
Committee Meeting

of

SENATE LEGISLATIVE OVERSIGHT COMMITTEE

“The Committee will receive testimony from senior staff members of the Port Authority of New York and New Jersey, and other invited guests regarding the draft 2017-2026 Capital Plan, including the new Port Authority Bus Terminal, the Gateway Rail Tunnel, the PATH extension to Newark Airport, the redevelopment of Newark Terminal A, and other options to increase trans-Hudson capacity”

LOCATION: Committee Room 4
State House Annex
Trenton, New Jersey

DATE: January 17, 2017
10:00 a.m.

MEMBERS OF COMMITTEE PRESENT:

Senator Robert M. Gordon, Chair
Senator Loretta Weinberg, Vice Chair
Senator M. Teresa Ruiz
Senator Paul A. Sarlo
Senator Thomas H. Kean Jr.



ALSO PRESENT:

Sarah A. Fletcher
Office of Legislative Services
Committee Aide

Mark J. Magyar
Senate Majority
Committee Aide

Erin Darreff
Christopher Emigholz
Senate Republican
Committee Aides

Meeting Recorded and Transcribed by
The Office of Legislative Services, Public Information Office,
Hearing Unit, State House Annex, PO 068, Trenton, New Jersey



ROBERT M. GORDON
Chairman

LORETTA WEINBERG
Vice-Chair

M. TERESA RUIZ
PAUL A. SARLO
THOMAS H. KEAN, JR.
JOSEPH M. KYRILLOS, JR.

SARAH A. FLETCHER
Office of Legislative Services
Committee Aide
(609) 847-3855
(609) 292-0561 fax

New Jersey State Legislature

SENATE LEGISLATIVE OVERSIGHT COMMITTEE

STATE HOUSE ANNEX

PO BOX 068

TRENTON NJ 08625-0068

COMMITTEE NOTICE

TO: MEMBERS OF THE SENATE LEGISLATIVE OVERSIGHT COMMITTEE

FROM: SENATOR ROBERT M. GORDON, CHAIRMAN

SUBJECT: COMMITTEE MEETING - JANUARY 17, 2017

The public may address comments and questions to Sarah A. Fletcher, Committee Aide, or make bill status and scheduling inquiries to Shirley Link, Secretary, at (609) 847-3855, fax (609) 292-0561, or e-mail: OLSAideSLO@njleg.org. Written and electronic comments, questions and testimony submitted to the committee by the public, as well as recordings and transcripts, if any, of oral testimony, are government records and will be available to the public upon request.

The Senate Legislative Oversight Committee will meet on Tuesday, January 17, 2017 at 10:00 AM in Committee Room 4, 1st Floor, State House Annex, Trenton, New Jersey.

The committee will receive testimony from senior staff members of the Port Authority of New York and New Jersey and other invited guests regarding the draft 2017-2026 Capital Plan, including the new Port Authority Bus Terminal, the Gateway Rail Tunnel, the PATH extension to Newark Airport, the redevelopment of Newark Terminal A, and other options to increase trans-Hudson capacity.

Issued 1/9/17

For reasonable accommodation of a disability call the telephone number or fax number above, or for persons with hearing loss dial 711 for NJ Relay. The provision of assistive listening devices requires 24 hours' notice. CART or sign language interpretation requires 5 days' notice.

For changes in schedule due to snow or other emergencies, see website <http://www.njleg.state.nj.us> or call 800-792-8630 (toll-free in NJ) or 609-847-3905.

