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EXECUTIVE SUMMARY

As the air cargo industry evolves, the region and its airport system must implement changes that both respond to emerging trends and anticipate future needs of its logistics partners. The New York City Economic Development Corporation (“NYCEDC” or “EDC”) and the Port Authority of New York & New Jersey (“Port Authority”) therefore initiated a strategic planning process to review and revitalize the air cargo market of John F. Kennedy International Airport (“JFK”). The work was begun with the understanding that the following goals were to be targeted in the Strategic Plan (“the Plan”).

- Grow and enhance air cargo movement within JFK and its environs
- Increase cargo-related employment opportunities available within New York City (“the City”)
- Promote a comprehensive regional freight policy and public investment
- Diversify and expand industrial business in the City and the region
- Generate new investment in cargo-related facilities and infrastructure to serve the City and JFK
- Maximize real estate usage and operational efficiencies within the JFK Study Area

THE IMPORTANCE OF AIR CARGO

In 2005, the Port Authority completed a detailed study of the economic impact of the Newark Liberty (“EWR”), La Guardia (“LGA”), JFK and Teterboro (“TEB”) airports. That effort determined that JFK’s cargo operations impact the region in four ways:

- **Direct** impacts involve those activities which take place on the Airport.
- **Indirect** activities occur off airport and include a wide range of supporting functions.
- **Induced** effects arise from the expenditures by the recipients of direct and indirect wages and salaries.
- **Catalytic** benefits are new businesses that are created by cargo activity.

The data indicate that 1,000 tons of annual air cargo activity provides and supports about 35 jobs within the region. Over the past decade JFK’s cargo volumes have declined by 600,000 tons.

BACKGROUND

JFK has long been considered one of the pre-eminent air cargo gateways in the industry. Growth was driven by balancing a strong flow of domestic cargo with international trade with emerging partners in Europe. As the air cargo industry matured, the international markets expanded to include Latin America and Asia, and more recently the Middle East. However, as the business expanded, so did the competitive arena. Based on geography, Los Angeles International Airport (“LAX”) developed a focus on trans-Pacific traffic, Miami International Airport (“MIA”) with South and Central America, and Chicago O’Hare International Airport (“ORD”), given its central location in the U.S., pursued commerce with all markets.
Aircraft technology became more sophisticated; more airports began to realize and address growing regional international trade interests and to take advantage of unused capacity in the holds of passenger aircraft. The result has been the emergence of numerous competitors for market share and a change in how some international cargo is routed. After September 11, 2001, the industry experienced seminal changes, the most significant of which continues today – the substitution of trucking activity for domestic air cargo and domestic legs of international air cargo. This trend has been exacerbated by unstable fuel prices and the rising costs of security, which makes the less expensive option of goods movement by truck, when possible, a more financially feasible option. In the face of continuing economic challenges, more mature markets are most severely impacted and the downturns in air cargo volumes over the past decade have affected JFK more than other gateways. JFK air cargo volumes have declined by almost a third over the past decade.

Through a competitive “Request for Proposal” process, a team of nationally respected firms led by Landrum & Brown (“L&B”) was selected to assess the global and regional air cargo markets, determine the long-term implications for JFK and the City, and recommend strategies for moving forward in the new operating environment. Simply stated, the issue is whether the Airport and the region can regain the levels of cargo activity that have been lost over the past ten years. If so, the challenge is then to identify the strategies and specific initiatives that the City and the Port Authority should pursue.

The development of this strategic plan for JFK is somewhat unique because of the extent to which the on- and off-airport businesses and operations are functionally integrated. The off-airport cargo community is home to one of the industry’s largest assemblies of customs brokers and freight forwarders that control the routing of most of the world’s international freight shipments. The physical plan for future growth must recognize the need for facile operations as well as closely coordinated business activities. Physical planning will be an important element for moving forward. As a mature airport, and perhaps the oldest true cargo gateway in the world, JFK has numerous facilities and infrastructure with functionality that has become limited and in need of modernization. This includes the access roads to both the airport facilities and to the regional cargo community for which connectivity is so important.

Six months of industry due diligence included extensive outreach to stakeholders at the Port Authority and the EDC, on- and off-airport tenants and users, the development community, and the industry at large. The comprehensive inputs were combined with a wide analytical spectrum of air cargo dynamics, forecasting, business agreements, operating practices, financial policies, and market opportunities. These analytical efforts indicate that there are opportunities to recapture some lost traffic, but that it will be necessary to change the Airport and regional business model to achieve this and to create new regional logistics operations.

**CRITICAL ISSUES AND FINDINGS**

**BRANDING AND VISION**

As the aviation and air cargo industries have evolved over the past twenty years, newer cargo developments and operations at primary and secondary gateways have eroded JFK’s market share of air cargo. At the same time there has been a deteriorating perception of JFK and New York as an ideal region in which to do business. Over the last five years the Port Authority’s marketing budget for air cargo has been reduced to zero and there has been little interaction between the Port Authority and the City on marketing efforts.
The Airport needs to define its future role in Air Cargo. How JFK should position itself is described on page one of the Recommendations Section that follows. As the air cargo industry has evolved, the primary competing U.S. gateways have developed an identity: MIA is the gateway for Latin America, LAX for Asia, and ORD is the entry into the heartland of the nation. The former dominance of JFK driven in large measure by its European connections has eroded proportionately to the maturity of that market. The aggressive cargo marketing by other airports and the expansion of the passenger market with wide-body aircraft enable secondary gateways like Dallas/Fort Worth International Airport (“DFW”), George Bush Intercontinental Airport (“IAH”), Atlanta Hartsfield Jackson International Airport (“ATL”), Washington Dulles International Airport (“IAD”), and Philadelphia International Airport (“PHL”) to siphon cargo that had historically flowed through JFK. Recapturing this lost cargo volume due to market fragmentation will be problematic and depends on innovative solutions to generate new air cargo activity.

Although the New York regional airport system still accesses the greatest variety of geographic markets, the challenges that face JFK as the most mature of the gateways require a rebranding and repositioning of the Airport among the industry segments with which it deals.

AIRPORT CAPACITY

The Port Authority has embarked on a substantial analysis of the capacity of its Regional Airport System so that it can better position those facilities to meet the needs of the City and the broader constituency they serve. This includes accommodating growth in passenger and cargo activity while maintaining a safe and secure operating environment with high levels of service. It is probable that the provision of future capacity will require modification of the aeronautical infrastructure, the potential deactivation of some existing cargo facilities, and the addition of new aviation support facilities. The impact requires that JFK must be planned with attention to the potential constraints, creating a new physical plan that addresses present and future industry needs with sensitivity to costs and operating efficiencies.

The impacts of a potential new runway and the land requirements of aviation support elements could impact available space for cargo and constrain available properties. A conceptual development plan that allows for phased, fiscally-prudent development of modern, cost-effective air cargo facilities must be prepared and implementation initiated when runway requirements are identified and finalized.

BUSINESS COSTS AND POLICIES

The cost of doing business in the Region and at the Airport is higher than at any other North American gateway and represents major concern to the industry which for the most part realizes that there is little that can be done on the broader scale. However, the cost concerns are complicated by two major issues. The first is that the Port Authority does not have a budget or financial targets for its air cargo operation. While the creation of a specific cost/revenue center for cargo is not typical, the size of the operation and the challenges the Airport and the Region face, argue for a more structured management approach.

