THE PORT AUTHORITY OF NY & NJ

January 31, 2012

The Honorable Chris Christie
Governor
State of New Jersey
State House
Trenton, NJ 08625

The Honorable Andrew M. Cuomo
Governor
State of New York
State Capitol
Albany, NY 12224

Dear Governors:

In response to last year's toll and fare increase, on August 18, 2011, you charged the Board of Commissioners of the Port Authority of New York and New Jersey to undertake a comprehensive review and audit of the entire agency, covering its finances, operations, and ten-year Capital Plan. On September 19, 2011, a Special Committee of the Board was organized to oversee that directive, and thereafter it retained the international firms of Navigant Consulting, Inc. and Rothschild Inc. to assist in this effort.

We present herewith the Phase I Interim Report. It is the Special Committee's intent that this Report together with our subsequent final report will present a thorough assessment of the Port Authority's current business model, finances, and operations, as well as provide corrective recommendations and measures. The findings and recommendations of the Report will be presented to the Port Authority's Board for consideration and appropriate action.

We note that the Report finds an "organization at a crossroads" and indicates that the Port Authority needs a top-to-bottom overhaul of its management structure. Navigant's preliminary review revealed, in their assessment, "a challenged and dysfunctional organization suffering from a lack of consistent leadership, a siloed underlying bureaucracy, poorly coordinated capital planning processes, insufficient cost controls, and a lack of transparent and effective oversight of the World Trade Center program that has obscured full awareness of billions of dollars in exposure to the Port Authority."

As can be seen in the Report, the World Trade Center redevelopment costs grew from an estimate of approximately $11 billion in 2008 to a current estimate of approximately $14.8 billion, with the estimated net cost to the Port Authority after third-party reimbursements growing from approximately $6 billion to approximately $7.7 billion.

Given that enormous burden, we are committed to taking the steps necessary to mitigate the Port Authority's exposure at the World Trade Center site by:

- Establishing new financial and management controls, and value engineering all possible aspects of the World Trade Center project. This crucial step should help

225 Park Avenue South
New York, NY 10003
T: 212 435 7000

limit or mitigate the approximately $1 billion of potential incremental cost exposure identified in the Report;

- Maximizing the recovery of costs spent on behalf of third-party stakeholders and strictly limiting any new financial commitments related to increased scope and third-party work. As noted in the Report, the Port Authority already needs to recover approximately $1.6 billion from public agencies and private entities, such as the National September 11 Memorial & Museum;
- Leveraging private sector expertise. The Port Authority has made advances in this direction by forming a joint venture with the Durst Organization on Tower 1 and actively negotiating a joint venture with Westfield on the retail components of the World Trade Center site. As suggested by the Report, the Port Authority underestimated approximately $1 billion of costs that were subsequently identified by the involvement of experienced, private partners. There may have been an opportunity to mitigate some of these costs had they been identified earlier; and
- Pursuing the feasibility of third-party capital sources to fund the commercial aspects of the site. Alternative methods of funding the infrastructure needs of the Port Authority may come from monetizing certain assets at the World Trade Center site.

The amount of debt at the end of 2001 ($9.1 billion) grew to $19.5 billion at year-end 2011, and is expected to increase further to approximately $20.8 billion by the end of 2012. This significant increase in the agency's debt load will remain a burden for years to come.

Gross compensation at the Port Authority has grown in the last five years by approximately 19%, from $629 million to $749 million, primarily as the result of "add-on" compensation such as overtime, unused vacation exchange and "longevity" programs. During this same timeframe, the cost of benefits for employees increased by approximately 35%, from $341 million to more than $458 million.

These findings underscore the Special Committee's objective of finding ways of lowering operating costs and increasing operational efficiencies across the agency. The Special Committee is strongly committed to bringing employee compensation and benefits in line with appropriate public employee benchmarks and has already asked our executive management team to examine the following measures:

- Requiring contributions to healthcare. If implemented for all employees, these contributions would result in expected savings of approximately $103.8 million over the course of the next four years;

- Eliminating "add-on" compensation programs, such as unused vacation exchange and "longevity." The estimated annual savings for eliminating these programs for non-represented employees is approximately $9.1 million;
- Implementing a merit driven compensation program;
- Imposing stronger controls on overtime; and
- Revising vacation and other compensated time policies.

Aside from these findings and recommendations, the Report includes preliminary observations on the Port Authority's current $25.1 billion Capital Plan and underlying capital planning process. The majority of that capital, more than $18 billion, is planned for assets excluding the World Trade Center site, reflecting significant state-of-good-repair and other needs of our core transportation assets. Yet the Report observes that the capital planning process does not necessarily align with the agency's overall priorities. Line functions promote projects to maintain their own asset base, while management roles and responsibility for oversight of the planning and project execution process are not clearly defined. Furthermore, senior management lacks key performance metrics to drive accountability for the execution of the Capital Plan.

The next phase of the Special Committee's work will further the detailed review of the hundreds of projects in the Capital Plan. However, it is clear that the Port Authority must refocus its organization and processes to increase the speed of project delivery and reduce project costs. Already, our executive management team is focusing on various steps to achieve these goals, including:

- Streamlining pre-construction approval processes;
- Reducing "soft costs" associated with project development;
- Requiring financial department review of all transactions before they are brought to the Board; and
- Improving communications internally to foster better collaboration and decision-making for critical projects.

These important steps, together with other improvements such as greater use of electronic systems to improve management of our real estate and leasing contracts, and improving the timely collection of revenues owed to us, will improve the value to the agency, and to the public, of the capital dollars we spend.

The above findings, along with the others in the Report, make abundantly clear something that we already knew: we must now move to a new era for the Port Authority. In 2011, the Board had already begun this process by implementing significant changes to

reinvigorate the agency. For example, in the past months it has moved forward in a proactive way with positive changes in governance and transparency by:

- Posting online the compensation of all employees of the Port Authority and committing the agency to quarterly updates;
- Implementing the elimination of the non-revenue component of the Port Authority's E-ZPass program for certain employees and retirees;
- Hiring the first new independent auditor for the agency in 31 years;
- Strengthening the Port Authority's internal Enterprise Risk Management System to allow the Board to better anticipate and mitigate potential problems;
- Establishing an Insurance Working Group to examine the Port Authority's insurance practices and costs; and
- Approving Preliminary Operating and Capital Budgets for 2012 expressly subject to any measures adopted by the Board as a result of the Special Committee's review.

Beyond these recent steps and the aforementioned commitments, much more needs to be done. The Special Committee's continued review will serve as the vehicle for this change, and as we move into Phase II with the guidance of Navigant and Rothschild, the principal objectives will remain the same: to reduce costs, improve efficiencies, and fulfill the Port Authority's mission as the engine for economic growth and job creation in the New York/New Jersey region. We look forward to your continued support.

Respectfully,

THE SPECIAL COMMITTEE OF
THE BOARD OF COMMISSIONERS
OF THE PORT AUTHORITY OF
NEW YORK AND NEW JERSEY

David Samson
Chairman

Scott Rechler
Vice-Chairman

William "Pat" Schuber
Commissioner

Jeffrey Lynford
Commissioner

Phase I Interim Report

Presented to:

The Special Committee of the Board of Commissioners of

THE PORT AUTHORITY OF NY & NJ

January 31, 2012

Presented by:

NAVIGANT

Table of Contents

I. EXECUTIVE SUMMARY 5

PRELIMINARY ORGANIZATIONAL DESIGN & OPERATIONAL ASSESSMENT 5
INITIAL COST REVIEW OF WTC PROGRAM 6
PRELIMINARY CAPITAL PLANNING ASSESSMENT 7

II. NATURE OF ENGAGEMENT & SCOPE 7

III. GENERAL APPROACH 9

COMPENSATION & BENEFITS REVIEW 9
INITIAL COST REVIEW OF THE WTC PROGRAM 9
PRELIMINARY CAPITAL PLANNING ASSESSMENT 9

IV. BACKGROUND 9

V. PORT AUTHORITY OVERVIEW 11

Observations & Findings 13
Preliminary Recommendations & Next Steps 15

VI. PRELIMINARY GENERAL ORGANIZATIONAL OBSERVATIONS 15

VII. PRELIMINARY COMPENSATION AND BENEFITS ASSESSMENT 18

SCOPE 18
METHODOLOGY 18
PRELIMINARY GENERAL OBSERVATIONS 19
EMPLOYEE HEADCOUNT 20
Observations & Findings 20
Preliminary Recommendations & Next Steps 22
COMPENSATION 22
Observations & Findings 23
Preliminary Recommendations & Next Steps 28
BENEFITS 29
Observations & Findings 30
Preliminary Recommendations & Next Steps 34
REPRESENTED EMPLOYEES CONTRACT CONSIDERATIONS 35
Observations & Findings 35
Preliminary Recommendations & Next Steps 36

VIII. INITIAL COST REVIEW OF WTC PROGRAM 36

BACKGROUND 36
SCOPE & METHODOLOGY 37
Observations & Findings 38
Preliminary Recommendations & Next Steps 43

IX. PRELIMINARY CAPITAL PLANNING ASSESSMENT 44

BACKGROUND 44
SCOPE & METHODOLOGY 44
Observations & Findings 44
Preliminary Recommendations & Next Steps 45

X. OVERVIEW OF PHASE II 46

PHASE II – ORIGINAL MANDATE 46

PHASE II – ADDITIONAL RECOMMENDATIONS 46
XI. APPENDIX – A 48
XII. APPENDIX - B 50
XIII. APPENDIX – C 51

Tables

Table 1 – Port Authority Core Functions 12
Table 2 - Cumulative Net Income by Line Department (Inception – 2010) 13
Table 3 – Summary Financial Trends by Year (2001 – 2011) 14
Table 4 – Executive Director Tenure 16
Table 5 – "Actual" vs. "Authorized" Staffing Trends (2006 - YTD Nov 2011) 21
Table 6 – Total Compensation Trend (2006 – 2010) 22
Table 7 – Total Compensation & Benefits Trend per Active Employee (2006 – 2010) 23
Table 8 - Port Authority Benchmarking Among Peers, Aviation 25
Table 9 - Port Authority Benchmarking Among Peers, TB&T 25
Table 10 - Port Authority Benchmarking Among Peers, Port Commerce 26
Table 11 - Port Authority Benchmarking Among Peers, PATH 26
Table 12 – "Add-on" Compensation for Non-Represented & Represented Employees (2010) 27
Table 13 – Existing "Add-on" Compensation Programs for Non-Represented Employees 27
Table 14 – Trends in Employee Benefit Expenses (2006 – 2010) 29
Table 15 - Breakout of Health Benefit Expenses by Employee Type (2010) 30
Table 16 – Port Authority Health Benefit Contribution vs. States of NY and NJ 31
Table 17 - Expected Savings from Health Care Initiatives 31
Table 18 - Paid Time Off and Cash-Out Policies of Port Authority vs. States of NY & NJ 33
Table 19 - Top 10 Overtime Recipients, Public Safety (2010) 36
Table 20 - Public Safety Overtime (2006 – YTD Nov 2011) 36
Table 21 – Periodic WTC EAC Comparison (Dec 2006 – Current Estimate) 37
Table 22 - Periodic WTC EAC Comparison (Dec 2006 – Nov 2008) 39
Table 23 - Periodic WTC EAC Comparison (Nov 2008 – Current Estimate) 40
Table 24 – WTC Current Estimate and Potential Exposure 42

Figures

Figure 1 – Port Authority Key Historical Milestones....13
Figure 2 – Operating Cash Flow Available for Investment in Facilities (2001 – 2010)....14
Figure 3 – Staffing Allocation Trend (2001 – YTD Nov 2011)....21
Figure 4 - Average Employee Base Salary by Public Agency & Authority (2010)....24
Figure 5 - Top 25 Employees Average Base Salary by Public Authority (2010)....24
Figure 6 – Number of Non-Represented Employees by Employee Group....28
Figure 7 – Average Cost of Vacation Day Exchange & Banking of Days, per Employee (2006 – 2010)....32

I. EXECUTIVE SUMMARY

The Port Authority of New York and New Jersey (the "Port Authority") is a complex organization, comprised of billions of dollars of vital infrastructure and transportation operations as well as significant real estate holdings. Navigant Consulting, Inc.'s ("Navigant") preliminary review revealed a challenged and dysfunctional organization suffering from a lack of consistent leadership, a siloed underlying bureaucracy, poorly coordinated capital planning processes, insufficient cost controls, and a lack of transparent and effective oversight of the World Trade Center (the "WTC") program that has obscured full awareness of billions of dollars in exposure to the Port Authority.

The organization is at a crucial crossroads. The Port Authority must re-affirm its core mission, and support it with a viable long range strategic and capital plan and an organization with renewed focus on operating efficiency and effectiveness, in order to sustain its relevance as a primary contributor to the economic growth of the region in the 21st Century. A significant undertaking will be required including both organizational and financial realignments to properly position the agency to address the challenges inherited by the recently appointed leadership. The following represents certain preliminary findings associated with the Phase I report commissioned by the Special Committee of the Board of Commissioners of the Port Authority at the request of the Governors of New York and New Jersey.

PRELIMINARY ORGANIZATIONAL DESIGN & OPERATIONAL ASSESSMENT

✧ ***The Port Authority must conduct a meaningful top-to-bottom organizational redesign focused on operating efficiencies and rooted in clearly defined roles and responsibilities, transparency, accountability, and aligned incentives***

- The Port Authority is a long standing bureaucracy that is inherently resistant to change, lacks effective collaboration between its strategic businesses, and would benefit from the effective development of a shared support services function.
- Promotion within the organization is primarily based on seniority, with little evidence of advancement or compensation being tied to performance. As a result, the organization has a concentration of long tenured senior and middle management employees.
- The magnitude of growth in size and cost of the security apparatus warrants an in depth review of its efficiency and relative effectiveness, as is currently being conducted.
- Overtime and other forms of "add-on" compensation resulted in an additional $20,559 per employee in 2010. Overtime expenses alone topped $85 million in 2010.
- Total "add-on" compensation, when combined with all other benefits, results in incremental average cost per employee equivalent to approximately 70% of base salary, a relatively high fringe benefit rate.
- 93% of employees make no contribution to their health care; by contrast, 100% of New York State and New Jersey State employees contribute to health care.
- Total cost of compensation and benefits for the average active Port Authority employee is estimated to exceed $143,000 annually.

- In addition to the scrutiny and curtailment of rapidly growing "add-on" compensation and benefit costs, represented labor contracts (and the current application of related practices) merit a detailed review with consideration of potential modifications to work rules to remove impediments to productivity and efficiency gains.

INITIAL COST REVIEW OF WTC PROGRAM

✧ ***WTC costs have grown significantly and gross costs will likely exceed approximately $14.8 billion, an increase of $3.8 billion since the last forecast in 2008. The Port Authority's net funding obligation has grown from approximately $6.0 billion to approximately $7.7 billion, before consideration of additional potential net cost exposures of approximately $800 million***

- The Port Authority was unable to produce supporting detail and source documents for the growth in cost estimates previously reported by prior Executive Directors to the Board of Commissioners and the Governors. Moreover, prior budgets for the WTC project did not include estimated tenant improvement and leasing costs associated with the commercial (*i.e.,* at One World Trade Center) and retail space at the WTC, thus understating the expected cost at completion.
- Total project costs have grown significantly from a previously reported $11 billion to approximately $14.8 billion, a $3.8 billion increase since the 2008 reforecast. Moreover, Navigant has identified additional potential exposures of approximately $1 billion that must be mitigated by the Port Authority to avoid further escalation in gross program costs.
- The gross cost increase of approximately $3.8 billion is primarily driven by: (i) the scope evolution of the WTC Transportation Hub ("Hub") in response to the mandate to open the National September 11 Memorial and Museum (the "Memorial") by September 11, 2011, (ii) anticipated allowances to commercialize One World Trade Center ("1 WTC") and the retail spaces, (iii) projects performed by the Port Authority on behalf of third-parties at the site (*i.e.,* related to the Memorial, existing subway operations, the campus security plan, and the Performing Arts Center), as well as, (iv) increases in financing and insurance expenses.
- Exposure to third-parties (where the Port Authority has performed work for other parties and expects to be reimbursed in the future) now total an estimated $1.6 billion and represent the primary area of cost escalation since the 2008 reforecast. The most notable exposures are seen in: (i) the proposed Memorial project (which, by some estimates, has grown to a total project cost of approximately $1 billion), (ii) the $300 million campus security plan developed by the City of New York, and (iii) the $200 million of work required to physically support the anticipated Performing Arts Center at the site. Assuring the collectability of these funds, particularly in instances such as the Memorial where funding obligations are already in dispute, must be a key priority of the Port Authority. In the face of uncertainty of collections, the Port Authority should enforce strict controls and curtail development of non-essential third party requests.

