world with expected delivery to its first customers in late 2006. The A380 has a double deck and is expected to seat between 555 and 853 passengers. The A380 is much larger than its competitors with a wingspan of 262 feet, a tail fin about 80 feet high, and a maximum takeoff weight of over 1.2 million pounds. A freight version of the A380 is scheduled for delivery in 2008.

Because of the size of the A380, U.S. airports have to make changes to accommodate the aircraft. This may include widening runways and taxiways, or restructuring gate areas to accommodate the additional passengers. This report examines (1) the costs and nature of the changes U.S. airports are making to their infrastructure to accommodate the A380, (2) the funding sources being used to finance these changes, and (3) the major factors influencing the changes being made.

The Federal Aviation Administration (FAA) and Airbus provided technical comments on the report. Airbus also commented on the 18 airports' cost estimates of the changes being made for the A380 and estimated \$720 million for these changes. Based on the costs airports reported initially and our subsequent reconfirmation efforts, we did not change the cost estimates provided by the airports.

[www.gao.gov/cgi-bin/getrpt?GAO-06-571](http://www.gao.gov/cgi-bin/getrpt?GAO-06-571).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gerald Dillingham at (202) 512-2834, or [dillingham@gao.gov](mailto:dillingham@gao.gov).

## COMMERCIAL AVIATION

# Costs and Major Factors Influencing Infrastructure Changes at U.S. Airports to Accommodate the New A380 Aircraft

## What GAO Found

The 18 U.S. airports that GAO identified as making changes to accommodate the Airbus A380 estimated that they would spend about \$927 million in completed, ongoing, or planned infrastructure projects. About 83 percent of the costs reported were identified for runway or taxiway projects. The remaining costs were for changes at gates, terminals, or support services. Some airports noted that if FAA changed the current runway requirements for accommodating the A380, their plans and estimates would change. For example, if FAA allows the aircraft to operate on 150-foot-wide runways under certain conditions, this would reduce costs at most airports. However, if FAA decided that more stringent standards should apply, at least half of the airports could face costs in excess of those reported.

Airport officials reported using several sources to finance the infrastructure changes. About 50 percent of the costs would be financed through federal grants under the Airport Improvement Program, they said. Passenger facility charges were identified as the source of financing for about 21 percent of the costs, with 29 percent from airport revenues, bonds, and other sources.

FAA's design standards and market considerations have been two major factors influencing the A380 changes at airports. For example, airports generally based their plans and estimates on either FAA standards that require 200-foot-wide runways and 100-foot-wide taxiways for this size aircraft or FAA's interim guidance. The guidance allows the conversion of existing 150-foot-wide runways to 200 feet by adding 25 feet of reduced strength pavement to each side and extending the shoulders and allows use of 75-foot taxiways by widening shoulders and adding center lights. Airports are also making changes based on the market they serve. For example, Los Angeles, Miami, New York, and San Francisco are major gateway airports that had little choice but to make changes to receive the A380 if they were to maintain their competitive status. Other airports have been approached with plans for future A380 passenger or freight service and weighed the costs of making infrastructure changes against the potential impact on their business. Still others have not been approached for A380 service but are making changes to accommodate it so that they can market their availability for this aircraft and potentially increase their international market presence.

The Airbus A380 in Flight



Source: Airbus.