

## On a Wing and a Prayer

### Highway Gridlock, Antiquated Cargo Facilities Keep New York's Airports Grounded

John F. Kennedy International Airport and LaGuardia Airport have long been among the city's most dependable economic assets, providing nearly 50,000 jobs for local residents and valuable revenue for hundreds of city businesses. However, largely because airport managers and city and state officials have neglected their infrastructure needs over the years, the two airports have been losing their competitive edge to other airports.

Over the past decade, both airports have experienced slower growth in passenger travel than nearly every other major American airport. And JFK, which was the world's premier cargo hub until 1990, now ranks fifth in international freight traffic. In addition, nearly a dozen airlines and smaller freight firms have recently moved at least part of their cargo operations out of Queens.

While important steps are now being taken to improve the airports—LaGuardia's main terminal was recently expanded and Kennedy is in the midst of a major overhaul—these redevelopment projects do not adequately address a number of systemic problems, like chronic congestion on the highways leading to the airports and a shortage of modern cargo facilities at JFK. Unless these issues are immediately addressed, the airports will continue to lose market share and miss out on a significant opportunity to participate in

# “Without better access, the airport is going to die very slowly. Kennedy won’t be a competitive airport

As part of a continuing focus on strengthening New York’s most vital industries, the Center for an Urban Future conducted a ten-month study of the economic importance of the city’s two airports—focusing special attention on the air cargo industry at JFK—and the obstacles to their future growth. The Center interviewed dozens of people working in aviation-related businesses, both on and off the airports, as well as airport managers, aviation experts and local elected officials.

In at least one respect, the findings were not surprising: The city’s two airports are much more than simple jumping-off points for travelers.

More than 47,000 people work at the two airports in jobs ranging from airline mechanics and ticket agents to food preparation workers and baggage handlers. Another 270,000 airport-related jobs—including freight forwarders, limousine drivers, travel agents and truck drivers—are scattered throughout the city. The air transportation industry accounts for nearly nine percent of all jobs in Queens, making it the borough’s second largest industry, behind health care. While some airport jobs do not pay especially well, wages in Queens’ air transportation sector averaged \$41,200 in 1998, well above the borough’s average of \$32,600.

The airports’ combined economic impact on the region is estimated to be \$30.1 billion. Fifty-five million passengers fly in and out of the two airports every year, and many of them come from out-of-town and spend money on taxis, restaurants, hotels and other local businesses. The city also benefits from Kennedy’s status as one of the world’s leading cargo hubs. Its vast network of freight companies not only process goods originating in, or destined for, the

York area, but also handles products coming from and going to cities up and down the Eastern seaboard.

The airports have many competitive advantages. LaGuardia’s proximity to Manhattan, for instance, makes it a natural hub for domestic passengers, particularly business travelers. And Kennedy still has more international passengers than any other airport in the U.S., one of the reasons why it remains a premier cargo hub (most freight is shipped in the bellies of passenger aircraft). JFK’s cargo operations are strong also because the airport boasts an unmatched network of experienced cargo professionals who know how to expedite freight shipments through the often sticky customs process.

But despite these advantages, both city airports have suffered a series of setbacks in recent years:

\* Over the past eight years, Kennedy has slipped from the seventh to the 14th busiest American passenger airport. During the same period, from 1991 to 1999, LaGuardia has gone from the 15th busiest passenger airport in the U.S. to the 20th busiest. Newark is currently the 11th busiest passenger airport.

\* Between 1991 and 1999, passenger airline traffic grew by 46 percent at Newark; 41 percent at Los Angeles International Airport; 27 percent at Miami International Airport; 23 percent at Chicago O’Hare Airport; and 106 percent at Atlanta Hartsfield International Airport. During the same period, it grew by just 16 percent at both JFK and LaGuardia.

\* Kennedy handled more cargo than any other airport in the world until 1990. Now it is fifth in the world and third in the U.S.

\* Between 1991 and 1999, cargo traffic increased by 126 percent at Newark International Airport; by 72 percent at Los Angeles International Airport; by 71 percent at Miami International Airport; and by 50 percent at Chicago O’Hare Airport. During the same period, cargo traffic at Kennedy grew by a modest 37 percent.

\* Between 1989 and 1999, Newark added 10,718 new on-airport jobs, a 79 percent spike. During the same time, employment at JFK declined by 3,578 jobs, a nine percent drop. At LaGuardia, employment increased by 1,204, or 14 percent.

To some extent, the airports' recent decline can be attributed to changes in the airline industry. In the past, most international flights originated in a few major airports, like Kennedy, and travelers from smaller cities invariably had to make a connection to one of them for overseas flights. Thanks to technological advances, smaller aircraft can fly longer distances and cities that would have trouble filling up seats on large 747s now offer regular overseas flights. As a result, airports in Chicago, Miami, Atlanta and Newark now compete with JFK for international passengers and freight business.

Nevertheless, many of the airports' problems could have been averted if airport managers and local government officials had aggressively planned for the airports' future growth. Instead, for much of the past two decades, the airports' importance has been taken for granted, their infrastructure has been neglected and their needs have been ignored.

To begin with, no recent mayor or governor has even attempted to address the mounting delays on the highways in Queens and Brooklyn that lead to the airports. Airlines, passengers and civic groups have been calling attention to chronic congestion on the Van Wyck Expressway and the Belt Parkway—the main routes to Kennedy—for more than 20 years, but there have been no significant improvements. As a result, JFK today is probably the least accessible airport in the U.S. The failure of government officials to deal with this problem has significantly affected the airport's competitiveness and caused it to lose both passengers and cargo business.

The unpredictability of the commute to Kennedy—getting there from Manhattan by car or taxi can take as little as 30 minutes or as much as two hours, depending on traffic—has caused an increasing number of New York-based travelers to fly out of Newark Airport in recent years.

Mounting traffic problems in Queens pose an even greater threat to the future of New York's air cargo industry, a sector of the city's economy that shouldn't be taken lightly—the cargo industry accounts for 44 percent of all employment at Kennedy and 45 percent of total wages earned at the airport.

Because the Belt Parkway is closed to commercial traffic, the hundreds of trucks that drop off and pick up cargo shipments at Kennedy every day are

with just one option to reach the airport from most parts of the city: the chronically crowded Van Wyck Expressway. The notorious delays on this overburdened route—and the additional shipping costs that ensue from the delays—have caused several airlines to relocate much or all of their freight business in the New York area from Kennedy to Newark. For instance, most of the major overnight freight companies, which thrive on speed, have greatly reduced their presence at JFK.

The delays have also prompted several other cargo carriers to shift freight business to more accessible airports in other parts of the country. Ten months ago, for instance, Nippon Cargo Airlines decided to shift much of the freight it ships between Japan and the East Coast from JFK to Chicago's O'Hare Airport.

"The biggest problem that Kennedy has is whether its status as one of the premier cargo airports can continue," says David Plavin, president of the North American chapter of Airports Council International. "Whether it can grow the way cargo is growing in general is going to depend on whether or not trucks can get in and out of the airport more easily than they can right now."

Just as city and state officials have long neglected to address infrastructure needs outside the airports' gates, the Port Authority—the bi-state agency that manages JFK, LaGuardia and Newark airports—has done little to invest in, or even promote, needed infrastructure projects at the airports for much of the past two decades. As a result, the passenger terminals and cargo facilities at both city airports are, on average, are older, less attractive and less efficient than similar structures at most other airports.

In particular, there is a troubling shortage of modern cargo facilities at and around the airport. According to a recent analysis by a national airport developer, Kennedy is short air cargo warehouse space by roughly two million square feet. Moreover, the majority of existing cargo facilities at the airport are more than 25 years old; in fact, several were built prior to 1960. Space is so tight and modern facilities in such short supply that a handful of airlines at the airport run their cargo operations out of lofty hangars—buildings

that were originally designed to house airplanes, not cargo. These buildings lack the time-saving features found in more modern freight facilities.

In addition, real estate prices at the airport are significantly higher than at most other airports in the nation. When services like utilities and security are factored in, rental prices at JFK can run as much as \$35 a square foot, often for sub-par space. In contrast, the most expensive cargo facility at Miami International Airport—a state-of-the-art building that opened three years ago—rents for \$14 a square foot.

In recent years, the combination of high real estate prices and the lack of modern facilities has forced at least a half-dozen airlines to relocate some or all of their operations to cheaper sites in Westchester, Long Island and Newark. Others, like Polar Air Cargo, recently decided to expand their operations elsewhere simply because they weren't able to find space at the airport.

Escalating real estate prices have forced an even greater number of freight forwarders and customs brokers out of the city. These businesses are essential to Kennedy's operations, but because most are small, they are particularly vulnerable to cost pressures like real estate. For years, most freight forwarders and customs brokers that could no longer afford to rent space at the airport moved to Springfield Gardens, a Queens neighborhood that is directly across Rockaway Boulevard from JFK's cargo areas. Today, however, space is just as tight in Springfield Gardens as it is on the airport. As a result, several dozen of these businesses have recently relocated to newer industrial parks in Nassau County.

