



THE PORT AUTHORITY OF NY & NJ



Critical Issues Facing Aviation and the New York/New Jersey Region's Airports

June 1, 2006

Summary Report



co-sponsored by
NYU Wagner Rudin Center for
Transportation Policy & Management
New York City Economic Development Corporation
The Port Authority of New York & New Jersey
University Transportation Research Center

and by
ARUP
Bombardier Transportation
Booz Allen Hamilton
DMJM Harris
Frasca & Associates
John F. Kennedy International Airport Terminal One
John F. Kennedy International Airport Terminal Four
Landrum & Brown
The Louis Berger Group, Inc.
NYC & Company
Parsons
Parsons

Parsons
Parsons Brinckerhoff
Silvester + Tafuro
STV Incorporated

Vaughn College of Aeronautics and Technology

Proceedings published by:

Critical Issues Facing Aviation and the New York/New Jersey Region's Airports June 1, 2006

On June 1, 2006, the NYU Wagner Rudin Center for Transportation Policy & Management, together with the New York City Economic Development Corporation, the Port Authority of New York & New Jersey, the University Transportation Research Center – Region 2, and 15 other co-sponsors, hosted the seminal event, "Critical Issues Facing Aviation and the New York/New Jersey Region's Airports." With over 240 in attendance from around the country, and from the private and public sector, the event focused on the challenges related to capacity limitations at the airports and on the highway and rail systems to which they need to be better linked.

The region's airports are important assets, not just in terms of providing the means for travelers to get to and from where they want to go or for freight to come in and out of the country, but also in terms of providing jobs and other economic benefits to the region. Yet, while the region's airports have some competitive advantages relative to other airports around the country, there are some serious shortcomings that have led a number of passenger and freight carriers to relocate some or all of their operations elsewhere in recent years.

An October 2000 report by Jonathan Bowles, titled "On a Wing and a Prayer," identified a number of challenges facing the region's airports. Among them: chronic congestion on the highways leading to and from the airports (especially for John F. Kennedy International (JFK) and LaGuardia airports, but increasingly for Newark Liberty International Airport as well); chronic congestion in the skies over the entire region, extending beyond the New York metropolitan area; a shortage of modern cargo facilities at JFK, and high real estate prices around all the airports.

Almost six years later, while the Port Authority has been addressing some of these issues, the systemic nature of these problems remains, along with the unpredictability in travel it entails. Indeed, while the Port Authority may be able to make improvements at its facilities, addressing capacity expansion in other locations or surface transportation issues beyond the tarmac requires coordination and cooperation with other agencies and operators, communities, and business and government leaders.

The event featured discussions and presentations by experts about the region's needs and how they might be met. In addition to the keynote address by Deputy Mayor Daniel Doctoroff, in which he announced the creation of a new high-level Task Force to address these difficulties, the symposium featured two panels of experts who tackled these issues through a combination of dialogue and presentation. Following is a summary of what transpired.

Keynote Address

Daniel L. Doctoroff, Deputy Mayor for Economic Development & Rebuilding, City Of New York

[The address began with the showing of a clip from the television show, *Seinfeld*, in which the theme is that "You just can't beat the Van Wyck."]

Key Strengths Tempered by Serious Challenges

As funny as it may be to be the punch line, the reason we are a punch line is because the region has a real and universally recognized problem. Further, if bold action is not taken to confront the lack of airport access, this deficiency will become the greatest threat to the region's ongoing economic prosperity.