- The Port Authority has significant, additional, potential cost risks (*i.e.,* above the $800 million identified in the Navigant report) relating to contingent financing commitments associated with other WTC projects.
- The Port Authority must implement enhanced transparency and accountability protocols to ensure the WTC redevelopment is completed without further cost overruns. Roles, responsibilities, and oversight need to be re-evaluated as the WTC program evolves from construction execution to that of an operating asset of the agency.
- The post traumatic effect from September 11, including the loss of 84 employees, cannot be underestimated. Nonetheless, in the face of this tragedy long-tenured, dedicated, career service professionals provided interim stability. However, in the course of the next decade the Port Authority has been consumed with the additional responsibility for the rebuilding of the WTC. The opening of the Memorial represents an opportunity to restore the Port Authority's focus on its primary mission.

PRELIMINARY CAPITAL PLANNING ASSESSMENT

✧ ***The Port Authority needs to align its capital strategy with its mission and objectives***

- Exposure to debt has more than doubled over the past ten years, from approximately $9.1 billion in 2001 to approximately $19.5 billion at the end of 2011, and future cash flow from operations alone is not sufficient to fund its ongoing capital projects.
- The Port Authority has expanded beyond its stated mission as a transportation infrastructure organization and, by fate or design, has also become a major real estate developer and asset owner with investments that dwarf its past holdings. The Port Authority must structure its organization, use its internal resources, and, as appropriate, use its private sector prowess.
- The capital planning and execution function lacks a clear leader, does not have consistent reporting mechanisms, and fails to effectively address the challenges facing the Port Authority. There is a lack of proper accountability for development, construction and asset management to the Executive Director. A full review of organizational design of capital planning and implementation is warranted.

II. NATURE OF ENGAGEMENT & SCOPE

In August 2011, in response to a Port Authority requested, and subsequently approved, toll and fare increase for its bridges and tunnels, and the PATH system, the Governors of New York and New Jersey requested a comprehensive review of the Port Authority. Consequently, in September 2011, the Port Authority established a Special Committee of the Board of Commissioners (the "Special Committee") to retain independent consultants and advisors to conduct a full review of the Port Authority's past and current governance, and management practices (the "Review"). Pursuant to an agreement dated as of November 23, 2011, the Special Committee retained Navigant to assist the Port Authority in readying the requirements of the Review. The broad scope of the Review is to include but is not limited to the following:

- A comprehensive analysis of the Port Authority's ten-year capital plan (the "2011 Capital Plan"), in an effort to reduce the size and cost of non-revenue producing projects, reprioritizing existing projects and establishing new priorities, and the most effective way to finance the same;
- A thorough review of the Port Authority's capital projects and spending over the past ten years to determine the causes and full extent of, as well as potential remedies to address, cost escalations of the Port Authority's projects, with a focus on the WTC site;
- A top-to-bottom review of the Port Authority's organizational structure and effectiveness, staffing levels, compensation, benefits, and financial management, including accounting, audit, financing, consulting and other contractual practices and agreements, all done to further lower costs and increase efficiencies within the Port Authority; and
- Establishment of a Project Management Office ("PMO") to coordinate activities associated with the Review.

In addition to Navigant, the Port Authority also engaged Rothschild, Inc. ("Rothschild") to assist in meeting the requirements of the Review. Rothschild's focus is to advise the Port Authority on evaluating effective financing strategies of the existing and new capital priorities.

Navigant's engagement is divided into two phases ("Phase I" and "Phase II").

Pursuant to the engagement terms with the Port Authority, the scope of Phase I consists of the following:

- Establishment and staffing of a PMO which would coordinate activities with regards to Navigant's scope of work in Phase I (as well as oversight, coordination, assimilation and integration of related work streams performed by third parties);
- Preliminary organizational design and operational assessment focused on a review of compensation and benefit cost structures;
- WTC cost review in consultation with the Special Committee; and
- Initiation of capital projects assessment in consultation with the Special Committee.

Pursuant to the engagement terms with the Port Authority, the scope of Phase II of Navigant's engagement will include the following:

- PMO Activities – Direct oversight, coordination, assimilation and integration of Phase II activities from both Navigant and third party consultants or advisors as appropriate;
- Organizational and operational assessment of the Port Authority for focus areas identified in consultation with the Special Committee; and
- Completion of capital projects review in consultation with the Special Committee.

The purpose of this report is to deliver Navigant's interim findings and recommendations with regards to the three identified work streams in Phase I, subject to the qualifications of **Appendix – C**. Further details on the anticipated Phase II scope of work can be found in **Section X**.

III. GENERAL APPROACH

Navigant conducted an initial meeting with the Special Committee and select members of Port Authority management in early December 2011. At that time, an information request was submitted to the Port Authority addressing the specific areas identified for focus in Phase I as well as providing additional information that will be useful in Phase II. To date, Navigant has reviewed numerous documents from the Port Authority. In addition, Navigant has conducted many meetings and interviews with all levels of Port Authority employees as well as certain members of the Board of Commissioners and the Special Committee.

COMPENSATION & BENEFITS REVIEW

Navigant conducted initial meetings with the Port Authority's Chief Administrative Officer and Human Resource departments. Subsequent to the meetings, information requests were sent in order to facilitate the review of key documents and other pertinent information. Navigant reviewed multiple documents, conducted numerous in person and telephonic interviews as well as performed detailed analyses of base pay, overtime, "add-on" compensation, healthcare costs, and other benefit analyses. The findings of these analyses were used in a benchmarking review using selected public and private peer groups.

INITIAL COST REVIEW OF THE WTC PROGRAM

Navigant reconstructed the historical costs of the WTC program using the chronology of periodic Port Authority presentations by prior Executive Directors and management to the Board of Commissioners, project cost reports current as of October 2011, related documents, and the findings of interviews to provide the Special Committee with the analysis of past spending at the WTC site. Furthermore, Navigant preliminarily and independently analyzed the Port Authority's estimated cost to complete for its reasonableness.

PRELIMINARY CAPITAL PLANNING ASSESSMENT

Navigant conducted meetings with key Port Authority staff involved in capital planning and began preliminary analysis of its organization and processes. In addition, Navigant compiled various reports of the Port Authority into a single database that allowed for analysis of the composition of the 2011 Capital Plan. Navigant also reviewed the projects in the 2011 Capital Plan by classification, to better understand the amount, maturity and priority of the portfolio of capital projects.

IV. BACKGROUND

The Port Authority has endured significant adversity over the last 20 years. From the WTC bombing in February 1993 to the September 11 terrorist attacks, the Port Authority has always responded swiftly. After the February 1993 bombing, the Port Authority restored the WTC to full function within a remarkable two month time span. However, the devastation and destruction of the September 11 attacks were unprecedented. The loss of life included the Port

Authority's Executive Director and 83 of its employees, causing a significant emotional toll on the psyche of the organization. The events of September 11 became a patriotic rallying point to demonstrate to the world that New York, the nation's largest city and heart of its financial sector, could respond and rebuild in the face of this adversity, in defiance of the intended intimidation and threat by the terrorist culprits.

The Port Authority accepted the monumental and crucial responsibility of what has now become the symbol of the country's resolve – to rebuild the WTC. The events of September 11 placed an unexpected and tremendous burden on the Port Authority, consuming considerable resources and attention in support of the redevelopment efforts. The distortive impact of this event has created a ripple effect that has been felt throughout the organization a decade later, including tumultuous changes in its leadership, intensive focus, and dedication to one of the largest infrastructure and development projects in the country, as well as extraordinary growth of its security apparatus.

Consequently, as the scope and design of the WTC have evolved, particularly in response to the national symbolic objectives and security concerns that have permeated the development, the required costs of rebuilding have correspondingly expanded. The objective of completing the Memorial by the ten-year anniversary of September 11 became a public mandate to reflect the profound national symbolism of the WTC's timely resurrection. To meet this timeline, the Port Authority had to incur significant costs related to the acceleration of the WTC construction program. The level of dedication by the Port Authority, from daily involvement of certain members of its Board of Commissioners, to on site construction personnel, has been unwavering. By the time of its completion, in addition to third party funding, the Port Authority will likely spend over $7.7 billion dollars of its own capital in this historic endeavor. The recent opening of the Memorial on September 11, 2011 marked the end of an extraordinarily difficult decade for the agency and the beginning of a new chapter in its history.

Given the strong leadership evidenced by the current Governors of New York and New Jersey, and their appropriate and intense focus on responsible government, increased transparency, organizational efficiency and fiscal responsibility, the Port Authority now has a window of opportunity to drive the transformational changes fundamental to addressing the challenges of the organization. With the relatively recent appointments of a new Chairman, Vice-Chairman, several Commissioners, Executive Director and Deputy Executive Director, the Port Authority has a reinvigorated focus.

The organization's new leadership appears intent on driving the change necessary to best position the Port Authority to meet the challenges of the 21st Century and to progress from its "business as usual" approach. A major theme in this endeavor is increased transparency and accountability throughout the organization. This is evident by the recent initiatives already undertaken by the Board of Commissioners, under the leadership of the new Chairman, including but not limited to:

- Appointment of new, independent auditors;
- Focus on improvements in the capital planning and project management processes;

- Strengthening of the Port Authority's internal Enterprise Risk Management System, permitting early intervention by the Board of Commissioners through proactive issue identification;
- Review of policies and procedures in order to address growing overtime expenditures;
- Pursuit of benefit program reform including health care contributions, vacation exchange and pension design;
- Demonstration of its commitment to full transparency through the initiation of complete disclosure on compensation of all employees;
- Creation of an insurance working group to better analyze and improve upon the Port Authority's current risk management policies;
- Fully embracing the top-to-bottom organizational review being facilitated by Navigant and Rothschild in pursuit of actionable interventions to drive operating and capital deployment efficiencies and developing ways to enhance the financing of its 2011 Capital Plan; and
- Approving preliminary operating and capital budgets for 2012 expressly subject to any measures adopted by the Board of Commissioners as a result of the Special Committee's review.

This interim report is being issued in response to limited areas of initial inquiry that the Special Committee of the Board of Commissioners has mandated.

V. PORT AUTHORITY OVERVIEW

The Port Authority is a complex organization, now employing over 6,900 people and generating revenues of almost $4 billion. The Port Authority's current mission is defined as follows:

"To identify and meet the critical transportation infrastructure needs of the bi-state region's businesses, residents, and visitors; providing the highest quality, most efficient transportation, and port commerce facilities and services that move people and goods within the region, providing access to the rest of the nation and to the world, while strengthening the economic competitiveness of the New York-New Jersey Metropolitan Region".

The Port Authority has a vast array of asset holdings segmented into aviation, port commerce, PATH (*i.e.,* rail transit), tunnels / bridges / terminals, the WTC, and various real estate development assets as identified in **Table 1**.

Table 1 – Port Authority Core Functions

CORE FUNCTIONS:	KEY FACILITIES:
AVIATION	
• Manages & operates NY / NJ airports • Manages related security apparatus • Manages operation & maintenance contracts for JFK & EWR • Manages parking contracts • Manages utility and energy contracts • Develops & maintains passenger terminals • Maintains runway infrastructure	• JFK Airport • LaGuardia Airport • Newark Airport • Stewart Airport • Teterboro Airport
PORT COMMERCE	
• Handles leasing & lease administration • Manages related security apparatus • Planning & development alternatives for land use • Oversees capital programs including waterway development • Manages NY Greenville Cross Harbor Rail Freight Program • Manages development of new MOTBY	• Howland Hook Marine Terminal / Port Ivory • Brooklyn Port / Red Hook • Port Newark • Port Elizabeth • Port Jersey • Greenville Yard
PATH	
• Manages 24/7 operation of trains, passenger services and rail yards • Manages related security apparatus • Manages all of PATH assets & infrastructure including railcar fleet, power, signals & commuter services • Delivery of capital program • Safety & Security program management • Manages all revenue programs (*e.g.* ,fare collection, & vendor contracts)	**NY Stations** • 9th Street • 14th Street • 23rd Street • 33rd Street • Christopher Street • WTC **NJ Stations** • Exchange Place • Grove Street • Harrison • Hoboken • Journal Square
TUNNELS, BRIDGES AND TERMINALS	
• Operates all Port Authority tunnels, bridges & terminals • Manages related security apparatus • Traffic management of all vehicular crossings, bus terminals and pedestrian flows • Emergency response at all tunnels, bridges & terminal assets • Manages and staffs cash toll collection booths and all electronic payment systems • Maintenance of all TB&T infrastructure • Delivery of capital program	• Holland Tunnel • Lincoln Tunnel • George Washington Bridge • Bayonne Bridge • Goethals Bridge • Outerbridge Crossing • Port Authority Bus Terminal • George Washington Bus Station
WORLD TRADE CENTER	
• Development, design, construction & coordination of WTC site in accordance with myriad of development agreements & stakeholders (MTA, NYSDOT, Silverstein Entities & Affiliates, Memorial, etc.) • Manages security apparatus • Manages retail and tenant leasing of 1 WTC • Design & construction of WTC transportation HUB • 1 WTC Construction • Vehicular Security Center • Common Site infrastructure • Construction of September 11 memorial • Coordinate the design and construction of SPI towers 2,3 & 4 • Performing Arts Center ("PAC")	• 1 World Trade Center • HUB • 9/11 Memorial & Museum • Central Chiller Plant
REAL ESTATE DEVELOPMENT	
• Leases & manages over 1.1 million sq ft in NY & NJ • Significant real estate owner and developer • Works with state development agencies in bringing underutilized development industrial sites to shovel ready status • Once online, the Port Authority will manage leasable space of approximately 3 million square feet as well as 0.5 million square feet of retail space at the WTC	• Newark Legal & Communication Center • Teleport • Essex County Resource Recovery Facility • Bathgate Industrial Park • Industrial Park at Elizabeth • Port Authority Bus Terminal Air Rights • Moynihan Station

In addition to its responsibilities related to two tunnels, four bridges, five airports, six seaports, and the PATH system the Port Authority currently:

- Manages over 1 million square feet of leased space in 11 facilities;
- Manages a 100-acre high-tech business park in Staten Island;
- Owns multiple industrial parks;
- Owns and serves as developer of two large waterfront projects; and
- Owns Essex County Resource Recovery (NJ's largest waste-to-energy facility).

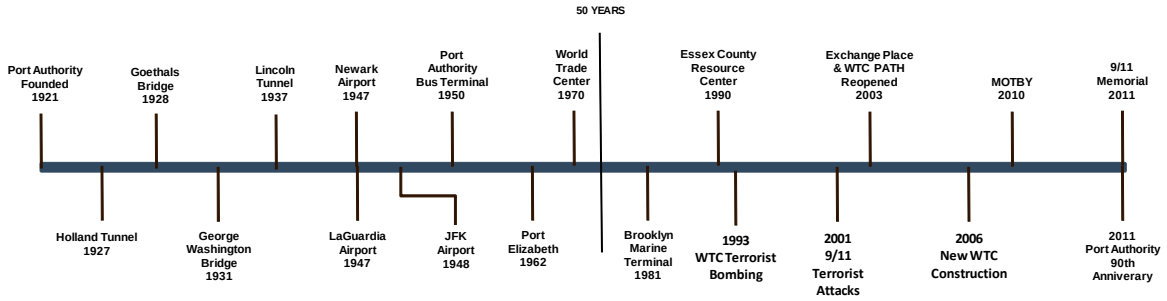
Once online, the Port Authority will manage leasable space of approximately 3 million square feet as well as 0.5 million square feet of retail space at the WTC.

Observations & Findings

✧ ***The Port Authority infrastructure continues to age and deteriorate***

The Trans-Hudson bridges and tunnels were built over 70 years ago. While many facilities at the airports and ports were constructed more recently, much of that infrastructure also dates back half a century or more (**Figure 1**). Going forward, the Port Authority facilities will require significant capital investment to maintain, secure, and enhance its assets.

Figure 1 – Port Authority Key Historical Milestones



Over the next ten years, the Port Authority has budgeted approximately $25.1 billion for capital spending. Of this amount, approximately $15 billion has been earmarked for state of good repair, security, mandatory capital expenditures and system enhancement projects.

✧ ***Historically, revenue and operating cash flow has been primarily generated by Port Authority tunnels, bridges, and airports***

When investments in facilities are taken into consideration, PATH, Ferry Services, and Port Commerce have required significant allocations of funds (**Table 2**).