To its credit, the Port Authority is now presiding over an infrastructure modernization program at JFK. Airlines there have committed \$5.1 billion to redevelop all nine passenger terminals and the Port Authority has channeled federal grants and its own funds to build new roads and parking garages. And in contrast to the inaction of city and state officials on the issue of access, the Port Authority is now developing a much-needed on-airport rail system to connect passenger terminals with the Long Island Railroad station in Jamaica, Queens and investing additional funds to expand ferry service to LaGuardia.

These are all important projects that will help make the airports more passenger-friendly. However, the bulk of the new developments at JFK only benefit the airport's passenger areas. The Port Authority has not invested the same energy or money to upgrade Kennedy's archaic and overburdened cargo areas. Despite all of the problems on the airport's cargo side, the Port Authority has no master plan to replace obsolete freight buildings with more modern structures and ensure that the airport's existing cargo facilities are adequate to handle expected growth in the freight industry. And while other leading cargo hubs, including airports in Miami and Atlanta, have aggressively helped to develop modern, affordable freight facilities in recent years, the Port Authority has stubbornly refused to even pay for the cost of demolishing obsolete warehouses and hangars.

Finally, infrastructure and real estate are by no means the only issues crucial to the long-term strength of the city's aviation industry. Another big obstacle to the industry's future growth is the growing problem of gridlock in the skies above New York. The region has the most congested air space in the world, and things have only been getting worse. Continued delays may cause airlines to add new service and make major capital investments elsewhere.

Technology to ease air traffic congestion is available, but the Federal Aviation Administration (FAA) bungled previous efforts to adopt newer air traffic control systems and, in recent years, Congress repeatedly refused to allocate adequate funding for the agency to get the job done. In March, Congress finally passed a bill that includes funding for this project. However, the same bill also allows for hundreds of new flights on small regional jets at LaGuardia and JFK, which will only add to the delays.

To be sure, Kennedy and LaGuardia are still world-class airports. Yet, many problems must be overcome to ensure that these enormous job and revenue generators stay in stride with their competitors and grow. With airline traffic and cargo shipments projected to increase substantially in the years ahead, the Port Authority, City Hall and the airlines must come together to address the industry's pressing needs.

### Top 15 American Passenger Airports 1991 vs. 1999

Over the past eight years, New York's airports have grown at a snail's pace compared to most other American airports. During this time, Kennedy dropped from the seventh busiest American passenger airport to the 14th busiest and LaGuardia plunged from the 15th busiest to the 20th busiest.

1991			1999		
Rank	Airport	Passengers	Rank	Airport	Passengers
1.	Chicago	59,257,551	1.	Atlanta	78,092,940
2.	Dallas/Ft. Worth	48,198,208	2.	Chicago	72,609,191
3.	Los Angeles	45,668,204	3.	Los Angeles	64,279,571
4.	Atlanta	37,915,024	4.	Dallas/Ft. Worth	60,000,127
5.	San Francisco	31,774,845	5.	San Francisco	40,387,538
6.	Denver	28,285,189	6.	Denver	38,034,017
7.	<b>New York (JFK)</b>	<b>27,441,937</b>	7.	Minneapolis-St. Paul	34,721,879
8.	Miami	26,591,415	8.	Detroit	34,038,381
9.	Newark	23,055,537	9.	Miami	33,899,332
10.	Honolulu	22,224,595	10.	Las Vegas	33,669,185
11.	Phoenix	22,140,437	11.	Newark	33,622,686
12.	Boston	21,547,026	12.	Phoenix	33,554,407
13.	Detroit	21,309,046	13.	Houston	33,051,248
14.	Minneapolis-St. Paul	20,601,177	14.	<b>New York (JFK)</b>	<b>31,700,604</b>
15.	<b>New York (LGA)</b>	<b>20,545,060</b>	15.	St. Louis	30,188,973
			20.	<b>New York (LGA)</b>	<b>23,926,923</b>

Source: Airports Council International

### Top Ten American Cargo Airports 1991 vs. 1999

Over the past eight years, Kennedy has fallen from the busiest American cargo hub to the third busiest. It has been leapfrogged by Memphis, the home base of FedEx, but it has also been surpassed by Los Angeles International Airport. Until this year, it also trailed Miami International Airport.

1991			1999		
Rank	Airport	Tons Carried	Rank	Airport	Tons Carried
1.	<b>JFK</b>	<b>1,257,069</b>	1.	Memphis	2,412,907
2.	Los Angeles	1,141,196	2.	Los Angeles	1,964,429
3.	Chicago	987,281	3.	<b>JFK</b>	<b>1,728,203</b>
4.	Miami	967,241	4.	Anchorage	1,657,633
5.	San Francisco	606,008	5.	Miami	1,651,087
6.	Atlanta	599,674	6.	Chicago	1,481,671
7.	Anchorage	587,817	7.	Louisville	1,440,395
8.	Dallas/Ft. Worth	547,008	8.	Newark	1,093,642
9.	Newark	483,622	9.	Indianapolis	1,041,810
10.	Dayton	441,418	10.	Dayton	895,255

Source: Airports Council International

# Getting to JFK: A Bumpy Road

No matter how many billions of dollars are invested to rebuild terminals and make other infrastructure improvements at Kennedy, the airport's future growth will be limited unless local public officials make it more easily accessible.

For decades, traffic tie-ups on the Van Wyck Expressway and the Belt Parkway, the two main highways leading to the airport, have been the rule, not the exception. The unpredictability of the commute—cab rides from Manhattan can take as little as 30 minutes or as much as two hours—makes it nearly impossible for travelers to know how early they must leave their home or office to catch a flight.

Unlike in most other major international cities—including London, Paris, Tokyo, Hong Kong and Rome—airport users in New York do not have the option of taking an express train to the airport. Airport users can get to JFK by taking the A Train to Howard Beach and connecting to a shuttle bus to the terminals, but the train ride alone takes 60 to 75 minutes and service is infrequent—trains come just every 15 minutes.

More than being a frustration, Kennedy's access problem is one of the main reasons it has lost passengers to Newark and freight business to other major airports.

The difficulty of getting to JFK has convinced thousands of passengers who used to fly in and out of that airport to instead book flights through Newark. (The number of passengers at Kennedy grew by just 16 percent over the past eight years, compared with 46 percent growth at Newark.) Continental Airlines, the dominant airline at Newark, has even alluded to New Yorkers' aversion to the traffic delays in Queens in its local advertisements, not-so-subtly offering Newark as the convenient alternative to JFK. Ironically, JFK is actually closer to Midtown Manhattan than is Newark—Midtown is 15 miles from JFK and 16 miles from Newark.

The lack of easy access to JFK has had an even greater effect on the airport's cargo operations. It is why overnight freight giants United Parcel Service and FedEx, whose businesses are based on quickly getting packages off planes and to their customers, have shifted most of their local business to Newark. FedEx and UPS

transported a combined total of 720,000 tons of freight at Newark during the year ending in April 2000, but only 187,000 tons at JFK. (FedEx, UPS, Airborne Express and Emery Worldwide—leading overnight freight firms—are all among the top eight cargo carriers at Newark, but only FedEx is even among the top 20 cargo carriers at JFK.) This access problem is also forcing other cargo carriers to re-evaluate whether JFK is worth the hassle.

Cars and taxis have the option of getting to the airport via the Belt Parkway, an east-west artery that runs along Brooklyn's coastal edge, but this route is off-limits to all commercial vehicles. As a result, virtually every truck carrying cargo to or from the airport is forced to use the overcrowded Van Wyck Expressway, a three-lane highway that not only serves most vehicles heading to the airport, but also the majority of cars and trucks heading to Southeastern Queens and parts of Nassau County. (Airport users account for about 15 percent of vehicles using the Van Wyck).

Peter DeBenigno, who runs a trucking company with more than 20 rigs coming in and out of JFK a day, says that constant delays on the Van Wyck have caused his truckers to miss delivery deadlines, which is costly to his clients and bad for business. "Customers are paying top dollar and if they miss a flight more than once, they'll go to other airports," he says.

Six months ago, Nippon Cargo Airlines shifted a good chunk of the freight it ships between Japan and the U.S. from JFK to Chicago's O'Hare Airport. Its regular flights from Japan still make the same route to the U.S.—stopping in Anchorage, Chicago and JFK—but much of the freight on those flights no longer goes through Kennedy. Much of the cargo it ships to or from cities outside the New York region—like Charlotte and Atlanta—is now shipped through O'Hare.

"It used to come here, but we decided that it's easier and less costly to go through Chicago," says Pete Diefenbach, Nippon Cargo's assistant director

sales and marketing. “It’s primarily because of access. In fact, there’s probably no other reason.”

Diefenbach says that the diversion hasn’t yet forced the airline to cut jobs at JFK. But he also says, “It’s probably resulted in slower growth than we had planned at Kennedy and larger growth in Chicago.”