^{*} ARUP, Bombardier Transportation, Booz Allen Hamilton, DMJM Harris, Frasca & Associates, John F. Kennedy International Airport Terminal One, John F. Kennedy International Airport, Terminal Four, Landrum & Brown, The Louis Berger Group, Inc., NYC & Company, Parsons, Parsons Brinckerhoff, Silvester + Tafuro, STV Incorporated, Vaughn College of Aeronautics and Technology

By way of background, Newark, LaGuardia, and John F. Kennedy International (JFK) airports combined provided \$57 billion in economic activity for the region in 2005. They provided 140,000 direct jobs, 50% of which were at JFK alone. In fact, JFK is the second largest employer in Queens after the health care sector. In 2005, of the fastest growing of top-tiered airports in the country, JFK, rebounded beyond pre-9/11 travel figures to a record 41 million passengers. Together, the region's three major airports accounted for roughly 100 million passengers last year, with even higher numbers expected in 2006.

Other trends, however, are less promising. JFK has historically been a major cargo airport. In 2004, JFK handled more than \$125 billion worth of cargo – the most in the world. But where it once handled the highest volume of cargo of any U.S. airport, it has now slipped to fourteenth as many air cargo carriers have shifted their operations elsewhere, largely because of poor access to JFK. In fact, traveling from Manhattan to JFK can take anywhere from twenty-five minutes to two hours; in other words, travel to and from JFK is extremely unpredictable.

There are national trends as well, and exactly what they portend remains unclear. There is more competition resulting from low-cost airlines, as well as more planes in the skies. Additional planes increase the pressure on an already clogged system. Then there are increasing fuel prices and increased security concerns and needs.

Within our region there are demographic changes as well. According to figures released by the New York Metropolitan Transportation Council (NYMTC) by 2030, the population in the New York metropolitan region is expected to increase by 2-3 million. Over 1 million of this increase will occur within New York City itself; if one thinks about it, 1 million people is equal to the populations of the cities of Boston and Miami, combined.

The Need for a New Paradigm

Tremendous population growth, along with the other trends we are seeing have serious implications for our region's entire transportation system, including airports, rail, highways, commuter rail, and subways. *We cannot think in isolation; we need to think boldly and comprehensively.* Not since the 1930s has this region needed such vision, but to bring the region's transportation system, which is nearly at a breaking point, into the 21st Century, we will need a new paradigm, along with a plan for financing and executing it.

To develop and implement a new paradigm, the region needs a new level of partnership and the recognition that a common fate requires a collective solution. This is why, for example, resolving the long-delayed negotiations between the city and the Port Authority of New York & New Jersey over real estate at the airports was so important. And there are other areas on which we agree as well.

The City of New York believes that solving the transportation bottleneck problem is the most important item for ensuring the strength of our economy. Thus, the city agrees with Anthony Coscia, the Chairman of the Port Authority, that this region needs a fourth airport. However, this will take time, and until then, we need to figure out how to increase the capacity and efficiency at the three airports we already have. Though this will not revolve all the problems, we need the AirTrain to connect to Lower Manhattan. And, we need to determine how to prevent JFK from losing its global status as an international freight center.

The Plan

To meet these challenges, I am announcing today the creation of a public-private Task Force that will include high level executives from the City of New York, the State of New York, the Port Authority of New York & New Jersey, and passenger and cargo providers. The Task Force will be charged with proposing bold solutions to the problem of access to our airports. They will focus on highways and rail capacity to and from the region's airports, will assess alternatives, and recommend specific programs to make the proposed solutions into a reality.

We must find a way to make this happen so that in the future, the New York region's airports won't be a punch line, but will be a recognized power house.

PANEL 1: AIRPORT CAPACITY

Moderator: William DeCota, Director of Aviation, The Port Authority of New York & New Jersey

Panelists: Christopher Wearing, Managing Partner, New York Office, Accenture

Mitchell Moss, Professor of Urban Policy and Planning, NYU Robert F. Wagner

Graduate School of Public Service

Cristyne Nicholas, President and CEO, NYC & Company Woodie Woodward, President, Woodward & Associates

William DeCota began the panel by providing some background information on the region's airports focusing on the need for friends. Friends, he suggested, are critical when trying to address difficult issues both for political and financial support and for being willing to be honest about shortcomings and strengths. Given the challenges facing the region's airports – the financial problems of the airlines, a densely populated region that limits expansion, security concerns, and a multiplicity of customer needs – friends are particularly important, and the Port Authority is pleased with the improved relations between the agency and the City of New York.

