# Matching Capacity & Demand at LaGuardia Airport

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# LaGuardia Airport

One of the Most Valuable Scarce Resources in the World

# Slots "Take off and Landing Restrictions"

 1968 - Congress passed the high-density slot rule which restricted access to the airports to a maximum of 1,064 per day

 Based upon the Engineering Performance Standards of the Airport

#### **Problems with Slots**

- Restricted Entry by New Carriers
- Inefficient Utilization by Small Aircraft
- Slot Designations Didn't Properly Reflect Demands Placed on the System

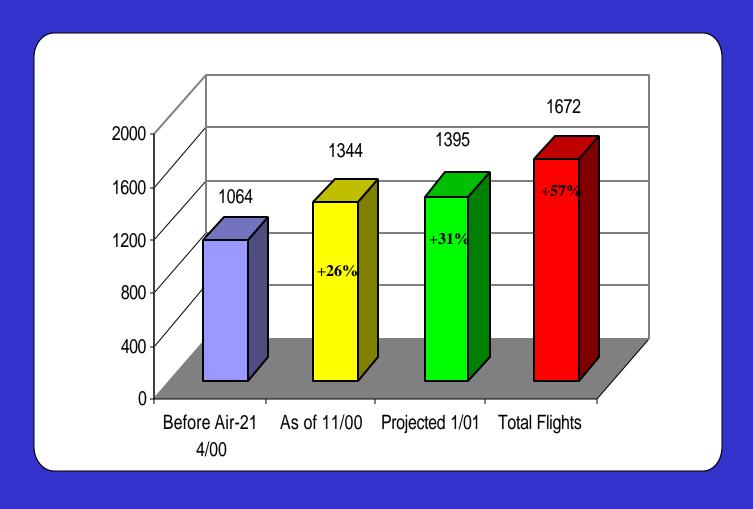
#### **Attempts at Solutions**

- 1985 Congressional action authorizing "buy/sell" and "use it or lose it"
- 1990 PA Proposal (Rejected by FAA and Congress)
  - Limited withdrawal from incumbents and reallocation to new entrants
  - Redesignate slot classes
  - Prohibit small aircraft from using large aircraft slots
- 2000 AIR-21
  - Landmark Aviation Legislation provides for airport funding to improve capacity and competitiveness
  - Mandates (limited) relaxation of slots for new entrants and limited incumbents to underserved cities

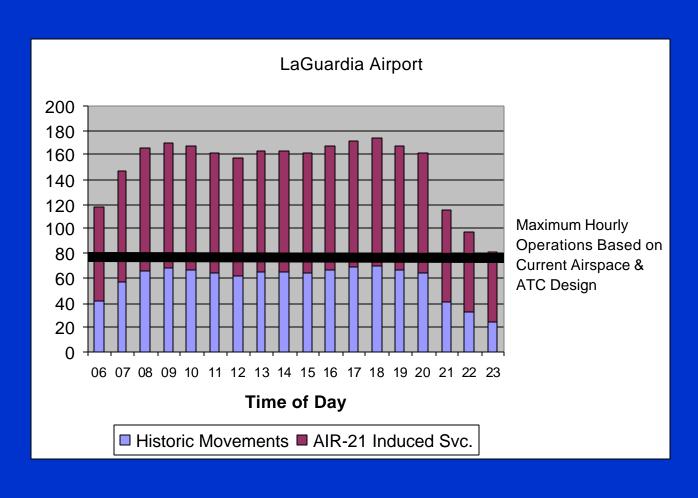
#### **AIR-21 Slot Modification Provisions**

- New Entrant Carriers Could Obtain Up to 20 Operations
- Under-Served Cities Served by Regional Jets/Turbo Props of Less Than 71 Seats Could Receive Unlimited Service

