

**United States House of Representatives
Congressional STAFF REPORT**



U.S. AIRPORTS IN CRISIS

**Prepared for U.S. Representative John L. Mica
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Former Chairman of the House Transportation Committee
Chairman of the House Transportation and Public Assets Subcommittee
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Executive Summary

Major airports in the U.S. have failed to keep up with passenger capacity needs with airport traffic increasing and as consolidation occurs. The United States Travel Association recently published a full-page declaration that was headlined, **“None of the World’s Top 25 Airports are in the United States”**. U.S. airports face an infrastructure crisis as this report highlights.

KEY FINDINGS

- 1. Major U.S. airports have significant capacity needs and face a meltdown during peak travel periods and air traffic control and weather delays.**
- 2. Expect more delays, aircraft ground congestion and safety and security challenges at major U.S. airports.**
- 3. Airport apron and terminal capacity becomes dangerously crowded during weather, air traffic control and high traffic periods.**
- 4. Major U.S. airports lag behind global competition.**
- 5. In 2013, 72% of passenger boardings occurred at the largest 30 U.S. hub airports.**
- 6. Over the past decade, airlines have increased baggage fees, ticket processing fees and other service charges, while the local Passenger Facility Charge (PFC), dedicated to improving airport terminals and facilities, remains locked at 2000 levels.**
- 7. As of April 2015, 349 airports have reached their maximum allowable PFC.**

Our major hub airports are near meltdown during major holidays and peak travel season. The nation’s aviation system is in serious need of capital investment to meet increasing demand and ever changing security requirements.

Compounding this growing problem is the fact that major airlines have significantly shifted operations towards large hub airports. With consolidation, 11

airlines have merged into 4 major carriers that dominate nearly 80% of today's passenger traffic. In order to respond to the resulting increase in demand and congestion at hub airports, the U.S. aviation system must be able to fund infrastructure investment in terminal and runway expansion. However, funding sources for airport infrastructure development have decreased since 2007. The PFC, which supports airport infrastructure, was last adjusted in 2000 when it was capped by the federal government at \$4.50 per passenger. Since then, the cost of security, construction and improvements have increased dramatically.

If the status quo remains, we cannot expect to cope with projected increases in congestion. This will lead to corresponding increases in flight delays and cancellations nationally, both of which will result in more customer complaints and a considerable negative economic impact. The ability of airports to safely and securely accommodate passengers is in jeopardy. Today, the busiest 30 airports in the U.S. handle 72% of the passengers and 349 airports have reached the PFC cap, constraining capacity and expansion needs.

This report is an examination of the current crisis in U.S. airport infrastructure capacity. Airlines shifting passenger revenues away from the Airport Improvement Program (AIP), rising passenger demand and increasingly strained federal resources have brought our nation's aviation system and airport infrastructure to a critical juncture. Unless additional resources are provided, America's aviation network and airport infrastructure will continue to fall further behind our domestic passenger service needs and global competition. The report will highlight current capacity needs and identify options that could alleviate the crisis in our nation's airport system.

Airport Passenger Traffic On The Rise

Over the past five years, U.S. airports have seen a 10% increase in passenger traffic totaling more than 847 million domestic and international passengers in 2014.¹ According to the FAA, passenger levels at all sizes of airports will continue to increase in the foreseeable future, reaching 1 billion by 2029 and exceeding 1.1 billion by 2034.² FAA estimates also predict that U.S. commercial air carrier enplanements will increase by 36 million passengers this year. U.S. airports simply do not have the capacity to keep up with demand.³

The U.S. Department of Transportation further reports that over the past five years on-time arrival performance has decreased by more than 5%.⁴ This means that

more than 21.3% of arrivals were delayed in 2014.⁶ Additionally, the Bureau of Transportation Statistics reports that U.S. airlines cancelled nearly 127,000 flights last year, a number not seen in seven years.⁷

This problem is perhaps most apparent with travel over peak holiday periods, which is becoming more and more challenging. 22% of flights were delayed over the Thanksgiving holiday last year – the highest percentage since 2007.⁸

It is important to note that delays at hub airports, which include those with the most pressing capacity problems, have a ripple effect that creates delays across the entire domestic aviation grid. It is therefore all the more urgent that we find a solution to the growing capacity problems facing our nation’s busiest airports. An efficient and properly functioning American aviation system is increasingly dependent upon these airports which currently lack the tools they need to execute their role as key nodes in our transportation infrastructure.

