APPENDIX

Good morning Chairman Wisniewski, Vice Chair Vainieri-Huttle and members of the Committee. Thank you for the opportunity to attend today's meeting and provide to you a presentation of the Port Authority of New York and New Jersey's proposed \$32 billion -10-year capital plan.

With me today are members of the Port Authority staff: Chief Financial Officer Libby

McCarthy, Chief of Major Capital Projects Steven Plate and Newark Airport Terminal A

Redevelopment Program Manager Catherine Cronin.

Over the last year and a half, the Authority's Board of Commissioners has worked on a substantive review process to examine the ten- year capital plan. Our goal was to create a capital plan that is focused on transportation, balanced and fiscally responsible, and advances the Port Authority's core mission of maintaining and building vital transportation infrastructure to meet the region's needs. This exhaustive process included many presentations and discussions with the agency's career staff from each line department, engineering, finance, and capital program management. Board

members led numerous robust and detailed conversations with staff, examining each department, facility and priorities, as well as state-of-good-repair projects which would add to the agency's goal of moving people and goods more efficiently throughout the region.

New major capital projects included in the plan include:

- \$3.5 billion for a new Port Authority Bus Terminal.
- \$2.3 billion to support the redevelopment of Terminal A at Newark Liberty
 International Airport.
- \$1.7 billion to build a new connection linking PATH trains to Newark Liberty
 International Airport's Rail Link Station.
- \$600 million for the redevelopment of LaGuardia Airport's Terminals C and D.
- \$2.5 billion for the redevelopment of John F. Kennedy International Airport and a new AirTrain system to serve LaGuardia Airport.

Additionally, the plan also includes \$7.6 billion to finish projects currently in construction, such as the Bayonne Bridge, Goethals Bridge, PATH's signal replacement program, upgrades to the Harrison and Grove Street PATH stations, the port and rail cargo facility at Greenville Yard,

LaGuardia Airport Terminal B Redevelopment, and the World Trade Center Program completion which includes the Transportation Hub, Vehicle Security Center, core site infrastructure and retail complex, in partnership with private development.

The draft plan also includes \$8.8 billion – or 30 percent of the total 10-year spending – for critical state-of-good-repair projects at the agency's transportation facilities, including \$1.5 billion to restore the George Washington Bridge, \$1.1 billion to replace the Lincoln Tunnel Helix and \$360 million to replace wharves and piers.

The draft Capital Plan includes a total of \$2.7 billion toward the payment of debt service for the critical Trans-Hudson rail tunnel "Gateway Project" between New York and New Jersey. That includes an already approved \$302 million toward debt service on the

Gateway Development Program's Portal Bridge North project.

The Capital Plan will be a blueprint for future spending, and does not replace the Board's authorization process for specific projects and contracts. In fact, the Board will specify how the Capital Plan and related questions of funding capacity will be monitored and might be adjusted in the future. The Committee on Finance and the Committee on Capital Planning, Execution, and Asset Management will continue their current practice of working with staff on quarterly monitoring of Port Authority capital expenditures and capital capacity.

The Board's oversight will include, at least every two years, a reassessment of the Capital Plan in light of then-current information as to capital capacity and the progress of capital projects. Commissioners can then determine whether there will be sufficient resources: to (1) invest in Capital Plan projects during the remaining period of the Capital Plan at

roughly the pace and the cost that has been planned, and (2) fund necessary expenditures in the subsequent ten-year period.

The Board will confirm through existing Board authorization procedures when construction may begin on a given capital project. This process will include consideration of: the revenue-generating potential and capital capacity impact of the project; the project's relative and the overall capital capacity of the Port Authority. If in the Board's judgment there is not sufficient capital capacity, then: (1) construction should not begin; (2) other projects should be deferred, eliminated, or modified to the point that there is sufficient capital capacity; or (3) the Board should consider other fiscally-prudent alternatives.

With respect to the Proposed Capital Plan, in the interest of transparency, it was my belief, shared by my fellow commissioners, that broad public notice and opportunity to review and comment be provided. The Port Authority – for the first time in its history –

held two public meetings, one each in New York and New Jersey that were attended by members of the public, as well as elected officials. An extended period of public comment was also open from publication of the Proposed Capital Plan, on January 11 until February 15, 2017, a day prior to the Board meeting at which a final vote will occur – tomorrow in fact.

Information on the proposed plan, public meetings and means to provide written comment were all available online at the agency's website, www.panynj.gov. I am pleased to report to you that over the course of the two meetings, approximately 56 speakers submitted comments, while through the website we received comments from over 250 individuals and organizations. The website closes to comments today.

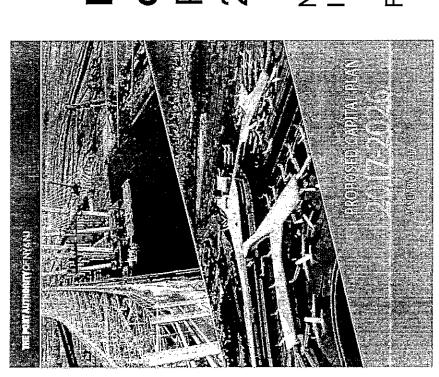
I can attest all board members took seriously their fiduciary and management responsibility and were committed to providing a ten-year capital plan that addresses the serious transportation infrastructure challenges facing the region and the Port

Authority. Agency staff worked tirelessly to both prioritize needs and provide the fiscal discipline and resources to fund this historic \$32 billion plan.

I believe we have laid a strong, fiscally prudent foundation for the Port Authority's continued leadership role in the regional transportation network, and I am proud of both staff and board members for their dedication to everyone who works, commutes or visits a Port Authority facility.

