

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

STATEMENT OF WARREN D. KROEPPPEL

GENERAL MANAGER, LAGUARDIA AIRPORT

SUBCOMMITTEE ON AVIATION

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

U.S. HOUSE OF REPRESENTATIVES

**HEARING ON THE REVIEW OF FAA OPERATIONAL AND SAFETY
PROGRAMS**

2251 RAYBURN HOUSE OFFICE BUILDING

UNITED STATES HOUSE OF REPRESENTATIVES

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**WARREN KROEPPPEL
GENERAL MANAGER
LAGUARDIA AIRPORT
FLUSHING, NY 11371
718-533-3401**

Chairman Costello, Congressman Petri, Congressman LoBiondo, Congressman Hall and other distinguished Members of the Subcommittee, good morning. I am Warren Kroeppel, General Manager of LaGuardia Airport for The Port Authority of New York and New Jersey. On behalf of the Port Authority, I would like to thank you for organizing this hearing and giving me the opportunity to testify today and to share with you our thoughts regarding the management of the nation's largest airport system and some of our current challenges. My comments will be brief and I request that my entire statement be entered into the record. While the focus of my remarks will be on the Administration's proposal for managing congestion at LaGuardia Airport, I will also take this opportunity to comment on other aspects of H.R.1356 Next Generation Air Transportation System Financing Reform Act of 2007 (NextGen).

The Port Authority of New York and New Jersey is a bi-state public authority created in 1921 by our States with the consent of Congress. Its mission on behalf of the States of New York and New Jersey is to identify and meet critical transportation infrastructure needs of the bi-state region and provide access to the rest of the nation and to the world. The Port Authority of New York and New Jersey operates many of the busiest and most important transportation links in the region. In addition to the airports which I will note in a moment, these facilities include AirTrain JFK and AirTrain Newark; the George Washington Bridge and Bus Station; the Lincoln and Holland tunnels; the three bridges between Staten Island and New Jersey; the PATH (Port Authority Trans-Hudson) rapid-transit system; the Port Authority-Downtown Manhattan Heliport; Port Newark; the Elizabeth-Port Authority Marine Terminal; the Howland Hook Marine Terminal on Staten Island; the Brooklyn Piers/Red Hook Container Terminal; and the Port Authority Bus Terminal in midtown Manhattan. The agency also owns the 16-acre World Trade Center site in Lower Manhattan.

The Port Authority is financially self-supporting and receives no tax revenue from either state.

The agency operates four airports that are critical to the nation's trade, travel, commerce and tourism – a rapidly growing global gateway, John F. Kennedy International (JFK); a major domestic and international hub, Newark Liberty International (EWR); the premier business airport, LaGuardia (LGA); and a vital corporate and general aviation reliever, Teterboro (TEB); as well as an urban helipad, the Downtown Manhattan Heliport (DMH). These facilities can handle aircraft as diverse as a Piper Cub, a Sikorsky S-76, and the Boeing 747-400 and just this week we greeted the Airbus A380's first voyage to the United States. In 2006, we warmly welcomed our 100 millionth passenger. These airports were used by 104 million passengers, with over 2.6 million tons of cargo and 1.2 million aircraft movements in 2006. We served an unprecedented number of customers in 2006, with JFK growing by more than 4% and Newark Liberty growing by almost 8%; while LaGuardia's traffic was flat. This activity produces annually an astounding \$62 billion in economic activity and directly and indirectly supports more than 375,000 jobs in the New York/New Jersey metropolitan region.

HISTORICAL BACKGROUND

The FAA's proposed NextGen legislation seeks to address a fundamental and undeniable problem, the scarcity of airfield resources at LaGuardia. It has been clear since the "High Density Rule" (HDR) was established in the late 1960s that certain airports have insufficient runways and taxiways to handle unconstrained demand without experiencing significant congestion, and attendant delay and passenger inconvenience. At LaGuardia, the problem is exacerbated by the fact that no amount of labor, capital or entrepreneurship can expand the constraint on capacity, namely airport land. The highly constrained facilities at LaGuardia are not capable of absorbing the demand for access to the airport without the use of tools to manage the inevitable delay and strain on the airport infrastructure that would ensue if access were left unchecked after the HDR expired at LaGuardia on January 1, 2007.

The issue of congestion management at LaGuardia is governed by its location; a mere eight miles from the Central Business District, and its physical size and layout. LaGuardia is by far the smallest of NY's area three commercial airports, consisting of only 680 acres in area. It has two intersecting 7,000-foot runways, and four passenger terminals with 73 gates. Yet within this space, it accommodated 25.8 million air passengers a year in 2006 more annual passengers per acre than any other airport in the world.

On April 5, 2000, Congress enacted the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century ("AIR-21"). Under AIR-21, Congress legislated the sunset of the HDR at Chicago O'Hare, LaGuardia and JFK. Congress hoped to lower the barriers to entry for carriers interested in providing new competitive services and those interested in providing service to small communities. By permitting new entrant carriers to serve LaGuardia, Congress hoped to see lowered fares thus affording new opportunities for travel and by permitting additional service to small communities. In addition, Congress hoped to advance the economic development objectives of these communities. These goals were noble and the objectives were largely met. Unfortunately, unintended consequences resulted from carriers rushing to add new service beyond what was physically possible.