The lack of highway options for trucks is also undercutting one of the airport’s natural advantages: its network of experienced freight forwarders and customs brokers. This competitive advantage is the reason that a large amount of cargo that is flown into Newark Airport is actually trucked to JFK to be processed by forwarders and shepherded through customs. Continental Airlines, for example, doesn’t fly a single plane into Kennedy, but it sends much of the freight that comes into Newark—about 30 trucks a day—to JFK. But because no east-west highway to Kennedy through Brooklyn is open to commercial vehicles, trucks originating from Newark cannot take the most direct route to Kennedy, through Staten Island via the Verrazano bridge and the Belt Parkway. Instead, most are forced to take a much longer route up the New Jersey Turnpike, across the George Washington Bridge, along the Cross-Bronx Expressway and over the Whitestone Bridge, where they can finally get onto the crowded Van Wyck.

Making matters worse, the Van Wyck hasn’t been widened since it opened in 1950, though traffic in Eastern Queens has increased exponentially during this time. Just during the past five years, the number of vehicles using the Van Wyck each day at its busiest point—Jamaica Avenue—has increased by 19,000, or 12 percent.

A generation ago, JFK was one of the country’s only hubs for international air traffic. Freight coming from or going to Europe or Asia had to go through JFK. Today, airlines—and their clients—have more options. Cargo can just as easily be shipped through Miami, Chicago, Atlanta or even Newark and then taken by truck to destinations up and down the East Coast.

“Without better access, the airport is going to die very slowly,” says Jacques LeVaillant, a cargo specialist for Air France who has seen the traffic conditions gradually deteriorate during the 40 years he’s worked at JFK. “If we don’t do something to improve the roadways, Kennedy won’t be a competitive airport for cargo anymore.”

For things to change, it will take a fundamental

change in attitude and commitment by city and state officials.

The Port Authority is responsible for making improvements inside the airports’ boundaries, but it is up to the city and state to invest in off-airport infrastructure projects. Unfortunately, however, no recent mayor or governor has given more than lip service to improving roadway access to Kennedy. To be sure, there is no easy solution to the traffic problems and there would likely be significant community opposition to major highway construction. But the airport’s importance to Queens and the city should outweigh these concerns. Any plan to deal with this problem must start by increasing capacity on the Van Wyck. Adding new lanes will be difficult because of limited space surrounding the highway. But it is possible in some places. Some have also suggested the idea of double-decking the expressway, which would essentially double the highway’s capacity. Another possibility is to close some of the entry points to the Van Wyck between Jamaica and the airport. Doing this would speed up the flow of traffic, making it closer to being an actual expressway. Both of these proposals would face numerous hurdles and may, in fact, have too many adverse community impacts to deserve support. But, at the least, local transportation officials should carefully study them.

Another immediate step should be to open the Belt Parkway to a limited number of small commercial vehicles, which would allow courier vans and small delivery trucks to take the Belt parkway from the airport to Manhattan and Newark. This isn’t a panacea: it would only benefit a small number of freight companies and couriers that operate vans and very small trucks. But any way of getting vehicles to take an alternative route to Manhattan would provide much-needed relief to the Van Wyck. The Port Authority has endorsed this plan and the state Department of Transportation (DOT) is said to be supportive, but city transportation officials have withheld their crucial support.

While far-reaching roadway solutions have not been on the radar screen of city or state officials, the state DOT has begun to address the issue to some degree. It is in the process of implementing Intelligent Transportation System technology along the Van Wyck. This includes putting up cameras to allow DOT traffic engineers to better monitor the flow of traffic

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quickly respond to accidents and flat tires, adding message signs to alert motorists about upcoming traffic standstills, and placing stoplights on entrance ramps to prevent vehicles from entering the highway in a continuous stream.

The governor and state legislature should continue to support these efforts. Public officials must also step up their efforts to provide airport users with fast, reliable and convenient public transportation alternatives to the Van Wyck and the Belt Parkway. Fortunately, the Port Authority is in the midst of building a rail link to JFK and has committed some resources to expanding ferry service to LaGuardia (See "Big Splash," page 9).

In addition, the MTA is in the process of studying how to extend subway service to LaGuardia. Its current capital plan includes \$645 million to design the project and begin construction. However, a top MTA official interviewed by the Center doubts that there is enough political will to actually get this done.

These are all important steps in the right direction. But not everyone is convinced that they are enough to make a real difference. "It's going to help," says Air France's Jacques LeVaillant. "But it's a patch-up job. What's missing is someone with vision, like a Robert Moses, to find bold ways to improve the Van Wyck and significantly improve the flow of traffic."

## A Rail Alternative to the Van Wyck

The easiest way to alleviate traffic congestion on the Van Wyck Expressway and the Belt Parkway is to give airport passengers and employees a quick and convenient way of getting to Kennedy by train.

Fortunately, after years of talking about a rail link, the Port Authority is now building it. The \$1.9 billion Airtrain is expected to transport passengers from Penn Station to JFK in 45 minutes. Initially, Airtrain will link the airport with the Jamaica train station, where airport users can connect with three subway lines as well as several commuter trains and city buses. Financed primarily by the \$3 federal surcharge added to every passenger's plane ticket at JFK, Airtrain will stop at all nine passenger terminals, the long-term parking lots and the A train subway stop in Howard Beach.

Linking the airport by rail with Jamaica will clearly help reduce the number of cars and taxis on the busiest part of the Van Wyck. The on-airport part of Airtrain, which is slated to open next year, will also make the airport significantly more attractive to passengers and airport employees who need to get from one terminal to another or from a parking garage to a terminal. It will make a complete loop around JFK's terminals in eight minutes, a vast improvement over the current system of shuttle buses, which can take up to 45 minutes to circumnavigate the airport.

Still, the ultimate goal must be a one-seat ride

between JFK and Midtown. Without this, travelers with several suitcases may still opt to drive or take a cab rather than make a transfer from one train to another. Plus, after a \$1.9 billion public investment, it would be a huge disappointment to settle for a two-seat ride.

Since the trains on the new line will be compatible with subway tracks, Airtrain certainly has the potential to be a one-seat ride. But it won't happen without sustained political and financial support from the governor and the mayor. The problem is technical: there aren't enough tracks in the rail tunnels connecting Manhattan and Queens to handle the traffic generated by both Airtrain and regular subway service. To solve the problem, the MTA will need additional funds from Albany or City Hall to complete an unfinished rail tunnel under the East River.

Public officials should also study seriously the possibility of extending Airtrain to LaGuardia. With a mere 15 minute train ride separating the two airports, LaGuardia could become a domestic satellite terminal of JFK. This would allow the New York airports to reclaim many of the international passengers they



## A Chance to Make a Big Splash

A one-seat train ride between Manhattan and JFK and a subway link to LaGuardia may be years away from happening, but expanded ferry service to both New York airports could soon be a reality.

Ferries will never come close to transporting as many people to the airports as would a convenient rail link, but they do provide riders with a far more predictable alternative than the city's highways. And the more people that take them the fewer cars on the roads.

Unfortunately, the existing ferry service to LaGuardia—there is currently no ferry service to JFK—has not even begun to realize its potential. The Port Authority introduced ferry service to LaGuardia more than a decade ago, but today just 300 to 400 people use the service each day. The number of riders has increased sharply since NY Waterway took it over from another company in 1998, but there is clearly room to grow. Arthur Imperatore, Jr., president of NY Waterway, believes that with the right changes, his vessels could soon be carrying as many as 3,500 riders a day to and from the airport.

First, the service has to be more easily accessible to passengers who aren't flying on the Delta Shuttle. The ferries currently dock just behind the former Marine Air Terminal, now the home of the Delta Shuttle. Delta passengers can access the ferry landing area through a side door in the terminal. But there is no dedicated bus service to transport riders from the dock to other terminals. In addition, the ferries, which run hourly in both directions, are timed to coincide with the arrival and departure of the Delta Shuttle, making the service inconvenient for passengers arriving at different times.

Second, LaGuardia's ferry terminal must be improved. As it is now, the loading area is nothing more than a barge, without any shelter to protect riders from inclement weather. In addition, service should be better marketed. Few people who don't regularly fly on the Delta Shuttle even know about it.

Fortunately, both NY Waterway and the Port Authority appear to be committed to addressing these problems and expanding ferry service. The company is planning to add faster vessels that can get from Wall Street to the airport in 20 minutes, down from 30 minutes today. Once this happens, Imperatore says he would consider increasing the frequency of the service. Meanwhile, the Port Authority has budgeted \$5 million to build a new ferry terminal at the airport and \$10 million to enhance ferry landings on the East River at 34th, 60th, 78th and 90th Streets.

Still, more could be done. Either NY Waterway or the Port Authority should add a dedicated airport bus connecting all airlines with the ferry terminal. Once the service is improved, the ferry operator, the Port Authority, the city and the major airlines at LaGuardia should all undertake a marketing blitz to pitch the service to travelers.

The Port Authority should also continue to support fledgling efforts to add ferry service to JFK. Empire Waterlink, a New Jersey company, plans to introduce high-speed ferry service for both passengers and cargo between JFK and several locations in Northern New Jersey this fall. Down the road, the company hopes to add service between Manhattan and JFK.

Its plan to transport cargo over the water between JFK and Newark airports is a novel approach that deserves careful consideration. Chris Von Zwehl, the company's president and CEO, predicts that by the fifth year of service, his boats will be carrying 300 tractor trailers of cargo every day between Newark and JFK, in addition to 30,000 passengers a week.