Thank you for the opportunity to be with you again, and now I am going to ask Libby,

Steve and Catherine to provide you with a more detailed look at the elements of the proposed ten-year plan.



Port Authority of New York and New Jersey Proposed Capital Plan 2017-2026

New Jersey Assembly Transportation and Independent Authorities Committee

February 15, 2017

Guiding Principles in Developing the Plan

The plan adheres to three guiding principles:

To apply the agency's financial capacity and full resources toward modernizing and expanding the region's aging airports, seaports, mass transit facilities, and other vital trans-Hudson

To continue serving our customers efficiently, focusing our facilities in a state of good repair, while ensuring safety, security and resiliency

To allocate the agency's affordable capital to its highest priority needs in a fiscally responsible manner so as to achieve a financially balanced plan

This foundation for the future is built on our four (4) main funding priorities and objectives: Renew, Expand and Connect, Partner and Deliver

transportation

assets

spending for projects required to **renew**, and maintain assets in a state of good repair, and ensure operational capacity, safety and securify \$8.8

to invest in projects that **expand** capacity, improve connectivity in the region and meet growth and transportation needs.

ライ

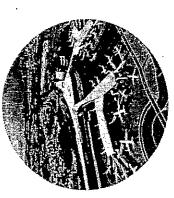
for projects where we partner with Federal and Regional stakeholders to complete Sandy restoration, improve resiliency, and build for the future? \$4.7

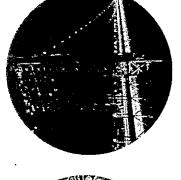
in spending to complete and deliver projects that are currently under construction

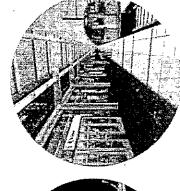
* Includes PA support of the Gateway Development Program

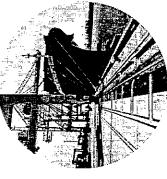
THE PORT AUTHORITY OF NY & NJ

Highlights of the Proposed 2017-2026 \$32.2 billion of investments in infrastructure and assets critical to the region include:











WTC: \$1.8B

Port: \$1.1B

PATH: \$4.4B

Aviation: \$11.6B

TB&T: \$10B

- · EWR Terminal A • LGA redevelopment
- LGA AirTrain system
- *JFK runway & taxiway rehabilitations

- PATH Forward program
- Signal system upgrade
- PATH extension to FWR

navigational clearance

Goethals Bridge Bayonne Bridge

Bus Terminal

GWB restoration

program

- PATH fleet expansion
- Harrison Station redevelopment

Planning Outerbridge Crossing replacement

Lincoln Tunnel Helix

replacement

Completion of:

* site-wide infrastructure

Intermodal container

Greenville Yard

Port Street Corridor

- Transportation Hub
 - Retail complex

A Comprehensive Budget and Capital Planning Process was used

Annual assessment of various factors impacting the Port Authority

- Contractual, municipal lease and other relationships
- Operational requirements for facilities
- Regional needs, customer demands and industry trends for each line of business



124

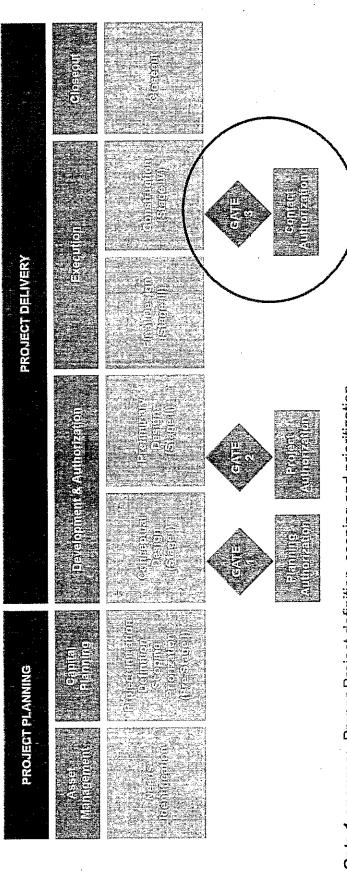
Integrated Financial Model

- Used to determine the capital capacity for the 10-year period
- Capacity is calculated based on statutory requirements, bond covenants and internal policy ratios
- Capacity is then allocated to the various projects under consideration using a comprehensive risk based approach

Projected Sources for the Capital Plan

Proposed Funding Uses	\$ in millions
Proposed Capital Program – Direct Port Authority Spending	\$29,500
Port Authority Support of the Gateway Program	2,700
Total Proposed Capital Program	\$32,200
Currently Projected Sources	
Consolidated Bond Proceeds	\$11,275
Pay-as-you-go Capital Investment	11,315
Other Special Obligations	2,700
Federal Funding for Storm recovery and resilience	1,600
Passenger Facility Charges – Aviation	2;800
Other currently awarded federal grants	530
New federal grants or other third party funding	1,730
Non-core real estate asset sales or net-leases	250
Total Funds Projected to be Available	\$32,200

A Rigorous Gates Process will be used to Manage the Plan



Gate 1 ensures: Proper Project definition, scoping and prioritization

Gate 2 ensures: Appropriate level of Project Development (cost, schedule and scope). Validation of available capacity prior to proceeding to Final Design

prior to proceeding to Final Design Gate 3 ensures: Project Compliance with existing budget &