The second consideration is the level of service received for the price – in other words – value. There are opportunities to reduce costs and create operating synergies that will make the Airport more attractive to the global market. This will include a combination of adjustments to rates and charges, new leasing terms, the addition of financial and economic development incentives, and the introduction of operating efficiencies. In certain instances,
the City must play a strong partnership role. A cost containment program for tenants and users of on- and off-airport facilities that includes rates and charges that balance risk and reward for potential partners is essential. The financial package should include a comprehensive City and Agency incentive package consistent with FAA guidelines.

TRUCKING

Increasingly stringent security guidelines have led to two significant changes in the air-cargo industry. The first is a tendency to push cargo to major gateways where economies of scale can reduce the cost of security screening for a shipper. The second is the increasing use of trucks rather than aircraft for the initial leg of moving domestic outbound cargo, as well as the domestic leg of international cargo, to avoid the additional screening costs of a second flight. Both trends magnify JFK’s competitive disadvantage due to congested roadways and the 53-foot trailer restriction. This is particularly significant since a substantial portion of JFK’s international cargo historically has been trucked to the airport from points as far away as Vancouver.

Air cargo operators have stressed to New York agencies that from a logistics perspective, the hindrance to using the more efficient trailer has substantial financial and operating implications, and adds to the higher cost of doing business in this region. Those agencies have acknowledged this longstanding issue. There is no designated interstate-highway route for 53-foot trailers to serve JFK, while these vehicles have become the trucking standard nationally, and are used within New York City despite the restriction. *The industry’s emphasis on this issue in interviews for the joint study reinforces the project team’s conclusion that the restriction adversely affects JFK cargo activity and potential regional job growth.*

PRIVATE INVESTMENT

The cargo activity levels in the Region and on the Airport make investment by the private sector attractive under the right business scenario. Revised leasing policies and practices to encourage private-public partnerships and third-party development of on-airport cargo facilities would encourage private investment and reduce the cost to the City and the Port Authority.

OFF-AIRPORT INFRASTRUCTURE AND DEVELOPMENT

The City has recognized that the synergies that currently exist between the on and off airport cargo communities around JFK must be exploited. The air cargo traffic flowing through JFK is largely dependent on the hundreds of supporting businesses in Queens and Nassau counties. The area directly across Rockaway Boulevard from the Airport’s busiest cargo area, holds one of the industry’s largest concentrations of customs brokers and freight forwarders. Revised and more efficient use of on-airport properties would facilitate the relocation of a substantial number of these operations. If that can be accomplished, there may be an opportunity to develop new businesses that actually generate cargo in an off-airport development. The creation of appropriate critical property mass which can accommodate a large planned development will be necessary.
The Team used their specialized knowledge and experience to integrate the study and evaluation into a realistic and fiscally prudent Plan for the Airport and the Region to address the Critical Issues. Because of its length, the document has been structured in four sections:

1. Recommendations
2. Implementation
3. Background and Analyses
4. Appendices

Listed and described in Section A are the five primary recommendations that are essential to address the loss of cargo activity at JFK. There are a number of additional recommendations that are subsets of the primary recommendations. These are discussed in greater detail in the Recommendations Section of the Plan.

As a client with the PA for this planning effort, the City indicated its support of JFK and its willingness to be a partner, as appropriate, in the pursuit of the initiatives discussed in the Plan. This partnership will be essential in creating a new image for the Airport and the Region and for introducing policy modifications, and new development initiatives that will be critical to future success.

*The City and the Port Authority have a unique opportunity to reposition JFK within the air cargo industry through boldness, initiative, and vision.*
SECTION A
RECOMMENDATIONS
The recommendations that follow are structured to develop a Strategic Plan ("the Plan") that integrates business, physical planning, and marketing considerations that will form the revitalized JFK Cargo Program. The recommendations reflect realistic analyses of the viable alternatives given the need for fiscal prudence and increasing industry-wide competition.

THE VISION

The vision is critical to the logic that underpins the initiatives. It would be the core of the marketing and business development efforts, and the basis on which future physical development is predicated.

John F. Kennedy International Airport ("JFK") would be positioned as a true gateway that encourages and accommodates robust domestic consolidation for international distribution, and addresses the reverse logistics with equal efficiency. The aggressive forecast (which is used for physical planning purposes) and demand/capacity analyses call for the Airport to handle approximately 3,500,000 tons of cargo in 3,000,000 square feet of facilities by 2040.

Future facility development would be conducted by third parties in an environment that shares both risk and reward, and works in a public-private partnership to control the costs of doing business for tenants and users. All future Cargo development would occur in Zones A, B, C and D as described in Chapter 6 of Section C in this document.

- Use of tractor-trailer combinations with 53-foot trailers would be allowed for pick-up and delivery of air cargo to the Airport and to the off-airport facilities immediately surrounding the Cargo Zones. Safety, infrastructure, and community concerns regarding these vehicles would be satisfactorily addressed. New air cargo facilities would be planned to address roadway geometry for the larger vehicles and have ample room for truck queuing and automobile parking.

- Fewer and larger common-use cargo facilities concentrated in Zone D would reduce truck movements as well as vehicle dwell time on the Airport. This contributes to reduced trucking costs and produces time savings for drivers. The reduced and concentrated number of facilities would also contribute to reduced emissions and more efficient traffic flows that would be facilitated by clear signage.

- Integrator operations would be concentrated in Zone C. This would also ease trucking congestion and reduce queuing issues. Part of Zone C would be preserved for the expansion of terminal capacity to accommodate passenger growth for the next 30 years.

- Eventually the carrier cargo facilities in Zone B would be relocated to Zone D. Zone B would be rededicated to customs brokers and freight forwarders creating an on-airport Cargo Village. This would create a more efficient operating environment for these supporting businesses, and accommodate their trucking elements and employee parking which are problematic in the current off-airport environment.

- All cargo would be moved out of Zone A which reduces trucks on the southernmost segment of the Van Wyck Expressway and would open up Zone A for new development.

- Off-airport facilities and development would be considered for those businesses that rely on shipping by air to give them immediate access to global distribution.
Recommendations and strategies have been grouped to address the key findings identified in the due diligence. For these planning purposes, air cargo is considered to be the core business activity. A core business is one that involves high volume activity and provides an “anchor” of sufficient scale to create a major revenue stream, justify long-term development of the Airport, and sustain a variety of ancillary and supporting services and businesses. The Airport must be able to develop clear competitive strengths in its core business and plan around its continued presence. Sustaining this core business is the critical priority of the Plan.

PRIMARY RECOMMENDATIONS:

Recommendation 1: Develop a single internal Port Authority Vision of the “new” JFK cargo environment that reflects, and is consistent with the City economic development goals and initiatives and the PA’s role to manage a regional system that includes three commercial airports.

Discussion
The development of this Vision is essential to a strategic rebranding of JFK within the air cargo industry. The reputation of the Airport as an aging facility and the perception that the Port Authority of New York & New Jersey (“Port Authority”) insists upon unyielding and uncompetitive business terms should be addressed. The relationship between the Port Authority and New York City ("the City") should be strengthened so that the New York City Economic Development Corporation ("NYCEDC" or "EDC") and the Port Authority share a common perspective on business development and that growth initiatives are mutually supportive. This should include a strategic integration of on and off airport physical development, partnering on creative business arrangements, and synergistic marketing.

Recommendation 2: Establish air cargo as a business center with specific cost controls and revenue targets.