If the status quo remains, we cannot expect to cope with projected increases in congestion. This will lead to corresponding increases in flight delays and cancellations nationally, both of which will result in more customer complaints and have considerable economic impact. According to a report commissioned by the FAA, aviation passengers bear nearly \$17 billion in additional costs every year due to flight delays.⁹

| Year | Airline Passenger Traffic ⁵ |
|------|--|
| 2009 | 767,816,588 |
| 2010 | 787,478,056 |
| 2011 | 802,134,604 |
| 2012 | 813,127,939 |
| 2013 | 824,956,471 |
| 2014 | 847,767,888 |

The Need for More Capacity

Planning and construction of airport infrastructure can take years if not decades to complete, but some of our nation’s large hub airports have already reached their capacity or are projected to reach their capacity in the near future. A Department of Transportation study on airport infrastructure development found that, “building a new airport runway can easily take more than a decade...” ... a decade that many of these airports simply do not have.¹⁰ Capacity constrained airports will not have the time to deal with increased customer demand unless they begin investing in new infrastructure. As it is, the United States ranks only 9th in quality of airport infrastructure, according to the latest *Global Competitiveness Report*.¹¹

With recent airline consolidation from 11 major air carriers down to just four, the nation's aviation system has seen a dramatic shift in passenger traffic towards large hub airports. These four major U.S. carriers now handle 80% of the nation's aviation passengers and as of 2013, more than 72% of passenger boardings were focused at the largest 30 U.S. airports.¹² Airline passengers can expect delays, misconnections and overcrowded terminals during weather and air traffic control delays and peak travel periods. The chart below shows the five hub airports most heavily congested as a result of considerable passenger growth in recent years:

| Airport ¹³ | Total Passengers (2012) | Share of Domestic Connecting Passengers (2009) | Passenger Growth Rate (2003-2013) | Largest Airline Carriers |
|-----------------------|-------------------------|--|-----------------------------------|--|
| JFK | 49,034,266 | 29% | 68.7% | JetBlue (38.6%) Delta (22.6%) American (16.7%) |
| PHL | 29,179,750 | 41% | 32.6% | US Airways (40.6%) Southwest (8.6%) |
| SFO | 42,616,804 | 27% | 32.4% | United (37.9%) SkyWest (11.4%) |
| ATL | 91,466,491 | 69% | 21.4% | Delta (66.4%) AirTran (13.7) |
| EWR | 33,952,143 | 29% | 17.4% | United (50.1%) |

As fewer airlines operate larger networks and as the number of medium-sized hubs fall and large hubs rise, this consolidation is forcing more and more large airports to reach their capacity restraints even though system-wide air traffic has not increased significantly.¹⁵ Another factor has been the change in passenger service from legacy carriers to discount airlines. Airlines are reconfiguring planes to allow even more passengers in less space, landing full passenger loads into terminals and minimizing their turnaround time. This puts more planes on the ground and at limited airside. As demand exceeds capacity and airlines schedule flights closer and closer together, increasing disruptions at large hubs cause further delays across the nation's jammed airports. Historically, 70% of the nation's chronically delayed flights emanate from the Northeast and yet this region's airports are significantly underprepared to handle this problem.

“Congestion at New York City area airports will likely become even worse in the next five to 15 years as demand for air travel grows...”

–*Newsday*
February 28, 2015¹⁴

According to the FAA's recent *FACT 3* report on airport capacity needs in the United States, the three major New York area airports and Philadelphia International Airport will continue to experience major system constraints even after all currently planned capacity improvements are implemented. Without further development, these airports will have significant congestion through 2020 and beyond.¹⁶ The FAA also projects that, without Next Generation (NextGen) airport modernization developments to assist with the need for additional capacity, 11 airports will experience severe congestion resulting in further disruptions at other airports around the country.¹⁷

Federally Authorized Revenue Sources

The United States has the most complex aviation network in the world, containing nearly 19,700 airports, of which more than 3,000 are eligible for federal funding.¹⁸ Funding sources for airport infrastructure development have decreased since 2007.¹⁹ In this timeframe, the Federal Government has decreased the amount authorized for AIP financing by nearly \$100 million annually.²⁰ These reductions coincide with a change in airline business models towards one that generates significant revenue through passenger baggage fees and ticket change and cancellation fees. These fees do not contribute any revenue to the Airport and Airway Trust Fund, which further depletes federal infrastructure resources.²¹

According to Airports Council International – North America’s (ACI-NA) latest *Capital Needs Survey*, U.S. airports will require more than twice the \$6.2 billion they expect to collect from AIP and PFC funds in order to finance necessary infrastructure improvements through 2019.²²

Unfortunately, the passenger facility fee has been capped for the last 15 years and 349 airports, including most major hub airports, have reached the cap and thus have limited resources to expand capacity.²³ The PFC offers a simple and cost efficient way to deliver much-needed resources to airports, allowing them to improve infrastructure to keep up with evolving demand. Both airlines and their passengers who use and help pay for the terminal facilities benefit from this arrangement.