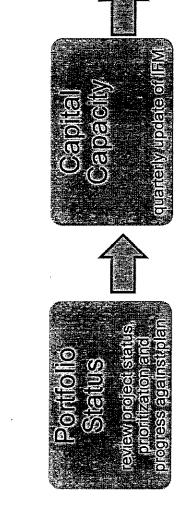
authorization

Validation of available capacity prior to proceeding to Construction

CRITICAL GATE THAT WILL
DETERMINE WHETHER A
PROJECT CAN PROCEED TO
CONSTRUCTION OR NOT

Preliminary, subject to change

Monitoring and Delivering the Plan







Gaite Review

15x



Recommendations for CPOC

L®บลกเลาไy review of capital performance and itecommendations for alignment with capacity



Planning, Execution,

and Asset

CPEAM: Capital

Planning Oversight

Committee

CPOC: Capital Management

Public Review and Comment Period

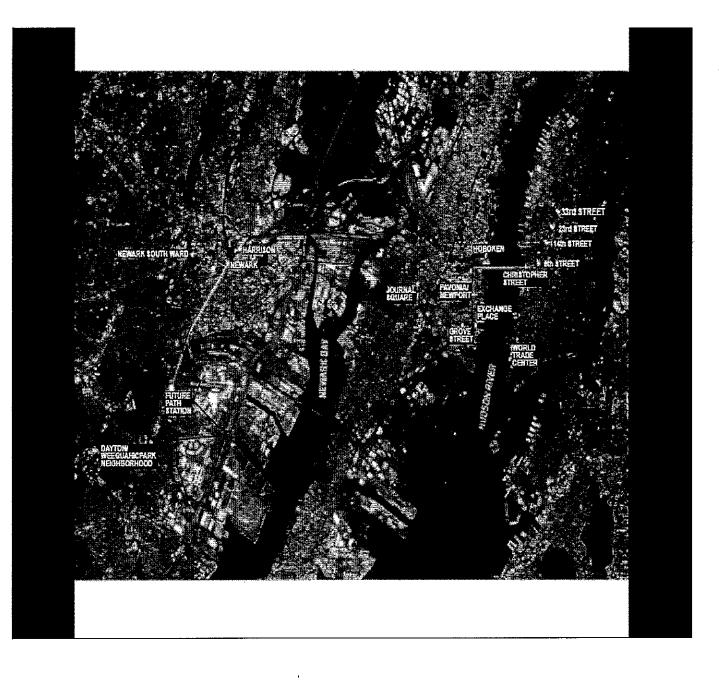
Proposed plan on PA website available for comment through February 15, 2017

Board consideration of final plan modifications based on comments at Board Meeting on February 16, 2017

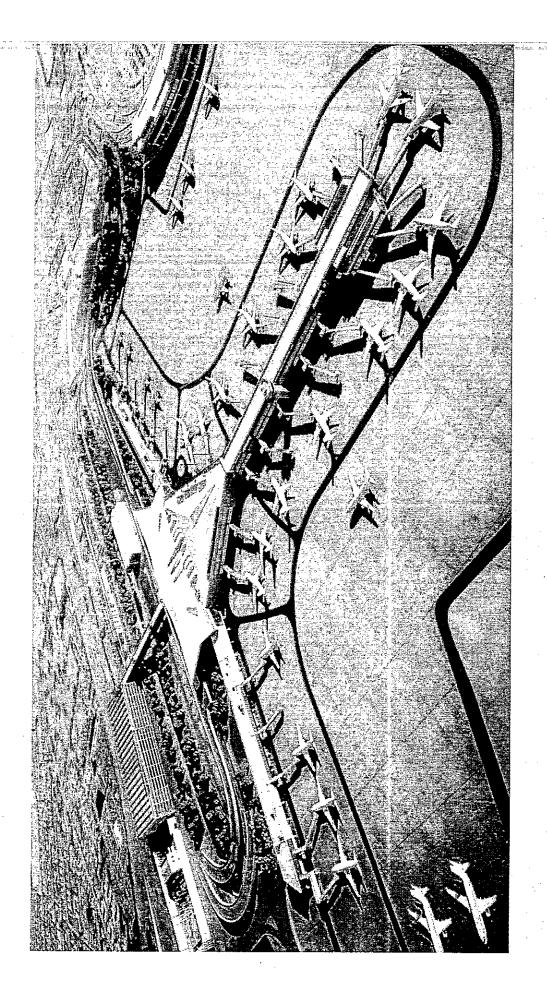




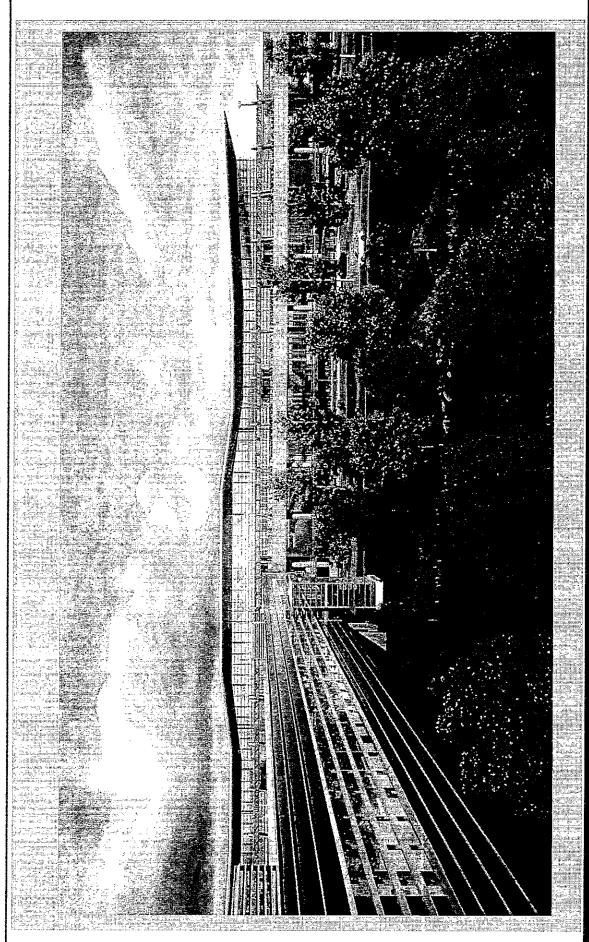
Public Meetings held in each state at PA offices on January 31, 2017 and February 7, 2017