That legislation enabled carriers meeting the statutory criteria automatically receive approval for HDR slot exemptions for LaGuardia. As a result, the airlines sought to schedule an additional 600 new flights a day at LaGuardia, immediately causing increased levels of flight delay, which accounted for a quarter of all flight delays nationally in September 2000. "Market forces alone [did] not limit the scheduling of additional operations or the scheduling of these operations in peak hours at the airport." High Density Airports; Notice of Lottery of Slot Exemptions at LaGuardia Airport, Docket No. FAA-2000-8278, 65 Fed. Reg. 69216, 69218 (Nov. 15, 2000). The result was a level of congestion and delay which made "carrier schedules impossible to meet, frustrate[d] passenger travel plans, and place[d] an unnecessary strain on carrier ground operations and on air traffic control services."

In response, the Port Authority announced that it was implementing a temporary moratorium on additional flights at LaGuardia that could be initiated pursuant to AIR-21. The FAA, in cooperation with the Port Authority, subsequently conducted a lottery for AIR-21 flights to be operated during congested periods in order to help alleviate excessive congestion at LaGuardia. The lottery limited total air carrier flights at the airport to approximately 75 scheduled flights (plus six unscheduled flights) per hour and also limited the total number of permitted AIR-21 flights to 159 flights. Additional lotteries have been held periodically to reallocate the small number of slots that had been previously allocated but were not being used.

I apologize for this lengthy history, but for members of the Subcommittee who have joined since AIR-21, there is a lesson to be learned. We believe that the extreme congestion, bordering on gridlock that took place after the enactment of AIR-21 is that LaGuardia would once again face crippling delays and congestion if no form of operational limitation replaces the HDR. The FAA has agreed. (65 Fed. Reg. 69216, 69218 (Nov. 15, 2000).

However, managing congestion is just one of the goals for LaGuardia in the post-HDR era. Congress had established the goal of creating opportunities for new entrants and ensuring service to small communities, and in addition, the FAA and the Port Authority were concerned about the efficient use of the airspace, or throughput.

As this Subcommittee begins consideration of H.R. 1356 (NextGen), I acknowledge that there are many significant policy questions before you. I hope my testimony will give the committee a chance to reflect on Section 503 *Allocation of Operating Authorizations at LaGuardia Airport*. This section must be considered in light of the FAA's August 29 Notice of Proposed Rulemaking (NPRM) concerning LaGuardia. Only by closely examining the NPRM do we gain insight into the Administration's intent. And only through an examination of history can you appreciate the potential impact.

SHARED GOALS: DIFFERING SOLUTIONS

Managing Congestion

To address congestion management, the FAA correctly focuses on the need to continue to place limits on flight activity consistent with the supply of capacity. The Port Authority agrees that this is an FAA responsibility. However, the Port Authority believes that the current limit on operations at LaGuardia may not be low enough, and that now is the time for further examination of this limit to determine whether reduced hourly operations rate or other measures will prevent delays from accumulating to excessive levels. A cap of 75 commercial aircraft movements per hour was a demand limit that generated a tolerable level of delay from 2001 through 2004. Since that time, delays to arriving and departing aircraft at LaGuardia have grown 33 percent between 2004 and 2006, comparing comparable January through November weekday operations between the two years.

The FAA should also consider, together with, or as an alternative to, adjustment of the base operational cap of hourly Operating Authorizations (OAs), variation of the cap during selected hours through the day to provide a time when the backlog of delayed operations could be reduced or cleared. The elimination of even a single authorization allows each backlogged operation to move up approximately one minute. Given a typical backlog of up to 20 fights, each eliminated authorization could reduce delays by approximately 20 minutes. Elimination of six authorizations would eliminate two hours of delay per day. Please see Attachment 1 for further details.

We believe the number of permissible hourly operations needs to be lowered until such time as FAA can restore its previously demonstrated level of productivity.

Providing Access opportunities For New Entrants

While we agree with the goal of providing new entrants and limited incumbents access to LaGuardia, we have great concern about the FAA's approach. While the NextGen legislation states that a provision of the rule that would be required would provide "air carriers and the traveling public with a stable and predictable schedule for planning future travel." [Section 41724 (b) (E)], the NPRM proposed that starting in 2010, and every year thereafter, ten percent of all existing Operating Authorities would be reallocated. The NPRM, much like the language in the NextGen Bill, are silent on the mechanics of how this would work.

A turnover of this nature would create excessive roiling for the entire airport community. Airlines that have spent years building their schedules so that they could provide hourly service in high-demand business markets would be faced with potentially losing key pieces of their operation. Even if airlines were successful in restoring some elements of their lost ten percent by re-purchasing through whatever mechanism is instituted, there is no certainty they will be able to restore their schedules. As for carriers who may successfully acquire new operating rights through the forced annual reallocation of ten percent of LaGuardia's capacity, there is no certainty that they will find contiguous gate space, which would permit them to take advantage of the new opportunity in a commercially viable manner. Both the NPRM and the NexGen Bill are filled with uncertainty that is quite troubling to airlines, the airport and the customers that we serve.

Preserving Service to Small Communities

The competing goal of promoting service to small communities that are served by smaller aircraft is not only important to air service at LaGuardia and to the trade, travel and commerce needs of New York City, but it is also essential to the communities from which those flights originate or are destined for, especially those located within 300 miles of New York City. These communities rely on access to New York City through LaGuardia, as well as the transfer opportunities available to other flights destined for

other cities. There must also be ways of allocating certain operating privileges to encourage competition and entry by other airlines. We believe that FAA should have the authority to address this goal.

