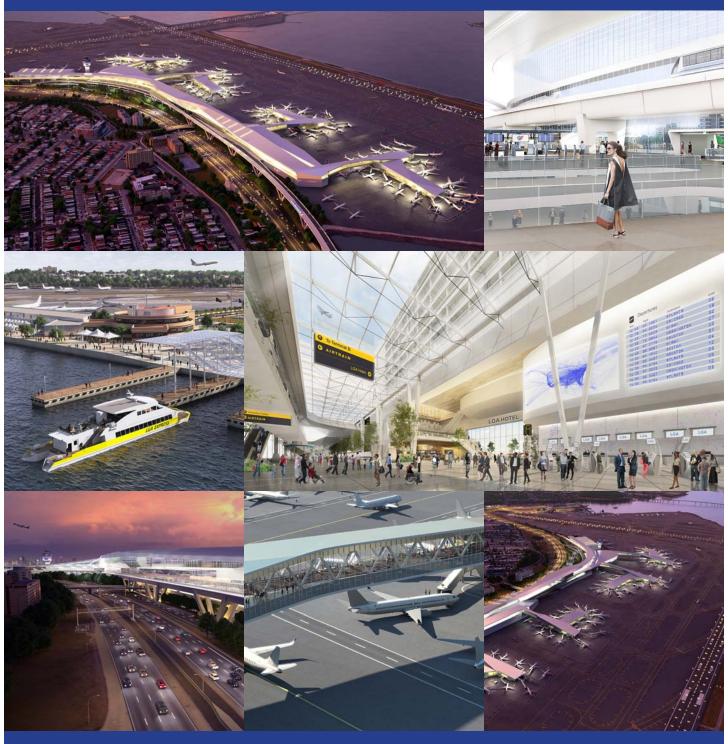
A 21st Century Airport for the State of New York: The New LaGuardia



A Report to the Governor from the Airport Advisory Panel: Guiding Principles for a Comprehensive Airport Master Plan

Airport Advisory Panel

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Co-chairman of Brookfield Office Properties and Chairman of the Board of Brookfield Financial

Andrew Cuomo Governor, The State of New York Dear Governor Cuomo,

LaGuardia Airport plays a critical role as a gateway for the State of New York. It is responsible for nearly 12,000 jobs and served nearly 27 million passengers last year. Yet its development over the years has been disjointed and sporadic. The airport today is consistently rated as among the worst airports in the world in terms of its design, delays, and overall passenger experience – a 20th century airport overwhelmed by 21st century demands.

In order for the State of New York and the region to remain competitive, we must modernize and revitalize this critical gateway for the 21st Century, to enable us to maintain our competitiveness and maximize job creation and economic opportunities.

In January, you appointed me to Chair an Airport Advisory Panel to advise you and the Port Authority of New York & New Jersey on the modernization of LaGuardia and John F. Kennedy International airports. The Panel did a deep dive over the last seven months in reviewing LaGuardia and its issues, and taking on your challenge to think boldly and to develop a holistic master plan for an airport that the people of the State of New York and the region deserve. Attached is our report outlining our recommendations for a new, 21st Century LaGuardia Airport.

Our recommendations were inspired by your charge to not just remodel or rebuild the existing facilities. We focused on a comprehensive vision for the airport that has been lacking over the decades of its prior development. We put a focus on putting passengers first and improving their experience, starting with how they get to the airport. We also put an emphasis on how a new, modern airport can be a good neighbor to the people of Queens by reducing traffic and expanding job opportunities.

As Governor, you have consistently emphasized that we must get government moving, and deliver real results for the people of the State of New York. Towards that end, our report contains specific recommendations including next steps to ensure that this vision can be translated into an implementable master plan.

We thank you for the opportunity to serve, and look forward to seeing the vision of a new LaGuardia become a reality.

Sincerely yours,

Dan Tishman

On Behalf of the Airport Advisory Panel

CC: John Degnan, Chairman, Port Authority of New York & New Jersey
Scott Rechler, Vice-Chairman, Port Authority of New York & New Jersey
Board of Commissioners, Port Authority of New York & New Jersey
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Executive Summary

hen Terminal B at LaGuardia Airport ("LaGuardia") first opened in 1964, it was called "the air gateway to America" and "the crossroad of the world." Now known as a "third world country" airport, LaGuardia is synonymous with cramped, dilapidated facilities ill-equipped to meet the demands of today, much less the demands of the future. For far too long, LaGuardia has been subjected to underinvestment and sporadic and piecemeal development with no overarching vision or plan on what the airport should be.