EWR Terminal A Rendering



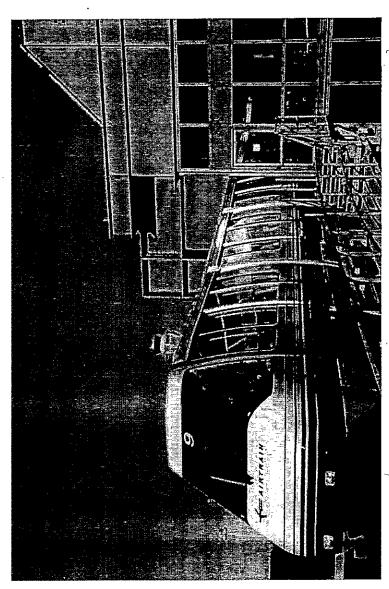
EWR Terminal A Rendering



THE PORTAUTHORITY OF NY & NJ

Newark Liberty International Airport AirTrain

New Jersey State Senate Legislative Oversight Committee



January 17, 2017

CTA development and construction began in the 1990s Provisions for EWR AirTrain were made in the 1970

New Central Terminal Area:

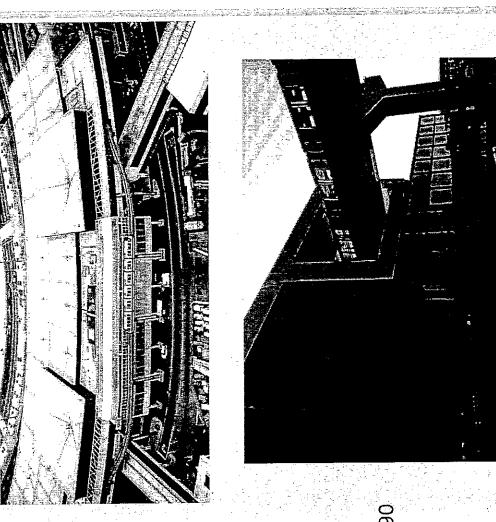
"Notches" designed into Terminals for Stations and guideway right of way

Airport Access Program: 1980/1990s

- Reduce roadway congestion
- Improve connectivity on airport
- Connect airport with Regional Rail Transit

Planning and Construction

- Planning began 1987
- DBOM Contract award December 1990
- First phase on airport
- Second phase extended to a new North East Corridor Station



Newark Liberty International Airport 🌼 AirTrain

employees, easing connection to airport destinations EWR AirTrain serves both airline passengers and

Opening Dates

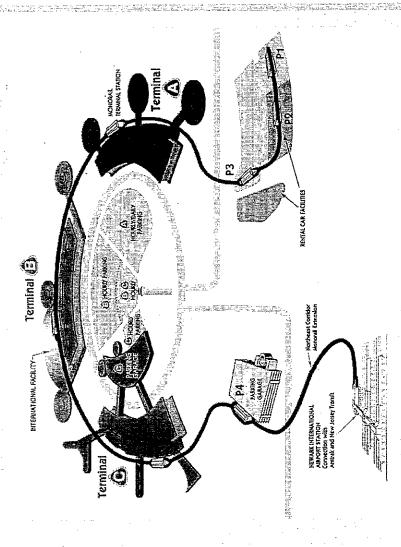
- Base System May 1996
- NEC Extension October 2001

Services

- Inter-Terminal Transfers (A,B,C)
- Rental Cars (P2, P3)
- Parking (P1, P3, P4)
- Hotel courtesy shuttles (P4)
- NJT and Amtrak (NEC)

Ridership

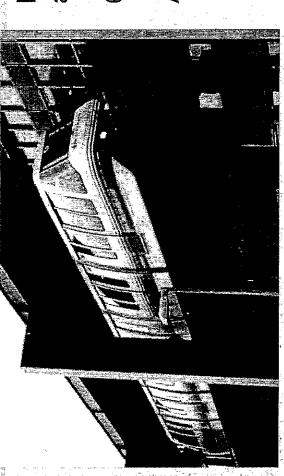
- Average 33,000 pax daily
- ~30% A,B,C transfers
- ~45% P1, P2, P3 & P4
- ~25% NEC



Frequency

- 5 am midnight every 3-4 minutes
- Midnight 5 am every 15 minutes

with a fleet of 18 vehicles using a monorail technology EWR AirTrain traverses 3 miles of elevated guideway



Steel box beam guideway structure

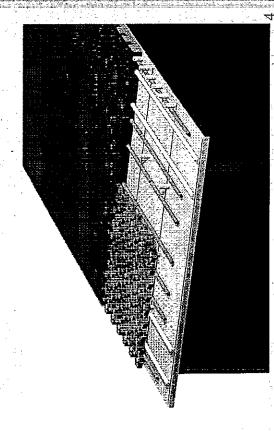
Composite running surface with heating system