The Port Authority strongly agrees that in the case of LaGuardia where it has been established that aeronautical capacity is finite and cannot be expanded, the overabundance of service to large markets with small aircraft effectively precludes other services. highly demanded resource such as LaGuardia should be used efficiently for both the benefit of the residents of the New York/New Jersey area and air travelers in general. Both the FAA and Port Authority differentiate between small planes to large places, which often poorly serve the traveling public and small planes to small places, which is often the only way small communities can be afforded access.

The Port Authority supports the concept that some portion of airside capacity should remain available to serve small community destinations within 300 miles of the airport and believes ensuring service to small communities must rest with the federal government.

Efficiently Using a Scarce Resource

In the NPRM, the Port Authority embraced the FAA's goal of using LaGuardia's scarce capacity to its highest and best use by encouraging upgauging to increase throughput even if we did not embrace the means. As such we are troubled that Section 503 explicitly lists five public policy goals for LaGuardia, without mentioning the goal of increased throughput that is so central to the NPRM, and to the future of the airport. It should be noted that although we strongly support the goal of upgauging, the FAA's method, as defined in the NPRM as an Average Seat Size target, would create substantial disruption. The Port Authority would be required to move airlines to new premises, change airport signage, modify baggage handling systems, and change configurations for TSA operations. The foregoing is impractical, inefficient and will result in increased expense and operational difficulty for the Port Authority, the airlines, and the customers we serve. Additionally, it may force the Port Authority to accommodate individual airlines on multiple concourses, thereby splitting their operations, decreasing their operational efficiency and increasing their operating costs. The Port Authority, as airport operator, is in the best position to determine how to efficiently allocate scarce resources of the gates at LaGuardia. Determination of the optimum balance of positive and negative effects of upgauging is best performed by the airport operator in consultation with the airlines using LaGuardia. The Port Authority has concluded that the approach embodied in the NPRM is overly prescriptive and administratively burdensome, and would result in unnecessary disruption and less efficient use of the scarce airport resource.

THE PORT AUTHORITY'S SOLUTION

Although the Port Authority supports the many principles, doctrines and tenets that the FAA has articulated, in the Port Authority's view, the proposed rule and

legislation needlessly interfere with the airport operator's proprietary rights to manage LaGuardia.

More importantly, it appears that the proposal would have undesirable impacts on the airport, the airlines, and, ultimately, the traveling public due to the fundamental mismatch between the proposed airfield policy and the management of landside infrastructure. The FAA's proposal is too prescriptive and improperly assigns to the federal government the responsibility of managing access to the all-important airport gate facilities, rather than acknowledging that the responsibility for doing so properly rests with the airport operator as the manager of the facility.

The Port Authority has determined that an alternative approach is preferable, realizable, and is responsive to the aforementioned goals. The FAA needs only to set the operational hourly limit and to establish the criteria for service to small communities. The Port Authority then will exercise of its right to manage utilization of access to LaGuardia terminal gate facilities, which avoids many of the potential pitfalls in the NPRM proposal and the NextGen legislation.

The Port Authority proposes using its proprietary powers to effectuate gate utilization measures, in consultation with air carriers, to achieve the objectives that Congress and the FAA have articulated. The Port Authority has a legitimate interest as the proprietor of the airport to seek to optimize the efficient use of limited airport capacity and facilities and to promote competition at LaGuardia.

Essentially, the Port Authority would establish utilization standards that would limit airline use of passenger gates on an hourly basis consistent with the aeronautical capacity of the airport as determined from time to time by the FAA based on input from all relevant sources. Airline rights to conduct passenger aircraft operations would be subject to take-back procedures based on frequency of use requirements, and capacity use requirements based upon the size of an aircraft and the numbers of passengers that may be accommodated at the corresponding gate.

Airline rights to conduct passenger operations would also be subject to limited reallocation to encourage competition and provide meaningful opportunities for new entrants to respond to actual circumstances. The Port Authority, agrees with Congress and the FAA that service to certain small communities should be maintained, thus a certain number of operating privileges, to be determined by the FAA, should be exempt from take back procedures related to seat usage and competition. Also, airlines would have the right to enter into direct arrangements with other carriers to buy, sell, borrow, or trade-operating privileges consistent with the objectives of the leasing policy, subject to airport operator consent which would be based on the policy objectives articulated by the FAA in the NPRM. The exact provisions of the LaGuardia terminal leasing policy, practices and agreements, would, of course, be developed in consultation with the airlines that use the airport. The Port Authority has initiated discussions with the air carriers serving LaGuardia and will expand this consultation in the months ahead.

NECESSARY CONGRESSIONAL ACTION

The FAA acknowledges that there is tremendous uncertainty embedded in the LaGuardia NPRM, uncertainty as to what Congress will authorize and uncertainty as to how market-clearing charges will work in its first application in the United States aviation context. Rather than face this tremendous uncertainty with the resultant highly disruptive effects on airlines, airports, and the customers, the Port Authority believes that it would be preferable to use gate leasing policy, which is a time-tested and common industry practice.

In the NPRM, the FAA did not specify the methodology it would use to reallocate OAs returned after their expiration. Nor does it elaborate in the NextGen Bill, other than to make clear it will be an auction or congestion pricing. If the FAA implements a market-based approach, any OA fee would add to airlines' expenses. The addition of such an expense will cause an air carrier to be much more resistant to reasonable increases in terminal rents and other charges that would normally fund improvements to the airport, and the incurred costs would likely be passed along to the passenger in the form of increased ticket prices. Any revenues derived under such a protocol should be used for investment in capital improvements at LaGuardia.