The new service still has some considerable obstacles to overcome. Perhaps the greatest is that it will be difficult to convince airlines to move away from truck service, which is inexpensive and the industry standard. But if the service proves to be convenient, quick and affordable, it would present an attractive alternative for airlines that now send hundreds of truckloads of freight each day between JFK and Newark.

### Growth in Passenger Traffic : New York Airports vs. Other Major American Airports

	1991	1999	Change in #s of Passengers	% Change
JFK 16 %	27,441,937	31,700,604	4,258,667	
LaGuardia	20,545,060	23,926,923	3,381,863	16 %
Newark 46 %	23,055,537	33,622,686	10,567,149	
Chicago 23 %	59,257,551	72,609,191	13,351,640	
Los Angeles 41 %	45,668,204	64,279,571	18,611,367	
Miami 27 %	26,591,415	33,899,332	7,307,917	
Atlanta 106 %	37,915,024	78,092,940	40,177,916	

## Growth Forecast

Thanks to several years of economic expansion, airline traffic in the U.S. has increased for eight consecutive years. The FAA believes that this trend will continue at least through the end of this decade. New York's challenge is to ensure that a good amount of the industry's future growth occurs at JFK and LaGuardia.

A record 665 million people traveled on U.S. commercial airlines in 1999, but FAA officials are forecasting that the number of airline travelers will increase to more than one billion by 2011. Travel on domestic routes is expected to grow by 3.6 percent a year, reaching 880 million in 2011. But, perhaps more significant for the future of Kennedy is that the number of passengers on international flights to and from the U.S. is projected to increase at an even greater clip—5.1 percent a year, reaching 239 million in 2011.

Even greater growth is expected in the cargo industry. According to the FAA, cargo traffic should more than double between now and 2011. Domestic freight volume is expected to increase from 11.5 billion tons in 1999 to 21.6 billion tons in 2011, an increase of 5.4 percent a year. International freight

## High Value Goods, Low Quality Space

The lack of easy access to JFK isn't the only thing holding back the airport's cargo industry. The shortage of modern warehousing facilities at and around the airport is another reason Kennedy's longtime dominance in this important job-producing field is in jeopardy.

Kennedy has more square feet of cargo warehouses than any other airport in the U.S., but most of them are cramped, inefficient and inappropriate for the type of freight operations that are required today. While a handful of airlines have built new freight facilities at JFK over the past decade, most of the cargo buildings at the airport are more than 30 years old (See "Age-Old Problem," page 16). And a few airlines at Kennedy, including TWA, actually base their cargo operations in converted airplane hangars rather than in specially outfitted cargo warehouses. By all accounts, JFK is starved for new cargo facilities. According to one national airport developer, International Airport Centers L.L.C., JFK is short roughly two million square feet of cargo warehousing space.

Operating in obsolete buildings can prohibit companies from equipping their facilities with the high-tech sorting and handling systems that would allow them to greatly streamline the loading and unloading process. It also makes it difficult for companies to add modern cooling and heating systems required for many of the perishables, live animals and other fragile goods that are commonly shipped by air today. And it leads to the inefficient use of warehousing space, a key problem in an age where oversized goods—like cars, boats and even airplane wings—are increasingly shipped by air.

All of this limits companies' growth and affects their ability to compete with other airlines which have ultra-efficient cargo facilities. And it puts Kennedy at a disadvantage compared to other airports, where the same carriers have newer freight facilities.

Though the airport's freight warehouses are among the oldest and least efficient in the country, rental prices at JFK are higher than virtually every other American airport. According to real estate agents and airline officials, most cargo carriers

pay \$25 to \$30 a square foot to rent space at the airport. When utilities and common services, like parking and security, are included, rental costs can balloon to \$35 a foot. In contrast, airlines at the airports in Miami and Atlanta pay about \$14 a square foot to rent state-of-the-art warehousing space in the newest cargo facilities.

The combination of inadequate facilities and high rental prices has driven at least a half-dozen airlines off the airport in recent years. Some, like Air France, which moved to nearby Glendale, have stayed in the city. But others have moved most or all of their operations to Long Island, Westchester or New Jersey.

One of those companies, Swissair, moved its reservation center and headquarters staff—about 200 jobs—from JFK to Melville about five years ago. It left because its rent was going up dramatically, even though it was operating its office and cargo operations out of a hangar built in 1958. "I don't think Swissair would have left if it could have struck a favorable offer," says Patrick Grasso, who was Swissair's manager of properties and facilities at the time. "We hated to leave. But we had no choice."

Another company, Atlas Air Cargo, recently announced plans to move its entire office staff—295 employees—from JFK to Westchester. Atlas' decision to relocate was sweetened by a state grant, but airport insiders say the company was eager to leave because of Kennedy's high real estate costs.

The lack of affordable space at the airport has convinced others to grow elsewhere. Polar Air, a fast-growing all-cargo airline, had long planned to expand into a much larger facility at JFK. But it couldn't find the right space or the right price. As a result, Polar recently decided to build a new maintenance hangar in Scotland instead of New York (See "Polar Air," page 14).

There is even more pressure today on freight forwarders and customs brokers to move out of Queens. These businesses, which are crucial to the daily movement of freight at JFK, would all prefer to be located inside the airport's boundaries. But because most of these firms are small and short on capital, few can afford to pay the airport's going rents. Over the past few decades, all but 20 or 30 of the roughly 400 freight forwarders and customs brokers that do business at JFK have moved off the airport grounds—ultimately costing the city jobs and tax revenue.

Until recently, most of these small businesses relocated to Springfield Gardens when they could no longer afford to rent space at the airport. This Queens neighborhood was never intended to be a major commercial center and is perpetually bemoaned for its old buildings, narrow streets, poor drainage system, high crime rates and lack of parking spaces. But freight companies flocked here because it has the supreme advantage of being located just outside of Kennedy's back door, the next best thing to being on airport.

For the past couple of years, however, Springfield Gardens has no longer been an option for most growing freight companies. According to local businesses and real estate agents, there is simply no space available there. At the same time, a handful of newer industrial parks have been developed just across the Nassau County line in towns such as Valley Stream and Inwood.

In recent years, roughly 50 freight businesses have set up shop at the Hook Creek Industrial Park in Nassau County. Another dozen or so firms are located elsewhere in Nassau County. Most or perhaps all of these firms would have stayed in Queens if space were available. Just ask Tony Camilleri, who says that he relocated his freight forwarding firm to Hook Creek because it couldn't afford real estate prices at the airport. "On the airport, prices are just totally out of whack," says Camilleri, general manager of Adcom Express. "If I moved into the same kind of space inside the airport, it would cost me three times more than I'm paying now."

Moving to a place like Hook Creek isn't necessarily the end of the world for the owners of cargo firms, but it is often the end of a decent-paying job for workers who live in the city and previously

“Someone has to start thinking of this ahead of time instead of doing things piecemeal.”

depended on city subways and buses to get to work at JFK or in Springfield Gardens. Those without cars often have no way of getting to their employer's new office. In addition, the city loses because tax dollars now get paid to Nassau County, even though the firm's trucks continue to take a toll on city roads.

Mike McKay, an aide to U.S. Representative Gregory Meeks, whose district includes JFK and the neighborhoods in Queens that surround it, believes that many more firms will move to Nassau County unless the Port Authority and City Hall do a better job of encouraging the development of new cargo facilities. "Many of these cargo businesses have outgrown their current space. They don't want to go to Long Island or New Jersey, but unless they have adequate, modern space, they're going to have no other choice."

Ironically, there is actually plenty of room to build additional cargo facilities at Kennedy. However, the Port Authority has squandered opportunities to develop available land at the airport for much of the past decade. In general, the agency has taken a hands-off approach to new development. It doesn't tear down obsolete buildings or push for new developments—it simply waits for airlines to take the initiative. This strategy may finally be working on the passenger side of the airport; airlines are beginning to redevelop their passenger terminals. But airlines have so far been reluctant to invest substantial sums into their less profitable cargo operations.

In press releases and other documents, the Port Authority claims that \$600 million is being spent on "cargo facilities redevelopment" at Kennedy—all paid for by the airlines themselves. Even if this figure were true, it means that cargo projects account for a mere

six percent of the \$9.3 billion in redevelopment projects under way at Kennedy.

However, it appears that even this modest figure exaggerates the true value of current cargo development. When asked by the Center to break down the projects, the Port Authority listed eight cargo developments that cost a combined \$400 million and four planned developments that will account for the other \$200 million. But the eight recently constructed freight facilities are hardly new—four of the eight were built prior to 1995 and all but two were built before 1999. In addition, the agency includes Building 208 among its four future cargo developments. While this building was once tapped to be the site of a new Polar Air cargo facility, Polar could not come to terms with the agency and has since decided to expand elsewhere.

The Port Authority doesn't even have a master plan for developing vacant areas on airport grounds or replacing old facilities with new ones. (Agency officials say they are now working on one.)

