Agenda

• Overview
  • Frank Lombardi, Chief Engineer

• Capital Program - Major Projects
  • Peter Zipf, Deputy Chief Engineer/ Director of Engineering

• 2008 Construction Program
  • Peter Zipf, Deputy Chief Engineer/ Director of Engineering

• Break

• Procurement Highlights
  • Lillian Valenti, Director of Procurement

• Construction Management Issues
  • Jim Starace, Deputy Director- Construction Management Division

• Closing – Q&A
The Port Authority’s Mission

• Enhance region’s competitiveness and prosperity.
• Provide transportation services that efficiently move people and goods within the region and facilitate access to the nation and the world.
Port Authority Facility Map

New York
- Newburgh
  - Stewart International Airport
- Teterboro Airport
- George Washington Bridge
- Journal Square Transportation Center
- PATH
- World Trade Center Site

New Jersey
- Newark - Liberty International Airport
- Newark
- Port Newark
- Elizabeth Marine Terminal
- Bayonne Bridge
- Howland Hook Marine Terminal
- Goethals Bridge
- Outerbridge Crossing
- Holland Tunnel
- PATH

Airports
- Teterboro Airport
- George Washington Bridge
- Bus Station
- Bus Terminal
- Newark - Liberty International Airport
- John F. Kennedy International Airport
- LaGuardia Airport
- Teterboro Airport
- Teterboro Airport
- Teterboro Airport

Marine Terminals
- Elizabeth Marine Terminal
- Howland Hook Marine Terminal
- Broklyn Marine/Red Hook Container Terminal
- Newark Marine/Red Hook Container Terminal

Bridges
- George Washington Bridge
- Journal Square Transportation Center
- PATH
- Holland Tunnel
- PATH

Tunnels
- George Washington Bridge
- Journal Square Transportation Center
- PATH
- Holland Tunnel
- PATH

Terminals
- Port Authority Primary Facilities:
  - 5 Airports
  - 4 Marine Terminals
  - 4 Bridges
  - 2 Bus Terminals
  - 2 Tunnels
  - 1 Rail System
  - WTC
Agency’s Priorities

Safety- protection from disasters, crime, and accidents
Opportunity- increase economic strength; enhance access
Sustainability- conserve natural resources
Capacity- financial strength and workforce
Quality- engineering/architectural and service excellence
Region’s Transportation Challenges

PROJECTED GROWTH BY THE YEAR 2020

• Aviation - 40%
• Ports - 100%
• PATH - 35%
• TB&T - 18%
• Security - 300%

$29.5 Billion

- World Trade Center $8B (27%)
- Access to the Regions Core $3B (11%)
- Port Commerce $1.9B (7%)
- Security $1.8B (6%)
- TB&T $4B (14%)
- PATH $3.3B (12%)
- Aviation $6.4B (23%)
2007-2016 Capital Program
Major Projects
## George Washington Bridge – Major Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspennder Rope Replacement</td>
<td>$250-300 M</td>
<td>2011</td>
</tr>
<tr>
<td>Recoating Underside of Lower Level</td>
<td>$125-175 M</td>
<td>2009</td>
</tr>
<tr>
<td>Cross Bronx Expressway Improvements</td>
<td>$50-100 M</td>
<td>2010</td>
</tr>
<tr>
<td>Upper Level Deck Rehabilitation</td>
<td>$100-300 M</td>
<td>2010</td>
</tr>
</tbody>
</table>
# Staten Island Bridges - Major Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goethals Bridge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goethals Bridge Modernization</td>
<td>$550-600 M</td>
<td>After 2009</td>
</tr>
<tr>
<td><strong>Bayonne Bridge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoating Underside NY &amp; NJ Viaducts</td>
<td>$20-30 M</td>
<td>2011</td>
</tr>
<tr>
<td>Bayonne Bridge Study</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Outerbridge Crossing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace Roadway Slabs in Toll Lanes</td>
<td>$1-5 M</td>
<td>2008</td>
</tr>
<tr>
<td>Recoat Underside of NY &amp; NJ Viaducts</td>
<td>$1-5 M</td>
<td>Underway</td>
</tr>
</tbody>
</table>
Lincoln and Holland Tunnels - Major Projects

<table>
<thead>
<tr>
<th>Lincoln Tunnel</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Capacity Enhancement at XBL</td>
<td>$50-60 M</td>
<td>2014</td>
</tr>
<tr>
<td>• Reconstruction of the Helix</td>
<td>TBD</td>
<td>After 2013</td>
</tr>
<tr>
<td>• Bus Ramp Slab Replacement</td>
<td>$40-50 M</td>
<td>After 2008</td>
</tr>
<tr>
<td>• Replace Vent System</td>
<td>$20-30 M</td>
<td>2009</td>
</tr>
</tbody>
</table>