Discussion
With the variables and challenges of the air cargo operation, the Port Authority would benefit from the creation of a separate business center. This would enable staff to set parameters for a tiered pricing structure for ground rents, develop targets for individual negotiations within a determined financial context, and evaluate the cost-benefit of potential new initiatives. Additionally, an air cargo “budget” would allow the Port Authority to better determine a dollar allocation for marketing. Businesses typically allocate 1½ to 2½ percent of their costs to marketing. This percentage is obviously linked to a number of variables including market position, dollar allocation priorities, overall funding capacity, etc. See Recommendation 5.
Recommendation 3: **Finalize the preferred conceptual layout plan as the basis for future development. Create renderings based on the alternatives that can be used for marketing tenancies and use of the Airport.**

**Discussion**

The Preferred Alternative may change slightly based on the results of current analysis of runway options. Nevertheless, it will be important to develop a conceptual rendering that can be presented to the industry for marketing purposes. More importantly, however, the Preferred Alternative has been developed to provide capacity for forecast demand in a fiscally prudent manner with all appropriate phasing. Future development must be strategic rather than incremental to ensure that the right facilities are available when needed. Other alternatives have been prepared to accommodate potential different runway options.

All of the alternatives reflect concepts that would provide high levels of service, safety, efficiency, and security for tenants and users, and incorporate state of the art landside concepts. The currently accepted version can be found at the end of this summary document. (See Exhibit A-1)

Recommendation 4: **Prioritize the joint effort by EDC and PANYNJ to allow use of the more efficient 53’ trailers while working to identify and address any related infrastructure, safety, and community concerns.**

**Discussion**

For large truck shipments that serve gateway airports the 53-foot trailer is the vehicle of choice for efficiency and cost effectiveness. This vehicle can carry five standard Unit Load Devices (containers) that typically measure 125’ x 96’ for cargo, while a 48-foot trailer can only accommodate four containers. In an environment where trucking costs have become increasingly important, the constraint on 53-foot trailers in effect reduces trucking efficiency to JFK by 20 percent and raises costs correspondingly, even though some operators use 53 foot trailers at the risk of summons. This reduces the competitiveness of JFK and the region with other gateway airports.

The industry outreach clearly indicated that for a number of companies the 53-foot trailer constraint and the resultant cost impacts of using smaller vehicles remove the City from their operating spectrum. The potential economic impact is substantial. Were this restriction to be lifted, JFK’s competitive position vis-à-vis other airports would be improved, attracting more cargo and creating more jobs than if the restriction had remained in place. Working with city and state transportation agencies, identification and attention to any safety and infrastructure concerns would be part of the review for lifting the 53 foot trailer restriction.

Recommendation 5: **Create and allocate funding for an aggressive and focused marketing effort.**

**Discussion**

During the course of the planning effort questions were raised by the Port Authority/EDC regarding the amount of money that could/should reasonably be allocated for marketing air cargo. Budgets at other airports are typically difficult to access or are not specifically designated for air cargo. Representative numbers vary based on available dollars, current market position, and regional interest, and commitment and range from several hundred thousand dollars to several million. The Port Authority and the City have no common vision for air cargo development and although it continues to market air cargo at the highest levels of the Aviation
Department, the Port Authority has no marketing budget and no formal marketing plan. In light of the levels of competition for market share and the aggressive posture of competitors in the northeast region of the U.S., it is essential that a focused marketing effort be built on the new branding.

## SUPPORTING RECOMMENDATIONS

### PHYSICAL PLANNING:

**Recommendation 6: Future cargo development should focus on larger facilities in Zone D to contain costs by providing economies of scale.**

**Discussion**

The Preferred Alternative recommends three large cargo facilities in Zone D that would be the primary focus of carrier activity (other than integrators). The facilities are double-decked and each capable of handling in excess of 1,000,000 tons with a throughput of 1.5 tons per square foot. From an operating perspective the ideal structure would be a single-handling company for each building. This would help control costs through economies of scale, minimize the proliferation of equipment on the cargo aprons, and expedite cargo processing. The focus on fewer large buildings in a single Zone would also reduce truck traffic on-airport, the related carbon footprint, and the dwell time of trucks. The reduced dwell time would lower trucking costs – a major regional issue.

Signage, as part of the Preferred Alternative, would be simpler and easier to follow for long-haul trucking, and short-haul connectivity with facilities across Rockaway Boulevard would be easier and faster.

**Recommendation 7: Maintain sufficient aircraft ramps to accommodate forecast freighter traffic.**

**Discussion**

Forecasted levels of freighter activity indicate a potential need for 38 aircraft parking positions in a conservative operating scenario. The Plan recommendation is that carriers would continue to meet long-term cargo demand through wide-body belly capacity, reducing the growth rate for freighter activity. Increasing sophistication in cargo handling equipment, and the emphasis on common-use facilities with a single major handler as the primary tenant, provides for increased efficiency in turning aircraft and optimization of ramp capacity. The Preferred Alternative provides capacity for future needs.

**Recommendation 8: Dedicate Zone C to the development of an integrator complex.**

**Discussion**

Both FedEx and UPS operate out of JFK. FedEx has the larger operation but has a substantial amount of unreported truck-to-truck traffic to serve its Long Island markets. The demand analysis calls for roughly 500,000 square feet of facilities to accommodate substantial trucking and employee parking, as well as airside operations. Concentrating this activity in Zone C, which may be slightly reduced by future expansion of the Central Terminal Area, would enable all other carriers to be accommodated in Zone D and distribute trucking movements, while improving levels of service throughout all of the Airport cargo operations.
Recommendation 9: Based on the Preferred Alternative, develop a “Cargo Village” in Zone B for the ancillary and supporting services upon which cargo activity depends. The focus would be customs brokers and freight forwarders.

Discussion
The Preferred Alternative provides for approximately 1.8 million square feet of state-of-the-art facilities for customs brokers and freight forwarders. This business segment would benefit from proximity to the on-airport cargo facilities. There are clear indicators of demand, assuming the facilities can be developed and leased for a price that the market will bear. Calculations indicate that this kind of incremental development on-airport would provide a greater financial benefit to the City than comparable off-airport development.

Recommendation 10: Explore the creation of a trade-oriented commercial development in Zone A.

Discussion
This concept, developed in greater detail in the context of the analysis, would enable the Port Authority to create a commercial development in excess of one million square feet, without any impact on existing cargo facilities and without phasing implications. The concept should be tested with a Request For Expression of Interest (at virtually no cost) to assess feasibility and interest in the development community. If development is considered viable, the project can progress, which would quickly generate jobs, create a new image for JFK in the global trade community, and generate a new source of revenue that could be used for cargo development and related activities.

Recommendation 11: Provide a Certified Cargo Screening Facility to serve the broker-forwarder community and small carriers.

Discussion
Current Transportation Security Administration ("TSA") guidelines require screening for all belly cargo. The cost of the equipment and the space requirements for the breakdown, screening, and buildup of cargo make the operation problematic for smaller users. Like the rest of the air cargo business, profitability is largely driven by economies of scale. The provision of this service by the Port Authority or by a third party to the regional cargo community and other potential users would provide another mechanism to lower costs and improve marketability. The Preferred Alternative includes this, but a facility could be added at an alternate site on a near-term basis.

Recommendation 12: Provide capacity for Customs inspection in all cargo buildings.

Discussion
U.S. Customs & Border Protection ("CBP") has indicated that its clearance efficiency could be greatly enhanced by providing a small inspection area in all cargo facilities, which would allow for freight designated for inspection to be staged, opened, and cleared. The presence of these clearance stations combined with fewer buildings to which CBP Inspectors travel would facilitate clearance and hold times. It would also enable CBP to make better use of its staff and optimize their output. The resultant expedited clearance could translate into cost savings for trucking.
Recommendation 13: Demolish or functionally shut down facilities determined to be no longer viable.