"Believe me, there is plenty of space here," says one airline official who's worked at JFK for more than 30 years. "But someone has to start thinking of this ahead of time instead of doing things piecemeal. I don't know how you're going to develop anything without a master plan."

In contrast, officials at Miami International Airport commissioned a master plan in the mid-1990s as a way of dealing with projected growth in cargo traffic. The blueprint called for demolishing archaic cargo facilities and erecting 18 state-of-the-art facilities by mid-2001. Fourteen have already been built. In the past five years alone, MIA has opened roughly 1.4 million square feet of new cargo facilities. Another 1.5 million square feet of cargo buildings is now under construction.

In Atlanta, three new 100,000 square foot cargo buildings went up at its airport in 1998, all of which were paid for entirely with airport funds.

If the Port Authority does come up with a master plan, its first recommendation should be to demolish old, existing structures to clear up space for redevelopment. Last year, Northwest Airlines tore down two 85,000 square foot hangars in which it previously rented space and, in their place, erected one technologically advanced 85,000 square foot warehouse. The result was not only a more efficient building for Northwest, but also more ground that

now free for development by other airlines.

With limited infrastructure investments, the Port Authority should also take advantage of unused space at the airport. For instance, a 120-acre plot of land east of Runway Four has not yet been tapped for development. Though there are logistical problems with this site, the area could be made accessible by erecting a small bridge or tunnel connecting the site with the rest of the airport. While acknowledging the site's future potential, Port Authority officials told the Center that they have not given serious consideration to using this land to expand the airport's cargo operations.

Nearly a decade ago, airport advocates floated the idea of developing a cargo warehousing complex at the nearby, state-owned Aqueduct Racetrack. The Port Authority already owns roughly 20 acres at Aqueduct, a parcel it gained when Governor Cuomo turned it over to the Authority in 1992. And since Kennedy's long-term parking lots were once used to accommodate spillover traffic from the racetrack, there is already a bridge over the Belt Parkway connecting the airport with developable parcel at Aqueduct. The agency could tap this site to develop a new cargo center or could move its long-term parking lot to the Aqueduct site and develop a cargo complex at the airport's current parking lot. Unfortunately, this project, like many others, hasn't yet made it onto the radar screen of Port Authority decision makers.

On a more positive note, City Hall has recently begun to pick up some of the slack. Late last year, the city's Economic Development Corporation (EDC) selected a developer to construct four new 170,000 square foot cargo warehouses on a 28-acre site owned by the city that is adjacent to Springfield Gardens and a short ride from the airport's freight area. Local businesses and elected officials had been pushing the city to develop this site—known as Idlewild Park—as cargo warehouses for more than a decade. An earlier start could have prevented dozens of freight forwarders from relocating to Nassau County, but EDC deserves credit for finally giving life to this project.

This \$73 million project should provide an enormous boost to JFK's long-neglected cargo industry. Still, this important project should be the beginning, not the end, of an effort to address the space needs of freight companies at Kennedy.

### Growth in Cargo Tonnage: New York Airports vs. Other Major American Airports

	1991	1999	Change in % Cargo Carried	Change Cargo Carried
JFK	1,257,069	1,728,203	471,134	37 %
Newark	483,622	1,093,642	610,020	126 %
Los Angeles	1,141,196	1,964,429	823,233	72 %
Miami	967,241	1,651,087	683,846	71 %
Chicago	987,281	1,481,671	494,390	50 %
Atlanta	599,674	883,123	283,449	47 %

## Polar Air

Polar Air, one of the world's largest all-cargo airlines, has been itching to expand into additional space at Kennedy for several years. But because of a shortage of available space at the airport and the Port Authority's hands-off attitude towards new development, Polar Air remains in cramped quarters at JFK and recently announced plans to build a new maintenance hangar in Scotland, an expansion that company officials say could have occurred in New York.

Though not in the same league as major airlines, Polar Air has been growing rapidly since its formation in 1993. But it has been stuck in the same 20,000 square foot space in one of the airport's oldest buildings for about five years. A Polar Air official who spoke on the condition of anonymity says that the firm desperately needs larger warehousing space and additional room where Polar planes can load and unload freight. "The facility we're in is too small," says the official. "We need a facility where we could do maintenance work, park about five airplanes at once, and have a warehouse that is about three times as large as the one we have now."

But space at the airport is incredibly tight and no large parcels have recently come available. Major air carriers, like United and Northwest, have recently dealt with their own space needs by building new, stand-alone cargo facilities. But smaller companies such as Polar Air simply don't have the resources to put up their own buildings. Meanwhile, the Port Authority has no plans to spearhead new building projects.

A couple of years ago, Polar Air thought it had a way out of the situation. It attempted to move into an empty 100,000 square foot hangar that originally housed Pan Am's aircraft maintenance operations. Polar spent considerable sums preparing for the move, but the deal fell through when an environmental study discovered contaminants in the ground surrounding the facility.

Polar Air still hopes to grow at Kennedy, which is one of the company's largest hubs. But partly because it couldn't reach a deal for a larger facility at the airport, the company has inked a deal to build a new hangar in Scotland and move maintenance work there. "That's work that could have been done at JFK," says the Polar official. "The process for building things at Kennedy is a nightmare. In Scotland, the government got involved to support our development. They came to us and made things attractive."

# Miami Advice

The ongoing redevelopment projects at Kennedy have come together more or less by accident, the result of several major airlines separately deciding to build new terminals rather than as part of a careful plan. The story couldn't be more different at Miami International Airport (MIA), one of Kennedy's biggest competitors in the race to sign up new international passenger and cargo airline routes.

## What's in the Box?

More than 1.7 million tons of freight moves in and out of Kennedy every year—everything from tulips grown in the Netherlands and apparel made in China to fish caught in Miami and computers assembled in Japan. Many of these products make their way to Kennedy because it is the biggest cargo airport serving one of the most important consumer markets in the world. Much of the cargo passes through JFK simply because of its reputation as the world's best-run cargo airport.

Though the airport looks its age and is one of the nation's least accessible cargo hubs, Kennedy is widely praised by people in the industry, largely due to its size and its unmatched cadre of freight forwarders, customs brokers and airport officials—all with years of experience navigating the bureaucracy of federal agencies that oversee the import and export of goods.

At the heart of it all are freight forwarders—the intermediaries between manufacturers and suppliers and the airlines. For example, when a local computer retailer needs a bulk shipment of PCs from its Tokyo warehouse, it will contract with a freight forwarder at Kennedy to arrange the quickest possible delivery.

Also essential are customs brokers, who take care of the ordinarily frustrating task of expediting freight shipments through customs officials in both the U.S. and in other countries. Almost like lawyers for cargo, these brokers ensure that goods being shipped comply with local import and export laws and are cleared through customs in an efficient and timely manner.

In 1991, driven by projections that the volume of passenger and cargo traffic into Miami would significantly increase over the next two decades, MIA officials initiated a master plan to take the airport into the year 2010. The plan, which was approved in 1994, was meant to provide a long-term vision of the airport and serve as a guide for future development. It included everything from a new runway to infrastructure upgrades and expanded terminals. Unlike the current redevelopment at Kennedy, it also featured an impressive investment in the airport's cargo areas.

MIA is now in the middle its \$500 million "cargo facilities development program," which has included tearing down several old cargo buildings and will ultimately result in the development of six additional warehouses. When this project began in 1992, cargo businesses at MIA were operating out of buildings that were even older and more inefficient than the ones at Kennedy. After all, the Miami airport opened in 1928, 20 years before Kennedy opened. But MIA officials realized that they had to sufficiently expand and modernize the airport's cargo facilities to accommodate expectations that air freight traffic at the airport would more than double between 1991 and 2010.

Nearly three years ago, as part of its master plan, MIA officials completed construction of a massive 600,000 square foot cargo warehouse that, because of its U-shaped design, has enabled the airlines that occupy the building to load and unload their freight in less time. Its modern design allows as many as 13 aircraft to pull up to the facility's cargo bays at the same time. Though the airport paid for this construction project on its own, with local and federal funds, the facility

completely full. With so much demand for new cargo facilities at the airport, there was no risk that the space would not be rented out. And the building's rents—roughly \$14 a square foot—are at least \$10 a foot cheaper than what airlines at Kennedy are paying for significantly older and substantially less efficient space.

The incredible success of this and other agency-initiated freight projects has led to the development of several other new cargo facilities by individual airlines. In the past five years alone, MIA has opened more than 1.4 million square feet of new cargo facilities. Adjacent to the 600,000 square foot cargo facility erected by airport officials, several airlines—including United and LanChile—are putting up another enormous, U-shaped cargo building. In addition, American is building a sizable addition to its

c u r r e n t

warehouse and FedEx plans to erect a 150,000 square foot facility that will allow the delivery giant to relocate a good part of its South American service from its Memphis headquarters to MIA. When all is said and done, its cargo program will have resulted in the construction of 18 new buildings.

MIA is similar to Kennedy in that there is not a significant amount of empty land on which new buildings can be developed. Yet, all of the new cargo facilities at the Miami airport have been built on sites where old warehouses and hangars once stood. At Kennedy, few cargo facilities have been modernized because the Port Authority has failed to create a plan for the future growth of the airport's cargo areas and refused to set an early pace for development by tearing down obsolete buildings.