Holland Tunnel

<table>
<thead>
<tr>
<th>Holland Tunnel</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rehab Vent System</td>
<td>$30-40 M</td>
<td>Underway</td>
</tr>
<tr>
<td>• Replace Pier 9/204</td>
<td>$30-40 M</td>
<td>2009</td>
</tr>
</tbody>
</table>
## Port Authority Bus Terminal - Major Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Bus Garage</td>
<td>$300-325 M</td>
<td>2012</td>
</tr>
<tr>
<td>Replacement of HVAC Units</td>
<td>$10-15 M</td>
<td>2010</td>
</tr>
<tr>
<td>Replace Auto Mgmt Control System</td>
<td>$5-10 M</td>
<td>2009</td>
</tr>
</tbody>
</table>
## PATH - Major Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH Stations Modernization</td>
<td>$350-400 M</td>
<td>2009</td>
</tr>
<tr>
<td>Purchase of New PA5 Cars</td>
<td>$325-375 M</td>
<td>2005</td>
</tr>
<tr>
<td>Signal Replacement Program</td>
<td>$225-250 M</td>
<td>2008</td>
</tr>
</tbody>
</table>
# LaGuardia Airport - Major Projects

<table>
<thead>
<tr>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Terminal Building Modernization $550-600 M</td>
<td>After 2010</td>
</tr>
<tr>
<td>Runway 4-22 Airfield Lighting Upgrade $15-25 M</td>
<td>Underway</td>
</tr>
</tbody>
</table>
### John F Kennedy Airport - Major Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Domestic Terminal</td>
<td>$315-325 M</td>
<td>After 2010</td>
</tr>
<tr>
<td>Rehab Runway 13R-31L</td>
<td>$125-135 M</td>
<td>After 2010</td>
</tr>
<tr>
<td>Runway Access Improvement</td>
<td>$80-90 M</td>
<td>2008</td>
</tr>
<tr>
<td>Rehab Taxiways S, SC, SD &amp; SR</td>
<td>$20-30 M</td>
<td>2008</td>
</tr>
<tr>
<td>Construct Centralized De-Icing Facility</td>
<td>$25-50 M</td>
<td>2009</td>
</tr>
<tr>
<td>Rehab Taxiway E</td>
<td>$20-30 M</td>
<td>2008</td>
</tr>
</tbody>
</table>
### Newark Liberty International Airport- Major Projects

<table>
<thead>
<tr>
<th></th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal A Modernization</td>
<td>$575-585 M</td>
<td>After 2010</td>
</tr>
<tr>
<td>Terminal B Modernization</td>
<td>$175-185 M</td>
<td>Underway</td>
</tr>
<tr>
<td>Rehab Runway 11-29</td>
<td>$15-20 M</td>
<td>2008</td>
</tr>
</tbody>
</table>
**Stewart International Airport - Major Projects**

<table>
<thead>
<tr>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport Development Program</td>
<td>$250-300 M</td>
</tr>
</tbody>
</table>
### Port Commerce - Major Projects

<table>
<thead>
<tr>
<th></th>
<th>Estimated Construction Cost</th>
<th>Forecasted Construction Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Dredging Project to 50‘</td>
<td>$75-85 M</td>
<td>Underway</td>
</tr>
<tr>
<td>• Berth Replacement</td>
<td>$15-20 M</td>
<td>2012</td>
</tr>
<tr>
<td>• Express Rail</td>
<td>$25-50 M</td>
<td>Underway</td>
</tr>
</tbody>
</table>
The World Trade Center Construction

- Transportation Hub
- One WTC, Freedom Tower
- Retail Redevelopment
- Site-wide Infrastructure
Access to the Region’s Core (ARC)

Project Alignment and Components

- Hudson River
- NY
- NJ
- Existing NEC Corridor
- Frank R. Lautenberg Station
- Existing AMTRAK Tunnels
- Existing Penn Station
- New Palisades Tunnels
- NJ Transit Mainline
- New Hudson River Tunnels
- 2 New ARC Tracks
- Secaucus Loop
- New Manhattan Tunnels
- Kearny Yard Midday Rail Storage
- NY Penn Station Expansion
- The Port Authority of New York & New Jersey
Introduction

THE REGION’S TRANSPORTATION CHALLENGES

The New York-New Jersey region is experiencing remarkable growth: our region will be home to 16 million more residents, 1.4 million more jobs, and a $600 billion increase in its Gross Regional Product.