TABLE OF CONTENTS

	<u>Page</u>
Elizabeth McCarthy Chief Financial Officer The Port Authority of New York and New Jersey	7
Steven P. Plate Chief Major Capital Projects The Port Authority of New York and New Jersey	28
Diannae C. Ehler General Manager Port Authority Bus Terminal and Lincoln Tunnel The Port Authority of New York and New Jersey	32
Louis P. Venech General Manager Regional and Transportation Policy Development The Port Authority of New York and New Jersey	34
Clarelle DeGraffe Deputy Director PATH Rail System The Port Authority of New York and New Jersey	67
Catherine Cronin Manager Physical Plant and Redevelopment Newark Liberty International Airport The Port Authority of New York and New Jersey	70
Mark Lohbauer Director Regional Plan Association	105
Janna Chernetz, Esq. Director New Jersey Policy Tri-State Transportation Campaign	117

TABLE OF CONTENTS (continued)

	<u>Page</u>
APPENDIX:	
PowerPoint Presentation submitted by Elizabeth McCarthy	1x
Testimony, plus attachments submitted by Steven P. Plate	12x
Testimony submitted by Diannae C. Ehler	24x
PowerPoint Presentation submitted by Louis P. Venech	29x
Testimony submitted by Clarelle DeGraffe	40x
PowerPoint Presentations submitted by Catherine Cronin	42x
Testimony, plus PowerPoint Presentation submitted by Mark Lohbauer	59x
pnf:1-127	

SENATOR ROBERT M. GORDON (Chair): This meeting of the Senate Legislative Oversight Committee will come to order.

Would you all please rise and join me in the Pledge of Allegiance? (all recite the pledge)

May I have a roll call, please?

MS. FLETCHER (Committee Aide): Senator Gordon.

SENATOR GORDON: Here.

MS. FLETCHER: Senator Weinberg.

SENATOR LORETTA WEINBERG (Vice Chair): Here.

MS. FLETCHER: Senator Ruiz. (no response)

Senator Sarlo. (no response)

Senator Kean.

SENATOR KEAN: Here.

MS. FLETCHER: Senator Kyrillos. (no response)

SENATOR GORDON: Okay; thank you very much.

Well, good morning, everyone, and welcome to this meeting of the Senate Legislative Oversight Committee.

Today we will focus on the Port Authority's recently proposed draft 10-year capital plan for the period 2017 to 2026 and its associated projects. We are most grateful to the Port Authority for providing us with the senior officials who are directly involved in projects that are of critical importance to both New Jersey and the region.

The draft plan includes a new Bus Terminal on Manhattan's West Side. As many of you are aware, this new terminal will replace the existing Port Authority Bus Terminal, which is nearing both maximum capacity and the end of its useful life.

The proposed capital plan allocates \$3.5 billion for the construction of the new Terminal. Of the \$3.5 billion earmarked for the project, \$500 million is anticipated Federal funding, which may or may not materialize.

There is widespread concern among elected officials, commuters, transportation advocates, and Port Authority officials alike that the \$3 billion will be inadequate to ensure the construction of the new terminal is complete, or nearly complete, by the end of the 10-year period. Any delay in construction will have long-lasting, negative repercussions for a corridor state like New Jersey, whose economy depends on the ability to move people and goods in a safe and efficient manner.

According to the Port Authority's own study, bus ridership is expected to increase 50 percent by 2040. It is also expected that Manhattan will add 300,000 jobs over the next decade, the vast majority of which will need to be filled by commuters. In order to keep New Jersey attractive and competitive, we must build and expand reliable transit infrastructure in a timely manner. To achieve that goal, we must ensure that adequate financial resources are available.

It is the goal of this hearing today to get a better understanding of the Port Authority capital plan, especially its fiscal underpinnings. We will hear from several invited experts and officials from the Port Authority, who will speak about planning, construction, and funding; as well as from two regional transportation planning experts. Based on their testimony, we hope to learn how much it will really cost to get these projects off the ground. If, as we suspect, the \$3.5 billion funding level is insufficient to guarantee timely construction of a new Bus Terminal, how much more is

needed? And, if \$3.5 billion isn't enough, or if Federal funding does not materialize, how can we ensure that the money for the Bus Terminal isn't siphoned off to other Port Authority projects that can be completed in the initial 10-year period?

I must tell you, I am very concerned that the Port Authority Bus Terminal appears to be the only project without a scheduled construction start date or completion date. In my mind, that makes the project a vulnerable target for those with other priorities.