Table 2 - Cumulative Net Income by Line Department (Inception – 2010)

($mm)	Invested in Facilities	Gross Operating Revenues	Operating Expenses	Allocated Expenses	D&A	Net Interest Expense	PFCs, Grants & Other[2]	Net Income / (Loss)	Operating Cash Flow ("OCF")[3]	OCF less Invested in Facilities
Inception - 2010[1]:										
Tunnels, Bridges & Terminals	$ 4,544.5	$ 19,126.8	$ 8,672.5	$ 1,650.6	$ 1,917.1	$ 1,337.6	$ (77.4)	**$ 5,626.6**	$ 8,803.8	$ 4,259.3
PATH	5,493.4	2,250.9	5,154.9	902.0	1,611.0	812.1	(1,179.0)	**(5,050.1)**	(3,806.0)	(9,299.4)
Ferry Service	134.9	1.8	44.6	2.4	10.4	13.0	(3.7)	**(64.9)**	(45.2)	(180.1)
Access to Regions Core ("ARC")	131.7	-	79.4	-	2.5	2.8	-	**(84.7)**	(79.4)	(211.1)
Air Terminals	13,400.7	37,243.6	22,077.3	1,907.7	5,815.5	2,231.4	(3,187.8)	**8,399.6**	13,258.7	(142.0)
Port Commerce	3,617.1	4,176.0	2,574.2	217.5	1,438.3	780.4	(35.7)	**(798.7)**	1,384.3	(2,232.7)
Economic / Waterfront Development	480.2	1,912.1	1,689.7	25.1	269.0	25.4	(2.4)	**(94.7)**	197.3	(282.9)
World Trade Center	3,601.5	7,193.0	4,010.6	299.7	749.2	711.9	(1,122.9)	**2,544.6**	2,882.7	(718.8)
PA Insurance Captive Entity	-	0.6	8.6	-	-	(11.1)	-	**3.1**	(8.0)	(8.0)
Regional Development Programs	1,322.9	-	129.3	-	1,068.4	658.4	-	**(1,856.0)**	(129.3)	(1,452.1)
Other	1,477.1	2,062.3	497.8	-	-	1.3	-	**1,563.1**	1,564.5	87.4
Total	**$ 34,204.0**	**$ 73,967.2**	**$ 44,938.7**	**$ 5,004.9**	**$ 12,881.4**	**$ 6,563.1**	**$ (5,608.9)**	**$ 10,187.9**	**$ 24,023.5**	**$ (10,180.6)**

Notes:

1) *Financials are provided from the date a particular Port Authority asset started to generate financial result.*
2) *Passenger Facility Charges ("PFCs") were established in 1992 and account for the vast majority of PFCs, Grants & Other.*
3) *Operating Cash Flow ("OCF") reflects Net Income / (Loss) plus D&A, Net Interest Expense, and excludes PFCs, Grants & Other, which are generally not considered operating in nature.*

- ✧ ***During the last ten years, Port Authority cash flows were insufficient to fund the capital expenditure program***

In the last ten years, the total outstanding debt of the Port Authority has increased from approximately $9.1 billion in 2001 to approximately $19.5 billion as of December 2011, mainly in support of the capital program (**Table 3** and **Figure 2**).

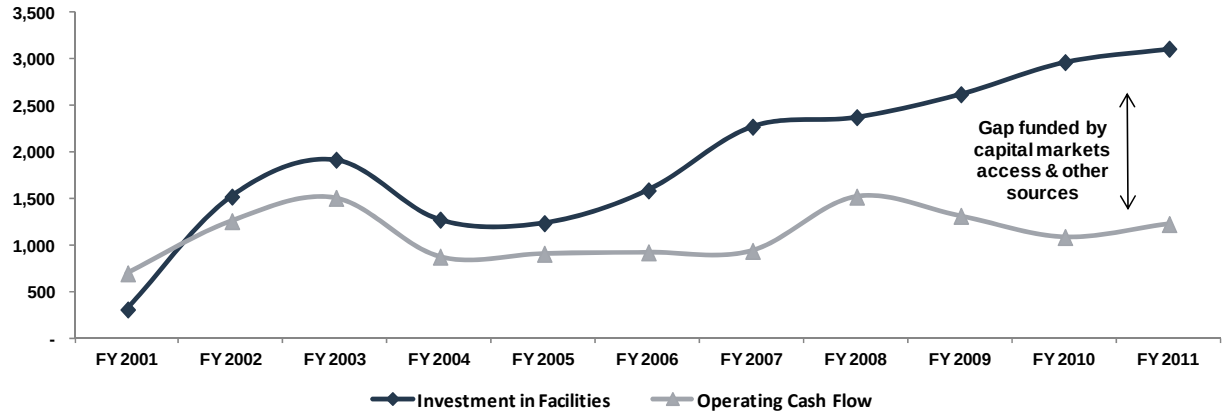
Table 3 – Summary Financial Trends by Year (2001 – 2011)

($mm)	Invested in Facilities[1]	Gross Operating Revenues	Operating Expenses	Allocated Expenses	D&A	Net Interest Expense	PFCs, Grants & Other[2]	Net Income / (Loss)	Operating Cash Flow ("OCF")[3]	OCF less Invested in Facilities	Total YE Outstanding Debt
Fiscal Year:											
FY 2001	$ 311.4	$ 2,742.9	$ 1,894.4	$ 149.8	$ 442.8	$ 193.7	$ (153.6)	**$ 215.8**	$ 698.7	$ 387.3	$ 9,059
FY 2002	1,522.7	3,258.0	1,839.1	159.9	435.2	238.9	(155.1)	**740.0**	1,259.1	(263.7)	9,335
FY 2003	1,918.5	3,446.3	1,788.2	149.1	521.1	277.8	(172.9)	**883.0**	1,509.0	(409.5)	9,756
FY 2004	1,275.2	2,864.8	1,846.4	139.9	614.2	332.8	(220.1)	**151.5**	878.5	(396.8)	10,961
FY 2005	1,237.6	3,000.7	1,952.3	139.0	686.7	316.8	(256.0)	**161.9**	909.4	(328.1)	10,984
FY 2006	1,589.3	3,038.5	1,974.7	140.0	724.3	319.9	(639.0)	**518.6**	923.8	(665.5)	12,330
FY 2007	2,272.9	3,191.6	2,071.5	180.4	691.9	246.9	(1,301.9)	**1,302.9**	939.7	(1,333.3)	12,751
FY 2008	2,375.2	3,987.4	2,282.4	183.2	715.5	496.6	(584.3)	**894.1**	1,521.8	(853.4)	13,037
FY 2009	2,621.5	3,771.9	2,253.3	202.1	786.9	329.3	(646.1)	**846.4**	1,316.6	(1,305.0)	14,450
FY 2010	2,966.0	3,689.7	2,411.1	190.0	865.5	499.3	(623.2)	**346.8**	1,088.5	(1,877.5)	16,309
FY 2011E	3,110.0	3,815.3	2,377.1	210.6	944.1	208.7	(654.1)	**728.9**	1,227.6	(1,882.4)	19,502
Total	**$ 21,200.3**	**$ 36,807.0**	**$ 22,690.6**	**$ 1,843.9**	**$ 7,428.2**	**$ 3,460.7**	**$ (5,406.3)**	**$ 6,790.0**	**$ 12,272.5**	**$ (8,927.8)**	**$ 19,502.1**

Notes:

1) *A significant portion of investments in facilities is attributable to the WTC.*
2) *Passenger Facility Charges ("PFCs") were established in 1992 and account for the vast majority of PFCs, Grants & Other.*
3) *Operating Cash Flow ("OCF") reflects Net Income / (Loss) plus D&A, Net Interest Expense and excludes PFCs, Grants & Other, which are generally not considered operating in nature.*

Figure 2 – Operating Cash Flow Available for Investment in Facilities (2001 – 2010)



- ✧ ***While future operating cash flow is expected to be bolstered by revenue increases primarily from scheduled fares, fees and toll increases from tunnels, bridges and PATH, continued access to capital markets will likely be required***

Over the next ten years, the Port Authority is projecting Net Operating Revenues (*i.e.*, defined by the Port Authority as gross operating revenues minus operating expenses), to grow from approximately $1.2 billion in 2011 to approximately $3.0 billion in 2020, a compounded annual growth rate of approximately 9.3%. Furthermore, the Port Authority is projecting an operating

margin improvement of approximately 50% over the same period, driven mainly from scheduled fare and toll increases in 2014 and some modest growth in facility traffic. However, given the capital program currently presented by the Port Authority, continued borrowing in the capital markets is expected to be required, with outstanding indebtedness forecasted to rise from $19.5 billion in 2011 to $25.2 billion by 2020.

Preliminary Recommendations & Next Steps

- Detailed contribution analyses for revenue and non-revenue producing projects need to be conducted on all Port Authority business segments to determine potential revenue enhancements and cost savings initiatives to improve cash flow.
- The long range forecast model assumptions should be reviewed and analyzed to better understand the validity of assumptions supporting expected margin improvement over the next ten years.
- Sensitivity analyses should be conducted around "best case", "worst case", and "likely case" scenarios for the entire portfolio of projects to understand related financial impacts of the 2011 Capital Plan, once finalized by the Special Committee and Board of Commissioners.
- The Port Authority should develop a comprehensive analysis of state of good repair ("SGR") projects to understand capital requirements for transportation infrastructure integrity.
- Return on asset and/or return on invested capital concepts should be considered in evaluating feasibility of future capital projects, as well as the allocation of capital across the various operating segments.

VI. PRELIMINARY GENERAL ORGANIZATIONAL OBSERVATIONS

While the completion of a comprehensive review of organizational design and effectiveness will be addressed in Phase II, the following preliminary observations are warranted:

- ***The Port Authority has expanded its areas of involvement in support of economic development over the last several decades, which continues to evolve***

While the Port Authority's tunnels, bridges, and airports continue to contribute the vast majority of cash flow within the organization, over recent decades the Port Authority has become a significant real estate developer and asset manager with its own expansive security force, a posture that warrants further evaluation as the demands of the WTC development approaches conclusion. For example, the Port Authority is also the owner of a resource recovery facility, which converts waste to energy. Furthermore, in large part as a reaction to the WTC bombing in February 1993, and the events of September 11, the Port Authority has assembled a sizeable security apparatus including a police force numbering over 1,700 employees.

As the Port Authority moves into the 21st century, it is imperative to assure alignment with industry trends in technology, commerce, and other areas of growth in order to ensure its

competitive advantages to stimulate further economic development and prosperity in the region.

- ***The Executive Director position, the defacto CEO, has turned over seven times in the last ten years***

With such turnover at the Executive Director level, it is difficult for any significant strategic initiatives, goals and objectives to be realized (**Table 4**). Organizations typically become inwardly focused and tend to run adrift in the absence of leadership continuity.

Table 4 – Executive Director Tenure

#	Executive Directors	Tenure
1	Patrick J. Foye	2011 - Current
2	Christopher O. Ward	2008 - 2011
3	Anthony Shorris	2005 - 2008
4	Kenneth J. Ringler, Jr.	2004 - 2005
5	Joseph J. Seymour	2001 - 2004
6	Neil D. Levin	2001
7	Robert E. Boyle	1997 - 2001

Additionally, review of the Port Authority organizational structures over the last ten years show a number of significant changes. Capital planning and project delivery, for example, had five different "owners" during this period. Capital planning and project delivery, a critical area of focus within the Port Authority, has suffered from a lack of consistency in management and leadership.

- ***The non-appointed senior career services professionals of the Port Authority have an unusually long tenure, averaging 24 years of service***

The senior management organization is very respectful, cordial, and appears to have a high level of dedication and commitment to the Port Authority's mission. In addition, senior management possesses a critical knowledge base and skills that needs to be transferred through integrated training programs to junior staff. In the absence of appointed leadership continuity driving collaboration and accountability, it is only natural for such a long tenured work force to develop a self-protective culture.

- ***The Port Authority is a siloed organization***

With chronic leadership changes, bureaucratic organizations will often inadvertently reinforce the barriers to strategic business unit collaboration, as well as the ability to obtain operating efficiencies derived through shared services. Non-appointed, career service professionals often will adopt strategies that protect control, and perpetuation, of their functional areas of responsibility. The Port Authority resident culture reflects many of the characteristics associated with this phenomenon. Examples include the capital planning process, security apparatus, and the existing WTC construction organization.

- ***The relatively recent appointments of a new Chairman, Vice Chairman, several Commissioners, Executive Director and Deputy Executive Director, provide the impetus for renewed focus and governance in driving future Port Authority strategy***

In the aftermath of September 11, the Port Authority's mission was in large part redirected to the rebuilding efforts around the WTC site. The organizational toll on the Port Authority during the last decade cannot be underestimated. Under the previous Executive Director, trust and confidence between the Board of Commissioners and its executive management reportedly deteriorated; as a result, the Board of Commissioners adopted roles and responsibilities in daily operations and management atypical for a governing board. The loss in confidence was largely ascribable to sentiments by the Board of Commissioners that they were not being timely presented with meaningful and reliable information to make informed decisions. While the response of the Board of Commissioners may be understandable given the circumstances, its new leadership has recognized the importance of restoring an elevated focus on the Port Authority's broader vision, mission and the revitalization of its strategies, supporting policies and oversight as it advances to meet its challenges.

The Port Authority would likely benefit from a meaningful organizational redesign to focus on its strategic business units and cost saving shared services functions. To be successful, entrusted appointed senior leadership needs effective command and control to manage change and drive accountability throughout the organization. Career service management must proactively communicate reliable and relevant information in proper context so that appointed leadership is best positioned for effective decision making. Management and represented/non-represented employees must collaborate on the manner and means that will allow the Port Authority to operate with the highest levels of productivity and efficiency. Migration from a culture based on tenure to one based on meritocracy will be essential to its continued success.

- ***The Port Authority is a transportation infrastructure asset manager and must deploy its capital with proper attention to preservation of infrastructure integrity***

The capital constraints of the organization may necessitate a top-down budgeting process. However, a comprehensive analysis of need with a standardized method of prioritizing capital spend is equally required. The Port Authority is an asset manager that owns and manages billions of dollars of infrastructure and must devote a significant portion of its capital to support the state of good repair of this portfolio as well as provide for new investments in the system with discipline. A systematic evaluation of needs must be conducted to balance the capital capacity constraints of the Port Authority with the imperatives of the operating businesses, while appropriately providing for contingencies in an aging asset base. In addition, while the Port Authority has made progress in identifying a hierarchy to better manage the stewardship of capital, effective command and control over planning processes and disciplined project delivery must be established.

- ***The Port Authority needs to further develop tools to drive accountability***

The Port Authority should consider aligning its key operating departments as strategic business units ("SBUs"). As SBU's, quantifiable metrics should be developed, measured and consistently

monitored to drive accountability in achieving the Port Authority's mission and specific operating objectives. The Executive Director and Board of Commissioners are developing a "dashboard" that provides quick feedback and status of financial and operational performance, key initiatives, and capital program delivery.

- ✧ ***The Port Authority's compensation structures must be aligned with the mission statement and related goals and objectives to ensure appropriate targets are achieved***

Compensation structures need to be aligned throughout the Port Authority organization including management and all levels of represented and non-represented employees. Consideration should be given to adopting "at risk" elements of management compensation that are contingent upon the achievement of operating objectives.

VII. PRELIMINARY COMPENSATION AND BENEFITS ASSESSMENT

SCOPE

Navigant has been asked to perform an assessment of the organizational design and operations of the Port Authority, with an initial focus on labor costs, including both compensation and benefits. Findings from Navigant's review are meant to provide a framework for recommendations that can ultimately be implemented as a series of parallel initiatives beginning in 2012. The scope of the labor costs assessment included benchmarking compensation and benefits by major job categories and reviewing benefits packages against prevailing practice in the public and private sector.

METHODOLOGY

The benchmarking exercise included review of compensation and benefits for the State of New York and the State of New Jersey and significant public authorities in the New York City metropolitan region. In addition, with respect to compensation benchmarking of the Port Authority's four largest line departments, five to seven public sector agencies and five to ten private sector companies were initially identified and reviewed for as potential peer comparables. Key business attributes of each potential peer were carefully scrutinized (*e.g.,* size of operation, number and age of facilities, operator vs. infrastructure provider, etc.). Ultimately, a smaller subset of peer groups was selected for each line department of the Port Authority based on review of these attributes (please refer to **Appendix – A** for details).

To complete the initial review of compensation and benefit costs of the Port Authority, Navigant reviewed numerous documents (including union labor contracts), conducted multiple in-person and telephonic interviews and discussions, as well as performed detailed analyses of base pay, overtime, "add-on" compensation, healthcare costs, and other benefits analyses.

The following provides Navigant's preliminary observations, findings, and recommendations with respect to (i) employee headcount, (ii) compensation, (iii) benefits, and (iv) represented employee contracts.