ACI-NA estimates that U.S. airports’ planned capital project costs are \$75.7 billion for 2015 through 2019, an increase of more than 6% from the estimate for 2014 through 2017.^{24 25}

| National PFC Collection by Hub Size ²⁶ |
|---|
| Large Hubs Account for \$40.1 billion |
| Medium Hubs Account for \$9.1 billion |
| Small Hubs Account for \$7.7 billion |
| Non-hubs Account for \$5.3 billion |

According to the Eno Center for Transportation, a non-partisan think tank that promotes innovative transportation policy, the problem is that many airports facing capacity constraints are prevented from even beginning to plan infrastructure improvements due to a lack of financial resources.²⁷

It is important to note that the current amount of \$4.50 has fallen in real value because of construction cost inflation. According to the *Means Construction Cost Indexes*, the current value of the maximum \$4.50 PFC is worth roughly half of what it was when it was implemented in 2000.²⁸ ACI-NA notes that, if not addressed, this drop in revenue for capital improvements will have a lasting impact:

“It is important to understand that the existing federally-mandated funding system fails to meet U.S. capital needs for modernizing and expanding airport capacity. Failure to meet the future capital needs of airports will impair the ability of U.S. airports to be globally competitive.” (Airports Council International North America Airport Capital Development Needs Report 2015-2019)²⁹

| Large Hub Airports, 4-Year Average 2008-2012 ³⁰ | | |
|--|-------------------------|-------------|
| Landing Fees | \$3,093,698,745 | 14% |
| Terminal Rental | \$3,878,526,161 | 17% |
| Cargo and Hangar Fees | \$592,492,261 | 3% |
| Fuel Sales | \$322,942,892 | 1% |
| Other | \$1,090,793,569 | 5% |
| Total Aviation Fees | \$8,978,453,627 | 40% |
| Facility Leases | \$540,888,948 | 2% |
| Terminal Concessions | \$1,444,631,673 | 7% |
| Rental Cars | \$1,444,018,890 | 7% |
| Parking | \$3,012,522,502 | 14% |
| Other | \$839,432,569 | 4% |
| Total Non-Aviation Fees | \$7,281,494,581 | 33% |
| Interest | \$409,389,793 | 2% |
| Grants | \$2,784,592,379 | 13% |
| PFC Revenue | \$2,537,062,716 | 11% |
| Other | \$184,967,937 | 1% |
| Total Capital Grants and PFCs | \$5,916,012,824 | 27% |
| Grand Total | \$22,175,961,032 | 100% |

Updating the PFC cap would allow airports to increase capacity without increasing their debt.

Unfortunately, airport administrators have few avenues other than the PFC through which to fund infrastructure investment, no matter how immediate the need. Parking is currently most large hub airports’ only major source of revenue that they can actively control, making capital investment planning incredibly difficult.³¹

Allowing airports to raise the PFC would supply increased revenue that could then be directed towards infrastructure development for the benefit of all stakeholders.³² As a major airport stakeholder, airlines should be interested in finding additional revenue for infrastructure investment that can be provided without suppressing demand in a significant manner, which raising the PFC does.

A passage from a 2013 Eno Center report entitled, *Addressing Future Capacity Needs in the U.S. Aviation System*, summed up the need for action well stating:

“Demand for passenger travel is growing, and within our current infrastructure and operational paradigm, the aviation system may not be able to accommodate all of this growth... While congestion and capacity constraints are concentrated at only a few airports, delays created at congested hub airports ripple through the entire system. In order to ensure that the United States’ aviation system is ready for the next generation of travelers, capacity will need to be expanded.”³³

“At a minimum, the FAA should be given discretion to increase the PFC cap if and when an airport can demonstrate the need for more investments in order to accommodate demand in the national aviation system.”

- Joshua Schank Eno Center
November 2013 ³⁴

Conclusion

- Expect chaos at U.S. airports this holiday weekend as airlines have consolidated seats and passenger traffic is focused on hub airports
- 21.3% of arrivals were delayed in 2014 – up nearly 5% over the last 5 years
- 22% of flights were delayed over the Thanksgiving holiday last year – the highest percentage since 2007
- The Federal Aviation Administration (FAA) forecasts passenger traffic to continue increasing to more than 1 billion annually by 2029
- The United States ranks 9th in quality of airport infrastructure according to the latest Global Competitiveness report
- Aviation passengers bear nearly \$17 billion in additional costs every year due to flight delays
- The passenger facilities fee per flight segment has not increased since 2000 while airline baggage service fees have ballooned
- According to the Means Construction Cost Indexes, the current value of the maximum \$4.50 PFC is worth roughly half of what it was when it was implemented in 2000
- Since 2007, the Federal Government has decreased the amount authorized for AIP financing by nearly \$100 million annually
- According to Airports Council International – North America’s latest Capital Needs Survey, U.S. airports’ will require more than twice the \$6.2 billion they expect to collect from AIP and PFC funds in order to finance necessary infrastructure improvements through 2019

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