The recommendations from Governor Andrew Cuomo's Airport Advisory Panel ("Panel") will end the disjointed development that has long plagued the airport and will provide the guiding principles for a holistic master plan for LaGuardia. The Panel's recommendations call for more than just "brick and mortar" improvements; they call for the development of an airport that puts the passenger first and provides an experience befitting the State of New York.

The Panel's recommendations for the new airport include the following elements:

Airport Recommendations:

- Demolish Terminal B and thoroughly redevelop Terminals C and D to build a unified airport terminal to form a complete, efficient, and appealing experience for passengers;
- Build the new unified terminal closer to the Grand Central Parkway coupled with an island-gate system that will create nearly two miles additional aircraft taxiways for better aircraft circulation and reduce gate delays that are frustrating for passengers and expensive for airlines;
- Appealing and significant terminal architecture with high ceilings, expansive natural lighting, and openness, designed so passengers intuitively understand the airport's layout;
- An "airport of tomorrow" that embraces cuttingedge technology and includes best-in-class amenities:
- An Airport People Mover (APM) such as an

- automated tram to provide passengers with easier movement between the airport's terminals;
- Business and conference center capabilities to meet the needs of the business traveler and local businesses;
- A sustainable and resilient airport that minimizes energy consumption, reduces harmful emissions, and protects critical infrastructure to keep the airport operational during a flood event;
- A design that accommodates a potential hotel, as well as future growth at the airport; and
- A Marine Air Terminal that is better integrated with the main airport via an automated tram or some other form of reliable and convenient mode of transportation.

New ways to access the airport, including:

- An airport designed to accommodate a future AirTrain;
- Ferry service to the Marine Air Terminal and, if feasible, to the east end of the airport; and
- Improved road configuration that will reduce congestion on the surrounding roadway network, including the Grand Central Parkway.

Consideration for the Queens Community

- An adequate and accessible cell phone lot waiting area so cars and vans can wait at the airport to pick up arriving passengers instead of on neighborhood streets;
- Adequate parking capacity to ensure that surrounding neighborhoods and roadways are not used for airport parking;
- Consolidation of the ten rental car companies in and around the airport into a single facility either at, or within close proximity to, the airport;
- Extensive employment opportunities for the Borough of Queens, including increased participation by Minority and Woman owned and Airport Concession Disadvantaged Business Enterprises (M/WBE, ADCBE) in line with the Governor's goal of 30% MWBE participation; and
- Expansion of the Port Authority's Aircraft Noise program as appropriate throughout construction.

Ensuring Accountability and Progress

- Retaining a Master Planning Firm to advise the Port Authority and the Governor, to translate the Panel's recommendations into an implementable master plan, and to coordinate airport development for the long-term; and
- Establishing a new Port Authority Board Committee to oversee airport development and implementation of the master plan.

This report addresses LaGuardia Airport due to the unique nature of the airport, as well as the immediate need to synchronize the Panel's recommendations with the pending public private partnership construction project.

The Panel will issue recommendations concerning John F. Kennedy International Airport in the future.

Introduction

rom the Erie Canal and New York State's historic Parkways, to the Brooklyn Bridge, the Tappan Zee Bridge and the New York City subway system, New York State is home to some of the most critical infrastructure in the United States. The Empire State is often defined by its rich history of construction, and the infrastructure built in the last century has served as a foundation for the success that New York enjoys today. The continuation of that success depends on our ability to adapt to the ever-evolving demands of the 21st century economy. As Governor Andrew Cuomo noted, these demands are often stymied by 20th century infrastructure. However, large construction projects that many have dismissed or ignored because they are too challenging to undertake can be overcome, as the Governor has demonstrated with the replacement of the Tappan Zee Bridge.