PRELIMINARY GENERAL OBSERVATIONS

- The Port Authority's actual headcount as of November 2011 totaling 6,913 was relatively flat when compared to the 2001 headcount of 6,954. While the line department and staff services headcount levels have actually decreased, this has been offset by growth of over 27% in the security function in an apparent protracted reaction to the events of September 11.

- The overall organizational structure of the Port Authority is heavily concentrated in senior and middle management. This structural characteristic in large part is driven by the long-tenured nature of the employee workforce that has been promoted based on seniority and not necessarily merit. In part, the broad middle management of the organization is attributable to the large number of highly skilled engineers required to support its asset management and development responsibilities. As a byproduct of this historical trend, comparison of the average compensation of the Port Authority to its peer group reveals that the Port Authority, when evaluating average employee compensation costs, is at the top of average pay ranges.

- However, further analysis reveals that the average compensation of the most senior, as well as the top 25 positions within line departments is at the median or below the peer group. Thus, the fact that the average employee compensation resides at or above the Port Authority's peer group is ascribable to the very broad middle and senior management group of the organization, and not the compensation of the most senior personnel.

- From 2006 to 2010, total gross compensation at the Port Authority grew from $629.3 million to approximately $749.3, respectively. Of this amount, base salaries grew from $507.6 million to $581.1 million, a compounded annual growth rate of only 2.7%. However, other amounts of compensation, (*i.e.,* "add-on" compensation) such as pay associated with the vacation exchange program and certain longevity programs grew by compounded annual growth rates of 10.6% and 5.5%, respectively. Overtime, the largest percentage of "add-on" compensation represents 23% of the total base pay for represented employees. Moreover, "add-on" compensation and benefits for all active employees when combined and taken as a percentage of base salary is approximately 70%. These "add-on" compensation costs are relatively rapid growing and tend to obfuscate actual total costs per employee being absorbed by the Port Authority.

- Benefits have increased approximately 35%, from $340.7 million in 2006 to over $458.8 million in 2010, driven by growth in healthcare and the population of retirees that drives up pension costs and other post employment benefits ("OPEB"). When combined, compensation and benefits per active employee grew to an estimated **$143,060** by 2010.

- In an effort to reduce these high costs, the Board of Commissioners is actively pursuing policy changes related to healthcare contributions, vacation policies, as well as "add-on"

compensation and incentive programs. Current initiatives being evaluated include, but are not limited, to:

- Increase in health care benefit contributions, which if implemented would result in expected savings over the next four years of approximately $103.8 million.
- Elimination of longevity and unused vacation exchange days payout for non-represented employees; based on preliminary review of payroll files, annual costs for these programs were approximately $9.1 million in 2010.

- It is important to note that the represented labor force, at approximately 68% of total, is the largest part of the Port Authority employee base. The Board of Commissioners recognizes it will be critical to work collaboratively with both represented and non-represented employees to improve efficiency and productivity. In furtherance of that objective, expired union contracts are being carefully evaluated not only for unit labor costs and benefits, but also with particular focus on work rule modifications that would be constructive in advancing the efficiency and effectiveness of the Port Authority's operations, prior to collective bargaining negotiations.

Phase II of Navigant's engagement, which is expected to be completed by late June 2012, will include an organizational design review and specific recommendations to further enhance the actions of the Board of Commissioners. The following interim report is in response to the Special Committee's requested areas of initial focus and provides Navigant's preliminary observations, findings, and recommendations with respect to (i) employee headcount trends, (ii) compensation benchmarking, (iii) benefits benchmarking, and (iv) represented employee's contract considerations.

EMPLOYEE HEADCOUNT

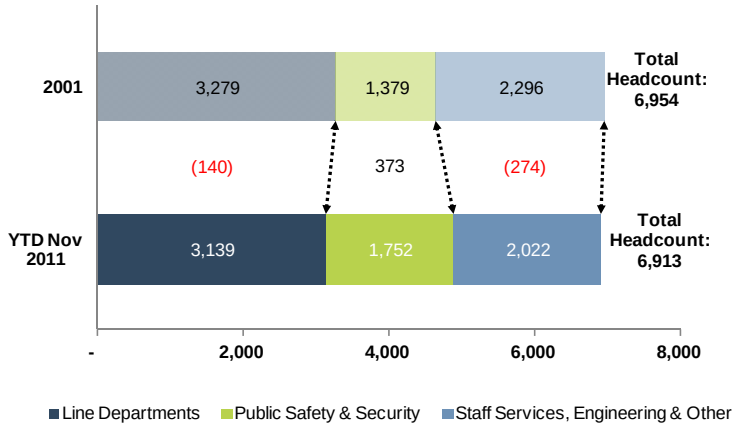
The total employee headcount has remained relatively flat over the last decade (from 6,954 in 2001 to 6,913 as of November 2011).

Observations & Findings

✧ ***Headcount mix has shifted from line departments and staff services to public safety***

From 2001 to 2010, line department headcount declined by 4.3% (from 3,279 to 3,139) and staff services, engineering & other headcount declined by 11.9% (from 2,296 to 2,022) (**Figure 3**). However, public safety headcount increased by 27.1% (from 1,379 to 1,752). The growth in public safety is in response to September 11 and heightened security efforts throughout the Port Authority organization.

Figure 3 – Staffing Allocation Trend (2001 – YTD Nov 2011)



✧ ***Port Authority manages headcount to "authorized" vs. "actual"***

Managing headcount to an annually budgeted, authorized number (approximately 7,200 in 2006) can result in delayed intervention in a recessionary environment. The Port Authority's actual headcount increased from 6,918 to 7,200, or 4.0%, during the recession of 2008 and 2009 before ultimately declining in 2010. The Port Authority would have benefited from an expedited review and timely adjustment to authorized headcount going into the recession. However, the adjustment to authorized headcount was not made until 2009, and the actual headcount reduction was not implemented until 2010, primarily through retirement incentives (**Table 5**).

Table 5 – "Actual" vs. "Authorized" Staffing Trends (2006 - YTD Nov 2011)

(#'s in 000's, except Headcount)	2006	2007	2008	2009	2010	Nov 2011
Total Year End Actual Headcount	**6,935**	**6,918**	**7,200**	**7,163**	**6,848**	**6,913**
YOY Change (#)	*(31)*	*(17)*	*282*	*(37)*	*(315)*	*65*
Total Authorized Staffing	**7,181**	**7,128**	**7,127**	**6,977**	**6,977**	**6,777**
YOY Change (#)	*(13)*	*(53)*	*(1)*	*(150)*	*-*	*(200)*
Actual Workforce Greater Than / (Less Than) Auth.	**(246)**	**(210)**	**73**	**186**	**(129)**	**136**
% Variance	*(4%)*	*(3%)*	*1%*	*3%*	*(2%)*	*2%*

✧ ***Productivity levels at Aviation, Tunnels, Bridges and Terminals, and Port Commerce appear to have increased since 2001, while PATH appears to have decreased***

The slight headcount reduction and increased traffic at Aviation, TB&T, and Port Commerce suggests a level of productivity increase, and likely reflects a combination of technology and the fixed aspect nature of individual facility labor requirements. PATH was the only line department where actual headcount increased during this period, while traffic essentially remained flat, implying lower productivity.

✧ ***Redundant support services exist in multiple areas of the organization***

A number of areas exist within the Port Authority where certain functions are partially replicated in both line departments as well as administrative departments (*e.g.,* elements of Human Resources, Risk Management, Finance, Technology, Planning & Development, Real Estate and Security).

Preliminary Recommendations & Next Steps

- Focus on real-time, actual, as well as authorized, headcount to more proactively manage size of labor force.
- The significant headcount increase in public safety & security should be further analyzed in the context of a special security report being prepared by The Chertoff Group.
- Identify useful productivity metrics to determine appropriate staffing levels for non-represented and represented employees.
- Review redundant areas of support services to determine the most effective organizational design and identify opportunities for cost savings.

COMPENSATION

Since 2006, the total gross compensation increased from $629.3 million to $749.3 million (before capitalized labor), a compounded annual growth rate increase of 3.6%. As a percentage of revenue, it has essentially remained flat at 21%. In the same period, base salary has increased from $507.6 million to $581.1 million, a compounded annual growth rate increase of 2.7%. However, longevity and unused vacation exchange days payout grew at a compounded annual growth rate of 5.5% and 10.6%, respectively (**Table 6**).

Table 6 – Total Compensation Trend (2006 – 2010)

($ In 000's)	2006	2007	2008	2009	2010	2006-2010 CAGR
Year-end Headcount	6,935	6,918	7,200	7,163	6,848	-0.3%
Revenue	**$3,038,538**	**$3,191,626**	**$3,527,552**	**$3,552,243**	**$3,634,023**	**3.6%**
Employee Compensation						
Base	507,623	524,927	546,431	575,957	581,099	2.7%
Overtime	86,763	96,025	103,234	88,560	85,376	-0.3%
Longevity	11,863	12,290	12,800	14,942	15,514	5.5%
Unused Days Payout	8,851	10,567	9,869	12,218	14,626	10.6%
Other Additional Comp.	20,193	23,069	31,226	35,953	25,270	4.6%
Gross Compensation, before Accruals	**$635,293**	**$666,879**	**$703,560**	**$727,629**	**$721,885**	**2.6%**
As a % of Revenue	***21%***	***21%***	***20%***	***20%***	***20%***	
Accrued Payroll and Other Accrued (1)	(6,038)	17,465	7,776	7,931	27,425	NA
Total Compensation, Gross	**$629,255**	**$684,343**	**$711,336**	**$735,560**	**$749,310**	**3.6%**
As a % of Revenue	*21%*	*21%*	*20%*	*21%*	*21%*	
Capitalized Labor, Compensation (2)	($83,904)	($86,975)	($94,773)	($108,327)	($115,327)	6.6%
Total Compensation, Net (on P&L)	**$545,352**	**$597,369**	**$616,562**	**$627,234**	**$633,983**	**3.1%**
As a % of Revenue	***18%***	***19%***	***17%***	***18%***	***17%***	

Notes:

(1) Amounts earned by employees during a given year that are not expected to paid during the same year.
(2) Labor costs in support of capital project spending.

In 2010, the average compensation of Port Authority employees, excluding costs of benefits, was $105,416 (base salary of $84,857 plus "add-on" compensation of $20,559). "Add-on" compensation is comprised of overtime, longevity payments, unused vacation exchange days payout, and other compensation together comprising approximately 24% of base salary (**Table 7**).

Table 7 – Total Compensation & Benefits Trend per Active Employee (2006 – 2010)

(Whole $, unless otherwise noted)	2006	2007	2008	2009	2010	2006-2010 CAGR
Year-end Headcount	6,935	6,918	7,200	7,163	6,848	-0.3%
Revenue *($ in 000's)*	**3,038,538**	**3,191,626**	**3,527,552**	**3,552,243**	**3,634,023**	**3.6%**
Average Employee Compensation						
Base	$73,197	$75,878	$75,893	$80,407	$84,857	3.0%
Overtime	12,511	13,880	14,338	12,364	12,467	-0.1%
Longevity	1,711	1,776	1,778	2,086	2,265	5.8%
Unused Days Payout	1,276	1,527	1,371	1,706	2,136	10.8%
Other Additional Comp.	2,912	3,335	4,337	5,019	3,690	4.9%
Total Average Compensation (1)	**$91,607**	**$96,398**	**$97,717**	**$101,582**	**$105,416**	**2.8%**
Total Employee Comp. as a % of Revenue	*21%*	*21%*	*20%*	*20%*	*20%*	
Average Health Benefit per Employee (2)	16,318	$18,042	$18,488	$20,757	$23,380	7.5%
Average Pension, OPEB, & Other Benefits Cost per Employee (3)	11,419	12,333	10,941	11,610	14,264	4.5%
Total Compensation & Benefits per Employee	**$27,737**	**$30,376**	**$29,429**	**$32,367**	**$37,645**	**6.3%**
Total Compensation & Benefits Expense per Employee	**$119,344**	**$126,773**	**$127,145**	**$133,948**	**$143,060**	**3.7%**

Notes:

1) *Calculated before the allocation of capitalized labor and payroll accruals*
2) *Primarily comprised of health insurance, but also includes vision, dental, life, and long-term disability insurance, for active employees only.*
3) *Calculated taking the total Pension, OPEB & Other Benefits cost and applying a pro-rata percentage based on active employees versus both active and retired.*

Other additional compensation is comprised of retroactive payments, one-time payments (*i.e.*, those made annually in a lump sum, such as grievance awards, attendance incentives, uniform allowances and lump sum merit increases), and miscellaneous payments such as short term disability payments.

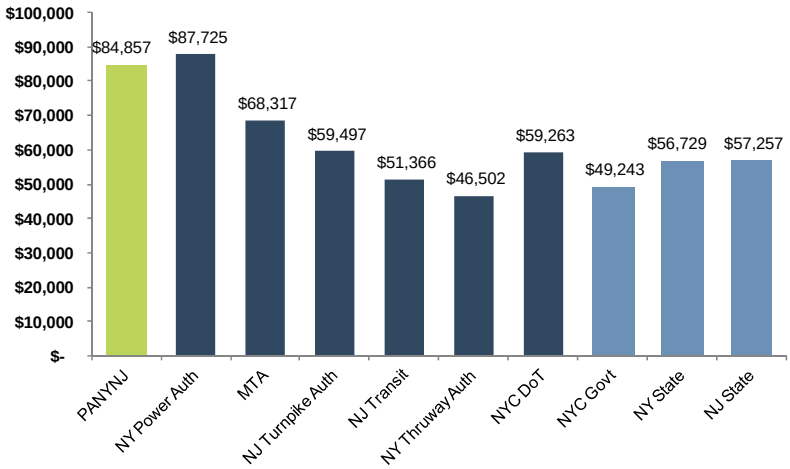
The health related benefit costs per employee (excluding retirees) were $23,380 (for detail see **Table 15**). Pension, OPEB, and other benefits combined to approximately $14,264 (active employee estimate, assuming same costs per active vs. per retired). In the aggregate, the estimated, average, total cost of compensation and benefits for a Port Authority employee was $143,060 (**Table 7**). In total, approximately 70% of base salary is comprised of "add-on" compensation and benefits (active employees only).

Observations & Findings

- ✧ ***The average base salary for Port Authority's employees, as well as the salaries of the top 25 employees, are amongst the highest relative to peer group***

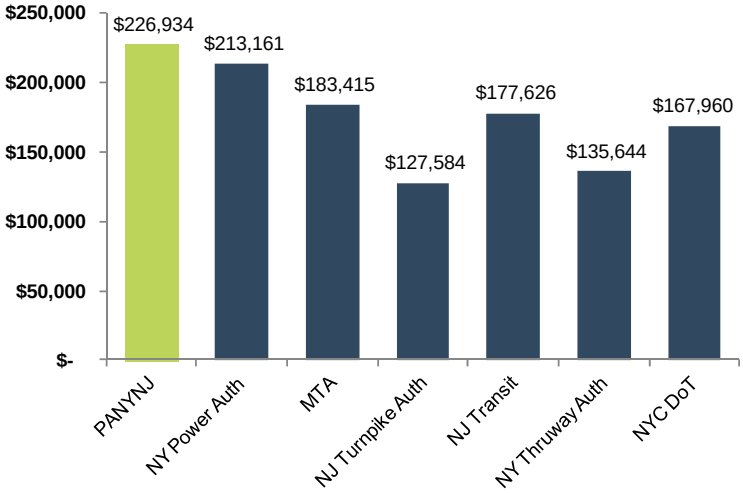
Except for New York Power Authority, the average base salary of $84,857 for the Port Authority is higher than New York and New Jersey state employees and other peer group public authorities in the metropolitan region (**Figure 4**).

Figure 4 - Average Employee Base Salary by Public Agency & Authority (2010)



Furthermore, the average of the top 25 base salaries of $226,934 at the Port Authority is the highest when compared to the average top 25 salaries of all other public authorities in the metropolitan region (**Figure 5**).

Figure 5 - Top 25 Employees Average Base Salary by Public Authority (2010)



While the Port Authority seems to be compensated higher than other public peers, it is important to note the complexity of the Port Authority's operations (*i.e.,* operating in transit, construction, asset management, etc.) in comparison to other organizations, such as New Jersey Transit (*i.e.,* only operating in transit). Likewise, the Port Authority believes, due to the complex nature of the organization, many employees tend to be highly educated and specialized (*i.e.,* engineers, career professionals), therefore commanding higher compensation. In this regard, the New York Power Authority exhibits a similar employee profile (primarily engineering staff), yielding higher compensation, on par with the Port Authority.