Rotary switches

Dual tired system: guide wheel and drive wheel

6 car trains - permanently coupled

Automatic train control



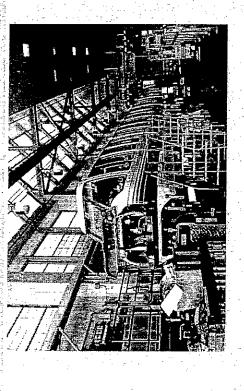
THE PORTAUTHORITY OF NYRNJ

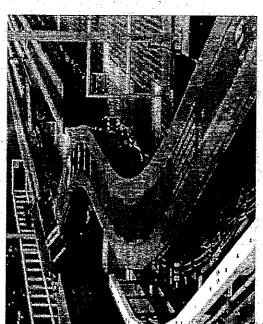
\$380 Million allocated for EWR AirTrain Interim Repairs

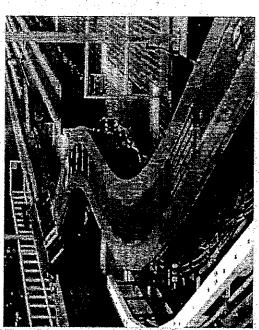
Vehicle Refurbishment: Bodies and Sub-components

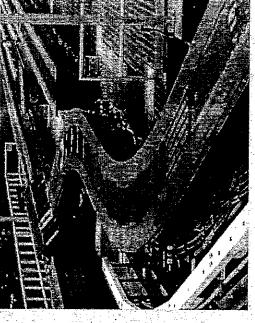
Running Surface & Heating Repairs Guideway: Switches, Structure,

Automatic Train Control Replacement









\$40 Million -Planning of an AirTrain Replacement

Goals

- Replace Age expired System
- Meet growing ridership demand
- Address changing Airport Layout

Professional Services Agreement

- Concept Alignment
- Coordinate with Terminal A Redevelopment
- Technology Assessments
- Industry Benchmarking
- Ridership Projections
- **Budget Development**
- Scheduling
- Environmental Documents
- Evaluation of Procurement and Project Delivery Approaches



Newark Liberty International Airport Terminal A Redevelopment Program

New Jersey State Senate Legislative Oversight Committee



January 17, 2017

Existing Terminal A is a circa 1973 asset in need of major investment to meet future needs

Capacity Constrained

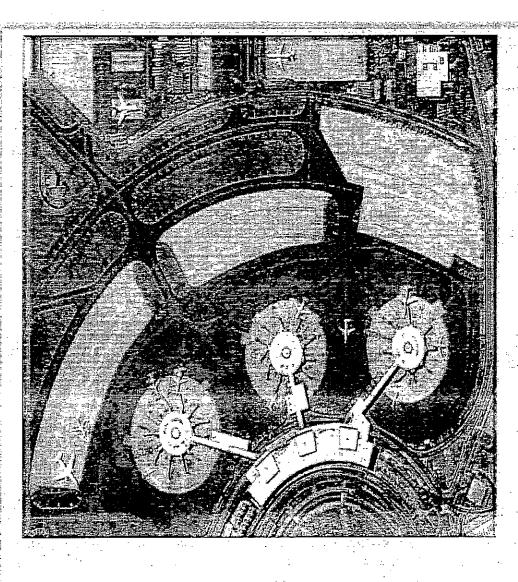
- Designed for ∼9 MAP
- Over 10 MAP in 2015

Current Deficiencies

- Operational Issues
- Screening
- Airside Corridor
- State of Good Repair
- Infrastructure
- Building Systems evel of Service

Future Constraints

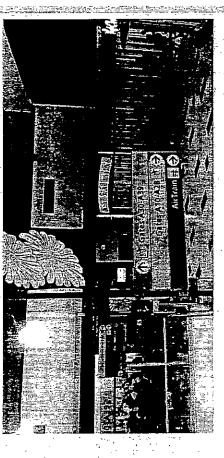
- Insufficient Queuing Space
- Frontage Congestion
- Limited Number of Gates
- Hold Rooms Insufficiently Sized

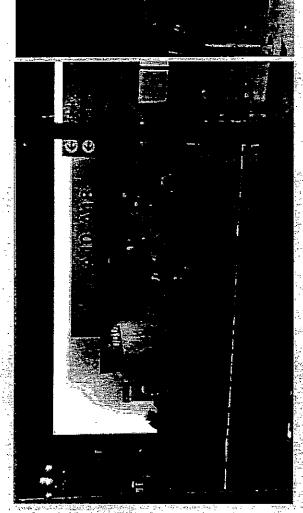


THE PORTAUTHORITY OF NYR NJ

Daily crowd conditions occur due to legacy corridors inadequate to accommodate security screening

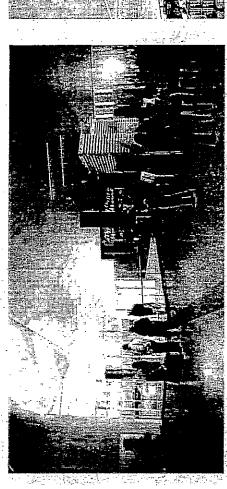


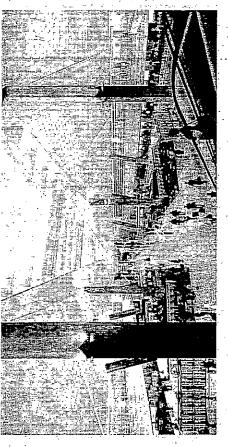


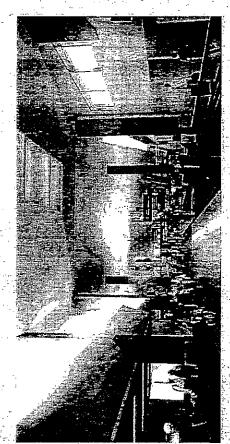


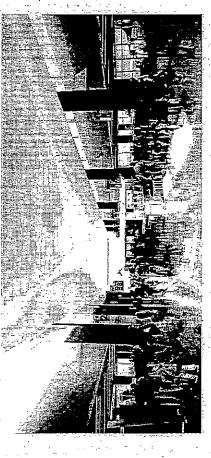
THE PORTAUTHORITY OF NY & N.

