

Delay Control and Airport Deregulation

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Problem



In the minds of the public, the success of the Next Generation Air Transportation System (NextGen) may depend more on the resulting level of delay and predictability than on the level of throughput. Measured in revenue passenger miles, throughput has roughly doubled since 1987 and tripled since 1982, but current delays are still considered unacceptable. The same may be true in 2025. No matter how great the increase in throughput achieved under NextGen, the system may be graded largely on delay and predictability.

Background



- **Delays dominate the public's view of FAA performance.**

GAO

United States Government Accountability Office

Testimony
Before the Subcommittee on Aviation
Operations, Safety, and Security,
Committee on Commerce, Science, and
Transportation, U.S. Senate

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NATIONAL AIRSPACE SYSTEM

DOT and FAA Actions Will
Likely Have a Limited
Effect on Reducing Delays
during Summer 2008
Travel Season

July 5, 2007

Ugly Airline Math: Planes Late, Fliers Even Later

February 25, 2009, 12:56 PM

Flight Delays Prove Costly, in Time and Money

Objective



- **At an aggregate level, evaluate the need for a mechanism within NextGen to control delay by matching supply and demand.**
- **Describe the key issues raised by an expanded role for airports in the matching of supply and demand through airport deregulation.**

Activities

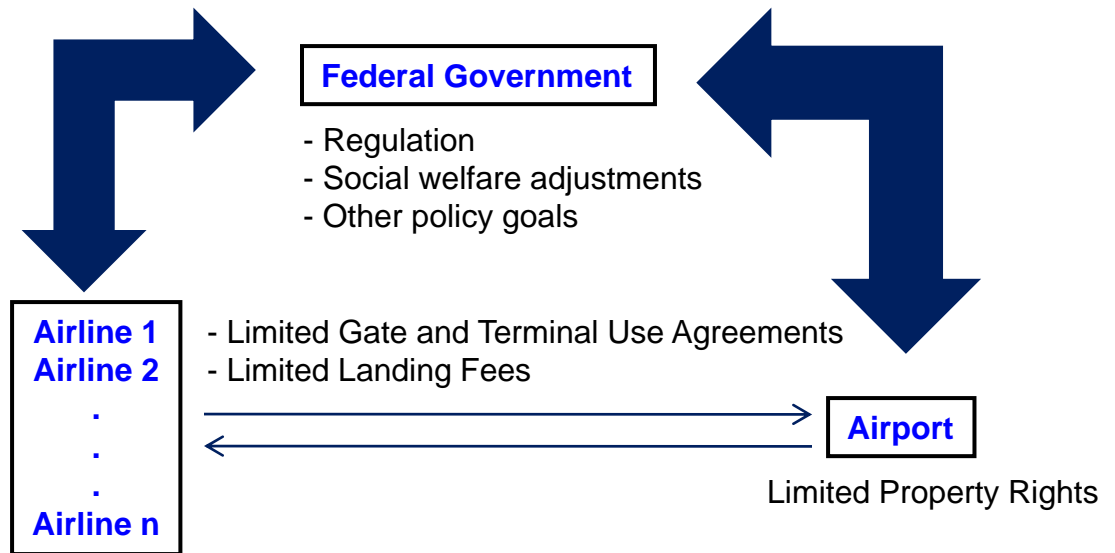


- **Examining the challenge of delay control in the NAS**
 - **Current demand forecasts in the context of planned NextGen capacity increases**
 - **Demand response to delay reductions**
 - **Bottlenecks.**

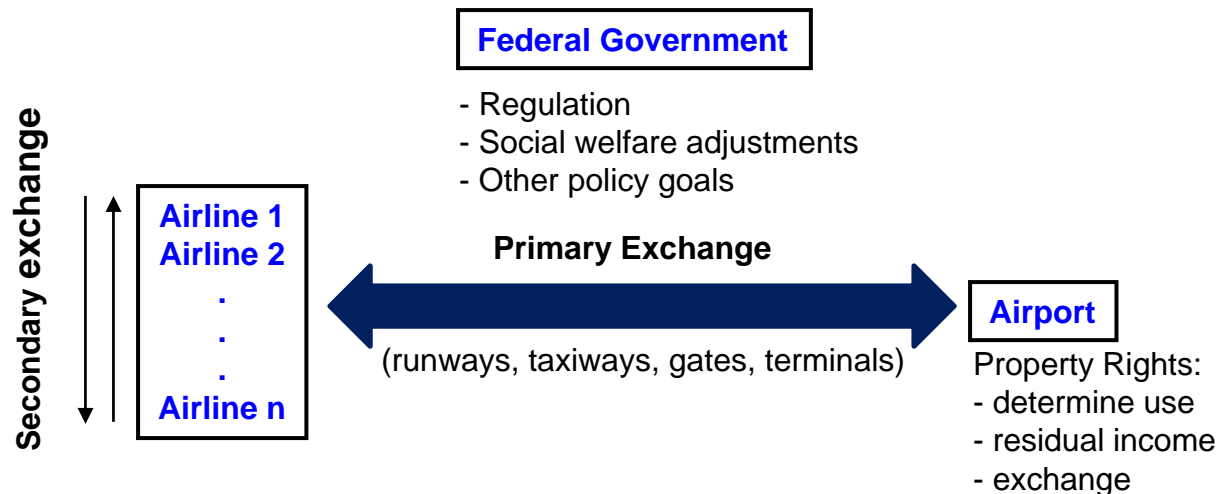
- **Research on airport deregulation**
 - **General issues**
 - **Experience in UK, EU, Australia, and New Zealand**
 - **Unique issues in the U.S.**

Highlight

Common intervention to control delay with the government directly participating in designing and implementing capacity allocation.



Alternative of allowing congested airports to match supply and demand based on local conditions and subject to federal regulation.



Highlight

To control delay in the absence of a mechanism (other than queuing) for matching supply and demand, increases in capacity must stay ahead of increases in demand.

Increased capacity

VS.

- Economic growth
- Population growth
- Fare reductions (long-term trend)
- Airline and passenger demand responses to delay reduction

Downward Pressure on Delay

Upward Pressure on Delay

Impacts



- **Better understand the need, if any, for additional delay control mechanisms within NextGen.**
- **Knowledge capture and dissemination on airport deregulation.**

Future Plans



If this exploratory research indicates planned capacity expansions may not be able to reduce delays from today's levels, then pursue more detailed modeling and analysis of the delay control problem and options for matching supply and demand.