### An Age-old Problem

21 of the 35 cargo buildings at Kennedy are at least 28 years old. Most of these outdated structures are inefficient for the rapid movement of freight. Some are empty but so old and outmoded that it is unlikely they will ever be occupied.

Building	Status	Year Built
Hangar 3	Vacant	1955
Hangar 4	Maintenance	1955
Hangar 5	Vacant	1955
Hangar 6	FedEx	1955
Hangar 12	TWA	1955
Building 80	Freight forwarders/Customs brokers	1955
Building 81	Vacant	1955
Building 83	Air France	1955
Building 84	El Al/UPS	1955
Hangar 15	Alliance Shippers	1958
Hangar 16	Evergreen Air	1958
Building 86	Air India/Air Pakistan	1961
Building 87	KLM/Polar Air/Aer Lingus	1961
Building 66	British Airways	1963
Building 67	Delta	1963
Building 260	Korean Air	1966
Building 208	Vacant	1970
Building 123	American	1971
Building 261	Lufthansa	1971
Building 263	DHL/Asiana	1971
Building 262	FedEx	1972

Source: Port Authority of NY & NJ



# Space Jam: Gridlock in the Skies

On top of the need to alleviate traffic tie-ups on the highways in Queens, New York's airports have to overcome an equally sticky problem: Congestion in the skies above the city.

In recent years, the city's airspace has become so congested that it is hampering the airports' ability to add flights and grow. Airline passengers in the New York region have experienced a noticeable increase in flight delays and cancellations—JFK, LaGuardia and Newark are all among the nation's 10 most-delayed airports. In addition, flights originating from or destined for the area's airports take much longer than they should; the FAA estimates that flights between New York and Washington should take 38 minutes, but airlines now schedule more than one hour for this route.

"The delay problem facing our industry is horrendous nationally, but it is particularly bad in New York," says Jack Shelly, executive director of the Queens-based Aviation Development Council, an industry-funded non-profit.

It's not difficult to understand why New York takes the cake when it comes to delays. The region has the most crowded air space in the nation. Between its three major commercial airports—JFK, LaGuardia and Newark—and four other growing airports—Teterboro (in New Jersey), Westchester (in White Plains), Stewart (in Westchester) and MacArthur (in Long Island), the area is inundated with more than 4,400 flights a day. In addition, the skies over Manhattan are also filled with numerous helicopters and the region is in the flight path of planes flying up and down the busy Northeast corridor.

The problem wouldn't be so bad if the government-run air traffic control (ATC) system had kept pace with the remarkable growth in airline travel. However, the FAA still uses the same antiquated air-traffic control system that it has used since the early days of commercial airline travel. In 1997, the National Civil Aviation Review Commission (NCARC), an investigative body set up by Congress, warned that continued reliance on the current outdated navigational system "will bring our

nation's aviation system to gridlock soon after the turn of the century."

Technology currently exists to move from the current land-based ATC system to a more efficient, satellite-based global positioning system. Such a system would permit planes to fly safely at closer distances to one another, cutting down on travel times and allowing more landings per hour at crowded airports. Robert Poole, Jr., director of transportation studies at the Reason Public Policy Institute, has written that taking maximum advantage of new technologies, like the global positioning system, could produce up to a 50 percent increase in hourly capacity of airports like LaGuardia. In addition, says Poole, adding a new type of radar system at JFK—a precision runway monitor—could substantially speed up operations at that airport during poor weather.

Up until now, however, the FAA has bungled efforts to update its air traffic control system, wasting billions of dollars in the process. Just as important, Congress has consistently failed to provide the FAA with the resources it needs to design, test and implement a new system. In both 1998 and 1999, Congress failed to agree on a package of funding for the FAA. As a result, the agency's budget remained steady during these years even though it had to allocate more money for safety inspections, air traffic controllers and other needs due to the surge in air traffic. That meant less money could be spent on improving the ATC system. In addition, Congress has made a tradition of raiding the Aviation Trust Fund as a way to plug holes in the federal budget and pay for non-aviation-related programs without raising taxes. The trust fund, whose proceeds come from a \$3 surcharge on each airline ticket, was originally intended to be a dedicated source of financing for aviation infrastructure improvements, like ATC modernization and the construction of new runways.

## A Tough Bill to Swallow

Earlier this year, Congress finally enacted legislation giving the FAA sufficient funding to combat the mounting delays at airports across the country. Unfortunately, the same bill included a provision that may create even more delays at LaGuardia and Kennedy.

The bill, known as AIR 21, lifts the 30-year-old cap on the number of flights during peak periods at the two New York airports, theoretically allowing an unlimited number of smaller, regional jets to fly in and out. Though this provision of the bill was aptly designed to provide more flights—and lower fares—to underserved markets in small cities like Syracuse and Rochester, it will likely lead to more congestion in New York's already clogged airspace.

Airlines have already applied for more than 600 new flights at LaGuardia. Only about a third of these requests will be granted because of the airport's limited capacity. But until the region's air traffic system is substantially redesigned, even a modest increase in flights at LaGuardia will lead to more delays at both New York airports, which share the same airspace.

Fortunately, some changes are afoot. In early March, the FAA and the aviation industry launched a new program to improve the flow of air traffic during severe weather. This should be helpful since 68 percent of last year's airline delays were attributable to bad weather. Also in March, both houses of Congress finally agreed on a federal budget bill that increases aviation spending by \$10 billion over three years. The bill gives airports the option of raising additional funds by increasing the ticket tax from \$3 to \$4.50 and, importantly, it removes the money raised from this surcharge—the Aviation Trust Fund—from the government's general operating fund.

Thanks to the recent Congressional allocation, the FAA also has begun to undertake a major airspace redesign. The agency expects to unveil its new model for the New York region's airspace in January, at which time it will begin a mandatory public review process.

While these developments are heartening, it is increasingly clear that more fundamental changes are needed to ensure that the ATC adapts to increasing air traffic demand in the future. The NCARC report, for instance, concluded that the FAA "lacks the organizational, management and financial wherewithal to keep pace with the dynamic aviation community" and that "the present system of federal budget regulation is inappropriate for a system controlling commercial operations that needs to be driven by demand for service."

Many aviation experts argue persuasively that the FAA should turn over control of the ATC to a private, user-funded corporation, leaving the FAA to continue as the industry's safety regulator. Canada, Australia, the U.K., Germany and more than a dozen other countries have done this with success. The corporations running the ATC system in these countries, most of which have been set up as non-profits, are typically funded from fees and charges levied on its users—namely, airlines and aviators. In addition to being accountable to its customers, such a system is able to fund technology improvements by issuing long-term revenue bonds based on the revenue stream from user fees and charges.

Whether or not the management of the ATC is privatized, there must be a concerted effort to hire additional air-traffic controllers to staff the control centers in New York and train the local controllers to use the new system. "If you improve the technology, you have to improve staffing levels to take advantage of that technology," says David Plavin, president of Airports Council International-North America and a former Port Authority executive.

In April, officials at San Francisco International Airport took a novel approach to reducing delays there. They asked the FAA for permission to force United Airlines, the airport's leading carrier, to eliminate many of its propeller-plane flights. Under pressure, the airline

recently agreed to reduce flight delays there by one-third, by scaling back the number of flights and rescheduling some flights to off-peak hours.

The Port Authority could exert similar pressure on major carriers in New York, particularly at LaGuardia, where airlines are known for scheduling several domestic flights a day on small aircraft to a handful of cities on the East Coast. While this frequent service presents passengers with more travel options, it would be better if airlines offered fewer flights on larger aircraft.

Ironically, Amtrak could give the city's airports a boost by offering high-speed train service from the city to Boston and Washington, D.C. Train service that truly rivals the plane in travel time would prompt many travelers to switch from the air shuttle to the train.

Finally, the Port Authority should consider the idea of building a new, third parallel runway at Kennedy. According to Bill Puckhaber, a former president of the JFK Chamber of Commerce and current publisher of Kennedy-based Airport Press,

airport's continued growth in the long run. Doing so, he says, would allow the airport to use two runways simultaneously for arriving jets, freeing up a third to be used strictly for departures.

Airports in Miami, Atlanta, Philadelphia and Phoenix are either in the process of building new, third parallel runways or have plans to add them. Boston and San Francisco are also considering adding new runways. But while everyone from the airlines to FAA officials and safety experts would like to see a new runway at JFK, chances of it ever happening are slim. With virtually no excess land at the airport, the only plausible option is to fill in part of Jamaica Bay and build a runway there. But any plan to do this will be vigorously opposed by environmentalists and community groups.

Still, the idea deserves a hearing from the Port Authority and City Hall. "JFK can't handle the volume that's coming in now," says Puckhaber. "And there's going to be hundreds of new regional jets coming in. If we don't build a third parallel runway, I can promise you that business will go elsewhere."

## Airports Mean Business for Queens Firms

It is difficult to exaggerate the importance of Kennedy and LaGuardia to New York City's economy. In addition to employing nearly 47,000 people at the airports—including baggage handlers, ticket clerks, freight loaders, airline mechanics, security agents, food service workers, air traffic controllers and customs officials—the airports provide a steady source of business for hundreds of non-aviation-related companies in Queens and throughout the city.