New Terminal will provide for ample check in, security and hold room concession space









Program includes four main elements

Airfield

- 140 Acres paving & demo of existing bldgs, concourses, satellites
 - Fraditional Design Bid Bulld
- Two contract packages

andside/Roadway

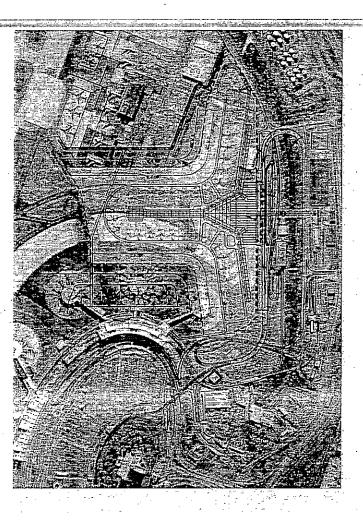
- 8 new bridge structures, roadway work, pedestrian walkway and peripheral ditch work
- Fraditional Design Bid Build
- Four contract packages

Parking Garage

- ~3,000 spaces & toll plaza Design Build

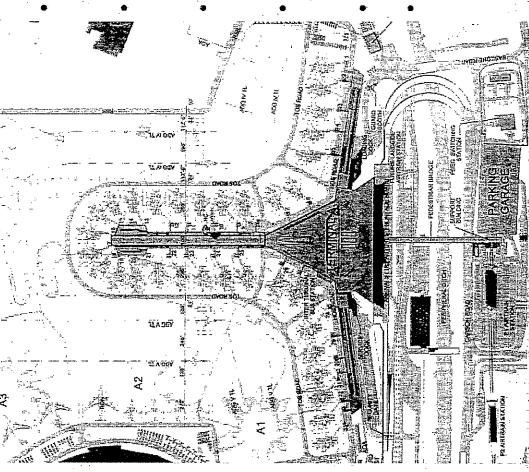
Ferminal

- Design Build
- Construction of frontage N60 bridge, pedestrian bridge and ramp area

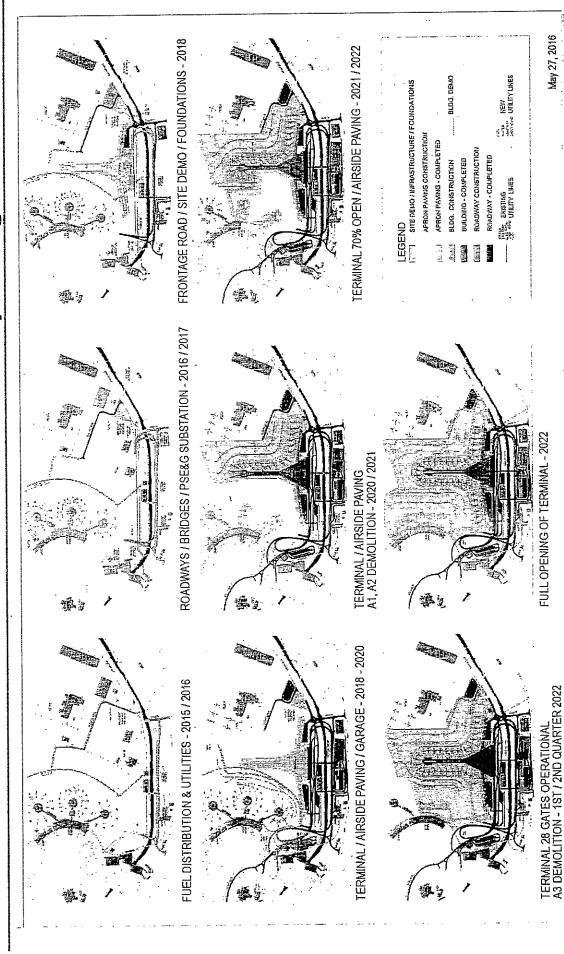


Terminal location and design optimized during the previous studies and planning

- \$2.4 B Total Program Cost
- Approximate 1M sq. ft. Terminal
- 33 Gates expandable to 45 gates in future
- 13.6 MAP design year: future capacity up to 19.6 MAP
- Flexible design to accommodate future technology
- EED Silver
- Resilient Design

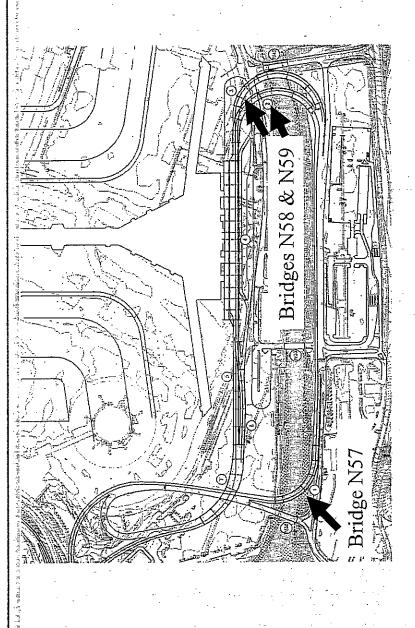


infrastructure work to achieve full opening in 2022 Terminal A implementation plan builds off current



Newark Liberty International Airport & Terminal A Redevelopment Program

Initial construction confracts are Bridges N57, N58 & N59 with award targeted for 1st Qtr 2017