New York's airports, particularly LaGuardia and John F. Kennedy International Airport ("JFK"), are no exception. Both airports play a critical role for the State of New York, but these facilities are unable to meet the demands of today, much less the needs of the future. Together, LaGuardia and JFK host an estimated 80 million travelers a year, directly provide nearly 50,000 jobs and support more than \$50 billion in economic activity in the region. Yet, many of the terminals at these airports were built more than 50 years ago during a different era in aviation travel and have not kept pace with today's passenger demands.

LaGuardia and JFK have been consistently rated among the worst airports in the world in terms of design and overall passenger experience. Skytrax, an independent firm that conducts international passenger surveys of the world's airports, placed JFK 60th in its list of the top 100 airports in the world and LaGuardia failed to even make the list of the top 100. Frankly, it does not require an international passenger survey to recognize the condition of New York's airports, particularly LaGuardia. As Vice President Joe Biden candidly noted, "If I blindfolded you and took you to LaGuardia Airport in New York, you would think, 'I must be in some third world country.'"

In order for New York and the region to remain competitive, we must rebuild and revitalize these critical international gateways for the 21st century economy. In January 2015, Governor Cuomo created a sevenmember Panel to advise the Governor and the Port Authority of New York and New Jersey ("Port Authority") on the modernization of LaGuardia and JFK airports to return these once great airports to the position that they deserve. These modernization efforts should move forward with the goal of delivering 21st century airports to the State, while maximizing job creation and economic opportunities throughout Queens and the region.

The Governor's airport advisory Panel is comprised of the following members:

Dan Tishman, Chair – Vice chairman at AECOM Technology Corporation and Chairman and CEO of Tishman Realty and Construction

Amanda Burden – Former New York City Planning Commissioner and a current principal at Bloomberg Associates

Tony Collins – President of Clarkson University, co-chair for the North Country Regional Economic Development Council, president of the Seaway Private Equity Corporation, and a member of NYSERDA's Technology & Market Development Advisory Committee

Jose Gomez-Ibanez – Derek C. Bok Professor of Urban Planning and Public Policy at Harvard's Kennedy School of Government and Harvard's Graduate School of Design

Queens Borough President Melinda Katz

Jackie Snyder – Special advisor for infrastructure for New York State and the former head of the NYC Design Commission

John Zuccotti – Co-chairman of Brookfield Office Properties and chairman of the board of directors of Brookfield Financial Properties LLC

In 1964, LaGuardia was called 'the air gateway to America . . .'









A 21st Century Airport for the State of New York: the New LaGuardia

... today it's been likened to a 'third-world airport.'













Profile of LaGuardia Airport

pened in 1939, LaGuardia borders Flushing and Bowery bays in the northwestern section of Queens, NY, and has been operated by the Port Authority under a lease agreement with the City of New York since 1947. Today, nearly 12,000 employees work at the airport serving nearly 27 million passengers, making LaGuardia the 20th busiest airport in the country. The airport contributes approximately \$16.3 billion in economic activity to the region, generating about 121,000 total jobs and \$5.9 billion in annual wages.

Twelve airlines serve nearly 70 non-stop destinations from 73 gates spread across four passenger terminals:

Terminal A – Currently known as the Marine Air Terminal, the terminal was designated as a historic landmark in 1995 and serves nearly one million passengers annually. The terminal has six aircraft gates and is over a mile from the main airport.

Terminal B – Opened in 1964, Terminal B has 35 aircraft gates, serves eight airlines, and accounts for about half of the airport's total passengers.

Terminal C – Opened in September 1992, Terminal C includes 22 aircraft gates operated by Delta Air Lines.

Terminal D – Constructed in June 1983 by Delta Air Lines at the east end of the airport, Terminal D has 10 gates and is connected by a pedestrian bridge to Terminal C.

Master Plan Design Competition

In October 2014, Governor Cuomo announced a master plan design competition for LaGuardia and JFK Airports to generate a vision on how to transform and modernize them for the 21st century. The Panel reviewed six submissions for LaGuardia that included a number of innovative concepts related to transportation access and overall airport design, which helped inform the Panel's final recommendations. The Panel narrowed down the field to three designs and has recommended that the contestants responsible for these designs¹ receive a one-time \$250,000 payment for their work related to the design competition.