We urge Congress to modify Sections 503 and 504 to enable the Port Authority to proceed with a simpler, more certain solution to LaGuardia's congestion issue: incentive-based gate-leasing policy. As such it is important to include gate-leasing policy as a potential 'market-based mechanism' as defined in Section 503(a) and Section 504(e). The FAA should set the hourly capacity of LaGuardia, provide for small community access and empower the Port Authority to proceed with its gate-leasing policy.

OTHER CHALLENGES

DELAYS

Newark Liberty International, LaGuardia and JFK finished 2006 as the first, second and fourth most delayed airports in the nation. What is more troubling is that the number of aircraft delayed is increasing, as is the average length of delay. The 5.5 million hours of delays at our airports resulted in the loss of \$180 million in productivity.

The Port Authority has assessed operations at the three airports using its own and FAA records of operations and has determined that little has changed to trigger such a large increase in delay. Weather conditions, aircraft fleet mix, the distribution of operations through the day and runway use patterns do not vary sufficiently to explain such a large change. However, at LaGuardia, as an example, the utilization of the airport's runways has dropped two operations per hour in good weather (Visual Flight

Rule, or VFR, conditions), and has dropped by as many as eight operations per hour during good weather with east wind conditions when Runways 4 and 13 are used.

Since no significant change has occurred in demand or physical characteristics of the fleet of aircraft, the airport runways, or the weather conditions, the cause of the increased delay despite the maintenance of the same hourly regulatory limits should be determined and, if possible, rectified.

The Port Authority has formed a coalition of air carriers from all three commercial airports to address what is becoming an untenable situation. Last month the coalition met with the FAA and we are developing a work plan to identify short-term and long-term initiatives that will improve the throughput at our airports without compromising safety. We urge Congress to monitor the delay situation in the New York/New Jersey metropolitan area so that the situation does not worsen, and to support air traffic management initiatives put forth by the FAA to address it. NY Governor Elliot Spitzer and NJ Governor Jon Corzine strongly support our agency's efforts to ensure that service to the traveling public be improved to provide a favorable business environment and to serve the millions of annual visitors to our region.

PORT AUTHORITY ACTION TO ADDRESS CONGESTION AND DELAY

The Port Authority has taken some very significant steps to address the congestion and delay situation at our airports. As I have described, LaGuardia is a land-constrained older airport, which needs considerable investment and modernization to enable its landside infrastructure and associated gates to accommodate larger aircraft thereby serving the growing demands of the vibrant New York / New Jersey region.

The Central Terminal Building (CTB) has 37 gates or about half the gates at LaGuardia. This terminal (constructed in 1964) has four gates that cannot accommodate aircraft with more than 110 seats, and five gates that cannot accommodate aircraft with more than 50 seats. Many hold rooms are undersized for the gates they serve. Not all security checkpoints have capacity to support the flow of passengers generated by gates operating at their full capacity. The Central Terminal Building is in need of significant capital investment, which would increase capacity by permitting larger aircraft to serve to LaGuardia without increasing operations. The agency is in the midst of a \$15 million study to examine the feasibility of modernizing the terminal to accommodate the forecasted passenger growth.

Another significant attempt to manage the growth in passenger demand is the Port Authority's pursuit to purchase the 93 years remaining on the Stewart International Airport's lease. Stewart, which is located 50 miles north of New York City, has two runways that generally do not compete with the airspace around the four Port Authority airports. We are currently in negotiation with the current lease-owner but expect to take over operation of that airport by October 1, 2007.

FLEXIBILITY IN THE PASSENGER FACILITY CHARGE (PFC) PROGRAM

The Port Authority has collected more than \$1.6 billion in PFCs and used them for vital capacity enhancing and security-related projects, including taxiway widening at JFK, and runway rehabilitation work at Newark Liberty and LaGuardia, the AirTrains at NEWARK LIBERTY and JFK, and an ARFF facility at LaGuardia. NEWARK LIBERTY. The program has afforded the agency the opportunity to expand our financial capacity. However, the \$4.50 cap and the strict eligibility requirements severely limit the Port Authority's ability to fully use the PFC as a financing tool. Therefore, the agency supports an increase of the PFC level, but recommends that this be done in conjunction with a relaxation of the eligibility requirements of the program. By broadening eligibility to all aviation-related capital projects the FAA would remedy the difficulty inherent in the uniform implementation of detailed eligibility requirements to different airport environments.

In addition, the Port Authority strongly supports a streamlining of the review process. The application process has been lengthy, costly and unpredictable. We support a system whereby the airport operators impose, report and audit the PFC-funded projects.

CONCLUSION

The Port Authority is confident that its gate leasing proposal is sound and workable and a desirable alternative to that which is set forth in the NPRM and discussed in Section 503.

The Port Authority's proposal provides for a continuing strong federal role in establishing and overseeing policies governing the use of the airport, relies upon the FAA's authority to establish flight limits to control demand relative to capacity, and recognizes that the FAA has a role in defining small community air service markets eligible for distinctive consideration.

The Port Authority's proposal also protects the airport operator's proprietary rights to manage its business relationships with its airlines, and control its facilities using airport leases, use agreements, and policies which have been fundamental to defining airport and airline responsibilities. As is the case at other commercial airports, the Port Authority's alternative would unite the administration of operating authorizations with the leasing of terminal space and facilities.

The terms are also consistent with airport responsibilities to promote competition and achieve efficient utilization of assets.