Discussion
A dollar figure on the total operations and maintenance ("O&M") costs for facilities that are no longer used was not available. Nevertheless, estimates from previous studies indicate that the cost in some facilities is as much as $2.00 per square foot. The Port Authority has 3.5 million square feet of "cargo" facilities considered to be unviable. The “closure” and/or demolition of fifteen percent of these facilities could generate savings approaching $1 million a year. The savings could be allocated to demolition of facilities that have the greatest adverse impact on marketing and overall aesthetics, and in particular, those that would not be targeted for demolition in the near future in conjunction with new development. Note that the cost of demolition was not included in the scope of study but is of course a consideration.

Recommendation 14: Create an Aesthetic Concept that will be included in Design Standards and Development Guidelines for all new cargo facilities.

Discussion
An important consideration in marketing is appearance. A majority of the existing cargo facilities are in disrepair and the surrounding areas are not well maintained. This affects overall marketing and has an immediate adverse impact on nearby facilities that are occupied and functioning. Aesthetics are particularly important where the cargo facilities are visible from public roads or airside where they are visible from arriving or departing aircraft.

Recommendation 15: Initiate an immediate clean-up of the cargo zones.

Discussion
The appearance of the grounds surrounding many of the cargo facilities has an adverse impact on marketing. While cargo operations are largely driven by costs, carriers and supporting businesses also focus on value. The high costs of leasing and doing business in the region will always be an issue. If potential tenants and users do not perceive that the facilities and environs in which they operate are well-maintained they will see less value for their investment and potentially seek other alternatives.

Recommendation 16: Ensure that new cargo facilities have the capacity for fumigation.

Discussion
The movement of perishables is an important segment of air cargo. On occasion fruits, vegetables, and flowers may require fumigation. A number of existing cargo facilities at JFK has climate controlled space for handling perishable products. This is available in the form of portable coolers which do not provide enough capacity currently. A fumigation operation requires about 300 square feet and can easily be built into new construction. This provides a valuable service that can enhance marketing at minimal cost.
LANDSIDE OPERATIONS

Recommendation 17: Analyze inclusion of the Van Wyck Expressway as part of the designated highway network for 53-foot trailer access and address the community impacts that might result.

Discussion
As discussed earlier, access to JFK for 53-foot trailers is critical. While there are broader access issues that will eventually need to be addressed for roadways in areas around JFK, it is most important to recognize that the immediate goal is to get the large trucks to the Airport. The EDC and PANYNJ will work to identify any safety and infrastructure concerns related to potential changes to allow direct truck routes to the airport. The agencies will continue to identify physical constraints for the larger trucks along the interstate highway network in the City and on the City roadway network in the adjacent off-airport cargo areas.

Recommendation 18: Reduce truck interaction with passenger activity on the southernmost segment of the Van Wyck Expressway.

Discussion
With a long-term strategy in place to focus on the development of Zone D, and the elimination of Zone A for cargo in the future, signage and roadway modification, as appropriate, should be implemented to divert air cargo trucking from the Van Wyck Expressway as it approaches the Airport to the east via JFK Expressway, 150 Street, and Cargo Plaza.

Recommendation 19: Improve off-airport connectivity between the facilities in Springfield Gardens and the Cargo Zones.

Discussion
A substantial amount of the air cargo – both inbound and outbound that is processed through JFK, is handled in supporting cargo facilities around the Airport. Connectivity is essential to reduce transfer time and costs. Levels of truck activity peak to coordinate with international shipping windows that can cause congestion on Rockaway Boulevard. The geometry of the existing access points should be reviewed and modified, as appropriate, to facilitate access consistent with efficient traffic management and safe operations.

Recommendation 20: Finalize negotiations and develop the JFK Truck Center.

Discussion
The Port Authority is finalizing the development of a trucking center that will enable vehicles to be staged off the roadway system while waiting for cargo pickup. The concept has been under consideration for some time and can immediately impact both revenues to the Port Authority, levels of service and amenities to the trucking industry, and carbon emissions by reducing truck movements and idling. The Port Authority should also ensure that all trucks, not at a cargo facility, be directed to the truck center and not be permitted to “hold” in unauthorized areas.
**Recommendation 21: Review and address roadway geometry for on-airport cargo facilities.**

**Discussion**

The improvement of access and egress to the individual cargo facilities can increase the efficiency and safety of trucking operations. Future facilities and connecting roadways in the Preferred Alternative are planned to accommodate larger trucks. All roads in the cargo zones should have appropriate turning radii and truck courts that allow for the maneuvering of full-size tractor trailers. A minimum depth of 150 feet is recommended for the truck court modifications. This standard should be applied to leaseholds where change of turning radii and maneuvering depth is possible.

**Recommendation 22: Create a new numbering system for the cargo facilities.**

**Discussion**

Because the JFK cargo community developed incrementally in four separate cargo zones over the past 60 years, and because the building numbering system was in large part chronologically derived, there is no apparent rational way of linking a building to a Zone. Although the redevelopment of the cargo Zones would take a number of years, the renumbering of the cargo facilities and linking them to a Zone would expedite way-finding for the industry and provide additional value at minimal cost.

**Recommendation 23: Simplify pickup and delivery and reduce trucking dwell time through fewer stops, more efficient landside planning, and technology.**

**Discussion**

New facilities in the Preferred Alternative provide for fewer truck stops and increased efficiency. Development criteria for these facilities should address landside operations and specifically physical planning elements that will accelerate truck handling. Facilities should be planned with an optimum number of truck bays to minimize queuing operations and expedite handling. The number of bays may vary based on the planned internal material handling systems and the nature of the tenants’ operations.

An enhanced shipment-ready computer system would alert customers as to when shipments are fully available for pick up and would schedule a window for pick up at the facility. The system would need to be developed, require the acceptance of off-airport cargo facilities to participate, and receive buy-in from the trucking firms. Performance monitoring (e.g., average wait times at facilities) would also need to be developed.

**Recommendation 24: Review and update both directional signage and indicators of building tenancies.**

**Discussion**

Truckers travel from as far away as Vancouver to bring cargo to JFK. Changing tenancies and the building numbering system make it difficult for a driver not familiar with the Airport to locate a specific facility and/or tenant. Signage would help direct truckers, unfamiliar with the Airport, off the Van Wyck Expressway as soon as possible. This would reduce congestion and improve safety.
Recommendation 25: Create a facilities update map that tracks tenancies on the Airport and is available via internet to the cargo community.

Discussion

As another potential way to assist way-finding, an updated cargo facilities map reflecting new numbering should be created. This could be easily updated and linked to the Port Authority website, but also available as an electronically-transmitted stand-alone document that can be used by the community to facilitate their trucking activities.

BUSINESS DEVELOPMENT AND FINANCE

This set of recommendations includes leasing and activities related to property management, as well as financial practices and policies. The purpose of these recommendations is to establish a framework within which the Port Authority and the City can mutually develop a more amenable business environment for the air cargo industry by lowering and/or containing costs.

Recommendation 26: Create a tiered pricing structure for ground leases.

Discussion

There are clear indications of demand in the Customs Broker and Freight Forwarding businesses for facilities on the Airport. The issue historically was that such operations were not encouraged to be on JFK. That philosophy has changed since the support functions clearly represent a strong potential leasing market and new revenue stream for the Port Authority and ultimately the City. The primary constraint has been cost. Although the business is willing to pay some differential for an on-airport location, current cost structures and lease terms make it difficult for small to mid-size firms to afford to relocate. The pricing analyses indicate that while the differences between on- and off-airport pricing can be addressed, a tiered ground rental structure that reduces the rate for land without ramp access, combined with longer ground leases on development, will enable basic facilities to be developed and leased.

Recommendation 27: Change the basic Port Authority leasing policy to enable property staff to negotiate ground leases in excess of twenty five years.