I fear that the new, so-called, *gates* that have been inserted in the current capital budgeting process will create opportunities to divert Bus Terminal funding to projects that can be completed in a shorter timeframe.

This morning we will also be getting a full briefing on the plan for the PATH extension to Newark Airport; on how we can increase PATH capacity in the years ahead; on the Newark Terminal A expansion; and on what we need to do to repair or replace the Newark Airport monorail.

I hope that we can identify today, for the benefit of the Legislature and the public, whether the draft plan allocates sufficient funding to the best and highest priority projects; and if not, what changes need to be made in the capital plan.

This is the first public discussion of the Port Authority capital plan since the actual document was released last Wednesday night. I'm sure we will have lots of questions. But before I turn to my colleagues for any comments, let me provide an overview of today's presentations.

We will begin with Elizabeth McCarthy, the Chief Financial Officer of the Port Authority, who will provide an overview of the \$32 billion capital plan. We will then hear from three panels: The first will

focus on the new Port Authority Bus Terminal and capacity issues at the Lincoln Tunnel. We will hear from Steven Plate, Chief of Major Capital projects; Diannae Ehler, General Manager of the Bus Terminal and Lincoln Tunnel; and Lou Venech, Manager of Regional Transportation Policy.

The second panel will focus on the proposed PATH extension to Newark Airport, and options to expand PATH capacity. That panel will consist of Mr. Plate; and Clarelle DeGraffe, Deputy Director of the PATH system.

The third panel will describe plans to expand Terminal A at Newark Airport and reinvest in the Airport monorail. That presentation will be made by Ms. McCarthy and Catherine Cronin, Manager of Physical Plant and Redevelopment at Newark Liberty Airport. I ask the Committee to organize your questioning around those subjects.

At the conclusion of the Port Authority testimony, we will have one, 30-minute response panel consisting of Janna Chernetz of the Tri-State Transportation Campaign; and Mark Lohbauer, of the Regional Plan Association.

We have a lot of ground to cover; and I hope I won't be hosting a dinner immediately after we hear the testimony.

With that, I'd like to turn to my colleague, Senator Weinberg.

Any comments?

SENATOR WEINBERG: Very briefly.

First, a point of personal privilege. I'd like to welcome Senator Ruiz back to the Committee after her parental leave. (applause)

SENATOR RUIZ: I'm still on parental. (laughter)

SENATOR WEINBERG: Oh, you're still on parental? You're going to be on parental for a good many years, Teresa, if you don't know that already. (laughter)

SENATOR KEAN: It doesn't stop. (laughter)

SENATOR WEINBERG: It never stops.

SENATOR KEAN: It doesn't stop.

SENATOR WEINBERG: And I want to thank the senior members of the Port Authority staff for being here. I identify with all of the remarks that our Chairperson talked about at the opening of this Committee meeting.

And I want to thank Senator Tom Kean. This has really been a bipartisan effort on behalf of the Legislature, from beginning to -- I can't say *to end*, because we are just, apparently, still at the beginning. But we are devoted, in a bipartisan way, to make sure that our transportation priorities are set appropriately, particularly at the Port Authority. So I want to thank the Chairperson for continuing these Committee meetings, and I look forward to getting onto the questioning.

SENATOR GORDON: Thank you, Majority Leader.

Senator Kean.

SENATOR KEAN: Thank you, Mr. Chairman; through you.

Thank you, Majority Leader. It's always a pleasure to work with you, and to try to get some--

SENATOR WEINBERG: I could give you a few references who might disagree. (laughter)

SENATOR KEAN: And occasionally we disagree with each other. I think that's been seen on occasion as well. (laughter)

Thank you for being here today. I know that we will have some very detailed questions focusing on the long-term priorities of this agency, as well as what's in the best interest of the taxpayer and the commuter alike, to figure out those best outcomes. So I think that-- Thank you for being here today, and I look forward to your presentations.