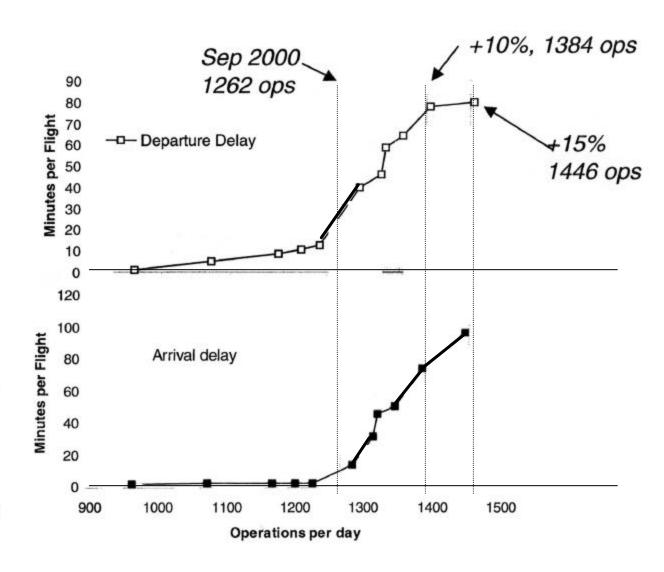
### Number of Flights at LGA



# Airside Demand vs Capacity LGA



#### **Average Arrival and Departure Delay**



Departure Delay: (Actual - scheduled pushback time)+ (taxi-out time minus 10 minutes)

**Arrival Delay:** time spent waiting for proper separation from previous aircraft.

### LaGuardia Airport Delays

25% of All Flight Delays Nationally

43% of All Delays Related to Volume

## The Challenge

What could we do to control flight activity when heretofore such activity was considered sancrosanct?

#### **Steps Taken to Prevent Gridlock**

**August 2** Request for Airline Notification

August 21 Voluntary Request to Reschedule

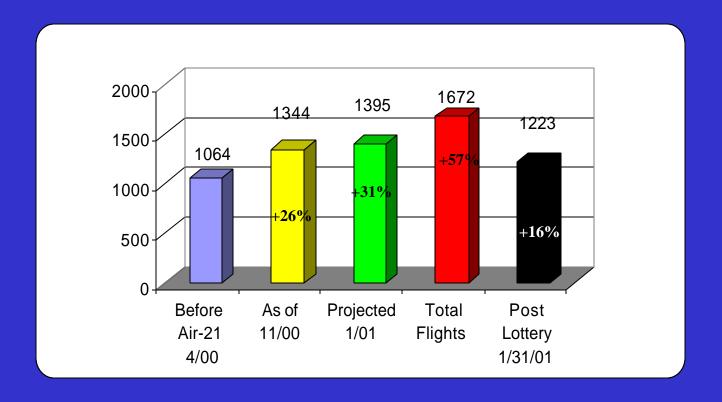
**Flights** 

September 19 Peak-Hour Moratorium

December 4 Lottery

#### **Number of Flights at LGA**

(Includes Post Lottery Flights)



# Administrative vs. Market Measures

## **Objectives**

- Achieve a Manageable Level of Demand
- Encourage Efficient Use of Limited Airside Access
- Encourage Competition for the Benefit of Passengers
- Retain Access for Small Communities

# **Market-Based Options**

- Congestion Pricing
- Auctions

# **Congestion Pricing**

Institute a Congestion Pricing Fee to Reduce Demand for Operations to Acceptable Target Levels

# A Fixed Charge per Aircraft Operation

- Only In Effect When Demand Exceeds Capacity
- Could be Structured in Various Ways
- Could be Varied During Time of Day to Reflect Differing Demand
- Could be Adjusted in Event of Misalignment of Demand & Capacity

#### **Auctions**

Do Not Require the Same Degree of Monitoring and Updating as Required Under Congestion Pricing

## **Rolling Auction**

- Multiple Rounds of Bidding with Payments Due at Auction Time
- Auction Winners Receive Right to Conduct Flight at Specified Hour of Day for Certain Length of Time
- Would Have a "Use it or Lose it" & Could be Tradable
- Could Have Varying Allocations Bases and Set-Asides to Ensure Access for All

# Issues Associated with Market Mechanisms

- Phasing Out or Elimination of Existing Slot Exemption Limits
- Potential Air Service Effects
- Level of Precision that the Fee can be Determined
- Use of Revenues

#### **Administrative Options**

- Extension of the Lottery
- Limits on the Number & Types of Aircraft Utilizing LGA

### **Multi-Faceted Solutions**