Four percent of the region's gross product is involved in aviation. In 2005, the region's airports generated \$20 billion in wages, \$57 billion in economic activity, and 500,000 jobs [including direct and indirect jobs related to the aviation sector]. And, all this economic activity occurs on only 8,500 acres of land total for Newark, LaGuardia, and JFK.

In 2005, 1.4 million planes flew into and out of the region's three key airports, transporting both cargo and 99.6 million passengers. This was 5.6 million passengers more than in 2004, and 15.6 million more than in 2003. By 2025, the Port Authority expects 150 million passengers. With more passengers, the airlines would like to provide more flights and to more destinations. However, the surrounding communities do not want to see more planes overhead, and building new capacity to expand the existing 8,500 acres is constrained at all three airports by roads and rivers. How to responsibly handle this demand is a key issue so DeCota's questions to the panel encouraged dialogue on the various facets related to it.

What will the region look like in another ten or twenty years?

Mitchell Moss addressed this question by first looking back and noting that since the 1950's when TWA launched its first trans-continental jet flights, aviation has become a central part of life. Since that time, several trends have led to the challenges we need to address today:

- Deregulation of air travel. Deregulation has made flights less expensive so that air travel has become a part of everyone's quality of life. With more affordable fares, people want to travel more and the pavement cannot be poured fast enough to keep up with demand.
- Movement to an information economy. New York's economy is centered around information, and beyond fiber optics and other similar technologies, the best means for exchanging information is through person-to-person exchange, which means moving people so they can be near each other.
- Increased demand for freight. Freight from JFK is used in all facets of life throughout New York.
 To give a sense of how important JFK's freight is to everyday life, JFK is one of the largest
 importers of fresh flowers; JFK handles 45% of all apparel flown into the United States as well as
 27 million metric tons of fish annually. Thus, one sees that many sectors fashion, dining, dating
 industry, to name a few are dependent upon JFK's ability to handle freight.

Unless the region has an airport system that can accommodate these needs, all facets of life will be affected. That means increasing access to JFK and modernizing LaGuardia, which is now a key point of departure and arrival for both business travelers and families.

Christopher Wearing approached the question from another perspective, noting that his employees take close to 120,000 flights each year into and out of the New York regional airports. Of these, 20% are "trainable" routes, where automobile or train is an option. If access is not increased and congestion

worsens, he believes that those traveling within the trainable routes will be lost to alternative travel modes.

According to Wearing, his company did a survey of its employees around the issue of congestion and delays and they likened travel out of New York airports to going to the Department of Motor Vehicles. You have to go, but you can manage your risk by working out exactly what time of the day to go, which day of the week to go, or by building more time into your schedule. Employees at Accenture will often travel a day earlier on business trips to ensure they arrive on time for meetings. Even with such changes in behavior, on an annual basis, 3,000 person-weeks of time are spent at airports instead of working. Thus, for the business traveler, changes that will allow more productivity while at the airport are increasingly important.

Finally, Cristyne Nicholas focused on the travel industry (which includes business travelers), noting that in 2006 there were 42.6 million visitors, with the primary growth among international visitors. While these international visitors account for only 18% of total visitors, they account for 40% of total spending among tourists. Thus, as an international gateway for travelers, JFK is especially important for the region.

The travel and tourism industry set a goal of 50 million visitors by 2015. The region is well on its way to realizing this goal before that but only if several key regional projects occur: the expansion of the Jacob K. Javits Convention Center; the extension of the Number 7 subway; and capacity increases at the region's airports, including the addition of Stewart International Airport in Orange County to free up space at the three primary airports in New York City and Newark. Suggesting that the problems will get worse before they get better, Nicholas also echoed Wearing and Moss' comments, suggesting that La Guardia's Central Terminal Building, as the key departure and arrival point for business travelers, also needs to be upgraded with more ways for travelers to increase productivity while waiting for their flights.