Discussion

This Plan confirms the Port Authority strategy to utilize private developers when financially feasible, to construct new cargo and cargo-supporting activities. Given the size of the potential investment, and the need to amortize the investment over time, it is essential that the length of the lease be extended to be competitive with other gateways where 35- to 40-year lease packages are available. The longer lease terms would allow developers to reduce the basic rents to tenants. The impact on flow through costs to the buildings occupants and users should become a part of future negotiations.
Recommendation 28: Initiate ground lease payments with the start of beneficial occupancy in new buildings.

Discussion
The Port Authority has historically required that ground lease payments for new development begin upon the signing of the lease. This forces developers to factor in this cost with the basic building lease payments accruing to tenants. This adds substantial costs to projects, some of which are already encumbered by demolition costs and potential contribution to infrastructure enhancements. The lease or associated development agreement should address this but also include a “failure to perform” provision.

Recommendation 29: Institute joint marketing and leasing provisions for new and competing properties.

Discussion
A major consideration for developers is the potential competition from lower priced existing Port Authority facilities. A cooperative leasing and marketing partnership should be in place that would enable the new development to address capacity challenges facing the Airport and accommodate new entrants to the Region. Relocation of tenants from the Port Authority to a private facility can be directly linked to demand and capacity issues, and developers can be required to compensate the Port Authority under certain mutually agreed upon conditions, for lost revenue. The intent is to prevent concerns over “pirating” tenants, creating an unfair playing field that discourages new development.

Recommendation 30: Develop and implement a phasing plan that will accelerate cash flow, minimize tenant moves and infrastructure modification.

Discussion
The Preferred Alternative presents conceptual development plans and phasing for the development of all four Zones. Phasing factors include lease expiration dates, property availability, and minimization of tenant moves. Ideally, a tenant should have to move only once. The PA as any facility owner/operator especially in a constrained financial environment needs to balance and consider near-term development options with the financial implications of revenue losses associated with long-term development considerations. The Port Authority has indicated that near-term development options and the more immediate financial benefits that development will bring may supersede the long-term considerations. This may alter the recommended phasing plan. The phasing plan derived from the Preferred Alternative is included in Appendix A.

Recommendation 31: Create a central clearinghouse for tenant alterations.

Discussion
A primary area of concern for tenants of Port Authority facilities is the ability to make changes to the facility that allow them to be responsive to operating requirements. In many instances, these improvements can represent cost savings, service enhancements, and/or expanded capacity. Developing a central coordination and follow-up point can ensure the completeness of requests, accurate routing, and responsiveness to the tenant. This role could be filled at the Port Authority level or at the Airport.
Recommendation 32: Ensure the availability of up-to-date design standards and development guidelines for tenants and potential developers.

Discussion
Part of the challenge of tenant alteration requests can be mitigated by a tenant awareness program regarding design standards and development guidelines. These should be updated consistent with any new safety, security, and/or code modifications. The Port Authority has always maintained (or exceeded) consistency with City Code. In light of the proposed volume of new development, the existing guidelines should be revisited to ensure relevance to a long-term aesthetic.

Recommendation 33: Explore the feasibility of a joint City and Port Authority Incentive Program to attract Airport tenants and users.

Discussion
The cost of doing business has been identified as a major consideration for JFK and it will be important to reduce costs where possible. That being said, incentives can play a role in the process after a level of tenant or user interest has been established. While direct subsidies cannot be paid by an airport to a carrier, there are a variety of options that are or could be available from the City and the Port Authority to encourage both development and operation. These are discussed at length in Chapter 8. The key in applying these incentives is to create a scenario for continuing success. These are best achieved by orienting incentives to volume discounts that flow through to all involved parties and achieving economies of scale.

Recommendation 34: Adapt and promulgate formal Performance Measures that will both inform and guide the Port Authority and the City on cargo activity and potential new initiatives.

Discussion
There are over one hundred measures that could be used to evaluate some aspect of air cargo activity at an airport. The value of these measures varies from airport to airport based on the tenant and user profiles, and general operating characteristics of the overall air cargo program. The use of too many measures tends to diminish their perceived value and the attention given to them by members of the cargo community. Chapter 8 recommends two sets of measures that would provide critical feedback to the Port Authority and its Senior Management, and to the City which will have a different perspective on the operations.

Recommendation 35: Introduce a new cargo tonnage reporting system for Airport tenants and users.

Discussion
Since 9/11 there has been increasing use of trucks operating out of air cargo facilities for domestic freight operations. Cargo that moves on a truck-to-truck basis is not reported to the Port Authority or to the Airports Council International. At JFK the long-term forecast estimates that approximately 600,000 tons of annual cargo will be unreported in 2040. This planning ambiguity that this volume represents creates planning challenges for space allocation and utilization. This also disrupts phasing of new development and distorts estimates of potential economic impacts and job creation. The Port Authority should introduce a reporting system that would enable them and the EDC to capture a more accurate understanding of how the JFK facilities are being used.
Recommendation 36: Re-evaluate the use of Industrial Development Agency funding for cargo development projects on a case-by-case basis.

Discussion
Under the Master Lease the NYC Industrial Development Agency ("IDA") is precluded from financing new cargo development at JFK. While the Port Authority may be able to provide financing conduits that can match IDA rates, the issue becomes one of allocation of scarce Port Authority resources between future passenger, cargo, and aviation support elements. Given the anticipated volume of new development, the potential assistance from the IDA on a specific project should not be precluded automatically, particularly if the assistance could be the key determinant for a new market entrant and increased regional economic activity.


Discussion
One of the challenges for a public agency entering into an agreement with the private sector is the requirement for a competitive process for partnership selection. The cost to the developer of a response to a large cargo project solicitation can exceed $500,000. This often discourages participation in a very intense, competitive environment. A modified and very focused RFP process should be explored.

MARKETING

Recommendation 38: Develop a Port Authority Air Cargo Marketing Plan that considers and integrates the City strategic input and participation.

Discussion
A formal, prioritized marketing plan for air cargo is essential to prioritizing workload and the allocation of resources. The absence of a marketing budget for air cargo has mitigated the need for the document to some extent. Nevertheless, the industry has changed over the past five years and competition has increased substantially for market share. If the Port Authority is to recapture lost tonnage and attract new users, the agency and the City must make their presence known in the industry, counter negative publicity and marketing by competitors, and present the new vision of JFK. The traditional arguments of delivering air cargo to so many people overnight must be replaced with an emphasis on cost control and efficiency, and global capacity tied into domestic redistribution networks. Many of the elements of the Plan are described in the recommendations that follow.

Recommendation 39: Establish a marketing budget for air cargo.

Discussion
The formulation of a marketing plan would enable the Port Authority and the City to understand what efforts need to be undertaken. Once initiatives are evaluated and prioritized, and the City and Port Authority have a sense of what should be done, a determination can be made regarding budget allocation. Because of the limited activity for the past three years and the absence of current marketing material, it is anticipated that year one costs would be higher than years two and three. The first year would be spent largely on refining the broad target market and pursuing specific priority carriers. By year two the winnowing process would have been completed and efforts could be much more focused.
Recommendation 40: Correlate a Gross Domestic Product ("GDP") analysis with emergent aviation markets to assist in targeting and prioritizing marketing efforts.

Discussion
Utilizing data on geographic region and country specific GDP, the Port Authority can identify highest relevant growth areas and develop a focused target list for marketing carrier outreach. This would pertain to both existing users and potential new entrants. While some regions have traditionally been strongholds for other gateways, the potential represented by substantial growth in such areas as Latin and South America, and Africa, must be considered on a structured basis. The work would also include identification of any requirements for liberalization of bilateral air service agreements and the development of statistical databases on air traffic and demographic data to allow an efficient preparation of tailored air service information packages.