Airlines located at the two airports regularly hire local businesses to provide everything from construction work on building projects to software for computer ticketing systems. The ongoing redevelopment of terminals at Kennedy and the construction of the Airtrain have created even more work for numerous general contractors, engineers and telecommunications companies.

Donna Jabbour, president of TNT Industries, says that 98 percent of her firm's work is done at Kennedy. Her general contracting firm has installed an automated cargo handling system for Nippon Cargo Airlines, put up bullet-proof walls for a building that houses the FBI and Secret Service, and built a bus turnaround area for United Airlines' cargo employees. The company employs six full-time employees, but provides jobs for many others because it subcontracts much of its work. "The airport gives a lot of small businesses like mine the opportunity to get involved and grow," says Jabbour.

Jabbour's firm is hardly the only one benefiting from Kennedy's growth. Aurora Electric, an electrical contractor based in Springfield Gardens, is now installing a high-tech power and lighting system in the Virgin Atlantic Clubhouse at Kennedy's new Terminal One. The company, which employs 25 to 50 employees—depending on how many projects it has at one time—does roughly 80 percent of its business at Kennedy, according to Veronica Rose, the firm's president.

The Queens Air Service Development Office, a non-profit founded in 1984 to match the purchasing needs of airlines and other aviation-related businesses at Kennedy and LaGuardia with Queens-based suppliers and contractors, helped local businesses obtain 489 airport contracts worth more than \$48 million in 1998.

# Running the Airports: The Buck Stops Where?

Over the past six years, New York City Mayor Rudolph Giuliani has reserved some of his harshest criticism for the agency that runs the city's two airports, the Port Authority of New York and New Jersey. The mayor correctly points fingers at an agency that long ignored many of the airports' infrastructure needs, but the Port Authority is by no means alone in neglecting the airports. Indeed, city and state officials have repeatedly failed to combat the worsening traffic situation on the highways leading to JFK and the federal government has failed to adequately deal with escalating congestion in the skies.

The situation is complicated by fact that while the problems facing New York's airports require immediate solutions from the public sector, no one governmental entity has the power to fix them all.

The city owns Kennedy and LaGuardia, but has leased the daily management of the airports to the Port Authority since June 1, 1947. The Port Authority, whose commissioners are jointly appointed by the governors of New York and New Jersey, runs both city airports as well as New Jersey's Newark International Airport, Teterboro Airport and a host of other bi-state operations, including the World Trade Center, the Port Authority Bus Terminal and the PATH train system. It oversees improvements made inside the airports' gates, from basic repairs of on-airport roadways to the redevelopment of new passenger terminals and cargo facilities. Meanwhile, city and state officials have authority over most off-airport transportation investments, such as the upkeep of the Van Wyck Expressway and the Belt Parkway. The Federal Aviation Administration has control over landings and takeoffs at all U.S. airports and is ultimately responsible for developing the technology to unclog airspace over the New York region.

The Port Authority has presided over more than 50 years of incredible growth at both New York airports. For much of the past decade, however, the agency has been criticized for letting the airports' infrastructure deteriorate and accused of shortchang-

ing LaGuardia. In particular, Mayor Giuliani has repeatedly blasted the authority for poorly managing JFK and LaGuardia, allocating a disproportionately large share of its resources to subsidize money-losing ventures that primarily benefit commuters from New Jersey, like the PATH train system and the Port Authority bus terminal, and paying the city too little in rental payments.

On one level, it's hard to argue with the mayor's assaults. Over the past five years, JFK and LaGuardia generated a total of \$664 million in net income for the Port Authority, while its New Jersey's assets brought in \$450 million. However, during this time, the city of New York received an average of just \$23 million a year in rent from the agency whereas the city of Newark received \$35 million a year. The agency redirected much of the income it received from New York's airports into PATH, which had a net loss of \$900 million during this period, and the bus terminal, which lost \$250 million.

While these numbers are significant, JFK and LaGuardia should not be thought of simply as potential cash cows for the city. Moreover, while PATH and the bus terminal disproportionately serve New Jersey residents, the city greatly benefits from these public transportation networks; for example, they take cars off city streets and help reduce pollution levels.

The real test of Port Authority management is whether it is adequately investing profits from JFK

LaGuardia back into their upkeep and modernization and whether the airports are well managed.

Until recently, there was a widely held belief, at least among airline officials based at JFK and LaGuardia, that the agency was pumping ample funds into the expansion of Newark Airport while ignoring the needs of the city's aging airports. Most of the passenger terminals at Newark were rebuilt or modernized in the early to mid-1990s, while the majority of passenger facilities at both JFK and LaGuardia looked as old as the airports themselves. Getting from one terminal to another at the two city airports has long been a nightmare, but Newark has had a convenient on-airport monorail for four years. And in 1997, work began on extending Newark's monorail system to connect with Amtrak and New Jersey Transit trains.

Fortunately, the Port Authority has begun to turn things around at the New York airports. Kennedy is in the midst of a \$9.3 billion overhaul, the largest airport improvement program in the nation (See "Airport Improvements," page 24). This is being driven by airlines that are redoing their passenger terminals, but the Port Authority has contributed \$3.7 billion—largely using federal funds—to improve infrastructure and build Airtrain.

The overwhelming majority of people surveyed for this report were pleased with the Port Authority's current leadership and had only good things to say about individual agency staff members. However, many of the same people had negative views about the Port Authority in general, saying, for instance, that the agency does not aggressively promote new development at the airports and has no long-term vision for growth. Moreover, many describe it as a frustrating bureaucracy where even relatively trivial decisions can take an appallingly long time.

One airline official at JFK recounted how the Port Authority dragged its feet on a recent project the company wanted to undertake. "I wanted to do a minor construction job. I sent in the specifications for the project, but they didn't even look at them. They just sent me back a list of their 19 specifications. But I had already met those specifications," said the person, who asked not to be identified. "Any time you deal with the Port Authority, they don't make things easy."

The problem may be in the way the agency is structured. While the Port Authority has staff based at each of the airports, decisions about most projects undertaken at the airports are made not by the local staff members, but by directors in the agency's Manhattan headquarters. Yet the decision makers in the Port Authority's central staff are occupied with matters at all three of the airports they manage, not to mention the many other projects the Port Authority controls.

It doesn't help that, unlike most other public authorities, the Port Authority is a bi-state agency not accountable to a single elected official. New York's governor appoints the agency's executive director, New Jersey's governor appoints its chairperson and each state appoints an equal number of board members. This bifurcated power structure alone can lead to bureaucratic nightmares. And, as has been evident for much of the past two years, when the two governors are at odds Port Authority projects can come to a complete stop. For example, the Port Authority board went 10 months without approving any major projects when the two governors were sniping about whether the agency should provide financial incentives to keep a major shipping company from leaving the Elizabeth Marine Terminal in New Jersey. This forced American Airlines to wait several months longer than it should have for the agency to approve its \$1.3 billion terminal redevelopment project at JFK.

Mayor Giuliani would like nothing more than to take control of the airports away from the Port Authority and contract out this work to a private company. Though the Port Authority's lease to manage JFK and LaGuardia isn't set to expire until 2015, the mayor has said that he expects the authority to step aside. The likelihood of this happening is slim. One high-ranking state official put it bluntly: "What the mayor is doing is ridiculous. It's insane to think that the Port Authority is going to give up the lease." Plus, the mayor's move to break the lease with the Port Authority could be negated by the next mayor.

Several major cities in other countries, including London and Amsterdam, have successfully privatized their airports or contracted with private companies to manage the airports. But only a handful of American cities have gone this route, the largest being Indianapolis.

But while no major U.S. city has privatized its airport, most have a greater degree of control over the running of their airports. Airports in Atlanta, L.A., Chicago, Philadelphia, Dallas, Denver, Houston and Miami, to a name just a few, are run by city or county governments. While many of these airports have thrived in recent years, this system of governance isn't without drawbacks. In many cases, airport officials have been accused of cronyism, political patronage and excessive spending. Airports that are ultimately controlled by mayors and city legislatures are also subject to budgetary whims and political agendas. For instance, city officials may decide to divert airport funds into other services during a recession. And since local officials are on short election cycles, they may be less likely than an independent entity to dedicate funds for long-term projects.

The Port Authority has many shortcomings (it has been guilty of its share of cronyism and political patronage over the years), but the bulk of its staff is not subject to political appointment. Many of them have years of experience dealing with the issues that come into play at the airports, have relationships with airlines and other businesses based at the airports, and know how to navigate the bureaucracy to get things done.

While privatization certainly has an appeal, it is too soon to take this step, which needs to be publicly debated before given serious consideration. For now, it makes more sense for a public entity like the Port Authority to retain control of the city's airports under an agreement that requires revenues from its New York assets to be spent in New York. In addition, the newly structured entity should be more accountable to New York state and city officials.