If Section 503 is incorporated into law we respectfully ask Congress to modify Section 503 and 504 to expand the definition of eligible market based mechanisms to include gate-leasing policy. In addition, we urge the Subcommittee to increase the PFC

level and to enhance the flexibility of the PFC program. Finally, the Port Authority states once more its appreciation for all of the efforts expended by the FAA and US DOT to date with regard to these proposals, and looks forward to an opportunity to have a conversation with the FAA and US DOT, and all airport stakeholders, regarding the development of the Port Authority's alternative proposal.

The Port Authority is deeply grateful to the Subcommittee for giving us this opportunity to discuss these important issues as the Congress deliberates on several significant aviation policy issues as part of the FAA Reauthorization process.

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ATTACHMENT 1

ASSESSMENT OF LAGUARDIA AIRPORT DELAYS COMPARISON OF 2004 AND 2006

SUMMARY

Seventy-five commercial aircraft movements per hour was a demand limit that generated a tolerable level of delay from 2001 through 2004. Since that time, delays to arriving and departing aircraft at LaGuardia have grown 33 percent between 2004 and 2006 (when comparing comparable January through November weekday operations between the two years). The Port Authority has assessed operations at LaGuardia using FAA and its own records of operations and has determined that little has changed at LaGuardia to trigger such a large increase in delay. Weather conditions, aircraft fleet mix, the distribution of operations through the day and runway use patterns do not vary sufficiently to create an environment that would generate such a large change. However, the capacity of the utilization of the airport's runways has dropped two operations per hour in most good weather conditions, and has dropped by as many as eight operations per hour during good weather, east wind conditions when Runways 4 and 13 are used.

There was no significant change in demand or physical characteristics of the fleet of aircraft, the airport runways, or the weather conditions that explains the reduced airport runway capacity

ANALYSIS OF FAA DELAY DATA

FAA delay data for LaGuardia for 2004 and 2006 was obtained from the on-line edition of the Aviation System Performance Metrics (ASPM) database from <http://www.apo.data.faa.gov/>. Since monthly data is only available for the first eleven months of 2006, comparisons between 2004 and 2006 only cover the first eleven months of each year. Delay was examined for weekdays since the operational limits proposed by the FAA would be in effect for weekdays and Sunday afternoons when airlines usually run a full schedule of operations. Saturday afternoons and Sunday mornings have considerably less activity.

Table 1 compares weekday delay minutes per aircraft for the first eleven months of 2004 to a similar period for 2006 for portions of flight operations into and from LaGuardia. All delay categories have increased between 30 and 35 percent.

Table 1

COMPARISON OF 2004 AND 2006 DELAYS

Delay Category	Delay Minutes per Aircraft 2004	Delay Minutes per Aircraft 2006	Percent Change
Airport Departure Delay	18.9	24.9	32%
Gate Arrival Delay	13.2	17.9	35%
Gate Departure Delay	9.4	12.3	31%
Taxi Out Delay	11.5	14.9	30%
Taxi In Delay	5.0	6.5	30%

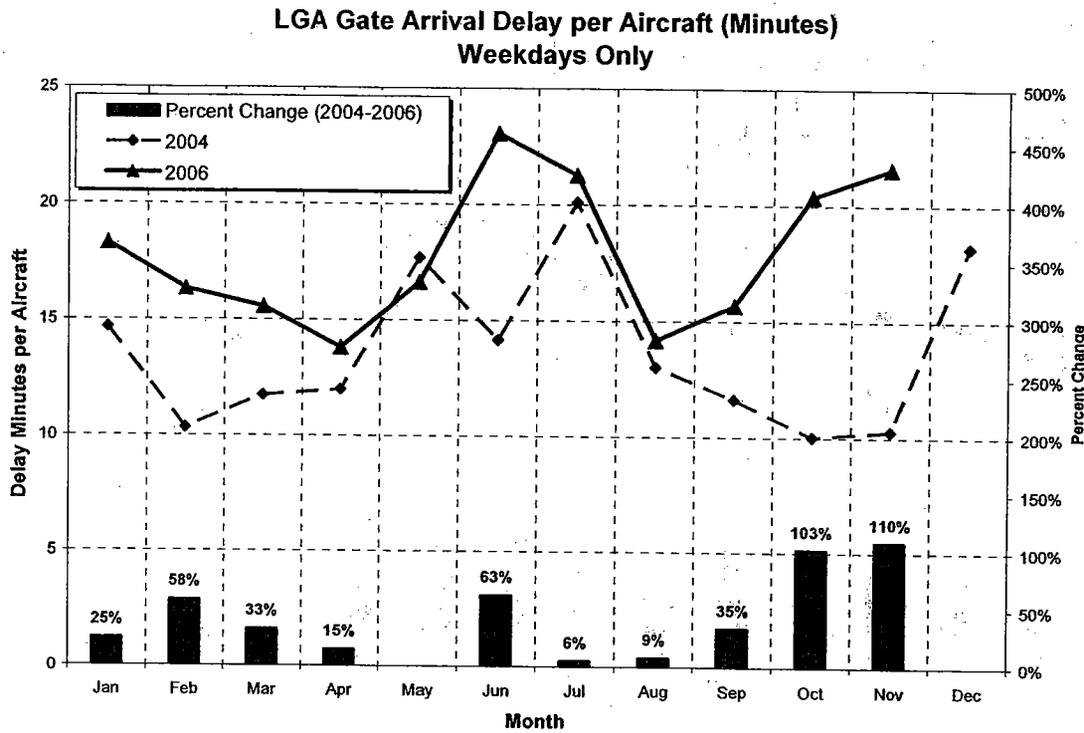
Source: FAA ASPM database and Landrum & Brown Analysis

Note: Comparison is for weekdays of the first eleven months of each year.