How important is it to accommodate visitors?

According to Moss, the "raw material of this region is information," and the greatest flow of information is through people. The secret to New York City's success is interaction among people and the future of this region is dependent upon efficiently moving people in and out of the area. As the principal mode for moving people and high value goods, aviation is even more important than the maritime industry to the continued success of the region.

U.S. Secretary of Transportation, Norman Mineta, recently announced a new initiative to combat congestion. What are the hopes for this region and how is the Federal Aviation Administration (FAA) responding?

Woodie Woodward responded to this query, explaining that she retired from the FAA at the end of December 2005. During the past month, she traveled to California, Florida, Italy, and twice to New York. While she flew to the first three destinations, she used the train between Washington, DC and New York City because after calculating the time it would take and the money it would cost to fly, it made more sense to use the train.

In terms of what FAA can provide for the New York metropolitan region, it is not promising. The region needs to press for more changes in air traffic procedures, the addition of new technologies, and more changes on the air space redesign effort that will establish new flight patterns. However, even if New York receives all that it needs in these three areas, Woodward suggested it will not be sufficient to provide the degree of relief needed. The region needs new infrastructure – runways, taxiways, terminals – and new policy options. The solution, once found, "will be radical and will cost a lot of money."

According to Woodward, it is very difficult to build new runways, particularly given the challenges brought by the environmental community. Though such political challenges can often be overcome during times of crisis, the region is not in enough of a crisis yet. Her advice to the region was to "quit wringing your hands and agonizing over it [building a new runway] and look for alternate solutions."

Moss added some context, explaining that Long Island was historically the center of the aviation industry when it first began. Yet, communities and government officials quickly began walling off and selling off

airports and landing strips. He suggested that we need to learn from history, focus on those locations where runways and additional capacity already exist, and ensure their preservation. In this respect, Stewart Airport provides an important opportunity, with runways and air fields already in place. It makes more sense to incorporate Stewart into a regional system than to fight the political battles to try to pave or build more within New York City.

The reason we have a problem is because there are many travelers who want direct service to many more destinations and with more frequency. The airlines are accommodating these demands, but in a way that is very inefficient. In 2005, for example, there were 97 seats filled on average on the planes leaving and entering LaGuardia. Thus, while demand is high, the use of the airfields is inefficient. Who is to blame for this?

Nicholas responded to this query, suggest that "blame" is not the right word; we should be thinking instead of "opportunity." The tourism and travel industry helps keep the economy in this region moving. Prior to 9/11, the Partnership for New York City established a Task Force to discuss overcrowding at the region's airports. At that time, the Task Force was leaning toward recommending fewer regional jets. The result would have been larger planes with more seats and less frequency. Nicholas suggested that in some ways it makes more sense to have lower frequencies with larger planes that are fully loaded.

"People dread the airport experience," and this is shameful given that airports are the first and last impression (beyond taxi cab drivers) when traveling to New York. Nicholas proposed several steps that could be taken to enhance this experience. First, a "boot camp" could be offered for Transportation Security Administration workers to teach them how to be friendlier. She offered, by way of example, her own experiences at LaGuardia and Orlando International airports in recent weeks. At LaGuardia, traveling with her father and newborn daughter, she found her hands full as she moved through security. As her father was dealing with removing his shoes, she needed to fold the stroller, while holding the baby. Without enough hands to do the job by herself, she eventually placed the baby in one of the baskets while she folded the stroller. The immediate response of the security personnel, who had been watching nonplussed until then, was to run over yelling that she could not send her baby through the x-ray equipment. Only after she explained that she never intended to do that and needed help to get through the system, did someone offer to help Nicholas and her family through. In contrast, at Orlando, she and her family were greeted by a concierge whose primary responsibility is to aid families traveling with children through check-in and security. Needless to say, her experience in Orlando was much more pleasant.