With this growth comes prosperity, but also substantial challenges. Are these providing a safe environment for the hundreds of millions of people who have to move through the region’s transportation facilities each year? I understand the fundamental importance of providing secure transportation—especially as September 11th would be better than The Port Authority.
2008 Construction Program
Agency’s 2008 Capital Budget

$2.5 Billion

Port Commerce & Economic Development $280M (11%)
PATH $256M (10%)
Regional Transportation Programs- $243M (27%)
Aviation & Airport Access Programs $695M (34%)
TB&T $197M (8%)
World Trade Center $860M (34%)
2008 Construction-In-Place

$1.7 Billion

- Port Commerce
  - $150M
  - 31%
- PATH
  - $151M
  - 9%
- Regional Development
  - $19M
  - 5%
- TB&T
  - $82M
  - 5%
- Aviation & Airport Access Programs
  - $517M
  - 38%
- World Trade Center
  - $752M
  - 45%

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY
2008 Construction Contract Awards

$680 Million

- Port Commerce: $75M (12%)
- PATH: $21M (9%)
- Security: $189M (30%)
- TB& T: $93M (15%)
- Aviation: $253M (40%)
## 2008 Contract Awards – TB&T

### 2008 Forecast - $93M

### Tunnels, Bridges, & Terminals

<table>
<thead>
<tr>
<th>Description</th>
<th>Ad Date</th>
<th>Engineering Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lincoln Tunnel-Resurface NY Expressway Bridge Between W 31st and W 33rd Streets</td>
<td>4th Quarter</td>
<td>$1-5M</td>
</tr>
<tr>
<td>Staten Island Bridges-Fire Standpipe Rehabilitation</td>
<td>4th Quarter</td>
<td>$1-5M</td>
</tr>
</tbody>
</table>
# 2008 Contract Awards – PATH

## 2008 Forecast - $21M

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Ad Date</th>
<th>Engineering Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comprehensive Signage Program</td>
<td>2ND Quarter</td>
<td>$1-5M</td>
</tr>
<tr>
<td>• MacMillan Bloedel- Misc Fire Protection</td>
<td>2ND Quarter</td>
<td>$0.5-1M</td>
</tr>
<tr>
<td>• HCMF Compressed Air System Upgrade</td>
<td>4TH Quarter</td>
<td>$0.25-0.5M</td>
</tr>
</tbody>
</table>
2008 Contract Awards
Aviation- New York Airports

2008 Forecast - $200M

**John F. Kennedy Airport**
- Demo of Hanger 12 and Construction of Centralized De-Icing Facility- Phase II
  - Ad Date: 3rd Quarter
  - Engineering Estimate: $40-55M
- Rehab Runway 13R-31L
  - Ad Date: 4th Quarter
  - Engineering Estimate: $150-175M
- Runway Access Improvement
  - Ad Date: 4th Quarter
  - Engineering Estimate: $40-55M

**LaGuardia Airport**
- Rehabilitation of the Central Terminal Building Roof
  - Ad Date: 2nd Quarter
  - Engineering Estimate: $10-15M
- Storm Drainage Rehabilitation
  - Ad Date: 4th Quarter
  - Engineering Estimate: $1-5M
# 2008 Contract Awards

**Aviation - New Jersey Airports**

## 2008 Forecast - $53M

<table>
<thead>
<tr>
<th>Newark Liberty International Airport</th>
<th>Ad Date</th>
<th>Engineering Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal B Fire Alarm System Upgrade</td>
<td>3rd Quarter</td>
<td>$1-5M</td>
</tr>
<tr>
<td>Terminal B Modernization - Mid Level Domestic Ticketing</td>
<td>3rd Quarter</td>
<td>$15-20M</td>
</tr>
<tr>
<td>Terminal B Modernization - Mid Level Meeter/Greeter Area</td>
<td>4th Quarter</td>
<td>$15-20M</td>
</tr>
</tbody>
</table>
## 2008 Contract Awards – Port Commerce

### 2008 Forecast - $75M

<table>
<thead>
<tr>
<th>Port Commerce</th>
<th>Ad Date</th>
<th>Engineering Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn Piers- Maintenance Dredging</td>
<td>2nd Quarter</td>
<td>$1-5M</td>
</tr>
<tr>
<td>Port Newark- Corbin &amp; Tyler Street Intersection Improvements</td>
<td>2nd Quarter</td>
<td>$1-5M</td>
</tr>
<tr>
<td>Port Newark- Concrete Roadway Repairs</td>
<td>3rd Quarter</td>
<td>$0.5-1M</td>
</tr>
</tbody>
</table>