Airport Rental Income Paid to the City of New York and Newark (in 000's)				
	1999	1998	1997	1996
JFK and LaGuardia				
Net Income	\$142,017	\$147,143	\$131,513	\$122,218
Rent Paid to NYC	\$5,053	\$32,065	\$37,150	\$30,023
Rent as % of Net Income	3.56 %	21.79 %	28.25 %	24.57 %
Newark Airport				
Net Income	\$113,960	\$112,945	\$98,970	\$71,459
Rent Paid to Newark	\$68,292	\$25,815	\$35,973	\$24,966
Rent as % of Net Income	59.93 %	22.86 %	36.35 %	34.94 %

Source: NYC Comptroller's Office

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## Ongoing Airport Improvements

Though many problems persist, there are signs that things are looking up at both city airports.

LaGuardia's central terminal was recently expanded and modernized, and the airport has added several new retail outlets to take advantage of its many free-spending business travelers.

But the most exciting projects are occurring at Kennedy. It is undergoing a \$9.3 billion redevelopment that includes rebuilding all nine passenger terminals; renovating roadways, parking garages and runways; and developing a rail link between all the airport terminals and Midtown Manhattan. The redevelopment, which is the first significant infrastructure renewal project at the airport since the 1960s, will undoubtedly help the beleaguered airport become more passenger-friendly and more competitive with newer airports in other major cities.

These infrastructure projects got under way during the mid-1990s, when Air France, Japan Airlines, Korean Air and Lufthansa spent \$435 million to rebuild Terminal 1, which opened in 1998. Next year, a new, expanded International Air Terminal—now known as Terminal 4—is expected to open after a \$1.2 billion makeover. Not to be outdone, British Airways is spending \$220 million to expand its terminal and both Delta Air Lines and American Airlines are planning new terminals that will each cost more than \$1 billion. In addition, Kennedy recently signed up a major new start-up airline, JetBlue Airways.

The Port Authority has kicked in \$3.7 billion—much of it coming from federal funds—to build Airtrain and make infrastructure improvements. Beyond these capital expenditures, the Port Authority recently hired more than 200 foreign language-speaking customer service representatives to assist passengers and it planted flowers along airport roads to make JFK more appealing to employees and visitors.

Not nearly as many construction projects are happening on the cargo side at Kennedy. The Port Authority now expects Continental to build a new freight warehouse and says that an outside developer will also construct at least one new multi-tenant cargo facility. In addition, Korean Airlines Cargo plans to open a new facility this fall. Though a lot more needs to be done, the Port Authority says that over the past decade, airlines have invested, or plan to invest, a total of \$600 million to build new freight facilities at JFK. Most of these projects happened in the early 1990s, including new facilities for China Airlines, Japan Airlines, Nippon Cargo Airlines and a multi-use building for federal agencies involved in the cargo clearance process. In the past three years, United Airlines and Northwest Airlines Cargo erected warehouses while a new Korean Airlines Cargo facility is expected to open this fall.

By any measure, the rebuilding campaigns at LaGuardia and Kennedy will be a tremendous boost for the airports and city. The fact that major airlines are spending hundreds of millions of dollars at JFK demonstrates their commitment to be in the city. And the Port Authority's infrastructure investments will help improve the airport's negative image. Best of all, the deci-



# Recommendations & Solutions

Proposed by the Center for an Urban Future

Because they serve one of the nation's largest metropolitan areas, New York's airports will probably always be busy passenger hubs and a vital economic engine for the city. But unless a number of changes are made to improve vehicular access to the airports, replace aging cargo buildings and alleviate congestion in the skies above the airports, Kennedy and LaGuardia will continue to grow at a much slower rate than the national average, lose business to airports in other cities, and miss out on an opportunity to add thousands of well-paying jobs in Queens. The Center for an Urban Future recommends that local policy makers take the following actions to keep New York's airports competitive:

## **Make Improving Access To Kennedy an Immediate Priority**

More than anything else, the mayor and the governor must make improving access to Kennedy a top economic development priority. The development of a rail link from between JFK and Jamaica is a tremendous first step, but this alone will not be enough to alleviate rampant congestion on the Van Wyck Expressway and cut down on travel times to the airport. There are, however, a number of things that the mayor, the governor and the Port Authority can do to address this nettlesome problem:

\* Make Airtrain a one-seat ride from Manhattan to JFK. Though Airtrain will finally offer a convenient alternative way to get to JFK, the current two-seat ride probably won't convince enough travelers to forego taking a cab to significantly improve traffic conditions on the Van Wyck. The ultimate goal must be a one-seat ride. The governor and mayor need to exert pressure on the MTA, and provide it with sufficient funding, to make the technical changes necessary to extend Airtrain from Jamaica to Midtown.

\* Support projects that increase capacity on the Van Wyck and the Belt Parkway. Where possible, city and state transportation agencies should widen these notoriously congested arteries. Meanwhile, local public officials—from the mayor and the governor to members of Congress—should exert the leadership necessary to make this happen. In addition, transportation agencies should study the feasibility of other far-reaching solutions, such as closing some of the entrances to the Van Wyck as a way of speeding up the flow of traffic or adding a second deck to the highway.

\* Allow some small commercial vehicles on the Belt Parkway. The mayor must end the city's opposition to this to give courier vans and small commercial trucks an alternative way of getting from JFK to Manhattan and Newark Airport—and ease some of the burden on the Van Wyck.

\* Continue to implement high-tech traffic-movement systems on the Van Wyck. The governor and the legislature must provide the funding necessary for DOT officials to continue adding cameras, signs and other technology along the Van Wyck to allow traffic engineers to better manage the flow of traffic, respond more quickly to accidents and alert motorists about upcoming tie-ups.

### **Extend Subway Service to LaGuardia**

To reduce the number of vehicles on the crowded highways between Manhattan and the city's two airports, government officials must fast-track efforts to create a rail link to LaGuardia. They should:

\* Provide the MTA with adequate funding to bring subway service to LaGuardia. The MTA has been studying the feasibility of extending the subway to the airport, but it won't be possible unless the governor and the mayor come through with ample funds, and the political support, to make it happen.

### **Expand Ferry Service to Both Airports**

With the right investments, New York could dramatically increase the number of airline passengers who forego the highways in favor of ferry service to the city's airports:

\* Make service to LaGuardia more convenient. NY Waterway must expedite its plan to add faster vessels and increase the frequency of its service, while the Port Authority should quickly follow through with its plan to build a ferry terminal at the airport. Meanwhile, the two should work out a plan to institute an on-airport bus that shuttles passengers from airline terminals to the ferry. Everyone involved, including airlines and the city, should team up to heavily market the service to New Yorkers.

\* Support efforts to bring ferry service to JFK. The Port Authority and the city should help Empire Waterlink, or another ferry operator, introduce freight and passenger ferry service to Kennedy.

### **Promote the Development of Off-Airport New Cargo Facilities in Queens**

To stem the tide of freight forwarders and customs brokers relocating from Queens to Nassau County, City Hall should continue to push for the development of modern warehousing facilities on city-owned properties in Springfield Gardens and other Queens neighborhoods.

## **Modernize Aging Cargo Facilities at JFK**

To keep airlines from moving their freight business to other airports, the Port Authority must address the serious shortage of affordable, modern cargo facilities at Kennedy. As a first step, it should abandon its long-time policy of letting industry determine the pace of redevelopment at JFK and instead create a master plan for the long-term improvement and growth of the airport's cargo areas, which should include the following:

- \* Replace obsolete buildings with newer ones. The Port Authority should develop a timetable for razing antiquated buildings at the airport that are currently empty and aggressively promote the development of modern buildings on these parcels, using financial incentives, if necessary.
- \* Take advantage of unused land at the airport for cargo development. The Port Authority should start with a 120-acre plot of land east of Runway Four that could be used as a cargo center if the agency were to make a handful of infrastructure improvements, like erecting a bridge or tunnel to connect the area with the airport's other freight handling areas. In addition, it should study the feasibility of developing an air cargo complex on the 25 acres of land it owns adjacent to Aqueduct Racetrack.

## **Address Gridlock in the Skies Above New York**

To ensure that New York's airports can handle anticipated growth in airline travel, the FAA, the Port Authority and the airlines serving JFK and LaGuardia need to come up with a strategy to combat growing congestion in the airspace above the city and reduce airline delays. They should:

- \* Modernize the Air Traffic Control System. The FAA must quickly put in place technology that will allow aircraft to fly safely closer to each other than is now allowed under the current, outdated ATC system. Meanwhile, Congress should seriously consider turning over control of the ATC system to a private, user-funded corporation, which, in the long run, is probably the best way of ensuring that the nation's air traffic system keeps pace with the growth of airline travel.
- \* Ensure the FAA has ample funding. Congress must make sure that the Aviation Trust Fund, money raised from the surcharge on airline tickets, is spent on aviation infrastructure projects, not to plug holes in the federal budget. Congress must also give the FAA sufficient funds to hire more air-traffic controllers in New York and train the controllers how to use the new technology.
- \* Exert Pressure on Airlines. Particularly at LaGuardia, the Port Authority and the FAA should institute incentives and penalties to get airlines to reduce the number of flights they offer at peak times.

# New York New Jobs

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