Another way to increase customer service and satisfaction is to change the rules governing taxi cabs. While two of the region's airports are situated within New York City, Newark is in New Jersey. Currently, there are only three cab services allowed to pick up passengers at Newark and New York City cab drivers are only allowed to drop off passengers. They must return to New York City with their cabs empty. Given fuel prices, a number of New York City cab drivers have begun refusing customers who want to travel to Newark (though this is illegal) since it costs them too much for the trip. As a result, customers using Newark Airport find it difficult to get cabs to and from the airport. The region needs to change the rules so that New York City cab drivers can pick up passengers at Newark who are bound for the city and so that Newark cab drivers can pick up city passengers at specific locations who are bound for New Jersey.

Picking up on Nicholas' comment about the problem of smaller planes with more frequencies, which is ultimately inefficient, Wearing explained that in a survey of his employees, they were asked would you accept fewer flights and options if overall the reliability of these flights were increased? The responses demonstrated that consistency and predictability are the most important features for the business traveler. Thus, if the airlines were to reduce shuttle service to those places for which an alternative mode could be used, while making the remaining flights more reliable, there would likely be a good deal of support. He added that increased frequencies are already not helping much since many travelers leave earlier or the day before anyway because of current levels of unreliability.

Moss cautioned that congestion is not only a problem at our airports – it is pervasive in our system so other modes are also often unreliable. Finally, he added that only in transportation is congestion viewed as a failure rather than as a sign of success. He offered that in the restaurant business, when people are

waiting, this is good; that on Broadway, when a show is sold out it means everyone wants to see it. Similarly, congestion in New York in some ways means that everyone wants to be here.

What is worse – congestion at the terminals or landside access problems? Which weighs more heavily on the traveler?

Woodward cited all of the above; basically anything that detracts from reliability is a problem. Wearing believed access to and from the airports weighs more heavily on travelers, though making the time spent at the airport more productive would be helpful. He described the "charging trees" at Seattle-Tacoma International Airport as an excellent example. These charging trees have different size outlets all over them so that any traveler can plug in his/her laptop computer, cellular telephone, personal digital assistant (PDA), or any other type of electronic equipment and charge it while waiting for the plane. Nicholas added that other types of amenities would also help, free baggage carts for international visitors, for example. Revenues that are lost by making them free could be reclaimed by advertising on the carts. Moss agreed with Wearing that landside access needs to be the priority – JFK is already more attractive and offers more amenities, but if the traveler cannot easily get to the airport, he/she is likely to look for alternatives regardless of what is offered at the site.

Questions/Answers with the Audience

The questions that were addressed from the audience to the panelists touched upon the need for a broader vision, how Stewart Airport fits or does not fit this vision, and whether pricing is truly feasible. One participant noted that the panelists and Deputy Mayor had called for bold plans, but that few people are looking to create a truly multimodal and comprehensive system that would link airports with rail – not just with rail as a means for accessing the airports, but as an integrated alternative for shorter haul trips. Without such a plan, the participant suggested that the solutions are really just "little improvements" that leave the larger regional transportation capacity issue unaddressed. Further, he stressed that while the region is reacting to projections of future growth, such forecasts have often been proved to be overestimated in the past. DeCota replied to this explaining that a multimodal approach would make sense if the region had a true high speed rail option; however, this is not yet the case. And, in terms of growth, while predictions are sometimes inflated, the trend is still continuously upward.

A second participant asked what could be done to overcome the challenges presented by Stewart Airport. He explained that there are diseconomies of no scale, that the airlines are reluctant to add more terminal operations and flights there, and that the airport is located on the fringe of the region, beyond the main catchment area. All of these points make it difficult to truly integrate Stewart as the fourth key regional airport. Moss replied that while it may have these difficulties, Stewart also has a built in asset in its linkage to the highway system and, if additional building occurs in the region, like a casino, there may be more demand for use of the airport.