- ✧ ***The average of the top 25 base salaries, as well as the salary for the senior position, at the Port Authority's four largest line departments compared to the Port Authority's peer group (both public authorities and private sector companies) reflects that the Port Authority is competitive and tends to fall in the median range***

The average salary for ***Aviation*** line department employees is highest among its peer group, even when compared to the private sector. However, the most senior position, as well as the top 25 salaries, falls between those of their public sector peers, and are significantly below the Port Authority's private sector peers (**Table 8**).

Table 8 - Port Authority Benchmarking Among Peers, Aviation

			All Employees	25 Salaries	Highest Position	
		Aviation	Average	Average	Name	Salary
1	Public	Port Authority of NYNJ, Aviation (NYC)	$81,035	$168,476	Director	$230,022
2	Public	Chicago O'hare (Chicago)	$67,793	$126,709	Comm. of Aviation	$179,109
3	Public	Los Angeles World Airports (LA)	$60,623	$190,086	GM	$326,856
4	Private	BAA Airports Limited (UK)	$59,625	NA	CEO	$1,504,661
5	Private	Aeroports de Paris (France)	$51,020	NA	Chairman & CEO	$480,926
6	Public	Hartsfield-Jackson (Atlanta)	NA	NA	NA	$221,000

The average salary of ***Tunnels, Bridges & Terminals ("TB&T")*** employees ranks second among its peer group. Average compensation for the top 25 highest paid employees, as well as the top position, align in a similar fashion to the average salaries for all employees, and appears to be within range of its peers (**Table 9**).

Table 9 - Port Authority Benchmarking Among Peers, TB&T

			All Employees	Top 25 Salaries	Highest Position	
		Tunnels, Bridges & Terminals	Average	Average	Name	Salary
1	Public	Bay Area Toll Authority (San Francisco)	$82,430	$166,611	Executive Director	$271,794
2	Public	Port Authority of NYNJ, TB&T (NYC)	$71,752	$148,558	Director	$193,414
3	Public	MTA Bridge & Tunnel Authority (NYC)	$67,063	$153,117	President	$205,000
4	Public	New York Thruway Authority (Albany)	$46,502	$135,644	Executive Director	$165,709
5	Private	Cofiroute (France)	$45,906	NA	CEO	$218,415
6	Public	Delaware River Port Authority (Philadelphia)	NA	NA	NA	NA
7	Private	Macquarie Atlas Roads Group (Australia)	NA	NA	NA	NA

Average salaries for employees of the ***Port Commerce*** line department are second highest in comparison to the peer group, and the highest excluding North Queensland Port Corp. (a private sector company). However, average salaries for the top 25 highest paid employees, as well as the most senior individual, fall much lower than any of their peers (**Table 10**).

Table 10 - Port Authority Benchmarking Among Peers, Port Commerce

			All Employees	Top 25 Salaries	Highest Position	
		Port Commerce	Average	Average	Name	Salary
1	Private	North Queensland Port Corp. Ltd. (Australia)	$93,446	NA	CEO	$297,489
2	Public	Port Authority of NYNJ, Port (NYC)	$90,954	$144,510	Director	$216,320
3	Private	Port of Taraunga (New Zealand)	$85,926	$206,100	EE #1	$558,807
4	Public	Port of Long Beach (LA)	$64,176	$160,851	Executive Director	$336,692
5	Public	Port of Los Angeles (LA)	$61,140	$235,706	General Manager	$307,751
6	Public	Port of Corpus Christie (TX)	NA	NA	NA	NA

Average salaries for employees of ***PATH*** are competitive to the peer group and PATH's compensation is very competitive with the MTA, the operator of the New York City subway system. Due to fare structure, size of operation, and geographical reach, private sector companies were excluded from the peer group (**Table 11**).

Table 11 - Port Authority Benchmarking Among Peers, PATH

			All Employees	25 Salaries	Highest Position	
		Rail Transit	Average	Average	Name	Salary
1	Public	MTA (NYC)	$72,514	$173,902	President	$229,000
2	Public	PATH (NYC)	$71,654	$141,424	Director and GM	$215,020
3	Public	Chicago Transit Authority (Chicago)	$61,772	$152,248	President	$198,000
4	Public	Massachussets Bay Trans. Auth. (MA)	NA	$121,887	General Counsel	$170,523
5	Public	SE Penn Transit Authority (Philadelphia)	NA	NA	NA	NA
6	Public	Port Authority Transit Corp (Philadelphia)	NA	NA	NA	NA

- ✧ ***Overtime, longevity, and unused vacation exchange days payout and other compensation increase base pay by approximately 25%***

In 2010, average "add-on" compensation per recipient was $22,866 with an average of $20,559 per employee (6,157 employees received some form of "add-on" compensation in a total headcount of 6,848 employees). The Port Authority's "add-on" compensation is a long established practice and is a material contributing cost in overall compensation (**Table 12**).

Over the years, the Port Authority has utilized "add-on" compensation programs, excluding overtime, as incentives (*i.e.,* retention, merit and productivity) to supplement base pay of non-represented employees. For example, the "Longevity IIB" program was authorized in 2008 by the Executive Director for non-represented staff with 25 or more years of service in recognition of satisfactory performance and contribution to the Port Authority over time. While management received little or no increase in base pay, total compensation did indeed increase as a result of the program. Longevity I was a targeted retention program offered in 2003, for the purpose of retaining certain key executives post September 11 for at least three years. At inception, the program was expected to last only three or four years and was not intended to become a permanent feature of the compensation plan.

Table 12 – "Add-on" Compensation for Non-Represented & Represented Employees (2010)

	Non-Represented Employees			Represented Employees			Total Port Authority		
	No. of Recipients	Avg. per Recipient	Total $	No. of Recipients	Avg. per Recipient	Total $	No. of Recipients	Avg. per Recipient	Total $
Overtime	463	$10,681	$4,945,153	4,689	$17,153	$80,430,635	5,152	$16,571	$85,375,788
Longevity	720	3,174	$2,285,245	3,576	3,699	13,228,617	4,296	3,611	15,513,862
Unused Vacation Exchange Days	603	11,381	$6,862,969	1,150	6,751	7,763,359	1,753	8,344	14,626,328
Other	448	3,843	$1,721,564	4,180	5,634	23,548,753	4,628	5,460	25,270,317
Total (1)	**1,388**	**$11,394**	**$15,814,931**	**4,769**	**$26,205**	**$124,971,364**	**6,157**	**$22,866**	**$140,786,295**
% of Total Recipients	*23%*	*NA*	*11%*	*77%*	*NA*	*89%*	***100%***	***NA***	***100%***
Total Headcount (2)			*2,193*			*4,655*			***6,848***
Recipients as a % of Total Headcount			*63%*			*100%*			***90%***
Add-on Comp. per Employee			*$7,212*			*$26,847*			***$20,559***

Notes:

1) *Total Recipients does not equal the sum of the parts above; many employees receive multiple types of "add-on" compensation and would be double counted by simple sum alone.*
2) *Total headcount is a year-end number and can be less than total recipients, since headcount fluctuates during the year.*

100% of the represented employees have material elements of "add-on" compensation, largely ascribable to cumulative terms and work rules embedded in union contracts. Approximately 60% of non-represented employees also benefit from these programs (**Table 13**). Most of these programs emerged over the course of the last decade (see **Appendix – B** for detailed descriptions of various compensation programs). Ongoing costs will be further evaluated during Phase II.

Table 13 – Existing "Add-on" Compensation Programs for Non-Represented Employees

Program Type	Program Description	Year of Inception	Active Participants
Merit	• FICA Benefit[1]	1969	14
	• Contractual Death Benefit	1989	1
	• Management Excused Days	2001	17
	• High Potential Program	2008	204
	• High Potential Program	2009	296
Career Service	• Service Incentive Confidential Clerical	1993	43
	• Longevity Police Superior	n/a	22
	• Career Service Plan 40+	2003	5
	• Career Service Plan 25+ Longevity II	2008	642
Retention	• Death Gamble - GTLII	2001	24
	• WTC Retention Program	2000	47
	• Parity / Retention Program - Longevity I	2003	3
Productivity	• Vacation Exchange	1975	533
	• Cumulative Retirement Days - Police Superiors Only	n/a	22

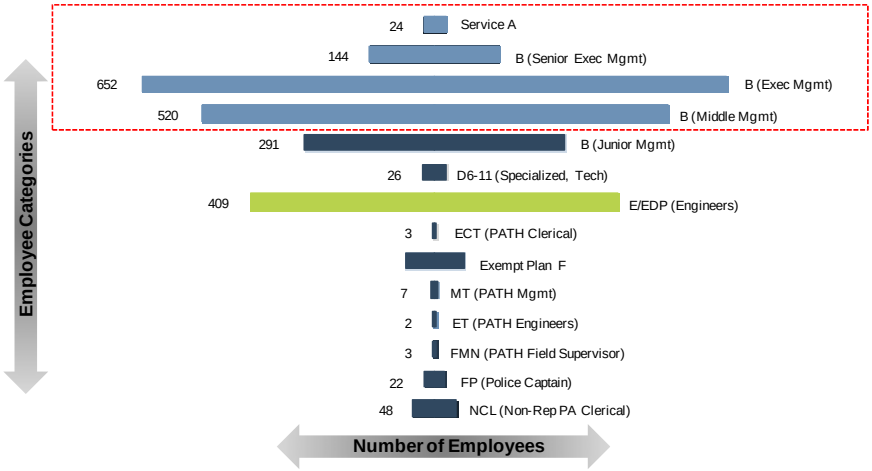
Note:

1) *Benefit program initiated in lieu of a base salary increase in 1969 that allowed for additional pay equal to the amount of FICA liability in that year. Currently, there are 14 eligible employees.*

- ✧ ***The organizational structure of non-represented employees of the Port Authority is a diamond shape, reflecting a very broad middle and upper management with limited span of control***

The general practice of promoting employees based on seniority has resulted in a diamond shaped organizational structure for non-represented employees, with approximately 60% (1,340 out of 2,216 employees) classified in the highest four salary band categories (*i.e.*, Service A, Senior Executive Management, Executive Management, and Middle Management). Furthermore, a majority of these employees are also in the top third of the salary range within their respective categories (**Figure 6**).

Figure 6 – Number of Non-Represented Employees by Employee Group



The Human Resources department plans to propose a new compensation program for management and engineering staff to increase mobility and encourage lateral moves across the organization while simultaneously flattening the compensation bands.

- ✧ ***The existing performance merit increase program of the Port Authority is not effective in rewarding, retaining, and motivating high performers***

Traditionally, the Port Authority has lacked effective performance review processes, as well as reward programs for high performers. The existing performance merit increases do not distinguish between high, average, or poor performers and have essentially become a form of cost of living adjustment. Typically, the difference between merit increases for a high performer vs. an average performer has been 1.5% to 2.0% of base salary, thus not providing much incentive. Accordingly, the Port Authority has, from time-to-time, relied on some form of "add-on" compensation to replace ineffective and insufficient performance merit increases.

Preliminary Recommendations & Next Steps

- ➢ Evaluate the costs of pension, OPEB, and other benefits for active vs. retired employees and require a segregation of these benefits.

- Eliminate the "FICA Benefit" (FICA is the Port Authority term used for additional pay, apart from base pay, equal to the amount of their FICA liability) and "Longevity" programs for non-represented employees. The annual savings, based on 2010 costs, from eliminating longevity and unused vacation exchange days "add-on" compensation for non-represented employees would be approximately $9.1 million.
- The Special Committee of the Board of Commissioners should consider eliminating all other remaining "add-on" compensation as shown in **Table 13** for non-represented employees.
- Implement an incentive driven compensation program that ties meaningful rewards to achievement of performance objectives, targets, and key initiatives.
- Overtime reduction should become a policy focus of the Port Authority.
- Conduct a departmental review of proper span of control for management personnel and re-evaluate tenure vs. merit based pay policies.
- Work rules established under collective bargaining agreements should be re-evaluated and collaborative efforts between management and union representatives should address impediments to enhanced productivity and efficiency.
- Evaluate the financial impact of the Human Resource department's proposed new compensation program and implement as indicated.

BENEFITS

Since 2006, the overall employee benefits expense (including both active and retired employees) has increased 35% (from $340.7 million to $458.8 million) even though actual head count has decreased by 1.3% (from 6,935 to 6,848 employees). This trend is largely due to continued rising costs of health insurance, and a growing population of retirees that drive increases in healthcare, OPEB, and pension expenses (**Table 14**).

Table 14 – Trends in Employee Benefit Expenses (2006 – 2010)

($ in 000's)	2006	2007	2008	2009	2010	2006-2010 CAGR
Year-end Headcount (1)	6,935	6,918	7,200	7,163	6,848	-0.3%
Revenue	**$3,038,538**	**$3,191,626**	**$3,527,552**	**$3,552,243**	**$3,634,023**	**3.6%**
Employee Benefits						
Health (2)	183,089	201,490	218,221	240,650	256,818	7.0%
Pension	89,623	88,992	90,447	88,368	123,249	6.6%
OPEB	24,938	33,496	17,695	24,058	34,665	6.8%
Other (S.S and Other Insurance)	43,092	48,687	48,264	53,776	44,098	0.5%
Total Employee Benefits	**$340,742**	**$372,665**	**$374,627**	**$406,852**	**$458,830**	**6.1%**
Total Employee Benefits as a % of Revenue	*11%*	*12%*	*11%*	*11%*	*13%*	

Note:

1) *Represents only active employees as of December 31st; however, benefits include amounts for retirees as well.*
2) *Primarily comprised of health insurance, but also includes vision, dental, life, and long-term disability insurance.*

Unfortunately, rampant cost escalation in the area of benefits has been a common experience in the public sector. Both Governor Cuomo and Governor Christie have proposed multiple initiatives designed to: (i) stop the apparent abuse of sick and vacation benefits or supplemental compensation, (ii) curtail the rapid rise in health care benefits by mandating greater employee

contribution, and (iii) address underfunding and eliminate abuses in pension practices. The following are some of the policy reforms being promoted by the States of New Jersey and New York that should be supported and/or emulated by the Port Authority.

- Create new health plans that would offer fewer benefits at lower prices, including at least one high-deductible plan.
- All public employees would pay a percentage of their health care premiums in a tiered system based on salaries.
- In New Jersey, police and firefighters would contribute an additional 1.5% of their salaries toward pensions, for a total of 10% and non-uniformed public workers would contribute an additional 2.0% of their salaries, for a total of 7.5%.
- In New Jersey, phase out the practice of distributing cash payouts for sick days.
- In New Jersey, limiting cash payouts for unused vacation exchange days.
- In New York, introduction of Tier 6 to the pension system to ease long term costs (see p. 34 for detail).

Observations & Findings

✧ ***Only 7% of the Port Authority's active employees provide contributions towards their healthcare costs; they contribute at rates well below the market norm, and they have access to health plans that offer more benefits than New York and New Jersey state employees***

For 2010, total medical insurance (health and dental) expense was $147.5 million for total active employees (**Table 15**). Port Authority employee contributions totaled less than 1% at $1.5 million of aggregate employee contributions, with less than 10% of employees currently contributing, compared to 100% of employees contributing for the States of New York and New Jersey (**Table 16**).

Table 15 - Breakout of Health Benefit Expenses by Employee Type (2010)

($ in 000's)	Non-Rep	Rep	Total Active Employees	Retirees	Total Recipients
Health	$46,855	$87,016	**$133,871**	$83,861	**$217,733**
Dental	4,757	8,835	**13,592**	8,486	**22,078**
Total Medical Insurance	**$51,612**	**$95,851**	**$147,463**	**$92,347**	**$239,811**
Employee Contributions	*1,475*	-	*1,475*	*1,682*	*3,157*
As a % of Total Cost	2.9%	0.0%	**1.0%**	1.8%	**1.3%**
Life Insurance	4,426	8,219	**12,645**	3,930	**16,575**
LT Disability	-	-	**-**	433	**433**
Total Health Related Benefits	**$56,038**	**$104,070**	**$160,108**	**$96,710**	**$256,818**
Year-end Headcount	*2,193*	*4,655*	***6,848***	*7,314*	***14,162***
Total Cost per Employee	*$25,553*	*$22,357*	***$23,380***	*$13,223*	***$18,134***

Table 16 – Port Authority Health Benefit Contribution vs. States of NY and NJ

	Port Authority		New York State		New Jersey State
	Non-Represented	Non-Represented (varies by Union)	Non-Represented	Non-Represented (varies by Union)	All Groups
Health Related Benefits	• 0% if hired pre-July 1st, 2005 • 10% (single) and 18% (dependent) of premiums for those hired post-July 1st, 2005	• 0% for all employees	• Pay grade 9 and below : 12% (single) and 27% (dependent) • Pay grade 10 and above: 16% (single) and 31% (dependent)	• Same as Represented • CSEA & PEF Unions	• 1.5% - 35% of premiums based on annual salary and coverage levels

In addition, the Port Authority's employees enjoy access to health plans that offer superior benefits, with lower deductibles and lower out-of-pocket costs, in comparison to the state agencies of New York and New Jersey.