**Image:**
- [Image of port and containers](image-url)
Reference to Construction Program

Port Authority Website
www.panynj.gov
PROCUREMENT HIGHLIGHTS
Construction Program

• Located on the Port Authority Website (www.panynj.gov/DoingBusinessWith/engineering/)

• Provides a forecast of construction contracts to be advertised
• Estimated range of construction cost
• Brief description of each project
• Contact person
• Guide of contracting procedures
• Bid process
Contract Advertisements

• Advertise publicly
  • Engineering News-Record
  • New York and New Jersey Newspapers
• Awarded to lowest qualified bidder
Pre-Qualification

- Special construction expertise
- Operational constraints
- Complex staging coordination
Bidders List

• List of Prime Contractors

• Complete a vendor registration/profile

• Receive copies of public advertisements by mail
Quick Bid Program

• Opportunity for M/WBE contractors
• Shorten award duration for small contract
  • Construction estimate under $500,000
  • Set aside list of M/WBE and SBE contractors
• Provide interested bidders with free construction contract documents
Bid Packages

Viewing Bid Packages

- Contract Desk, Three Gateway Center, 3rd Floor, Newark, NJ

Obtaining Bid Package

- By mail to or Pick up
- $100 non-refundable payment by Company check or money order

Sealed Bids

- Procurement Department, One Madison Ave, 7th Floor, New York, NY
- Publicly opened and read
- Bid openings posted on website
Contractor Responsibility and Integrity

- PA awards contracts only to “Responsible” Contractors
  - Never indicted, convicted, suspended, debarred, or terminated by any governmental agency
  - Never failed to pay taxes
  - Never subject to criminal investigation or civil anti-trust investigation by government agency
  - A signed statement that sets forth the reasons therefore.
Insurance Provided by the Port Authority

- Typically PA procures insurance
  - Public liability
  - Workers compensation and employer’s liability
  - Builder’s risk
CONSTRUCTION MANAGEMENT
Types of Compensation Provisions

- Four basic types of compensation provisions:
  - Lump Sum
  - Unit Price
  - Combination Lump Sum and Unit Price
  - Net Cost
## Bonding

### GENERAL CONSTRUCTION CONTRACT REQUIREMENTS

<table>
<thead>
<tr>
<th>Engineer’s Estimate</th>
<th>Bid and Performance and Payment Bonds</th>
<th>Financial Statement</th>
<th>MBE/WBE Subcontracting Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $500,000</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>$500,000-$1,000,000</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Over $1,000,000</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
Payment Policies

• Estimate and certify for payment the approximate value of work performed.
• Once a month payments - contractual retainer
• Twice a month payments for M/WBE Set-Aside Program
• Exempt from sales taxes
Apprenticeship Program

• New York Apprenticeship Program
  • Construction Skills 2000 Apprentice Program
    • Introduce high school graduates to a systematic pathway into union-sponsored, skilled trade

• New Jersey Apprenticeship Program
  • Construction Industry Advancement Program
  • Newark/Essex County Construction Careers Program
    • Prepare High School graduates to join construction and building trade union
Minority, Women, and Small or Disadvantaged Business Enterprise Program

- Construction contracts
  - Under $500,000 set aside for MBE/WBE
  - $500,000 to $1 million set aside for SBE

- M/WBE Goals
  - 12% MBE
  - 5% WBE

- DBE
  - included for projects with federal funding

- Firms must be certified by PA
- Disadvantaged Business Enterprises included for projects with federal funding
Contract Administration Enhancements

• Audit Issues
  • Terminology Change- Audit “adjustment” in place of “over charge”
  • Actions taken by Audit Dept. to reduce backlog
  • Timely Audit Response
  • 30 day Contractor response
• Operating costs
• Equipment Rates
  • Over scale wages
  • Emergency Response
• Retainage Modifications
Recycling

- Submit Recycling Plan
  - 75% removal
    - Steel
    - Concrete
    - Asphalt
    - Clean Soil

- Use of Recycled Materials
  - Recycled asphalt pavements (RAP)
  - Supplementary Cementitious Materials (SCM)
Priority Work - Net Cost With Fee

- Priority Work Orders
  - Service interruption avoidance
  - Critical customer service work
  - Critical public relations

- One GC based on low bid fee
  - For each major facility group
THANK YOU!