SENATOR GORDON: Thank you.

Senator Ruiz.

SENATOR RUIZ: Good morning. And thank you, Chairman, for holding this discussion; and the Majority Leader, Senator Weinberg, for always being a passionate advocate for mothers. (laughter)

I have to tell you -- a point of personal privilege, way off base here. But we have a fabulous new room that was opened to nursing moms; and I have used it on several occasions. And it's just great to see that the State is paying attention to the needs of women. Thank you very much. (applause) So all of the-- I know; right? So maybe we should open up these rooms, also, at Penn Station and at the Port Authority, while we're at it. (laughter)

I want to thank all of you for being here this morning for the discussion that we're going to have in a very positive and open way. Of course, as the Senator representing the City of Newark, I have commuters who use all the venues that are in discussion today -- the PATH extension, hopefully, that they'll use; the Penn Station with the PATH that's currently there; Port Authority and Penn Station in New York.

There are some questions that I do have about the airport and its function as it exists today. So at some point, if I do not have the opportunity to stay for the length of the Committee, I would just hope that,

perhaps, a staffer can come over -- because there are just some concerns that I'm getting from constituents who are using all the terminals. And they're experiencing some hiccups in their way to getting to the actual gates that they need to respond to.

So I just want to say thank you, and it's great to be back.

SENATOR GORDON: Thank you.

With that, let's begin with Elizabeth McCarthy, who will provide an overview of the capital budget.

Libby.

E L I Z A B E T H M c C A R T H Y: Thank you, Chairman Gordon and members of the Committee.

As you noted, I am the Chief Financial Officer of the Port Authority, and I have been with the Port Authority for four years. Prior to joining the Authority, I had more than 30 years of financial experience, in both the public and private sectors, including leadership roles as Chief Financial Officer for the Long Island Power Authority; the New York Power Authority; as well as DPL Inc., a public utility holding company; and as a partner at PricewaterhouseCoopers.

My office worked closely with the offices of the Chief Engineer and Chief of Capital Planning, Execution, and Asset Management to assist senior leadership and the Board of Commissioners in developing the proposed capital plan. It is an honor for me to present to you the Port Authority of New York and New Jersey's proposed \$32 billion capital plan for 2017 through 2026, which was released for public comment on January 11, as you noted.

What I want to leave you with today is an understanding of how the proposed capital plan -- which we believe sets a balanced foundation for the agency going forward -- was developed; the makeup of the plan, as well as highlights of significant projects in the proposed plan; the manner in which the plan will be managed and monitored once adopted; and the process by which the public can comment on the proposed plan.

The Port Authority develops and manages some of the region's most vital transportation assets. Our region's transportation network is more than a means of personal travel. It is a complex network of infrastructure assets that connects people and goods within the region, provides access to the nation and the world, and drives the region's economic development and prosperity.

In February of 2015, the Port Authority endorsed the recommendations of the Special Panel on the Future of the Port Authority, which called for the Port Authority to reassess and update its 10-year capital plan to reflect investment in the region's transportation needs. Months of deliberation followed. Without question, this proposed, comprehensive 10-year capital plan reflects a number of difficult choices required to balance investment priorities in a fiscally responsible manner.

The plan adheres to three guiding principles: One, to apply the agency's financial capacity and full resources toward modernizing and expanding the region's aging airports, seaports, mass transit facilities, and other vital trans-Hudson transportation assets. Two, to continue serving our customers efficiently, focusing on maintaining facilities in a state of good repair, while ensuring safety, security, and resiliency. And three, to

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

The balanced portfolio of critical infrastructure projects presented in the proposed capital plan both affirms and supports the Port Authority's mission to meet the region's core transportation needs, while simultaneously acting as good stewards for the public's resources in a fiscally responsible way.

Also, as recommended by the Special Panel on the Future of the Port Authority, \$600 million in unallocated Regional Development Funds have been redeployed to transportation projects that align with the agency's core mission.