¹SHoP Architects; Dattner Architects, and PRESENT Architecture PLLC

Guiding Principles For a Comprehensive Airport Master Plan

Airport Recommendations

A Single, Unified Airport

LaGuardia should look and feel like a single, unified terminal both from within and outside the airport complex. The airport should form a complete, efficient and appealing experience for passengers, with a consistent aesthetically pleasing facade worthy of a world-class airport serving one of the world's premier cities. Such a design should be viewed as a single airport complex with a visually attractive presence along the Grand Central Parkway.



The first phase of this unification experience should begin with the demolition of Terminal B and the construction of a new and larger 21st Century terminal with a new central departure and arrivals hall (central hall) located between the new terminal and Terminal C, linking the two terminals for the first time. Passengers arriving via a future AirTrain can disembark directly into the new central hall with its views of the airfield, affording passengers an appealing entry into the airport.

The Panel recommends that the Port Authority support and encourage Delta's strong desire to thoroughly redevelop Terminals C and D in parallel with the construction of the new Terminal B and Central Hall. The overall terminal design should follow the recommended framework of creating a continuous and unified airport.

Airside Improvements

The airport's current taxiways consistently operate at capacity during peak travel times, which results in increased gate delays that are frustrating for passengers and expensive for airlines. The Panel recommends moving the airport terminals closer to the Grand Central Parkway and adopting an islandgate system in which passengers access gates via a pedestrian bridge connecting the terminal headhouse to the gate area. This will enable the construction of additional taxiways underneath the bridges, which would improve aircraft circulation, reduce taxi-in and taxi-out times, reduce gate delays, and decrease harmful carbon emissions from idling aircraft.

Starting with the new Terminal B and Central hall, moving the terminal 600 feet closer to the Grand Central Parkway and adopting an island-gate system would increase taxiway circulation from 4,594 feet/0.9 miles to 11,026 feet / 2.1 miles – an increase of 2.4x compared to the existing terminal. With the redevelopment of Terminals C and D, moving these facilities closer to the Grand Central Parkway would yield a total taxiway increase of nearly two miles. These gains should improve overall airport efficiency





as aircraft can start up at any gate and have the flexibility to taxi in multiple directions.

LaGuardia Airport is also the only major airport in the region that does not provide non-stop service to the west coast. Due to a perimeter rule established by the Port Authority in 1984 to grow Newark Liberty International and JFK airports, flights into and out of the airport are limited to only 1,500 miles, with certain exceptions. The Port Authority is currently evaluating the impact (in regards to airport operations and passenger experience, as well as environment, noise and other issues) in modifying or lifting this rule. The Panel recommends that the physical redevelopment of the airport be carried out in a manner to be able to accommodate appropriate aircraft in the event the Port Authority Board amends the existing perimeter rule in the future.

Passenger-first Airport Experience With best in-class amenities

Passengers at the new airport should intuitively understand the layout of the airport and where they need to go upon entering the terminal and central hall. The airport should be designed with generous height and openness to ensure a sense of orientation for passengers and facilitate efficient movement throughout the airport.

The redesigned airport should be an "airport of

tomorrow" that can adopt and embrace innovations in technology that enhance passenger experience. Examples of these technological improvements include automated check-in, self service bag check-in, facial recognition and other technology to enhance and expedite security, and apps that provide passengers will real-time information on flight status, retail, dining, and entertainment options on-airport, as well as in Queens and throughout New York City.

New York is also home to some of the best dining and shopping experiences in the world and the new airport should be no exception. From global retail names to small, local, "only in New York" establishments, the airport should provide passengers a best in-class retail and dining experience that is worthy of, and unique to, the State of New York.

Airport People Mover

Today more than four million of LaGuardia's passengers connect to other flights at the airport. This number will only increase organically with the continued growth of air traffic. The number of connecting passengers could increase further if the Port Authority were to amend its perimeter rule for LaGuardia, which limits the distance of flights to and from the airport to only 1,500 miles, with certain exceptions.

The new airport should include an Airport People

Mover (APM), such as an automated tram, to move passengers throughout the airport in a convenient and accessible manner. The Panel recommends that future development provide optionality for a new APM and recommends the Port Authority conduct a comprehensive study to determine the best APM system for the airport. The type and size of the APM should be based on anticipated passenger demand.