Related to this point, another participant noted that this still leaves the issue of governance since the airports are situated under different jurisdictions and in different communities. Moss pointed to the closer relationship of the Port Authority and the City of New York as an important change in governance that has taken place and, in some ways, the first important step to a more regional approach. Nicholas also pointed to the Deputy Mayor's announcement as a positive start.

Finally, on the issue of pricing, several participants asked additional questions on this issue, asking why airlines tend to price below actual cost and whether pricing could be introduced to allocate limited aviation capacity. None of the panelists had an answer to the first query, but Woodward did advocate more flexibility on the part of FAA to allow for congestion pricing schemes.

PANEL 2: SURFACE TRANSPORTATION

Moderator: Elliot Sander, Director, NYU Wagner Rudin Center for Transportation Policy &

Management

Panelists: Jonathan Jay, Managing Director, Cargo Services, John F. Kennedy International

Airport, American Airlines

Robert Land, Senior Vice President for Government Affairs and Associate General

Counsel, JetBlue Airways

David Lewis, Executive Vice President and Director for Economics and Financial

Services, HDR/HLB Decision Economics Inc.

Nancy Sparks, Managing Director, Regulatory Affairs, FedEx Express

The second panel began with short presentations by each of the panelists, followed by a period of discussion and dialogue among the panelists, and then some questions taken from the audience.

Nancy Sparks. FedEx is more than an airline – it has aircraft and trucks. FedEx Express (the original FedEx) is a truly intermodal operation and delivers cargo to locations all around the world. In the New York region, FedEx's hub is at Newark Airport, where it accounts for roughly half of all Newark's cargo business. At JFK, Fed Ex's operations account for 10-12% of the airport's cargo business, and FedEx also serves the greater metropolitan region out of Stewart and Lehigh Valley airports.

The key customer service provided by Fed Ex is "time definite transportation," so access is critical to its business. In fact, the company just released a study on access (www.access.fedex.com). The barriers to access and the ability of FedEx to collapse time, space, and information come in both physical (congestion, limited facilities) and economic forms (trade rules, outdated regulations). Thus, to deal with access issues, one must look across all modes and at multiple actors – all-cargo and pax transporters, cargo and express services, scheduled and chartered services, truck and air, domestic and international, and integrators and forwarders.

On the earlier panel, Secretary Mineta's new national congestion strategy was mentioned. FedEx welcomes this initiative as a way to deal with limitations imposed by the current infrastructure, particularly as it prefers to build new infrastructure to meet new demand rather than trying to shift behavior through pricing. With that said, and this is my view, we must be careful of new financing techniques since in some cases they lead to paying twice. For example, while FedEx supports tolling of new roadways or existing roadways where additional value has been added (e.g., truck only lanes), it does not support the tolling of already existing roads (which were already paid for when they were built) just to increase revenues without adding additional access. Similarly, while public-private initiatives can be beneficial, and FedEx is involved in several, we need to be careful of losing the idea of "public services." Too often public-private partnerships are used as a means for the federal government to avoid their own responsibilities to the infrastructure that supports the economy of the country.

Robert Land. JetBlue Airways is based out of JFK, an airport which has experienced a 25% increase in annual passengers per year between 2000 and 2005. JetBlue is JFK's largest air passenger carrier; with 7 new gates opened just today at JFK, there are now a total of 21. With these volumes and more expansion planned, JetBlue has an internal group assessing airspace, airside, and landside access.

The key to keep in mind when thinking of the access problems to and from JFK is that originally, four expressways were planned for the airport. However, only one – the Van Wyck Expressway – was eventually built, and the Van Wyck poses a serious challenge for customers trying to enter and leave JFK. The reason is clear – built as a flow-way, traffic demand on the Van Wyck currently exceeds the design, which has 15-16 exit/entrance ramps on each side of the roadway within a four-mile span. One possible short-term solution is to install red light meters that would regulate the amount of traffic entering the roadway, allowing for more reliable flow.