In order to develop the plan, the Authority's engineering, capital planning, operations, and financial planning professionals conducted a comprehensive survey of the current and most pressing capital needs; as well as a thorough, risk-based evaluation of the relative benefits and priorities these capital requests reflected. Multiple meetings were held with the Board of Commissioners, and follow up analysis was performed. I can only say this was a very robust, deliberative process.

And just as trees cannot grow to the sky, the Port Authority's financial capacity is not unlimited. Therefore, in determining funding allocations, we had to make choices. First, every project that is currently in construction was evaluated to confirm that it should be completed, and sufficient funds were allocated to deliver all of these projects. Next, funds were allocated to maintain our assets in a state of good repair, and provide for projects required by law or for security purposes. After funds were allocated to provide for these projects, and projects that will fortify and

restore our assets damaged by Superstorm Sandy, other high priority projects that will expand and improve the critical transportation assets were funded.

This foundation for the future is built on our four main funding priorities and objectives: renew, expand and connect, partner, and deliver, which you can see on slide 3.

As the Port Authority enters its 95th year, and as we serve an ever-growing region, maintaining our assets in a state of good repair is critical so that we can continue providing infrastructure that is efficient, reliable, and safe. Renewing our existing assets represents 27 percent, or \$8.8 billion, of this proposed capital plan. If we include projects of this type that are currently in construction, renew projects represent 37 percent of the proposed plan.

Another cornerstone of this proposed capital plan are projects that expand capacity, improve connectivity, and advance the region's transportation needs. At \$11.1 billion, these projects represent over a third of the proposed spending, or almost half of the plan when projects that are currently under construction are included.

Together with our Federal and regional partners, we are also following through on our commitment to restore infrastructure that was damaged by Superstorm Sandy, enhance our resiliency, and plan for the future. These projects represent \$2 billion in spending during the 10-year period. This category also includes the Port Authority's support of the Gateway Development Program in the amount of \$2.7 billion, which I will provide more detail on momentarily.

Finally, a critical component of the plan is the capital dollars allocated to ensure that we deliver on the projects that we have already begun to construct. This category makes up 24 percent, or \$7.6 billion of the capital plan spending; and as I noted, is made up of the projects in the three categories discussed above.

Significant projects include the \$2.5 billion to support the Terminal B Redevelopment Project at LaGuardia Airport; and \$5.1 billion to complete other large projects, like the Bayonne Bridge Navigational Clearance Program, the Goethals Bridge Replacement Program, PATH Signals Replacement Program -- including Positive Train Control; as well as the upgrades to the Harrison and Grove Street PATH Stations, our port and rail cargo facilities at Greenville Yards, and the World Trade Center site.

On slide 4 you can see some of the major projects included in each category. I'll point out just a few highlights. As discussed previously, renewing our transportation facilities and maintaining our assets in a state of good repair continues to be a top priority for the Authority. Significant projects in the category include the \$1.5 billion for Restoring the George program, which includes the suspender rope replacement program at the George Washington Bridge; \$1.1 billion for the full replacement of the Lincoln Tunnel Helix; and \$360 million to begin the replacement of the wharfs and piers at the Port facilities.

Significant projects that will allow us to expand our facilities and connect the region include the full replacement of the Port Authority Bus Terminal, with \$3.5 billion in spending during the next 10 years, which Steve Plate will discuss more fully shortly. This is in addition to the \$370

million in necessary state-of-good-repair and quality-of-commute improvements to the existing facility while the new facility is being designed and constructed. Diannae Ehler will speak about that in a few minutes.

Major investments in passenger terminals and related infrastructure at LaGuardia Airport, as well as redevelopment of JFK to prepare for its future, are also included. And as Catherine Cronin will discuss in a few minutes, the redevelopment of Terminal A at Newark Liberty Airport is in the plan.

A new AirTrain connecting LaGuardia Airport to Willets Point, creating rail access at all of our major airports; and an extension of the PATH Rail infrastructure from the existing terminus at Newark Penn Station to the Northeast Corridor rail link at Newark Liberty Airport, which Steve Plate will also discuss.