Business and Conference Center Capabilities And Hotel

With more than 40 percent of passengers traveling for business purposes, the new airport should include business and conference center capabilities to meet the needs of its business-travelers, as well as local businesses that may want to utilize the services and amenities.

Common in most world-class airports, a boutique hotel located in the airport's new central hall would provide passengers with a convenient overnight option and conference facilities. The Port Authority should evaluate the merits of a 200-room boutique hotel to determine the hotel's potential contribution to the overall passenger

experience, the anticipated revenue generated by the hotel, and how it can be developed and branded in a way that complements rather than competes with the hotels nearby.

Marine Air Terminal

The Marine Air Terminal serves a small but integral role at LaGuardia with nearly one million passengers passing through the terminal each year. However, the Marine Air Terminal is over a mile from the main airport requiring passengers connecting to flights at other terminals at the airport to do so by car, bus, or airport shuttle.

While the Panel reviewed a number of alternative uses for the Marine Air Terminal, such as a new museum and other civic programs, it concluded that the terminal should remain an aviation facility in light of LaGuardia's limited footprint and the anticipated increase in passengers. However, it should be modernized in the same manner as the rest of the airport and it should be better integrated with the main airport via an automated tram or some other form of reliable and convenient mode of transportation, based on anticipated passenger demand.





Access to the Airport

Future Rail Connection

LaGuardia is the only major airport in the New York City region that is not accessible by rail. The New York Metropolitan Transportation Authority (MTA) has made a number of efforts to increase public transportation to and from the airport by select bus service, express bus service, and regular bus service. However, none of these options are as efficient and reliable as rail service. Passenger demand for rail to those airports that provide AirTrain service has done nothing but continue to increase. Since the AirTrain opened at JFK in 2003, ridership has increased 247 percent and last year saw a record ridership of 6.5 million passengers. At Newark Liberty International Airport, AirTrain ridership has increased by 137 percent since it was introduced in 2001.

The Panel supports Governor Cuomo's vision to bring rail service to LaGuardia from Willets Point. However, given the densely populated communities surrounding the airport, the Panel recommends that the Port Authority and the MTA work with the community to conduct the necessary evaluation and planning to determine the best method and route for rail service to LaGuardia that minimizes community impacts. In the interim, the Panel recommends that the Port Authority and the MTA expand upon existing service such as the M60 and Q70 bus service to increase public transportation access to LaGuardia.

Ferry Service

In 1987, Pan Am started a water taxi service from Wall Street (Pier 11) to the Marine Air Terminal. Delta Air Lines acquired the service and operated it until 2000. Since that time, with faster and more efficient watercraft, ferry service has become a more viable form of transportation.

The Panel recommends that the Port Authority explore a strategy for a ferry service operation to the Marine Air Terminal and, if feasible, to the east end of the airport as well. With the potential of integrating the Marine Air Terminal via an automated tram, the new ferry service would provide passengers with additional transportation options to travel to the airport.

Improved Road Configuration

The redevelopment of the airport presents an opportunity to address the confusing and inefficient road configuration, which results in inconvenienced passengers and increased congestion on both local roads and the Grand Central Parkway. The Panel recommends that the Port Authority develop a more efficient roadway configuration to improve traffic flow at the airport and reduce congestion on the surrounding roadway network, including the Grand Central Parkway, and, more importantly, on residential streets.

Community Issues

ore than 600,000 residents live near LaGuardia and approximately 50 schools are located within five miles of the airport. As important as it is that LaGuardia become an airport for the 21st Century, it is just as important that the Port Authority remain a good neighbor to the community throughout construction. In addition to the aesthetic benefits of a new, modern airport, the Panel has provided a number of recommendations to improve the quality of life for the communities surrounding the airport and the Borough of Queens:

Cell Phone Lot Waiting Area

Unlike most airports, including JFK and Newark Liberty International Airports, LaGuardia does not have an adequate cell phone lot for individuals waiting to pick up arriving passengers. As a result, cars and vans clog local streets and the Grand Central Parkway to wait for arriving passengers. The Panel recommends that as part of the modernization of LaGuardia the Port Authority identify a location for an adequate and accessible Cell Phone Lot Waiting Area at the airport.