- Required DEP permitting concurrently due to impacts on Peripheral Ditch
- Bridge 58 & 59 abutments on east of ditch land in current UPS site so notice initiated for relocation

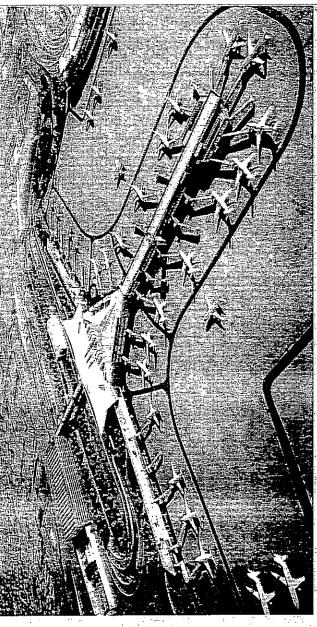
Additional activities also engaging industry to further Terminal A Redevelopment

Professional Service Contracts

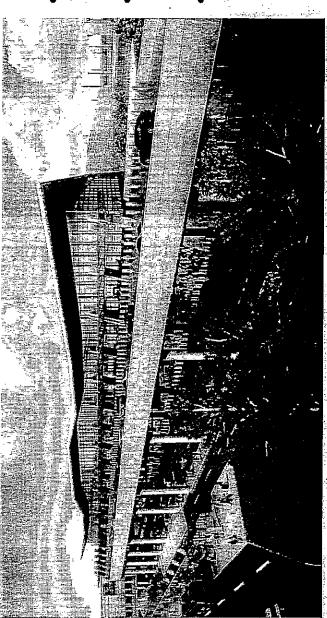
- PM services
- Design services
- CM services

Industry Outreach

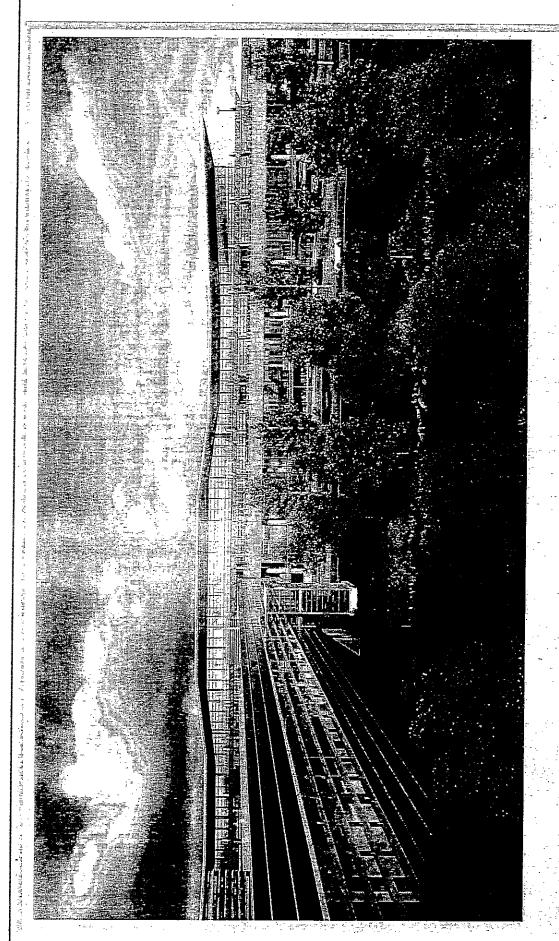
- documents issued for RFI and RFQ erminal -
- Industry conference -October 2016
- MBE/WBE conference planned for spring



Terminal A Replacement will also serve as an economic driver for the Region



- 9,000 job-years
- \$600 million in wages
- \$3.3 billion in economic activity



Newark Liberty International Airport 🌣 Terminal A Redevelopment Program

3lox

Statement Steven P. Plate, Chief Major Capital Projects The Port Authority of NY & NJ

PATH Extension of North East Corridor (NEC) Rail Link Station (RLS) and Port Authority Bus Terminal Replacement (PABT)

Thank you Chairman Wisniewski and members of the committee,

My name is Steven Plate and serve as Chief of Major Capital Projects. I have been with the Port Authority for over 30 years and most recently, was the Director of World Trade Center Construction for the past 11 years. I am happy to provide an overview of two major projects in the proposed ten-year capital plan -- the PATH Rail Extension to Newark Liberty Rail Link Station and Port Authority Bus Terminal Replacement (PABT) projects.

PATH Rail Extension to Newark Liberty Rail Link Station

The proposed ten-year capital plan allocates \$1 billion towards the PATH Rail Extension to Newark Liberty Rail Link Station with an estimated total project cost of \$1.7 billion; we have made an assumption that to fill the balance, the Port Authority would apply for federal funding.

Today, PATH's Newark to World Trade Center Line currently operates, and begins at Newark-Penn Station. Extending the PATH system from Newark Penn Station to the Northeast Corridor Rail Link Station, located in Newark's South Ward adjacent to the Dayton neighborhood, would improve transit access for commuters and airport customers coming from many of the communities currently served by PATH including Lower Manhattan, Bergen, Hudson, and Essex Counties in New Jersey. On the map, you can see the location of the proposed new station and its proximity to the Amtrak, NJT, Northeast Corridor and the AirTrain.

By extending the PATH Newark to World Trade Center Line to NJ TRANSIT, Amtrak, and the Newark AirTrain at the Northeast Corridor Rail Link Station at EWR, this project will facilitate transit access to Newark Liberty International Airport (EWR) and Newark's South Ward. The extension would provide substantial benefits in reduced travel times, increased travel time predictability and lower costs for air travelers making use of EWR from lower Manhattan, as well New Jersey communities, and provide commuter access from regional New Jersey suburbs and cities directly to destinations in Jersey City, Hoboken and lower Manhattan.