- ✧ ***The Human Resource department is ready to propose to the Board of Commissioners initiatives to reduce healthcare costs for both active represented and non-represented employees***

The largest, controllable benefit expenses at the Port Authority are those related to providing healthcare related benefits for both active and retired employees. The Human Resource department's new initiative would require every employee of the organization to contribute (up to 35% but not less than 1.5% of salary) towards their health care premiums in a tiered system based on salaries. In addition, the Port Authority plans to offer HMO, PPO, and High Deductible plan options to reduce overall plan costs as well as lower the cost to employees. The expected savings over the course of the next four years is approximately $103.8 million. Reduced health plan benefits will have direct effect on other post-employment benefit costs for retirees as well (**Table 17**).

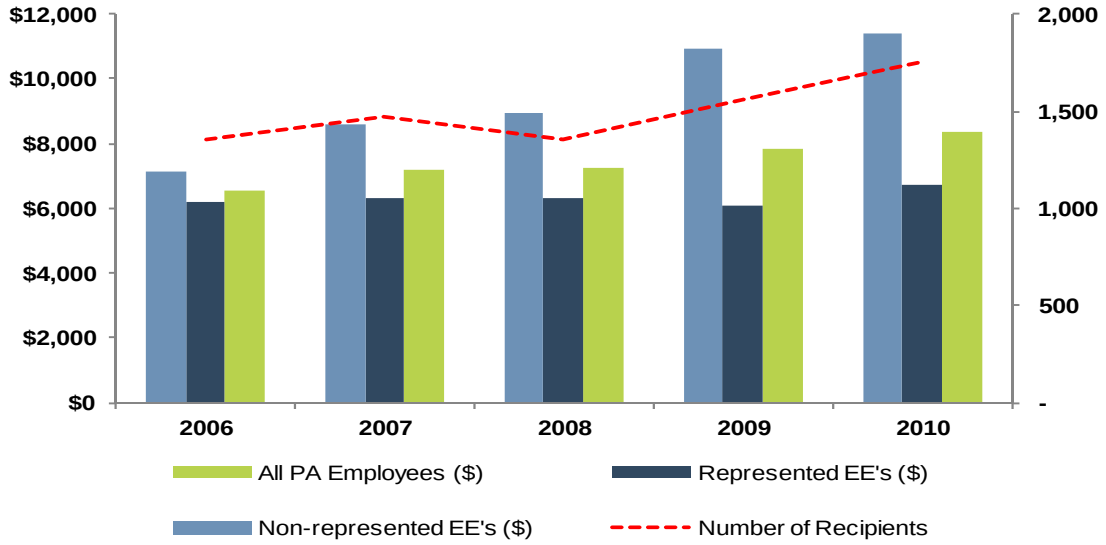
Table 17 - Expected Savings from Health Care Initiatives

($ in millions)	Year 1	Year 2	Year 3	Year 4	Total Savings
Employee Contribution Rate Changes					
Non-Represented	$3.0	$6.1	$9.5	$13.1	$31.7
Represented	5.1	10.5	16.2	22.2	$54.0
Total Savings from Rate Changes	**$8.1**	**$16.6**	**$25.7**	**$35.3**	**$85.7**
Health Plan Redesign					
Selection of UHC "Choice Plus Pro" Plan	5.9	0.0	0.0	0.0	$5.9
Alternative Low er Cost Options	3.0	2.4	2.4	2.4	$10.2
Passive Dental PPO	2.0	0.0	0.0	0.0	$2.0
Total Savings from Redesign	**$10.9**	**$2.4**	**$2.4**	**$2.4**	**$18.1**
Total Expected Savings from Initiatives	**$19.0**	**$19.0**	**$28.1**	**$37.7**	**$103.8**

✧ ***The vacation exchange program and "banking of days" has led to significant costs***

Since 2006, the cost of cashing out vacation days has increased 64%, from $8.9 million to $14.6 million, mainly from non-represented employees (from $7,100 per employee in 2006 to $11,400 per employee in 2010). Furthermore, the true cost of these payments is a multiple of the initial payout costs since they are included in the calculation for the determination of pension payments if they are incurred during the "pensionable period" (*i.e.,* three years prior to retirement) (**Figure 7**).

Figure 7 – Average Cost of Vacation Day Exchange & Banking of Days, per Employee (2006 – 2010)



A review of paid-time-off and cash-out policies of the Port Authority vs. the States of New York and New Jersey reveals that the Port Authority offers less of a vacation allowance, is more liberal on cash exchange of unused vacation exchange days, and does not allow cash payout or accrual of sick days (**Table 18**).

Table 18 - Paid Time Off and Cash-Out Policies of Port Authority vs. States of NY & NJ

	Port Authority		New York State		New Jersey State
	Non-Represented	Represented (varies by Union)	Non-Represented	Represented (varies by Union)	All Groups
Paid Vacation Days	• After 1 year, 17 days increasing to a maximum of 35 days after 30 years (43 days max for Senior Executives)	• After 1 year: 10-18 days (depending on union group) • After 5-26 years: 27-39 days (depending on union group)	• After 1 year, 26 days increasing to a maximum of 38 days after 35 years	• After 1 year, 31 days increasing to a maximum of 43 days after 35 years	• After 1 year, 30 days increasing to a maximum of 43 days after 20 years
Paid Sick Days	• Employees can take sick days based on a calculation dependent on tenure. In no case can employees receive cash for these days or accrue them	• Employees can take sick days based on a calculation dependent on tenure. In no case can employees receive cash for these days or accrue them	• 200 hour max sick bank, payout available upon retirement • Banked sick leave can be used to offset the cost of monthly insurance premiums upon retirement	• 200 hour max sick bank, payout available upon retirement • Banked sick leave can be used to offset the cost of monthly insurance premiums upon retirement	• $15,000 max sick payout upon retirement
Vacation Carryover	• A maximum of 10 days per year, w ith no more than 1 year current allow ance in total carryover (2 years for pre-9/11 hires)	• Up to one year of allotment • PATH allow s no carryover	• 40 days max	• 40 days max	• No limit
Vacation Payout upon Separation	• 1 year's allow ance max payout, if hired after 9/11 (see above for allow ances) • 2 year's allow ance max payout, if hired before 9/11 (see above for allow ances)	• One year of allow ance or no limit in a few circumstances (see above for allow ances) • PATH allow s no payout	• 30 day max payout and 200 hours max sick bank	• 30 day max payout and 200 hours max sick bank	• 1 year's allow ance max payout and $15,000 max sick payout upon retirement (see above for allow ances)
Vacation Exchange (1)	• If perfect attendance and 30 days or more allow ance, can exchange all but15 days • If perfect attedance and few er than 30 days allow ance, can exchange all but 10 days • Payments are bi-w eekly and pensionable	• Varies greatly based on Union • PATH allow s no exchange • Payments are made in lump sums and not pensionable	• Employees up to Grade 24 can exchange 3 or 6 days for $500 or $1,000 credit to offset health insurance costs	• Employees up to Grade 24 can exchange 3 or 6 days for $500 or $1,000 c credit to offset health insurance costs	• N/A

Note:

1) *Vacation days, when exchange, are considered unused vacation exchange days compensation.*

- ✧ ***The Port Authority has made certain modifications to the vacation allowance and policies for cashing out unused vacation exchange days, and is contemplating additional actions to conform closely to New Jersey's policy reform***

The Port Authority's vacation exchange policy was extended for 2012; however, it was amended with the following changes:

- Neither the Executive Director nor Deputy Executive Director will be eligible.
- Employees with at least 30 days of vacation allowance can exchange all but 15 days.
- Employees with fewer than 30 days can exchange all but ten days.
- Attendance requirements to be eligible for this exchange remain unchanged.

In addition, the Port Authority's Human Resource department has proposed (but has not yet implemented) a revised vacation allowance, effective January 1, 2012, that would provide a maximum of 27 vacation days for general non-represented employees and 30 for senior executive management (down from 35 days and 42 days, respectively). However, this revision will only apply to new hires going forward and all employees already at or past the 27 and 30 vacation day milestones will be grandfathered in and retain their current allotment. Furthermore, in 2013, the Human Resource department recommends vacation exchange payments be made in lump-sum, rather than bi-weekly, which would mean that these payments will no longer be "pensionable".

- ✧ ***The State of New York has proposed a new bill to introduce a Tier 6 into the pension system in an attempt to significantly cut back long-term expenses to employers and mitigate abuse by their employees***

If passed, the bill would add a new pension tier for all new employees of the New York State and local governments, as well as those covered by New York City pensions. The Port Authority's full-time employees are required to join one of two cost-sharing defined benefit pensions plans, the New York State and Local Employees' Retirement System or the New York State and Local Police and Fire Retirement System. Key changes in this tier relate to increasing employee contributions and retirement ages, disallowing overtime as part of base salary, setting stronger anti-salary-spiking mechanisms, and eliminating provisions around the cashing out of sick days for additional service credit upon retirement.

Preliminary Recommendations & Next Steps

- ➢ Implement reforms, as proposed by the Port Authority, requiring contribution from all non-represented and represented employees and offering health plans with less expansive and costly coverage.
- ➢ Uniformly apply shortened vacation schedules to all employees (*i.e.*, not only to new hires going forward).
- ➢ Significantly reduce allowed vacation exchange days or eliminate the program for all employees of the Port Authority.

- Eliminate the delineation between employees for cashing in vacation days upon separation so that all employees have the value of one year of vacation allowance as a maximum (*i.e.,* eliminating the extra year of allowance for employees hired before September 11).
- Endorse the current proposed bill that allows the inclusion of a Tier 6 into the New York State pension system for both civilian and police and fireman that would have a significant positive impact on the long-term pension cost.
- Evaluate the feasibility of changing the structure of the existing pension plan, ultimately pursuing defined contribution plans in place of defined benefit programs.

REPRESENTED EMPLOYEES CONTRACT CONSIDERATIONS

The Port Authority union contracts cover approximately 4,691 personnel, or 68%, of the Port Authority's 6,913 actual employees. The vast majority of these contracts has either expired or will expire in 2012. Navigant conducted a preliminary review of key terms and conditions of six primary union contracts related to salary, health and life insurance benefits, vacation and paid time off, other compensation incentives, as well as historical past practices often used to establish implied benefits. In addition, work rules that could have an impact on impeding productivity or by driving additional compensation (*i.e.,* overtime and related benefits) were considered.

Observations & Findings

- ***Complex work rules subject to inconsistent application can often lead to excessive overtime and compensation for certain represented employees***

In 2010, the Port Authority's total overtime expenses were $85.4 million. Approximately 95% ($80.4 million) was earned by represented employees and 42% ($33.6 million of $80.4 million) was related to public safety. The top ten overtime earners in public safety averaged 105.4% of their base salary. The Port Authority implemented a number of initiatives to reduce overtime in Public Safety and it appeared that the Port Authority was making a good progress in 2009 and 2010, after peaking in 2008. However, this positive trend was reversed by November 2011 as overtime had increased 23% over the prior full year (up to $41.4 million from $33.6 million). Police work rules are complicated and appear to create significant staffing challenges and inefficiency (*e.g.,* alteration from regularly scheduled duty tours, or regularly assigned facility automatically results in an extra four hours of pay in addition to pay at straight time rate for the full tour) (**Table 19** and **Table 20**).

Table 19 - Top 10 Overtime Recipients, Public Safety (2010)

	Title	Base Salary	Overtime	OT as a % of Base
1	Police Sergeant	$103,964	$132,286	127.2%
2	Police Sergeant	103,964	129,043	124.1%
3	Police Sergeant	107,911	126,338	117.1%
4	Police Sergeant	107,911	123,884	114.8%
5	Police Lieutenant	124,098	112,467	90.6%
6	Police Sergeant	103,964	104,916	100.9%
7	Police Sergeant	100,960	104,687	103.7%
8	Police Sergeant	103,964	102,340	98.4%
9	Police Sergeant	99,375	100,406	101.0%
10	Police Lieutenant	129,449	98,310	75.9%
		$1,085,560	**$1,134,677**	**Avg: 105.4%**

Table 20 - Public Safety Overtime (2006 – YTD Nov 2011)

	Overtime ($s)	YoY (%)	Count	Per Recipient	YoY (%)
2006	$44,075,892	NA	1,577	$27,949	NA
2007	$49,781,632	12.9%	1,633	$30,485	9.1%
2008	$52,663,459	5.8%	1,857	$28,359	(7.0%)
2009	$38,364,269	(27.2%)	1,777	$21,589	(23.9%)
2010	$33,644,953	(12.3%)	1,723	$19,527	(9.6%)
YTD Nov 2011	$41,405,876	23.1%	1,688	$24,530	25.6%

Preliminary Recommendations & Next Steps

- Conduct analysis necessary to evaluate the current work rules as applied and practiced with the assistance of special labor counsel and establish priorities, in collaboration with represented labor, to focus on improved efficiency and productivity.
- Work rules and contractual obligations should be evaluated and potentially modified to effectively manage the police department productivity and efficiency and to control overtime.
- Evaluate effectiveness of command and control function of public safety & security in light of what appears to be chronic excessive overtime, as well as other apparent inefficiencies.
- Carefully consider findings of the pending Chertoff Report in evaluating current costs and practices relative to the effectiveness of the security apparatus.

VIII. INITIAL COST REVIEW OF WTC PROGRAM

BACKGROUND

From June to November 2008, the Port Authority conducted a comprehensive analysis to determine what the true scope and design of the WTC Program was expected to be, including the related impact of the mandate to complete the Memorial by September 11, 2011. As a result of this effort, the Port Authority was required to materially alter the phasing of construction, redesign major elements of the WTC program resulting in an increase in cost, as well as balance the needs of a variety of disparate functions and stakeholders (both public and private). Furthermore, given the high level of integration of the various projects at the site, the Port Authority was often required to perform significant work for other agencies and third parties in an effort to deliver on expectations. As the WTC program has evolved, the Port Authority has

also absorbed the increased costs of financing and insuring the projects at the site, at no minor expense. In addition, efforts to accurately reflect the cost of marketing, leasing and improving the retail and office elements of the site with the input of the Port Authority's commercial partners were not made until recently, further increasing the estimated cost of the WTC program. It is important to note, however, that these total project costs are off-set, in part, by anticipated reimbursements from certain parties and sources of outside the Port Authority, including the Federal Transit Administration and insurance carriers, among others.

SCOPE & METHODOLOGY

Navigant reviewed numerous documents and conducted in excess of 50 hours of interviews with members of the WTC construction staff, select management of the Port Authority and other persons with direct knowledge of the history of construction at the site. From this foundation, Navigant reconstructed the historical costs of the WTC program using the chronology of periodic presentations by prior Executive Directors and management to the Board of Commissioners, project cost reports current through October 2011, related documents, and other communications of the Port Authority (**Table 21**).

Table 21 – Periodic WTC EAC Comparison (Dec 2006 – Current Estimate)

($mm)	December 2006	January 2008	November 2008	May 2010	February 2011	Current Estimate
Project Title:						
WTC Transportation Hub	$ 1,921	$ 2,442	$ 3,200	$ 3,291	$ 3,440	$ 3,737
1 World Trade Center	2,478	2,877	3,100	3,190	3,190	3,949
9/11 Memorial (PA)	785	195	195	195	195	195
Vehicular Security Center 1	472	478	633	667	667	698
Site Infrastructure	1,048	1,255	1,525	1,563	1,661	1,965
WTC Retail	1,337	1,301	1,450	1,550	1,550	1,722
Streets and Utilities	-	254	254	274	274	334
Cortlandt St. #1 Station	-	-	-	150	150	150
Performing Arts Center	-	-	-	-	-	182
9/11 Memorial (3rd Party)	-	-	-	-	-	833
Contingency	-	-	600	600	352	352
Additional Finance Expense	-	-	-	-	-	352
NYPD Campus Plan	-	-	-	-	-	300
NYSDOT	-	-	-	-	-	20
Total	**$ 8,041**	**$ 8,802**	**$ 10,957**	**$ 11,480**	**$ 11,479**	**$ 14,789**
Reimbursements / Funding	(4,490)	(4,490)	(5,016)	(5,016)	(5,016)	(7,076)
Net Program Cost to the Port Authority	**$ 3,551**	**$ 4,312**	**$ 5,941**	**$ 6,464**	**$ 6,463**	**$ 7,713**

Reconstructing the WTC program historical costs and the interim Estimates at Completion (the "EAC") through various sources was necessary because the Port Authority's staff were unable to produce supporting detail and source documents, for any of the presentations, prior to February 2011, that traced historical cost growth previously reported by prior Executive Directors to the Board of Commissioners and, at times, the Governor of New York. To assess the reasonableness of the EAC of the WTC program, Navigant evaluated the record of each component project to identify the level of cost risk associated with delivering the project within current expectations.