Exhibits 1 and 2 show comparisons of airport departure delays and gate arrival delays by month for 2004 and 2006. Delays have increased in all months. However, the largest increases occurred in June, September, October and November of 2006.

Exhibit 1

COMPARISON OF 2004 AND 2006 GATE ARRIVAL DELAYS



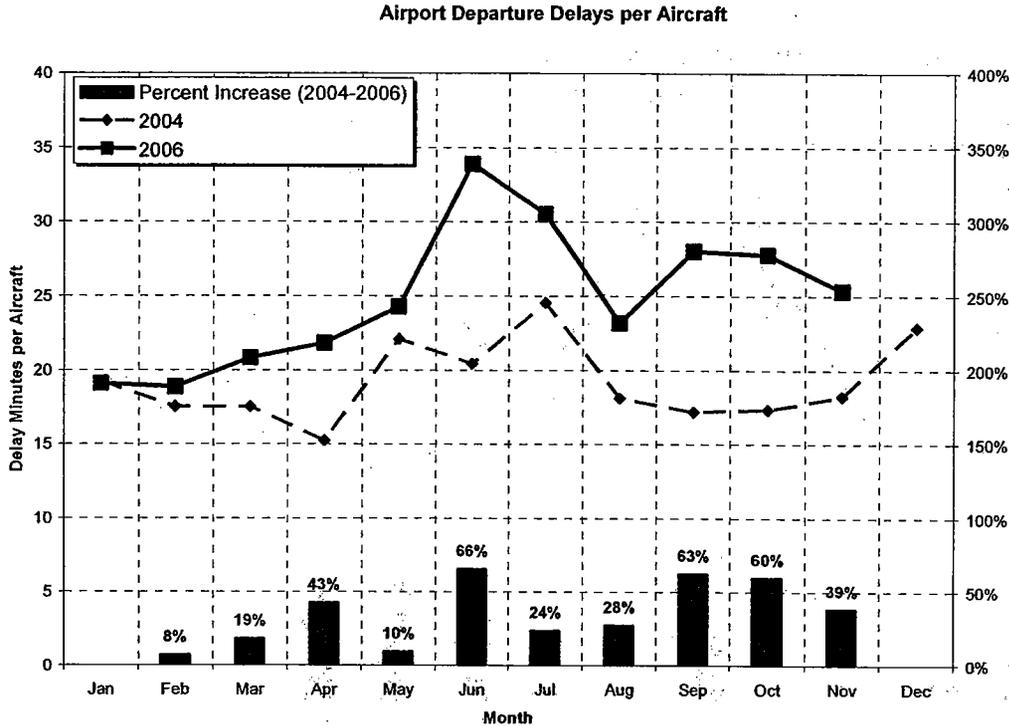
Source: FAA ASPM database and Landrum & Brown Analysis

Since October tends to be one of the busiest months, and the first week of October 2006 is the basis of future activity under the FAA proposed rule, The Port Authority prepared a more detailed analysis comparing airport operations and delays between October 2004 and October 2006. This analysis was prepared from the joint FAA and Port Authority CATER database of aircraft operations at LaGuardia. This analysis covered four factors that effect airport runway capacity utilization:

- Airport Runway Use Configurations
- Airport Weather Conditions (Ceiling, Visibility, Wind Speed and Direction)
- Aircraft Fleet Mix
- Volume of Aircraft Operations by Runway by Five Minute Increments

Exhibit 2

COMPARISON OF 2004 AND 2006 AIRPORT DEPARTURE DELAYS



Source: FAA ASPM database and Landrum & Brown Analysis

Airport Runway Use Configurations

The CATER database records the primary arrival and departure runways in use or the "configuration", as well as the times the runway configuration changes. CATER records for October 2004 and October 2006 were evaluated for configuration use between the hours of 6AM and 10PM. The results of this analysis are summarized in **Table 2**. Configurations that include operation of both runways occurred more often in 2004 than in 2006. Most of the use of the single runway configurations in 2006 occurred on Saturdays when demand is lower. Most of the remaining time occurred on October 20 and 29, 2006 when winds were too strong from the northwest to use Runway 4/22. These two days do not account for a major portion of the large delay differences between October 2004 and 2006.

Table 2

COMPARISON OF RUNWAY USE CONFIGURATIONS

OCTOBER 2004 TO OCTOBER 2006

Runway Use Configuration	Number of Runways in Use	October 2004 Percent Use	October 2006 Percent Use
Arrive 13/Depart 13	1	0.3%	0.7%
Arrive 22/Depart 13	2	35.5%	34.3%
Arrive 22/Depart 22	1	0.0%	0.7%
Arrive 22/Depart 31	2	15.0%	23.2%
Arrive 31/Depart 31	1	3.5%	8.6%
Arrive 31/Depart 04	2	19.3%	15.9%
Arrive 04/Depart 13	2	26.4%	13.9%
Arrive 04/Depart 04	1	0.0%	2.7%
All Configurations		100.0%	100.0%
Dual Runway Configurations	2	96.2%	87.3%
Single Runway Configurations	1	3.8%	12.7%
Saturday Usage	1	3.7%	9.6%
Weekday Usage	1	0.1%	3.1%

Source: FAA and PANYNJ CATER database and Landrum & Brown Analysis

Note: Runway Configuration Use Shown Only for 6AM to 10PM

Weather Conditions

The CATER database reports the hourly and special weather observations made by the National Weather Service at LaGuardia. Missing data in the CATER database was obtained from <www.wunderground.com>. Between the hours of 6AM to 10PM, 92% of ceiling and visibility observations in October 2004 permitted visual flight rules operations (higher capacity), as compared to 94% in October 2006. Thus, in general, ceiling and visibility conditions in 2006 provided more opportunities to operate LaGuardia in its highest capacity modes.