Recommendation 41: Develop a cost/benefit route – weight analysis including fuel burn calculation and time to market elements to compare JFK against other established and emergent gateways.

Discussion
A route-weight fuel burn analysis would enable the Port Authority to further narrow and prioritize the most profitable carrier markets. By drawing the comparisons to competitors, the marketing group would be better positioned to discuss the actual cost of doing business. This type of analysis is best focused on freighter operations, although a similar application could be used for passenger development.

Recommendation 42: Create renderings of the proposed new cargo and commercial development in the Zones.

Discussion
While it is understood that some of the development may change over the course of the forecast period, it is important that the Port Authority demonstrate visually to the industry the changes that are anticipated. This will be important for mature business segments who have dealt with JFK over the years as well as marketing targets. The renderings should present aspects of the development that reinforce visually, to the extent possible, changes to landside access, aircraft parking, on- and off-airport connectivity, and special services such as the Truck Center and central screening facility, that would reduce costs, improve operations, and enhance the air cargo community’s quality of life.

Recommendation 43: Develop new collateral material to address the planned changes and offset the negative marketing on security and costs from competitors.

Discussion
JFK must present a new image to the industry. It is constantly denigrated by competitors for issues both real and manufactured. It is a gateway with high costs in a business environment that is cost sensitive. New material that positions the Port Authority and the City as partners with the industry and stresses cost containment and security as well as time and operational enhancements including access will be important to the message. Renderings and cost analyses should be part of the material. Generic, adaptable presentations should be prepared by the Port Authority and the EDC. The possibility of incentives should be introduced as part of the material.
Recommendation 44: Identify and initiate joint PA-EDC marketing initiatives.

Discussion
As gateways compete with one another for a larger piece of the global market, more airports are teaming at some level with their city or region to extend marketing discussions beyond the typical parameters within which airports normally market themselves. This added dimension often includes elements such as facilities and services for regional partners and available incentive programs all geared to business elements of a carrier's operations. In marketing to Asia, the involvement of a City, particularly one as prestigious as New York, adds substantial weight to the discussions and opens the discussions up on issues such as quality of life which, to the Asian markets, is significant.

Recommendation 45: Develop generic Sales Kits with specific inserts for market segments – carriers, trucking, customs brokers and freight forwarders.

Discussion
Sales Kits should be available for all marketing and property representatives. This can be a four, six, or eight page folder with the capacity to handle inserts that should be developed for carriers, truckers, and supporting industries. These business segments have different interests and concerns that should be addressed in the relevant insert. For example, the Zone B Cargo Village would have a special insert for brokers and forwarders, while Zone D would address the issues with which carriers are concerned.

Recommendation 46: Increase targeted trade show participation.

Discussion
Because of budget reductions, the Port Authority does not participate in air cargo industry trade shows. Historically, involvement has always been an issue because the Port Authority has been sensitive to outside perceptions of agency staff travel, particularly to overseas destinations. The Port Authority is one of the few airports of international stature that is not represented at meaningful international air cargo events. In many instances cities also participate with an airport to maximize the impression made on targets and to develop a better understanding of the synergies joint marketing can offer. Part of the issue with these trade shows is their sheer number, which makes prioritizing attendance problematic. Nevertheless, there are at least four annual events that should be targeted for marketing air cargo at JFK: 1) TIACA (The International Air Cargo Association), 2) IATA – the International Air Transport Association, 3) Routes – Europe, and 4) Routes - Asia. Additionally, the Port Authority should target a conference focused on Latin America. The Air Cargo Americas conference held every two years in Miami should also be considered. It is important that the Port Authority and the city representatives who participate are knowledgeable and can speak with some authority on the issues.

Recommendation 47: Develop multi-lingual marketing material on a selective basis for top priorities.

Discussion
While English is a fairly well-accepted language in the aviation industry, it is less so in emerging markets. Beyond that, it is a professional courtesy and sign of respect to have presentation material available in the home country language. It is impractical to consider a large number of languages. Once the primary geographic targets have been identified, the top three may be appropriate for translation.
Recommendation 48: Create a Port Authority/The City air cargo-oriented marketing presentation and tour.

Discussion

As a high priority market for most global carriers, City and the Port Authority with a regional airport system will receive requests for assistance with tours, operational and technical assistance, and general planning help from carriers, airports, and foreign governments. This may involve assistance with hotels, restaurants, and other social amenities, as well as site and facility visits, and classrooms. Responsiveness to such requests is an excellent marketing tool and each represents an opportunity for new business.

Recommendation 49: Create a Port Authority/City public outreach initiative to inform the public on air cargo issues.

Discussion

In addition to the enhanced marketing efforts, a public information and outreach program should be created to ensure that the region understands the complexities, challenges, and benefits of air cargo.

Recommendation 50: Develop and Market the Zone A “Trade Mart” Initiative

Discussion

The development of Zone A for commercial trade-related purposes would be best pursued as a joint venture between the Port Authority and the City. The Port Authority must be involved because the property is on-airport and subject to the appropriate operating, safety, and security guidelines and restrictions. The tenancies of the primary facilities, however, would more appropriately fall outside the Port Authority’s basic marketing expertise but would be well-suited to the charter of the EDC. The physical development would be a PA responsibility and the marketing would be substantially enhanced through the activity of the EDC. There are major firms that would be interested in exploring such a concept.

OFF-AIRPORT

A major component of the planning effort involved reviewing off-airport facilities and markets, and assessing what could be done to revitalize the real estate market and potentially create new jobs. The primary issues are that in the millions of square feet surrounding the Airport, vacancy rates are very low, developable land is extremely limited, and existing uses are fragmented among numerous property owners. The challenge, therefore, is to create a concept that is viable from a cargo development perspective and has a reasonable chance to be coordinated. The intent is to create a development zone that encourages cargo growth by accommodating a range of activities that provide additional value and levels of service to the movement of goods by air.
Recommendation 51: Pursue the adaptive reuse of off-airport facilities for logistics support and value-added services for air cargo in the event that the redevelopment of Cargo Area B creates vacancies off-airport.

Discussion

This recommendation starts with the recognition that the primary purpose of the Springfield Gardens industrial area is the direct support of the air cargo activities at JFK. Several critical subcomponents must be evaluated independently and will be linked ultimately to the development of the on-airport cargo village in Zone B. The underlying premise is that the development of Zone B may create vacancies off-airport that would allow for adaptive property and building reuse and/or redevelopment. The critical steps include:

1. Determine the timing and size of the initial construction for on-airport support facilities in Zone B and, on a more limited basis, in Zone D.

2. Assess the demand for facilities that provide for activities such as light assembly or manufacturing of air eligible products, specialized packaging, perishables processing, critical parts supply, fulfillment, and electronics repair. The pursuit of value added services for off-airport trade development would create some additional business synergies from which the success of Zone A would benefit.

3. Identify property owners that have holdings sufficient to form a critical mass for an off-airport development.

4. Examine the potential for an incentive package for key property owners and study a relocation strategy to the airport for tenants wishing to relocate to the JFK area. The incentives could include tax benefits for property and capital expenditure, training, an economic development zone, etc.

5. Based on the nature and size of the development, explore financing and development alternatives including the participation of the private sector in infrastructure modification.

6. Promote the use of and extend as needed, Foreign Trade Zone (FTZ) status to the Springfield Gardens area. FTZ status would be a major advantage for importers whose products would fly into JFK to be processed and redistributed domestically.

This is a complex initiative and will require close coordination between the Port Authority and NYCEDC to evaluate its feasibility and execute implementation strategies.