Taken together, Navigant's analysis reveals that cost growth at the WTC is primarily caused by: (i) the commitment to open the Memorial by September 11, 2001, (ii) work for third-parties that was required due to the inter-related nature of structures at the site (*e.g.,* portions of the Performing Arts Center ("PAC") foundation that are integral to underground infrastructure including the Vehicle Security Center ("VSC")), and (iii) the omission in prior budgets of allowances for the marketing, leasing and tenant improvements for the commercial office and retail space at 1 WTC and Retail projects.

These findings are summarized in an EAC prepared by Navigant through a review of project cost reports, documented change orders and allowances for known exposures represented in the records of the Port Authority (the "Current Estimate"). In addition, the Current Estimate was subjected to a qualitative risk analysis. Navigant identified areas of cost risk through project cost reports, relevant documents and probability assessed these items through interviews with knowledgeable project participants. From this basis, Navigant developed a range of possible scenarios and selected a probable outcome to report incremental risk or potential exposure to the Current Estimate.

Observations & Findings

- ***The evolution of design and the challenges the Port Authority faced to deliver the Memorial by September 11, 2011 resulted in the November 2008 reforecast from $8 billion to $11 billion***

In December 2006, the program for the WTC was estimated at approximately $8 billion. In November 2008, as a result of a focused effort by the Port Authority to understand the evolution of the project, the impact of the commitment to open the Memorial plaza by September 11, 2011, and to systematically reforecast the WTC program, the EAC was increased to approximately $11 billion (the "November 2008 Forecast"). The November 2008 Forecast revealed that the approximately $3 billion increase was largely due to impacts from changes in scope and the evolution of design. An integral component of the design evolution was the coordination amongst the program stakeholders to timely deliver the subterranean structures and infrastructure prior to certain key dates and within expected costs. Accordingly, the largest variances occurred in the more complex projects at the site, including: (i) the WTC Hub at approximately $1.3 billion, (ii) 1 WTC at approximately $0.6 billion, and (iii) below grade site infrastructure at approximately $0.5 billion (**Table 22**).

Table 22 - Periodic WTC EAC Comparison (Dec 2006 – Nov 2008)

($mm)	December 2006	November 2008	Variance $[1]	Variance %
Project Title:				
WTC Transportation Hub	$ 1,921	$ 3,200	$ 1,279	*66.6%*
1 World Trade Center	2,478	3,100	622	*25.1%*
9/11 Memorial (PA)	785	195	(590)	*-75.2%*
Vehicular Security Center 1	472	633	161	*34.2%*
Site Infrastructure	1,048	1,525	477	*45.5%*
WTC Retail	1,337	1,450	113	*8.5%*
Streets and Utilities	-	254	254	*0.0%*
Contingency	-	600	600	*0.0%*
Total	**$ 8,041**	**$ 10,957**	**$ 2,916**	***36.3%***
Reimbursements / Funding	(4,490)	(5,016)	(526)	*11.7%*
Net Program Cost to the Port Authority	**$ 3,551**	**$ 5,941**	**$ 2,390**	***67.3%***

Note:

(1) Positive variance reflects increased costs.

- ***Site-wide coordination in the accelerated development of the WTC program has required the Port Authority to perform work for other agencies and entities resulting in further expansion in the scope that increased the $11 billion reforecast to a Current Estimate of $14.8 billion***

The Current Estimate for the WTC program is approximately $14.8 billion. This increase of approximately $3.8 billion since the November 2008 Forecast was not primarily driven by cost growth in the original scope of the WTC program. Rather, this increase stems from additional projects being performed by the Port Authority on behalf of other agencies and parties (approximately $1.57 billion). In large part, this work was necessary to advance inter-related elements of the site and assure the opening of the Memorial by September 11, 2011. Simultaneously, the Port Authority has begun to refine the program associated with the commercialization of the site. A recently developed budget for the leasing and operation of the Retail and 1 WTC projects performed in conjunction with the Port Authority's operating partners, The Durst Organization Inc. ("Durst") and Westfield Group ("WDC"), reflected an increase of approximately $1 billion in the Current Estimate. Lastly, additional and typical finance and insurance expenses on a more costly program occurring over a longer duration of approximately $0.6 billion are included in the Current Estimate. The balance of the increase is driven by scope changes related to site-wide infrastructure (approximately $0.3 billion), and project execution costs (approximately $0.3 billion). These impacts occur throughout various components of the program. The following table presents the variance in costs from November 2008 to the Current Estimate by individual project (**Table 23**).

Table 23 - Periodic WTC EAC Comparison (Nov 2008 – Current Estimate)

($mm)	November 2008	Current Estimate	Variance $[1]		Variance %
Project Title:					
WTC Transportation Hub	$ 3,200	$ 3,737	$ 537	(2)	*16.8%*
1 World Trade Center	3,100	3,949	849	(3)	*27.4%*
9/11 Memorial (PA)	195	195	-		*0.0%*
Vehicular Security Center 1	633	698	65	(4)	*10.3%*
Site Infrastructure	1,525	1,965	440	(5)	*28.9%*
WTC Retail	1,450	1,722	272	(6)	*18.8%*
Streets and Utilities	254	334	80	(7)	*31.5%*
Cortlandt St. #1 Station	-	150	150		*0.0%*
Performing Arts Center	-	182	182	(8)	*0.0%*
9/11 Memorial (3rd Party)	-	833	833		*0.0%*
Contingency	600	352	(248)		*-41.3%*
Additional Finance Expense	-	352	352		*0.0%*
NYPD Campus Plan	-	300	300		*0.0%*
NYSDOT	-	20	20		*0.0%*
Total	**$ 10,957**	**$ 14,789**	**$ 3,832**		***35.0%***
Reimbursements / Funding	(5,016)	(7,076)	(2,060)		*41.1%*
Net Program Cost to the Port Authority	**$ 5,941**	**$ 7,713**	**$ 1,772**		***29.8%***

Notes:

(1) Positive variance reflects increased costs.
(2) Superstructure concrete and steel (~$150 million), trade contractor performance (~200 million), and financial expense (~$100 million).
(3) Redevelopment budget for commercialization (~$700 million) and financial expense (~$100 million).
(4) Financial expense and schedule acceleration (~$65 million).
(5) Site-wide infrastructure scope (~$300 million) and Redevelopment requirements at PMF/Commercial Parking (~$100 million).
(6) Redevelopment budget for commercialization (~$275 million).
(7) Church St. (~$50 million).
(8) Budget to bring structure to grade.

- ***Third-party funding commitments and various sources of external capital have, or are expected to, limit the Port Authority's cost for the WTC program to $7.7 billion before accounting for further risk exposure identified in Navigant's review***

The Port Authority is performing a set of projects for other agencies and entities for which it has contractual or oral commitments for reimbursement. For example, the Current Estimate includes: the Cortlandt St. Station development being performed at the request of the MTA, work in process for the 9/11 Memorial Foundation (the "Memorial Foundation"), certain sub-grade work that will benefit the PAC and similar infrastructure commitments for other agencies. Given the Current Estimate, the Port Authority's net cost for the WTC program would be approximately $7.7 billion, representing approximately $14.8 billion of total gross costs, less approximately $7.1 billion in reimbursements by third parties and funding provided by insurance proceeds, public funds and private sources.

Delivery of the WTC program at this net cost assumes full reimbursement of third party funding commitments. The reimbursement of these funding commitments is subject to ongoing discussions with various stakeholders and may be subject to dispute and collection risk. To

mitigate the financial impact of nonperformance by other stakeholders, the Port Authority may choose to establish certain financial reserves.

In addition, subject to the requirements of existing contractual agreements, the Port Authority may elect to curtail development of third-party elements and limit the exposure of the Port Authority to only that project scope necessary for the overall advancement of the program. For example, the Port Authority has significant third party stakeholder exposure on the Memorial. While the Port Authority's original financial commitment was estimated at $195 million out of a total project cost of $500 million, the design and scope of the project have evolved such that some estimates indicate the project may now cost approximately $1 billion. The Memorial Foundation and the Port Authority are already disputing significant costs related to the construction impacts of the Memorial, and total exposure to the Port Authority is now estimated at approximately $300 million. The Memorial Foundation is relying heavily on private fundraising efforts in a recessionary environment, calling into question the Port Authority's ability to collect on funds both committed and expended for the benefit of the Memorial Foundation. Consistent with the approach outlined above, the Port Authority has elected to significantly reduce the construction personnel deployed on the museum portion of the Memorial project and limit the agency's exposure, ensuring that only certain construction continues prior to the resolution of the cost reimbursement dispute.

- ***Navigant's review of the reasonableness of the Current Estimate suggests the potential for incremental cost exposure to the Port Authority of $0.8 billion or $8.5 billion of total funding by the Port Authority for completion of the WTC program***

The Current Estimate has been prepared consistent with industry protocols; however, based on a preliminary risk analysis there may be potential total project cost exposure of approximately $1 billion. This potential for program level cost growth may increase the net obligation (*i.e.,* after expected reimbursements from third parties) of the Port Authority by $0.8 billion, to $8.5 billion in total expenditures funded by the Port Authority for completion of the WTC program.

The principal drivers of the potential program level increase are: (i) anticipated costs, and the associated impact on contingency, stemming from continued evolution of the Retail project (approximately $0.4 billion); (ii) cost of work for third parties, most notably for the New York Police Department ("NYPD") and scope changes to Cortlandt Street Station (approximately $0.2 billion) both expected to be reimbursed by third parties as previously described; and (iii) soft cost escalation, extra work, and delay mitigation costs in the completion of the Hub (approximately $0.2 billion). The remaining approximately $0.2 billion is comprised of miscellaneous elements, such as incremental finance expense, additional design and coordination for site infrastructure work, trade contractor financial deficiency, and design costs in the VSC (**Table 24**). Again, tactics for the mitigation of a portion of these risks include enforcement of reimbursement commitments, establishing reserves or curtailing certain work within the program.

Table 24 – WTC Current Estimate and Potential Exposure

($mm)	Current Estimate	Potential Exposures Amount $	Potential Exposures Amount %
Project Titles:			
WTC Transportation Hub	3,737	213 (1)	*6%*
1 World Trade Center	3,949	10 (1)	*0.3%*
9/11 Memorial (PA)	195		
Vehicular Security Center 1	698	10 (2)	*1%*
Site Infrastructure	1,965	210 (3)	*11%*
WTC Retail	1,722	452 (1)	*26%*
New Projects	1,499	87 (4)	*6%*
Streets and Utilities ($334)			
Cortlandt St. #1 Station ($150)			
Performing Arts Center ($182)			
9/11 Memorial (3rd Party) ($833)			
Other Costs			
Program Contingency	352		
Additional Financial Expense	352	46	*13%*
WTC TOTAL	**14,469**	**1,028**	***7%***
3rd Party Stakeholder - Add'l Potential Exposure:			
NYPD Campus Plan	300		
NYSDOT	20		
Total with 3rd Party Stakeholders	**14,789**	**1,028**	***7%***
Reimbursements / Funding	(7,076)	(212)	*3%*
Net Program Cost to the Port Authority	**7,713**	**816**	***11%***

Note:

(1) Potential for underfunded contingency.
(2) Potential acceleration costs.
(3) Potential scope changes for Chiller Plant, VSC and Security.
(4) Potential exposure to contractor non-performance.
(5) Potential cost growth for Streets, Cortlandt Station and PAC.

✧ ***The Port Authority may have other cost risk in the form of contingent liabilities***

Based on the Port Authority's bond offering statement disclosures, it appears the Port Authority has made certain financial obligations in connection with certain WTC site bond financings of up to $600 million of gross credit support on other projects at the WTC site, $400 million of which are reimbursable by the State of New York and New York City, leaving $200 million of net exposure. In addition, in November 2011, $1.2 billion of Liberty Bonds were issued to finance the private development at the Tower 4 site. The Port Authority, in addition to being a future major tenant at the building, has agreed to provide credit support for this financing through a complex arrangement of interest rate support, rent deferrals, and rent-free periods. Estimating the outcome of these arrangements is speculative, as multiple events need to transpire for the obligations of the Port Authority to be triggered, therefore, Navigant has not included a provision for these figures in the Current Estimate or in any potential exposures. Further research and analyses relating to the underlying contracts that document these commitments will be conducted in Phase II of Navigant's work.

Preliminary Recommendations & Next Steps

- Identify a single candidate reporting to the Executive Director with the sole responsibility to manage the successful construction, completion, and commercialization of the WTC.
- Reevaluate the roles, responsibilities, requisite experience, and appointments of the WTC Sub-committee as the WTC evolves from a focus on construction execution to asset management.
- Perform a comprehensive forensic construction cost audit of the entire WTC program to validate the costs expended, the Current Estimate and to identify any additional exposure items.
- Conduct a focused review of the development budget associated with asset management and the future operations of the 1 WTC and the Retail project that involves all constituents.
- Pursue reimbursement from third parties for completed work and any pending commitments for work conducted in good faith.
- Prior to committing to, or initiating, any additional work requests from other agencies and parties, secure contractual evidence of funding commitments as well as reimbursement capacity.
- Assess the contingent liabilities of the Port Authority and risk-assess same in the EAC for the WTC program.
- Unless intended to create construction efficiencies or produce direct cost reductions, freeze design to the extent possible.
- Prepare a comprehensive risk register, probability assess beneficial or adverse outcomes on a continuous basis to increase the accuracy of the EAC based on contemporaneous information.
- Evaluate current WTC related insurance programs for cost effectiveness and counterparty credit risk for existing coverage.
- Perform sensitivity analysis on optimistic, pessimistic and probable case scenarios to understand cost impacts on the EAC and in particular the adequacy of contingency.
- Integrate development and construction budgets, providing a holistic reporting of the WTC program in a standardized format on a monthly basis to the Executive Director and Board of Commissioners.
- In light of the influence of the WTC on the capital needs and execution resources of the Port Authority, perform a detailed impact evaluation analysis on the 2011 Capital Plan.
- Evaluate potential monetization of the income producing elements of WTC as an alternative form of capital for the Port Authority.

IX. PRELIMINARY CAPITAL PLANNING ASSESSMENT

BACKGROUND

The 2011 Capital Plan is comprised of more than 900 projects totaling approximately $25.1 billion. Of this, approximately $18.2 billion is planned for the Port Authority's assets excluding the WTC site (approximately $6.9 billion). Of note, while addressing the capital needs of the WTC site in the period from 2002 - 2010, the Port Authority invested approximately $13 billion in its other assets.

SCOPE & METHODOLOGY

Continuing from the work conducted on the WTC, Navigant performed a preliminary review of the composition of 2011 Capital Plan and the capital planning process.

Navigant considered documents and conducted interviews with select management of the Port Authority. In addition, Navigant prepared a database of all projects in the 2011 Capital Plan and attended meetings of the Capital Planning Oversight Committee (the "CPOC").

Observations & Findings

- ***The Port Authority needs to assure that the long-range capital strategy aligns with its mission and objectives***

The Board of Commissioners recognizes that, in light of the demands of the WTC and the impact of the recessionary environment, the Port Authority does not strategically allocate capital by business unit or in concert with the overall objectives of the organization. Rather, line functions promote projects that maintain a particular asset base and fit within an internally mandated budget constraint. Many of the projects in the 2011 Capital Plan are in initial planning stages and are approved in their entirety when the total scope, budget and potential impacts are not yet mature. This approach further constrains the ability of the Port Authority to reassess priorities and alignment with a dynamic capital strategy. The Port Authority needs to assure that the strategy for the allocation of capital aligns with the mission and objectives of the organization for the 21st century. In Phase II, Navigant will evaluate with the Special Committee the actions necessary to re-position the capital strategy of the agency for the coming decade.

- ***The initial review of the capital planning and execution process indicates that roles and responsibilities may not be clearly defined***

The current management oversight of the execution of the Capital Plan is performed by the CPOC. While CPOC is conceptually a sound approach, the execution falls short of industry practice as it lacks a clear leader, is managed by committee, does not have consistent reporting mechanisms or a communication protocol, and is unfocused without an agreed-upon materiality threshold for items under discussion. In addition, the observed inconsistency in the command and control structure did aggravate the timely communication of challenges by the

Executive Director to the Board of Commissioners. Lack of accountability of development, construction and asset management functional leaders to the Executive Director exacerbates this condition. A review of the organizational design of the capital planning and execution functions within the Port Authority will be an area of focus in Phase II of Navigant's work.