And I have already spoken about the significant projects in the Partner and Deliver categories of the plan, and Clarelle DeGraffe will brief you on PATH's major projects in these categories.

In addition to the proposed Port Authority spending of \$29.5 billion, the proposed plan also provides for the Port Authority support of the Gateway Development Program, a critical trans-Hudson rail link and associated infrastructure. This support, in the amount of \$2.7 billion, includes the approximately \$300 million that was approved by the Port Authority's Board in October. As with that authorization, the amount included in the proposed plan would support debt service on a portion of Gateway Development Corporation's low-cost borrowing, and the Port Authority would not be subject to project cost overrun or funding gap risk.

This support will be subject to the Port Authority's rigorous gates review process, as are all projects in the plan.

Slide 5 depicts the proposed capital plan dollars allocated by department. As you can see, the largest spending is in the aviation and TB&T departments, which is consistent with our major airport redevelopment projects and the substantial investment in our bridges, as well as spending in the period toward a new Port Authority Bus Terminal.

The Port Authority employs a comprehensive planning process that considers multiple factors in the development of the annual budget and long-range capital plan, and ensures that the agency is consistently moving towards achieving long-term goals.

The 10-year capital plan was developed as part of a comprehensive planning process and risk-based prioritization that considers asset condition, operational and revenue impact, threat assessment, customer service, regional benefit, and regulatory or statutory requirements. This comprehensive planning process includes an annual assessment of the factors that impact the continuing operations of the Port Authority's facilities, such as contractual, municipal lease, and other relationships; as well as regional needs, customer demands, and industry-specific business environments.

Additionally, although a joint agency of the two states, the Port Authority stands on its own, both operationally and financially. Operationally, the management structure of the Port Authority is similar to that of a traditional corporate entity. Financially, the Port Authority is self-sustaining and raises the funds it needs to acquire, construct, or improve its facilities primarily on the basis of its own credit. Except in limited

circumstances, the Port Authority does not receive Federal or State support. When it was created, the states provided the Port Authority with the power to establish charges for the use of its facilities and to borrow money through its bonds or other obligations.

Slide 7 presents the Port Authority's lines of businesses and related individual facilities. As you can see from the map, the facilities spread across the New York/New Jersey metropolitan region and provide a key network of aviation, ground transportation, infrastructure, and marine terminal facilities. In large part, the revenues of the Port Authority are generated from the tolls, fares, landing and dockage fees, rentals, and other charges at certain of its facilities. Not all of the Port Authority's facilities produce surplus revenues. Additionally, some facilities operate at a deficit, or are non-revenue producing for the Port Authority.

Given this wide span of operational facilities that are critical for the region's economy and the resilient demand of transportation services, the Port Authority revenue base benefits from a large and diverse user pool. After covering operating expenses, these revenues are used to pay debt service on Port Authority consolidated bonds, and then are available to invest in capital or cover other authorized obligations.

The factors of the aforementioned, comprehensive planning process provide inputs to the Port Authority's integrated financial model, which is used to determine the capital capacity for the 10-year period and, therefore, the size of the capital plan. In determining capital capacity for this proposed 2017 through 2026 period, the Port Authority projected its future net revenues based on its existing contracts and leases, and its

currently approved rates and charges, subject to contractual or other escalations.

The Port Authority also included reasonable assumptions regarding Federal or other third-party funding sources that would be available to support various projects in the plan; net proceeds from the sale or net lease of non-core real estate assets; and potential revenues from various sources of fees and charges at its facilities, including potential changes to reflect adjustments to keep pace with inflation that the Board may consider in the future.

The projections do not include broad, general increases and auto or truck tolls in the period beyond the previously approved adjustments based on inflation.

The chart on slide 8 shows that our projected sources are balanced--

SENATOR KEAN: I'm sorry.