Recommendation 52: Create a “virtual” Cargo Village which includes off-airport facilities.

Discussion

The off-airport cargo community at JFK is one of the largest in the world, and provides an unsurpassed amount of knowledge and experience in domestic and international goods movement to include services that accommodate virtually every kind of product shipped by air. Creating a “virtual” cargo village that includes on- and off-airport businesses would provide a much expanded and more accurate picture of the services and facilities that are available. This is basically a marketing concept that would incorporate the off-airport facilities into the JFK marketing and development effort and would typically be included in a marketing plan.
The Issue of Infrastructure Financing

During the course of the planning effort, the Port Authority and EDC requested guidance on the best method of financing infrastructure projects on- and off-airport. Experience indicates that there is no best method.

It is anticipated that most future development will involve a private partner (or partners) in some form if not in entirety. Each project must be evaluated on a case-by-case basis because of the variables involved. The cost and availability of money, equity participation, conflicting public resource allocation priorities, as well as basic variables such as risk, timing and demand, and the potential for a more creative public-private partnership agreement on long-term ownership or revenue sharing will determine how best to finance a project.

It is not unusual for an RFP to generate several responses with widely divergent approaches to financing. In any such project the financing can impact the revenues which are split among the developer, his financing entity, the airport, and/or the City. The timing and amount of the cash flow may be very important considerations with regard to which financing option is preferable. Lastly, one of the key considerations is how the financing option impacts the basic rent and fee structure that will flow through to the tenants. A high rate of return to the Airport or the City from a building with a prohibitive rent structure is worthless.
SECTION B
IMPLEMENTATION PLAN
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SECTION B
IMPLEMENTATION PLAN

NEXT STEPS

This section lays out a timetable for implementing the recommendations for the Air Cargo Study (“the Plan”). The schedule is predicated in part upon approvals of the Plan, the time it takes to establish and/or coordinate functional responsibility, and the availability of reasonable funding. The Plan also recognizes that physical development will be based on market–driven factors. No new development is recommended except where currently indicated as a need by the industry, or where the analyses indicates a benefit would accrue to the Port Authority of New York & New Jersey (“Port Authority”), New York City (“the City”), or regional stakeholders. There are no “if you build it they will come” assumptions, nor should there be. New regional business concepts can and should be tested with responsible stakeholder interest, and new development will largely accrue to the private sector.

There are several clear and overriding considerations for implementation. The first is a designation of appropriate leads for the Port Authority and the Economic Development Corporation (“EDC”). For the Port Authority this is essential because the air cargo operation is not defined as a separate business center and its management is split among the central offices, properties, financial, marketing, and financial staff – most of whom are in discrete business units. Coordination on time-sensitive issues or those that require multi-unit input can be problematic. The EDC is essentially new to the air cargo business and to airport operations. This adds a requirement to “educate” as well as coordinate on the development of appropriate strategies and initiatives. Effective marketing and the potential realization of several recommendations will depend on teaming and cooperation, which in the past has not been required.

The situation will be compounded by timeframes. Implementation will take place over a decade. Issues and staff, and potentially political perspectives, will evolve and change. While the Plan does not suggest rigidity, it will be important to create and maintain a vision that will become JFK to the global air cargo industry.

The timeframes that follow are estimated based on reasonable planning assumptions. A number of these are predicated upon certain sequencing which may vary. There are also a number of relatively inexpensive quick-turn items that can be pursued almost immediately. Where possible these should be pursued to demonstrate interest and commitment. The steps are not completely prioritized since it is assumed that there will be multiple leads from either the Port Authority or the EDC, and a number of tasks may proceed simultaneously.
2012

1 Implementation – Port Authority/EDC
   1. Designate the City and Port Authority leads and create the Planning Team.
   2. Review the Plan and determine top priorities for implementation based on
designated and available staff.
   3. Create a proposed time frame for starting implementation.
   5. Determine levels of financial contribution.
   6. Determine the Vision of the “new” JFK cargo environment that reflects and is
consistent with the City’s economic development goals and initiatives.
   7. Determine introduction strategies for the local community and the industry.

2 Establish air cargo as a business center with specific cost controls
   and revenue targets – Port Authority
   1. Designate lead for the air cargo business center.
   2. Determine air cargo elements to be included and the revenues and costs for
each.
   3. Establish a budget for the business center.
   4. Allocate appropriate dollars for business development/marketing.

3 Pursue modification of the constraint on 53-foot tractor-trailers –
   Port Authority/EDC
   1. Renew collaborative efforts to identify and address any potential concerns with
implementing meaningful reform of this restriction for JFK cargo access.
   2. Develop and initiate a detailed trucking survey to quantify use (or non-use) and
potential implications for air cargo.
   3. Quantify potential adverse impact on air cargo growth, and characterize
impacts on communities and infrastructure.
   4. Explore IT applications for tracking and verification.
   5. Address the Van Wyck Expressway as the initial priority with Springfield
Gardens to follow.

4 Create a central clearinghouse for tenant alterations – Port Authority
   1. Review the existing process internally.
   2. Check with tenants to identify processing issues and choke points.
   3. Ensure tenants have the most recent design standards and development
guidelines.
   4. Identify common errors based on tenant misinformation.
   5. Determine average processing time and set new performance targets.
   6. Determine new internal process and lead.
5 Explore a trade-oriented commercial development in Zone A – Port Authority/EDC
   1. Determine the Project Lead.
   2. Review the development concept and in detail and identify phasing issues.
   3. Determine agency roles and responsibilities.
   4. Identify potential bidders.
   5. Develop the core business assumptions.
   6. Create defined physical parameters.
   7. Identify development considerations and challenges.
   8. Create an “offering sheet” discussing the concept.
   9. Issue a Request for Expression of Interest ("RFEI") and schedule a meeting and site tour to determine interest.
  10. If interest – issue a limited Request for Proposal ("RFP").
  11. Identify a regional broker for assistance.

6 Finalize negotiations and develop the JFK Truck Center – Port Authority
   1. Provide right of first refusal on possible future relocation. This will give a developer options to remain involved in the event physical relocation of the facility is required.

7 Initiate an immediate clean-up of the cargo zones – Port Authority
   1. Review existing lease requirements on cleanup and site maintenance.
   2. Announce site inspection schedule.
   3. Determine penalties for failure to cure.
   4. Identify Port Authority controlled areas where appearance is an issue and initiate cleanup.

8 Introduce a new cargo tonnage reporting system – Port Authority
   1. Identify existing problem areas with carriers under the current system.
   2. Create motivation to comply.
   3. Ensure format captures data that is unreported captures truck to truck traffic and does not duplicate.
   4. Establish internal monitoring and collection parameters.
   5. Determine distribution format and methodology.
9 Re-evaluate the potential use of Industrial Development Agency (“IDA”) funding for cargo development - EDC
   1. Determine how best to modify the Master Lease
   2. Identify parameters under which IDA funding *might* become an option.
   3. Outline the process that would be required.

10 Develop a joint Port Authority/City public information and outreach program on air cargo – PA/EDC
2013

1 **Finalize the Preferred Alternative – Port Authority**
   1. Review runway alignment options and compare to the Preferred Alternative.
   2. Modify Alternative as appropriate.
   3. Finalize Alternative for marketing and business development purposes.
   4. Finalize the Phasing plan.