Statement Steven P. Plate, Chief Major Capital Projects The Port Authority of NY & NJ

Part of the formal planning process will include ridership studies to determine not only the potential numbers of users, but also the origination of future riders.

The proposed program elements would include:

- Extending the PATH rail infrastructure from Newark Penn Station at Newark-Penn Station to the Northeast Corridor Rail Link Station at Newark Liberty Airport by 2.4 miles
- A new passenger station, located in Newark's South Ward, adjacent to the Dayton neighborhood, and with connection to the Northeast Corridor Rail Link Station at Newark Liberty International Airport.
- Intermodal connectivity to the existing transportation --- Amtrak/NJT northeast corridor lines, Newark Liberty AirTrain, NJ Transit bus lines
- Pedestrian access to the station
- Rail storage and staging yard
- Project design to accommodate future construction of a parking garage facility, through a potential public-private partnership.

As with planning on all major projects seeking federal funding assistance, this effort would undergo review known as an "Environmental Impact Statement", by a designated federal agency under the federal NEPA environmental review process. Included during the review is a robust public involvement and outreach effort, including the creation of two advisory groups: the Technical Advisory Committee (TAC) and the Stakeholder Advisory Committee (SAC).

Construction is anticipated to start in 2020 and be completed with full revenue service operations available to PATH in 2026.

Port Authority Bus Terminal Replacement (PABT)

The existing Port Authority Bus terminal was opened in 1950 and was expanded in 1981. As you know, currently, it is a challenge to meet the passenger demand. The new terminal will meet current and future projected passenger capacity, provide for safe reliable commute and enhance the customer experience.

Statement Steven P. Plate, Chief Major Capital Projects The Port Authority of NY & NJ

At present, the PABT accommodates approximately 232,000 passenger trips and more than 7,800 bus movement per average weekday, but demand is expected to increase to as many as 270,000 daily peak-hour passengers by 2020, and as many as 337,000 daily peak-hour passenger by 2040. The existing facility is also incompatible with current bus configuration; which require enhanced bus staging and storage.

The overall proposed program will replace the existing PABT, which is nearing the end of its useful life, with a state of the art bus terminal in a location to be selected following robust community outreach and stakeholder engagement. This will allow us to lay the groundwork for the various federal, state, local regulatory review processes that are a part of such a project, including the federally mandated NEPA environmental review process.

The new facility can be constructed to be scalable, and prepare to meet the approximately 35 to 50 percent growth in passenger traffic forecasted by 2040, while meeting all contemporary standards and code requirements.

Elements of the project, which are again subject to appropriate federal, state and local review, include:

- A 21st century terminal facility equipped with ramping system to allow access to and from the Lincoln Tunnel and Route 495 Corridor
- Bus parking and staging facilities to aid in on-time performance and operational efficiency
- Pedestrian connectivity to West Midtown and pre-existing subway system
- Considerations for commercial retail and community amenities to equally benefit the surrounding neighborhood and bus commuters in the region.

The proposed Port Authority 10-year capital Program provides for \$3.5 billion in funding through 2025. This allocation includes funding for planning, design and permitting, environmental review, public outreach and participation and construction.

The public outreach, planning and environmental review phase will inform the requirements, design and construction of the new bus terminal on the West Side of Manhattan. I anticipate that this phase of work will take approximately 2-3 years to complete. The process will include a robust alternative analysis which informs the NEPA review.

Statement Steven P. Plate, Chief Major Capital Projects The Port Authority of NY & NJ

Today, the Total Project Cost is not defined: we have a range of \$7.5 - \$10 billion. This will be refined as the planning, environmental review and public outreach phases are underway. The final Total Project Cost will be informed by design and engineering costs, environmental and regulatory review costs, insurance and other financial costs and ultimately, construction costs.

Tomorrow, February 16th I will be presenting to the Port Authority Board, at their monthly meeting, a request for authorization for \$70 million; this will allow us the ability to work with our procurement department to engage consultants with expertise in the disciplinary engineering design, environmental and regulatory review and public communications and outreach.

For the next ten years, the \$3.5 billion budgeted project amount will be used towards all that preliminary work I spoke of earlier: planning, initial and final engineering design, environmental and other regulatory review, communications and outreach efforts and initial construction phases.

Being a construction engineer and having decades of experience building large project in urban environments, I can tell you that the staging of a project is critical to maintaining the balance of construction progress and project impacts to the surrounding community. There will be numerous challenges to building the PATH to Newark Extension and Port Authority Bus Terminal Replacement including, but not limited to neighborhood quality of life concerns, traffic management, staging areas, available work times and coordination of multiple contracting entities.

The phasing and implementation plan for construction of these two projects will be developed based on the results of the planning and environmental review phases, as well as an extensive public outreach and participation from the region's stakeholders. Construction will be staged to minimize disruption to the surrounding area, as well as bus and rail operations with the development of a master schedule that facilitates coordination with regional transportation partners and other construction program.

As we continue, to efficiently leverage Port Authority funds for this project, we will seek to apply for federal grant funding and private value capture opportunities.

I welcome these projects and their challenges, but I also remain cautious that these projects are not only completed and fulfill the critical transportation needs of the

Statement Steven P. Plate, Chief Major Capital Projects The Port Authority of NY & NJ

region, but also enhances the Port Authority's reputation as a builder of regional transportation infrastructure.

Thank you for the opportunity to appear today and I am happy to answer any questions that you may have.