Parking

The Port Authority is currently constructing a new 1,100-space parking garage on the east end of the airport, and a new 3,100-space parking garage will be carried out by the public- private partnership for the construction of the western half of the main airport. The Panel recommends that the Port Authority conduct a thorough analysis of the number of parking spaces needed to ensure an adequate level of parking such that the surrounding neighborhoods are not used as parking for the airport. Parking garages should be located within easy access to the Airport People Mover or within walking distance to the terminals. The new parking garages should also be incorporated into the overall architecture to ensure a unified design treatment of the entire airport complex.

Consolidated Car Rental

There are currently ten car rental companies that serve LaGuardia, but only two of these companies are located on the airport. The Panel recommends that the Port Authority explore how these companies can be consolidated into a single facility, either at or within close proximity to the airport, connected by a single mode of transportation. Such a facility would provide passengers with greater ease and access to a car rental company of their choosing and reduce congestion on the adjacent roadways.

Employment Opportunities

The construction of the new Terminal B with the central hall and the supporting infrastructure is estimated to be a \$4 billion project. The construction is expected to generate an additional 8,000 direct jobs and 18,000 total jobs. This project and future development of the airport presents significant employment opportunities for the Borough of Queens and the region, as well as opportunities for increased participation by Minority and Women owned and Airport Concession Disadvantaged Business Enterprises (M/WBE, ADCBE).

Building upon the Port Authority's long-standing commitment to M/WBE and ACDBEs, the Panel recommends that the Port Authority build upon the agency's strong track record of capacity building and contractor programs to ensure that airport development supports Governor Cuomo's goal of 30% MWBE participation. The Port Authority should ensure that development reaches a broad spectrum of businesses and job seekers reflective of the communities and region where the airport is located.

Aircraft Noise

In the spring of 2014, Governor Cuomo directed the Port Authority to undertake a series of comprehensive actions regarding aircraft noise at LaGuardia and JFK airports, such as establishing aviation community roundtables, implementing a Federal Part 150 noise study, and installing additional monitors to track aircraft noise. The Port Authority has established a new Aviation Noise Office staffed by a team dedicated solely to addressing noise issues at the airports. The Panel commends the Governor and the Port Authority for these actions and recommends that the Port Authority expand these efforts as necessary throughout construction of the new airport structure.



Hurricane Sandy flooded LaGuardia's runways, shutting down the airport for two days.

Sustainability

s an airport for the 21st century, the new airport should lead as a facility that is resilient and sustainable. The new terminal with its island-gate system is a more efficient terminal configuration that minimizes energy consumption. The new airside design and configuration should reduce taxi time and fuel burn. With an airport interior designed with generous height and openness, the airport should be able to better utilize natural light.

With its close proximity to Flushing and Bowery Bay, LaGuardia is also vulnerable to storm surge and flooding. That vulnerability and its larger impact were vividly demonstrated during Hurricane Sandy when approximately 100 million gallons of saltwater flooded the airport and shut it down for two days, impacting 250,000 passengers and causing an estimated economic loss to the region of roughly \$108 million. The Port Authority has implemented a number of resiliency and storm mitigation projects to protect vital infrastructure and improve flood control at the existing facilities. The new airport should be designed so that critical infrastructure is elevated and protected in order to keep the airport operational during a flood event.

Ensuring Accountability and Progress

project with the scale, importance, and challenge of the new LaGuardia requires a high level of oversight and coordination to ensure accountability and progress. The Panel recommends that the Port Authority issue a request for proposal (RFP) to retain a Master Planning Firm to advise the Governor and the Port Authority, to translate these recommendations into an implementable master plan, and to coordinate overall airport development for the long-term. The Panel understands that the Port Authority intends to move

forward with this recommendation within the next 60 days. The Master Planning Firm should ensure that each part of the airport's development is undertaken consistent with the overall vision of the Panel, as well as provide the necessary additional framework to the Panel's recommendations.

The Panel also recommends that the Port Authority establish a new committee of the Port Authority Board comprised of Port Authority Commissioners to oversee the project's development and ensure accountability.