Nobody is bothered more by the congestion on the Van Wyck than the nearby communities, into which automobile and truck traffic overflows. Again, potential solutions exist, including restriction of traffic on service roads or perhaps a JFK access-only lane at certain times of the day when up to 30% of the traffic is either heading toward or leaving the airport. Alternatively, the regulations for the Cross Island Expressway and Belt Parkway, which currently only allow non-commercial traffic, could be changed. This route provides alternate access to JFK and has better flow even though it currently has higher volumes. If commercial traffic were allowed, this could help alleviate traffic on the Van Wyck.

Other proposals have been developed over the years, including one to add express lanes above the Long Island Expressway, but this is also unlikely to be welcomed by communities on either side. Nevertheless, there is still room for expansion that could add new lanes for either high occupancy vehicles or airport only travel.

David Lewis. The critical issues related to access to the region's airports include bottlenecks and the resulting spillover onto local roadways and transit systems already at or above their own capacity limitations. The key questions are can the region increase capacity further and how?

One means for doing this is through private-public partnerships, which can both increase productivity and resulting living standards for the region. To explain how this happens, growth in output occurs through either adding more workers or increasing productivity. In the New York Metropolitan region, the population is aging and immigration is insufficient to fill the gap in terms of numbers of workers. Thus, to increase growth, we will need to focus on increasing productivity.

Nowhere has the digital revolution been more influential than in transportation. It is digital technologies that have enabled just-in-time logistics which tremendously increase productivity. However, reliability and predictability are the key attributes necessary for successful just-in-time logistics, even more so than overall speed and time. A one-hour savings, for example, is valued at \$195, but a one-hour reduction in travel time variability is valued at \$395.

Such emphasis on reliability and predictability are true for travelers as well, who value a one-minute reduction in variability at 3-4 times that of a one-minute reduction in the overall time spent traveling. As described earlier on Panel 1, people are already adding time cushions to manage their risk while traveling, but this is very costly.

Both public and private sectors benefit from continued investment in advanced logistics and the infrastructure needed to support such operations. The private sector benefits from increased productivity, profitability, and stronger shareholder returns; the public sector benefits from a stronger economy and higher standards of living.

In conclusion, the relationship between infrastructure and the private sector needs to be jointly exploited by public policy makers and private firms. To do this effectively, public and private officials need to understand the role of infrastructure in the business case for private investment in advanced logisitics and the connection to higher standards of living. Better mechanisms for signaling and communication between public officials and private logistics managers are required, and finally, public-private modalities through which public agencies and private firms can develop win-win cost, risk, and benefit sharing arrangements need to be established.

Jonathan Jay. American Air cargo has 64 daily wide-body departures and arrivals daily at JFK (the largest widebody station in its network) and offers extensive less-than-truckload (LTL) and exclusive shuttle network services. Last year it carried 49.9 million pounds of mail, 95% of which either originated or terminated in New York, and 365.2 million pounds of freight, 40% of which originated or transited through JFK, and 60% which terminated at JFK.

American Air cargo offers three services – Priority Parcel, Expedite FS, and Confirmed FS, all of which are "flight specific" products. In other words, in contrast to FedEx's "time definite service," which is based on the time a selected item will arrive, American Air cargo is based on ensuring that specific cargo is

placed on specific flights at specific times. Priority Parcel provides the highest boarding priority and fastest transit times, with no advance booking required and service to over 200 worldwide destinations. Expedite FS provides priority boarding on every flight and complete tracking from origin to destination, including connecting flights. Confirmed FS provides full shipment tracking, acceptance and recovery at all American Airlines Cargo terminals, with worldwide connections with Interline partners and American Eagle destinations. Thus, there is a wide range of service offered.