Aircraft Fleet Mix

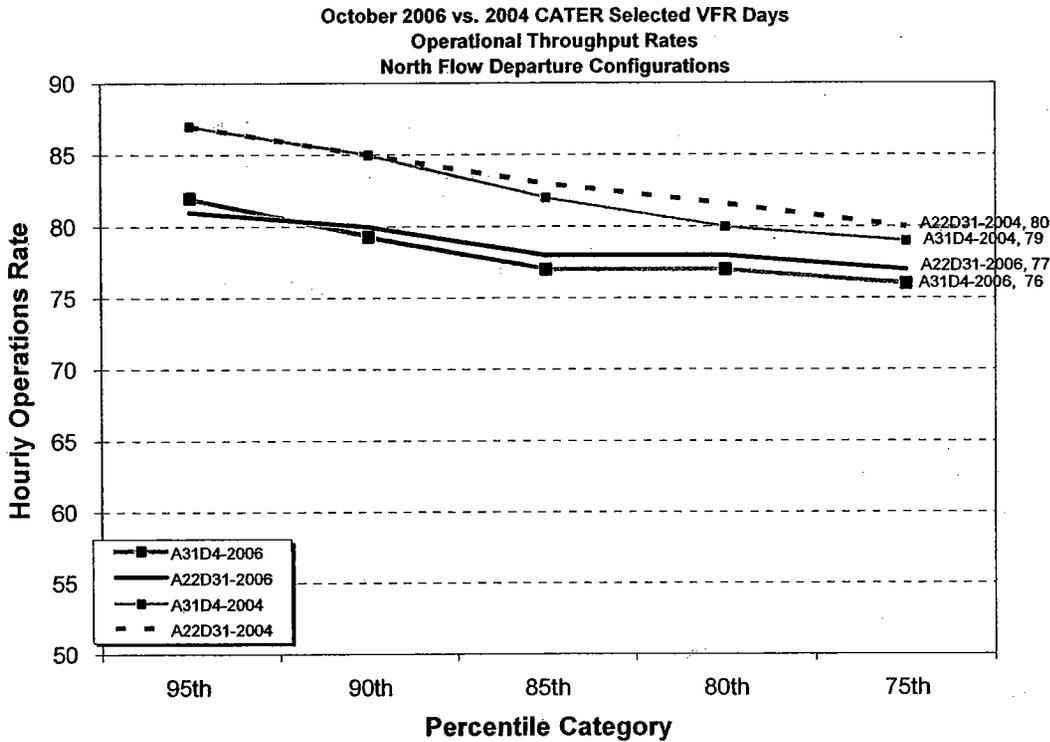
The more uniform the aircraft fleet mix, the more uniform the separations are between successive aircraft, and the greater likelihood that a higher level of capacity can be achieved. Small class aircraft that weigh less than 20,000 pounds or heavy class (and B-757) aircraft that weigh more than 300,000 pounds, need greater separations when they are in an aircraft traffic flow that contains predominantly large class aircraft. Small and heavy aircraft comprised approximately 10 percent of the aircraft fleet in October 2006 compared to 13 percent in October 2004. These values are sufficiently similar allow similar average aircraft separations in 2006 compared to 2004. Thus, the changes in aircraft fleet mix between 2004 and 2006 have not changed the capacity of LaGuardia.

Volume of Aircraft Operations by Five Minute Increments

Selected days for each of the five most commonly used runway operating configuration were analyzed to determine the hourly rate of aircraft operations achieved under each one. The hourly rate of aircraft operations was assessed by five minute increments between 6AM and 10PM. Exhibit 3 shows a comparison of four days with similar north flow departure conditions (departures on Runway 4 or 31) between 2004 and 2006. The analysis shows that both configurations lost three to four operations per hour of aircraft operations (throughput) between 2004 and 2006.