2 **Develop an Air Cargo Marketing Plan – Port Authority/EDC**
   1. Determine the lead for air cargo marketing and designate the marketing Team.
   2. Use Gross Domestic Product (“GDP”) analysis to help target and prioritize efforts.
   3. Develop a cost/benefit route – weight analysis including fuel burn calculation and time to market.
   4. Determine budget allocations.
   5. Identify any bilateral or trade constraints.
   6. Identify existing tenants and/or users with growth plans.
   7. Identify existing tenant/user partner needs and opportunities.
   8. Determine priority markets by geography and market segment.
   9. Develop key marketing message for general publication.
  10. Develop key messages for specific market segments.
  11. Create renderings of the proposed new cargo and commercial development.
  12. Identify off-airport opportunities.
  13. Develop new collateral material.
  14. Develop generic Sales Kits with specific inserts for market segments.
  15. Develop selective multi-lingual marketing material.
  16. Identify joint Port Authority-EDC marketing initiatives.
  17. Develop a prioritized list of targeted trade show participation.
  18. Determine potential participants.
  19. Create an Airport/City marketing presentation and tour.
3. **Explore reuse of off-airport facilities for logistics support - EDC/Port Authority**
   1. Determine the timing and size of the initial construction for on-airport support facilities in Zone B and on a more limited basis in Zone D.
   2. Assess the demand for facilities that provide for support activities.
   3. Identify property owners that have holdings sufficient to form a critical mass.
   4. Develop a potential incentive package.
   5. Review private sector financing and development alternatives.
   6. Assuming demand, consider the extension of Foreign Trade Zone status to the development.

4. **Explore developing a “Cargo Village” in Zone B – Port Authority/EDC**
   1. Select a broker with whom to work.
   2. Coordinate with off-airport targeted consolidation opportunities.
   3. Develop strategies for approaching partner owners and incentives.
   4. Identify immediate opportunities based on phasing in Zones B and D.
   5. Establish development time frames.
   6. Determine the potential capacity of initial development.

5. **Introduce a Certified Cargo Screening Facility – Port Authority**
   1. Confirm the site and timing for long-term use.
   2. Identify an existing facility for potential interim screening.
   3. Develop core business assumptions and terms.
   4. Develop and issue an Request for Qualifications (“RFQ”).

6. **Adapt and promulgate formal Performance Measures – Port Authority/EDC**
   1. Identify project leader.
   2. Finalize performance measures.
   3. Determine measurement and reporting processes.
   4. Determine cure periods as appropriate.
   5. Determine implications of failure to comply.
   6. Coordinate with the cargo community.
7 **Create a joint City/Port Authority Incentive Program – EDC/Port Authority**

1. Determine Project Lead.
2. Identify key marketing areas where existing and new incentives might be helpful.
3. Create Incentives Menu consistent with FAA guidelines.
5. Establish evaluation criteria.
6. Determine points at which the City should become involved and how.

8 **Provide capacity for Customs inspection in all cargo buildings – Port Authority**

1. Meet with Customs to determine space requirements.
2. Define potential benefits of enhancements.
3. Include capacity for Customs in development guidelines for new facilities.
4. Explore with existing tenants potential carve out of space.

9 **Implement a signage and locator program – Port Authority/EDC**

1. Identify existing directional signage.
2. Review accuracy of building signage.
3. Survey community for feedback and concerns.
4. Identify off-airport needs.
5. Identify on-airport needs.
6. Create a new numbering system for the cargo facilities.
7. Create a facilities update map.
8. Update building tenancies.
9. Distribute to the regional cargo community.
10. Link to the Port Authority’s website.
11. Institute signing to divert air-cargo trucking from the Van Wyck Expressway eastward via JFK Expressway, 150 Street, and Cargo Plaza.

10 **Create a tiered pricing structure for ground leases – Port Authority**

1. Determine targeted differentials between property with and without airside access.
2. Determine and test market a targeted facility lease rate extrapolated from a modified ground rent.
3. Factor in the cost of money and length of lease to calculate potential lease payments.
5. Establish a modified ground rent structure.
6. Determine other lease terms as appropriate.
11 Change the basic Port Authority leasing policy to enable property staff to negotiate ground leases in excess of twenty five years – Port Authority

12 Initiate ground lease payments with the start of beneficial occupancy in new buildings – Port Authority

13 Create a “virtual” Cargo Village which includes off-airport support facilities – Port Authority/EDC
   1. Determine the Project Lead.
   2. Explore the concept with regional business and industry associations.
   3. Identify primary stakeholder concerns and issues.
   4. Develop a potential marketing concept for stakeholder review.
   5. Determine marketing control and legal implications.
   6. Establish participation criteria.

14 Demolish or functionally shut down facilities determined to be no longer viable – Port Authority
   1. Identify all non-viable facilities and determine current O&M costs.
   2. Determine cost of demolition and clean up versus opportunities for new development consistent with Preferred Alternative and phasing plan.
   3. Shut down facilities as appropriate.
   4. Determine feasibility of allocating cost savings to demolition and site preparation.
2014

1. **Refine the operating requirements of the Integrators to ensure the continuing viability of Zone C**
   1. Meet with the Integrators to update operational requirements.
   2. Update forecast volumes.
   3. Determine facility and ramp requirements.
   4. Determine landside requirements.

2. **Update Design Standards and Development Guidelines for all new cargo facilities – Port Authority**
   1. Create an Aesthetic Concept on a zone by zone basis.
   2. Include a Customs inspection area in the new cargo facilities in Zone D.
   3. Include a provision for a fumigation facility in new cargo development.
   4. Include a provision for a truck-tracking Information Technology ("IT") system.

3. **Improve off airport connectivity between the facilities in Springfield Gardens and the Cargo Zones – Port Authority**
   1. Review and modify, as appropriate, the geometry of the existing access points to facilitate turns and optimize roadway levels of service.
   2. Review and address roadway geometry for on-airport cargo facilities.
   3. A minimum depth of 150 feet is recommended for the truck court modifications to the leaseholds of turning radii and maneuvering depth should be made where possible.

4. **Simplify pickup and delivery, and reduce trucking dwell time through fewer stops, more efficient landside planning, and technology – Port Authority**
   1. Explore shipment-ready computer systems to alert and schedule customers for cargo pick up.
   2. Coordinate system introduction with the regional cargo community and major trucking firms.
   3. Include, where applicable, customer inputs.
   4. Introduce a performance monitoring system.
With the exception of the planned Truck Center and a cargo facility currently under negotiation, future development and related phasing will be driven by market triggers and physical planning needs. The original Master Lease for the Airport between the Port Authority and the City would have expired in 2015. A number of ground leases are naturally linked to that date. The expiration of those leases will provide the Port Authority with an historical level of development flexibility to implement the broad changes that are envisioned.

It is anticipated that the regional market for air cargo and the supporting business and physical infrastructure will remain strong if appropriate modernization occurs. The private sector will be a strong partner in future growth. The partnership opportunities for development both on and off airport will be substantial and varied, requiring case-by-case consideration and public sector creativity and willingness to explore new risk-reward scenarios with regard to financing. The ability to consider different options will be critical. It is possible that each development scenario, when defined, will have different goals and objectives. This will make it virtually impossible to prioritize the “best” financing options at this time.

The Port Authority and New York City will face numerous challenges over the coming decade as they seek to re-energize the air cargo business at JFK. Increasing levels of competition, and rising costs regionally and within the industry will be the primary challenges. This Plan outlines an approach that is consistent with the best practices at major cargo airports throughout the world, and recommends initiatives that are fiscally sound, operationally pragmatic, and reflective of the most current security considerations. The full development of the new facilities as proposed will take up to ten years and should be driven by market forces. In moving forward adherence to the plan must be balanced with appropriate flexibility. Nevertheless, it will be important to maintain an integrated business and physical planning vision that positions the long-term success of JFK’s cargo operations over near-term financial benefit.