Infrastructure and access to the airport is critical for this type of business since any delay in reaching the airport can result in the cargo not being placed on the specified airplane. And, while there has been much discussion today about the Van Wyck, it is not just the Van Wyck; it is the entire infrastructure around JFK and around the region. When the weather is bad and there is flooding that backs up traffic on the George Washington Bridge and the Cross Bronx Expressway, the trucks also miss their appointed flights and the delay is experienced long before they reach the Van Wyck.

How do we compare with other regions?

Sparks addressed this by pointing out that FedEx's cargo growth is on the other side of the world, in China. While "in the purple world I live in, Memphis is the center of the universe," Sparks pointed out that Newark is the gateway to Europe while Anchorage and Oakland have become the gateways to Asia, the fastest growing area. She also noted that FedEx is also somewhat uniquely well-served by the region's airports since it uses both Newark and JFK, but forwarders who need more facilities find their capacity sorely limited. In terms of other areas that have done better, Chicago O'Hare International Airport has been more responsive on increasing access and on taking advantage of the opportunities related to growth in Asia. It is important for New York to support those airline carriers trying to provide service to China.

Lewis added that there are more regions competing with the New York region now and that while congestion pricing has been mentioned as a means for addressing capacity problems, it does not balance demand. Instead, congestion pricing is really just a tool for determining what the market is willing to bear in terms of fares. He pointed to Heathrow Airport's experiment with congestion pricing in the 1960s, noting that there was no change in congestion, though they did reap much higher revenues.

What happens if we fail to resolve these access issues?

Land explained that as an origin and destination carrier, most of JetBlue's passengers (roughly 85%) either start or end at JFK so the need for improved infrastructure is a particularly urgent matter. If these access problems are not adequately addressed, JetBlue's expansion will slow and eventually stop and it will begin to look elsewhere for other expansion opportunities.

The goal, according to Jay, is a dependable and reliable product. If access fails at any one point, the entire system backs up and this dependability and reliability is lost, as are customers eventually. Sparks explained that for FedEx, a key to their success is offering the latest possible pick-up and earliest possible drop-off. The more time cushion that needs to be built in for reliability, the earlier that last pick up becomes and the later the earliest drop-off. As a result, customers do not get the full benefit of next day delivery services and are more likely to look at less expensive alternatives. Roadway congestion, thus costs FedEx because it must run extra trucks and planes so that customers do not feel the impact of congestion problems directly and, it costs businesses because they find themselves holding larger inventories than necessary so they need not worry about running out of something if the delivery is late.

Questions/Answers with the Audience

The questions posed by the participants at the event touched primarily on public transit access and AirTrain. With respect to the relevance and quality of public transit access to the airports, Jay described the AirTrain as the "best thing to happen to JFK." Land noted that "JetBlue loves AirTrain," but that it is only part of the overall solution. JFK is unique in that it has nine individual buildings rather than two or three smaller and interconnected terminals. AirTrain helps in linking the terminals and making it easier for passengers, who are increasingly booking their own flights on-line, to make use of different airlines for their connections. AirTrain also helps the employees avoid traffic on the Van Wyck, but the real fulfillment of the dream is still the one-seat ride. JetBlue supports the idea of a one-seat ride, but not from lower

Manhattan as has been recently discussed. Instead, JetBlue believes the real market is to midtown, where passengers can then connect to both subways and commuter rail.

When asked why the airlines at JFK have been relatively quiet about AirTrain compared with their counterparts at Newark Airport, Land explained that initially JetBlue had a campaign promoting AirTrain, but when it ran into early operational difficulties, JetBlue drew back from their promotion. Nevertheless, he agreed that now would be a good time to revisit this along with other airlines and the Port Authority. He added that it is important to remember that such a campaign is aimed at changing the mindset of travelers, which takes time.