Exhibit 3

COMPARISON OF HOURLY RATE OF OPERATIONS FOR CONFIGURATIONS WITH NORTH FLOW DEPARTURES



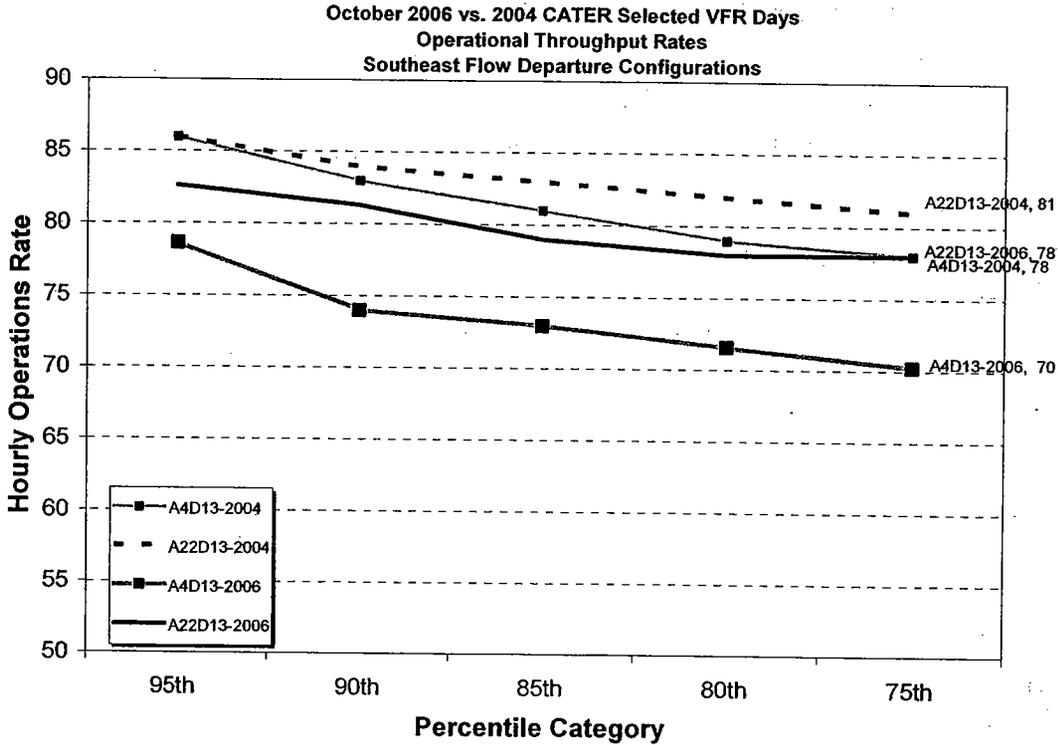
Source: CATER databases and Landrum & Brown Analyses

Both configurations had throughput values in 2004 that generally exceeded 80 operations per hour at least 20 to 25 percent of the time. In 2006, 80 operations per hour was exceeded only 5 percent of the time.

Exhibit 4 shows a similar analysis for the two dual runway configurations that have departures on Runway 13. These two configurations were generally accepted as being among those with the highest capacity at LaGuardia. In 2004, the arrive on Runway 22 and depart on Runway 13 configuration achieved a throughput rate of 80 operations per hour or more at least 25 percent of the time. In 2006, 80 operations per hour was achieved only 10 percent of the time. In 2004, the arrive on Runway 4 and depart on Runway 13 configuration achieved a throughput rate of 80 operations per hour at least 15 percent of the time. In 2006, 80 operations per hour is rarely

Exhibit 4

COMPARISON OF HOURLY RATE OF OPERATIONS FOR CONFIGURATIONS



WITH SOUTHEAST FLOW DEPARTURES

Source: CATER databases and Landrum & Brown Analyses

achieved and most throughput rates are below 75 operations per hour. From this analysis it appears that the four most commonly used runway operating configurations that account for more than 85 percent of daytime configuration usage have lost five to ten percent of their aircraft operations throughput. These same four configurations generally had rates of aircraft operations that exceeded 80 operations per hour at least 20 to 25 percent of the time in 2004, in 2006 now only exceed 80 operations per hour approximately 5 percent of the time.

Tables 3 and 4 show the throughput rating for all configurations during VMC conditions (92 to 94 percent of all weather) for October 2006 and 2004, as recorded by the FAA ASPM databases. These tables confirm the 5 percent loss of throughput between 2004 and 2006 at the 95th percentile and at the 75th percentile

levels and provide data that agrees with the CATER analysis. These tables also show that between 2004 and 2006, the median throughput value has fallen below the 75 operations per hour FAR Part 93 limit on commercial aircraft operations.

Table 3

FAA ASPM EFFICIENCY RATING FOR OCTOBER 2006

Actual Efficiency Counts								
	Time Periods	Max	99th	95th	75th	Min	Median	Average
Departure	400	47	45	42	38	2	35	33
Arrival	400	44	43	41	38	8	35	33
Total Operations	400	88	82	80	75	17	71	67

Source: <http://www.apo.data.faa.gov/>

Table 4

FAA ASPM EFFICIENCY RATING FOR OCTOBER 2004

Actual Efficiency Counts								
	Time Periods	Max	99th	95th	75th	Min	Median	Average
Departure	359	50	48	44	40	6	37	35
Arrival	359	48	45	43	40	13	37	35
Total Operations	359	90	87	84	79	24	75	70

Source: <http://www.apo.data.faa.gov/>

CONCLUSIONS

The analysis of runway throughput shows that between October 2004 and October 2006 runway throughput at LaGuardia declined by five percent. FAA ASPM data shows that peak period throughput levels (those achieved 25 percent of the time or more) have declined from 79 to 75 aircraft operations per hour and median throughput levels have declined from 75 to 71 operations per hour. The 71 operations per hour median throughput rate has fallen below the 75 operations per hour FAR Part 93 limit on commercial aircraft movements. One consequence of the reduced operational throughput is that aircraft delays have increased by over 30 percent.

The data analysis shows no physical or aircraft schedule reason for the change in aircraft throughput between October 2004 and 2006. Airline schedules and fleet mix are approximately the same. Weather conditions, as defined by ceiling and visibility, were slightly better in 2006 than in 2004. No changes to airport runway or taxiway geometry occurred. The use of single runway configurations increased from 2004 to 2006. However, most of this use occurred on Saturdays when aircraft activity is less.