- ***Performance metrics limited to budget compliance can impede an effective capital project planning and execution process***

The most successful organizations create a capital plan, construct a conforming budget and monitor progress against key performance metrics, where budget compliance is just one of several measures. The Port Authority should consider expanding the methods by which it monitors project performance and create the opportunity to proactively address areas of under-performance. To maximize effectiveness, such an initiative would require change management within the organization as a comprehensive definition of execution would become the measure of performance. Phase II of Navigant's work will address this organizational concept.

Preliminary Recommendations & Next Steps

- Phase II should include, but not be limited to:
  - An evaluation of the formation of a Capital Projects Office that reports directly to the Executive Director. This office would be responsible for the development and execution of the capital plan and effective communication of same. Navigant anticipates that a Capital Projects Office would be led by a single, senior executive.
  - An analysis of the unconstrained needs of the Port Authority against the 2011 Capital Plan to identify areas of potential risk.
  - A review of recent execution performance against the previous capital plan developed in 2007 and updated in 2008.
  - An assessment of proposed projects in the 2011 Capital Plan for, non-income producing assets to evaluate the benefit of same; this does not include projects intended for safety and security of infrastructure assets.
  - A study of the feasibility of monetizing non-core assets to provide an alternative form of capital for the funding of transportation infrastructure.
- Establish a task force to develop a long-range capital strategy that aligns with the Port Authority's evolving mission and objectives.
- Institute a systematic method for prioritizing project needs within constrained capital capacity and conduct annual assessments.
- Develop a protocol to measure and assess execution progress against performance metrics; address areas of under-performance against goals.
- Continue critical review of all projects in the 2011 Capital Plan.

X. OVERVIEW OF PHASE II

PHASE II – ORIGINAL MANDATE

In conjunction with the Review, Phase II of Navigant's engagement is expected to be completed and the report delivered by end of June 2012. Pursuant to Navigant's existing engagement and as discussed with the Special Committee during the interview process, Phase II will include (as refined by mutual agreement):

Project Management Office

- Oversight and coordination of organizational review and operational assessment.
- Oversight and coordination of finalization of WTC cost review.
- Coordination of ten-year Capital Plan Review through Rothschild.

Organizational Design and Operational Improvement

- Review business segment operating budget.
- Review Contract Service expense category to reduce costs.
- Review Material, Equipment and Other expense categories to reduce costs.
- Summarize findings and recommendations into a strategic framework.

Finalization of WTC Cost Review

- Review of avoidance costs.
- Assessment of accuracy of design and construction cost-to-complete, including timeline of completion.
- Identify key drivers of variances in project costs and record lessons learned for mitigation in future endeavors.

Capital Projects Assessment

- Complete preliminary rank order prioritization.
- Complete scorecards for designated capital projects with support of Port Authority personnel.
- Establish a dynamic evaluation methodology for ongoing update of capital projects and planning processes.
- Identification of considerations with regard to financing implications and alternatives.

PHASE II – ADDITIONAL RECOMMENDATIONS

Areas of importance for further review have been identified and recommended in the Phase I report that are not included in the engagement scope and terms of the original Phase II mandate of Navigant's consulting arrangement. A preliminary list of those groups by related work stream is detailed below:

Organizational Design and Operational Assessment

- Facilitate the Board of Commissioners' evaluation of the Port Authority's vision, mission, and strategy to meet the challenges of the 21st century.
- Develop and recommend pay for performance incentive systems.
- Assist the Board of Commissioners in its evaluation of the Port Authority's overtime and "add-on" compensation policies.
- Conduct detailed analysis of union contract work rules (in conjunction with special counsel and business segment managers), the current application of same, and the potential corrective actions to remove impediments to productivity and efficiency, and establish a foundation of focus on expired union contract terms and develop specific recommendations for incorporation in same.
- Review, analyze, and recommend consolidation of certain duplicate shared service functions, identify the expected annual cost savings and develop a detailed implementation plan supporting same.
- Review OPEB and make recommendations regarding potential benefit modifications for retirees.
- Assist in the development of executive "dashboard" to reliably and timely report status of key financial and operational performance metrics.
- Identify key revenue enhancements, including lessee pass-through cost collection, opportunities and assist in the development and implementation of enforcement strategies.

WTC Cost Review

- Perform a comprehensive forensic construction cost audit of the entire WTC program to validate the costs expended, to identify additional exposure items, and provide potential mitigation strategies.
- Evaluate contractor exposures including status of current claims.
- Develop and implement strategies with regards to reimbursements from third parties for completed work and any pending commitments for work conducted in good faith.
- Evaluate WTC related insurance programs for cost effectiveness and counterparty credit risk.
- Integrate development and construction budgets, providing a holistic reporting of the WTC program in a standardized format on a monthly basis to the Executive Director and Board of Commissioners.

Capital Projects Assessment

- Develop a mechanism to more reliably determine levels of state of good repair necessary to ensure Port Authority infrastructure integrity.
- Implement a comprehensive reorganization of the capital planning and execution function, identifying key leaders, roles, responsibilities, processes, and mechanisms for tracking progress on cost, risk management as well as delivery.
- Perform a study of the feasibility of monetizing non-core assets to provide an alternative form of capital for the funding of transportation infrastructure.

XI. APPENDIX – A

DEFINED PEER GROUP

Public (*i.e.*, State Agencies, etc.)	Private Sector (incl. Publicly Traded Co.)	Notes
Public Authorities and State Agencies		
1) New York Power Authority 2) Metropolitan Transit Authority (MTA) 3) New Jersey Turnpike Authority 4) New York Thruway Authority 5) New York City Department of Transportation 6) New York City Government 7) New York State Government 8) New Jersey State Government	• **NA:** Private Sector peers were "not applicable" given this group was focused on public authorities and agencies in the New York and New Jersey region	• Key attributes include being a public authority or state agency with jurisdiction in major New York and New Jersey metro regions • Must have responsibility in the areas of transportation, real estate, or economic development (preferably the former) • If possible, focus should be on authorities/agencies that DO NOT receive tax revenue
Tunnels, Bridges & Terminals		
9) MTA Bridge & Tunnel Authority (NY City) 10) Bay Area Toll Authority (San Francisco, CA) 11) Delaware River Port Authority of PA & NJ 12) New York Thruway Authority (NY State)	1) Macquarie Atlas Roads Group (Australia) 2) Cofiroute (Germany, France, UK, USA)	• Key attributes of peers should include operation of both bridges and tunnels (age of assets is also pertinent) • Operation of toll roads is applicable, but less so if operations are highly concentrated in such activities. • Older assets at a peer align more comparably to the Port Authority's assets (*i.e.*, bridges built in 1920s-30s). • Delaware River Port Auth, though much smaller in size, was selected due to it being a bi-state authority with ties to New Jersey, as well as a focus on transportation
PATH Rail System		
1) Massachusetts Bay Transportation Authority (Boston, MA) 2) Southeastern Pennsylvania Transportation Authority (Philadelphia, PA) 3) Delaware River Port Authority of PA & NJ (Western NJ) 4) MTA (NY City) 5) Chicago Transit Authority	• **NA:** Private sector peers are **not comparable** due to: ➢ Different fare structure (not flat-fee; instead, based on distance traveled) ➢ Compensation systems in foreign companies is different than in the U.S., namely for the PA, which limits comparability ➢ Private ownership of rail systems does not occur in the U.S.	• Key attributes of peers should include a flat-fee fare structure and the absence of any federal or state taxpayer subsidies, with location in a major metro with high traffic volume • Age of assets were considered as this will yield a larger staff of maintenance and engineering employees • Delaware River Port Auth, though much smaller in size, was selected due to it being a bi-state authority with ties

Public (*i.e.*, State Agencies, etc.)	Private Sector (incl. Publicly Traded Co.)	Notes
	• Privately owned and operated commuter rail systems in Tokyo, Hong Kong, Berlin and Taiwan were identified but eliminated from peer group for reasons noted above.	to New Jersey, as well as a focus on transportation
Aviation		
1) Chicago O'Hare International Airport (ORD) 2) Los Angeles World Airports (LAWA) 3) Hartsfield-Jackson Atlanta International Airport (ATL)	1) Aeroports de Paris (France) 2) BAA Airports (United Kingdom)	• Key attributes of peers should include a high volume of international passenger and aircraft traffic in major cities, and focused execution of airport infrastructure operations (not including retail and concession activities, baggage handling, or other airline and passenger services). • If possible, peers should operate multiple facilities, whether commercial or private.
Port Commerce		
1) Port of Los Angeles (California) ***2)*** Port of Long Beach (California) ***3)*** Port of Corpus Christie (Texas)	***1)*** Port of Tauranga Ltd (New Zealand) – NZSE: POT ***2)*** North Queensland Ports Corporation Limited (Northeastern Australia), a Government Owned Corporation *Note*: The defining characteristics of GOCs are that they have a distinct legal form and they are established to operate in commercial affairs. While they may also have public policy objectives, GOCs have financial objectives to satisfy shareholders with ROI and dividends. (Source: Wikipedia, citation needed)	• Key attributes of peers are that their activities be focused on port infrastructure operations and coordinating capital investment in port facilities. Secondarily, peers with similar geographic size and volume would also comparable. • Port operations like stevedoring, cargo handling and towage services, among many others, are activities performed by Port Authority lessees and do not provide a basis of comparison with the Port Authority.

XII. APPENDIX – B

EXAMPLES OF "ADD-ON" COMPENSATION

Pay Category	Pensionable	Description[1]	# Staff
Fica Benefit Bi-Weekly Payout	Yes	As an offset and in lieu of a base salary increase in 1969, this program allowed employees to opt for additional pay, apart from base pay, equal to the amount of their FICA liability in that year. Currently 14 employees remain who receive this pay.	14
Vacation Exchange	Yes	As a program, initially authorized by the Board in April 1976, current employees with perfect attendance may opt to prospectively exchange their upcoming year's vacation for cash to be paid in bi-weekly increments. Employees can exchange all but 10 vacation days from their annual allotment. Service A employees had no attendance requirement up to 2012.	533
Longevity Clerical	Yes	Originally authorized in 1993, this is a career service payment for non-represented clerical staff to encourage retention and reward sustained satisfactory performance. After 5 years the employee receives an annual incentive payment of $500 in bi-weekly increments, which increases every 5 years to a maximum of $2500 after 40 years of service.	43
Group Term Life II (Death Gamble)	Yes	As a retention mechanism, in 2002 Tier 1 employees were provided with additional life insurance coverage to address a potential reduction in benefit that could occur for beneficiaries of Tier 1 employees currently eligible for retirement, but who choose to continue to work at the Port Authority. The earnings offset the imputed value of that additional life insurance.	24
Longevity I (Retention Program-2003)	Yes	A targeted retention incentive payment offered in 2003, at the then Executive Director's discretion, for the purpose of retaining certain key executives post 9-11 for at least three years. Pay is currently received by three key executives.	3
Longevity IIA (40+ Yr Career Service Plan)	Yes	A career service payment authorized in 2003 for non-represented staff not on a longevity schedule and having 40 or more years of service. Payment in recognition of their four decades of sustained satisfactory performance and contribution to the Agency.	5
Longevity IIB (25+ Yr Career Service Plan)	Yes	A career service payment authorized in 2008 for non-represented staff with 25 or more years of service in recognition of their sustained satisfactory performance and contribution to the Agency over time. Longevity IIA, the 40-year plus longevity program, was rolled up into this program same year.	642
For Police Superiors Only			
Longevity FP (Police Superior Longevity)	Yes	Payment made to Police Superiors in recognition of their years of experience. Police Superior longevity is a flat rate based on Detective Lieutenant longevity and years of police service, starting with one year of police service and currently topping out at 30 years police service with a current annual rate of $20,020.	22
Cumulative Retirement Days	Yes	An incentive for Police Superiors to maintain perfect attendance throughout their careers.	22

Note:

(1) *Descriptions have been provided by the Port Authority HR department for various programs listed above.*

XIII. APPENDIX – C

NAVIGANT REPORT QUALIFICATIONS AND DISCLAIMER

THIS CONFIDENTIAL REPORT HAS BEEN PREPARED FOR THE SPECIAL COMMITTEE OF THE BOARD OF COMMISSIONERS OF THE PORT AUTHORITY IN CONNECTION WITH NAVIGANT'S PHASE I WORK PURSUANT TO THE AGREEMENT, DATED AS OF NOVEMBER 23, 2011, BY AND BETWEEN NAVIGANT AND THE PORT AUTHORITY. THIS REPORT CONTAINS INFORMATION RELATED TO THE PORT AUTHORITY AND IS BEING PROVIDED ON A STRICTLY CONFIDENTIAL BASIS. THE CONTENT OF THIS REPORT IS NOT TO BE USED FOR ANY OTHER PURPOSE AND, EXCEPT AS MAY BE REQUIRED BY LAW OR ANY OTHER REGULATORY OR GOVERNMENTAL AUTHORITY HAVING JURISDICTION OVER THE PORT AUTHORITY, CANNOT BE DISTRIBUTED WITHOUT THE WRITTEN CONSENT OF NAVIGANT AND MAY NOT, IN ANY CASE, BE RELIED UPON BY ANY THIRD PARTIES WITHOUT NAVIGANT'S PRIOR WRITTEN CONSENT.

DUE TO TIME AND OTHER LIMITATIONS, THIS REPORT HAS BEEN PREPARED UTILIZING LIMITED DUE DILIGENCE. IT IS BASED ON ASSUMPTIONS, FORECASTS AND ESTIMATES MADE BY THE MANAGEMENT OF THE PORT AUTHORITY, INFORMATION PROVIDED TO NAVIGANT BY PORT AUTHORITY PERSONNEL, INFORMATION PROVIDED BY INDUSTRY SOURCES, AND, IN SOME CASES, ASSUMPTIONS MADE BY NAVIGANT, WHICH MAY NOT HAVE BEEN REVIEWED WITH PORT AUTHORITY MANAGEMENT. ANY HISTORICAL FINANCIAL INFORMATION OR OTHER INFORMATION GIVEN TO, AND SUBSEQUENTLY PRESENTED BY NAVIGANT MAY NOT BE RELIABLE. ANY FINANCIAL STATEMENTS OR OTHER DATA CONTAINED HEREIN, INCLUDING ANY FORECASTS, ARE THE FINANCIAL STATEMENTS AND FORECASTS OF MANAGEMENT, NOT NAVIGANT. NAVIGANT HAS NOT SUBJECTED THE INFORMATION CONTAINED HEREIN TO AN EXAMINATION IN ACCORDANCE WITH GENERALLY ACCEPTED AUDITING OR ATTESTATION STANDARDS OR THE STATEMENTS ON STANDARDS FOR PROSPECTIVE FINANCIAL INFORMATION ISSUED BY THE AICPA. FURTHER, THE WORK INVOLVED DID NOT INCLUDE A DETAILED REVIEW OF ANY TRANSACTIONS, AND CANNOT BE EXPECTED TO IDENTIFY ERRORS, IRREGULARITIES OR ILLEGAL ACTS, INCLUDING FRAUD OR DEFALCATIONS THAT MAY EXIST. ACCORDINGLY, NAVIGANT CANNOT AND DOES NOT EXPRESS AN OPINION OR ANY OTHER FORM OF ASSURANCE ON THE FINANCIAL INFORMATION AND DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OR CORRECTNESS OF THE HISTORICAL AND FORECASTED FINANCIAL DATA, INFORMATION AND ASSESSMENTS UPON WHICH THIS REPORT IS PRESENTED.

IN ADDITION BUT NOT IN ANY WAYS LIMITING THE FOREGOING, IT SHOULD BE NOTED THAT THE SOURCE OF ALL FINANCIAL INFORMATION OR OTHER INFORMATION RELATING TO THE PORT AUTHORITY CONTAINED IN THE TABLES, FIGURES AND BODY OF THIS REPORT WAS INFORMATION PROVIDED TO NAVIGANT BY PORT AUTHORITY PERSONNEL.

IT MUST BE RECOGNIZED THAT ANY PROJECTIONS OF RESULTS OR BENEFITS SET FORTH IN THE ATTACHED MATERIALS ARE NECESSARILY, BY THEIR NATURE, INHERENTLY UNCERTAIN, AND NO WARRANTY OR REPRESENTATIONS, EXPRESSED OR IMPLIED, IS GIVEN THAT THE RESULTS OR BENEFITS SET FORTH IN SUCH PROJECTIONS WILL BE ACHIEVED OR REALIZED.

NAVIGANT IS NEITHER A LAW FIRM NOR A CERTIFIED PUBLIC ACCOUNTING FIRM. ACCORDINGLY, THE INFORMATION CONTAINED HEREIN IS NOT INTENDED TO BE AND SHOULD NOT BE RELIED UPON AS LEGAL, AUDITING OR ACCOUNTING ADVICE.