Through you, Mr. Chairman, when is that-- By definition, when does the currently preapproved toll increases end? What fiscal year?

MS. McCARTHY: So the last toll increase of the five-year scheduled toll increases was in December of 2015.

SENATOR KEAN: Correct; so--

MS. McCARTHY: And then, in addition to that, back in 2008, the Board approved an inflation-based adjustment to the tolls, and that is carried forward.

SENATOR KEAN: So your-- If I may, through the Chair, a point of clarification. So you're looking for -- currently approved tolls end when, for your analysis?

MS. McCARTHY: So the currently approved tolls -- the last of the scheduled toll increases was 2015.

SENATOR KEAN: Right.

MS. McCARTHY: Based on our current estimate of inflation, the way that the inflation mechanism would work--

SENATOR KEAN: Yes, I know.

MS. McCARTHY: --would be 2020 and 2024, in the plan period.

SENATOR KEAN: Thank you.

MS. McCARTHY: Yes.

The chart on slide 8 shows our projected sources are balanced with our proposed spend in the 2017 through 2026 period.

The proposed capital plan is a blueprint for future spending, and does purport to supplant the Port Authority Board's authorization process for specific projects and contracts. Ten years is a long planning horizon; and facts, and circumstances, and risks will change. Accordingly, the capital plan and funding capacity will be monitored and will be adjusted in the future. The Port Authority Board has directed staff to ensure its Gates Management Process--

SENATOR GORDON: Excuse me, Libby, before we get into the next slide.

MS. McCARTHY: Yes.

SENATOR GORDON: I just wanted to ask you a question about the sources on page 8.

MS. McCARTHY: Yes.

SENATOR GORDON: An earlier slide, breaking down spending by department -- 36 percent, I see, is being devoted to aviation-related projects. If one looked at the \$32.2 billion in funding, is there -- can you characterize the sources of funding by mode of transportation? For example, my understanding is that a good deal of the non-borrowed funds that are available to the Port Authority are generated by toll revenue from drivers. How much is derived from aviation-related uses, as opposed to drivers, as opposed to maritime uses? Can you provide a rough breakdown on that?

MS. McCARTHY: Yes; a rough breakdown, off the top of my head, is that-- So the TB&T provides, as you know-- I'm just going to go back and frame this. We do have a consolidated revenue pool that supports our consolidated bonds. The bonds are revenue-based of all of the revenues of the facilities. We then take that and use that to allocate across the facilities.

TB&T is roughly 50 percent of our net revenues, and aviation is roughly the other 50 percent. Ports is close to break-even; and then, of course, PATH -- being the nature of a mass transit operation, does run at a deficit.

SENATOR GORDON: Okay.

MS. McCARTHY: Okay. Those are off the top of my head, Senator; and we'll certainly confirm those numbers for you.

SENATOR GORDON: The thought behind my question is that, I was just wondering whether the airports are paying their "fair share," as opposed to the drivers paying the tolls.

MS. McCARTHY: Yes; so traditionally, the airports produce surplus revenues that we can take off the airports to support the rest of the capital program, subject to some limitations.

SENATOR GORDON: Right.

MS. McCARTHY: And we do do that in this whole capital program. Once again, we create the whole capacity, and then we allocate it out; unless there are restrictions, as with -- as an example, on slide 8, the passenger facility charge revenues. Those are invested in the airports.

SENATOR GORDON: Okay.

MS. McCARTHY: Okay?

SENATOR KEAN: If I may--

SENATOR GORDON: Senator.

SENATOR KEAN: --just following up on Senator Gordon's question on PATH.

What would you look at as the annual loss if it's a percentage of the budget?

MS. McCARTHY: My--

SENATOR KEAN: If you're doing 50-50, and then a loss, (laughter) it doesn't seem to--

MS. McCARTHY: We look at TB&T--

SENATOR KEAN: Right.

MS. McCARTHY: --together with PATH and the ferries as the interstate transportation network.

SENATOR KEAN: And so it is not really a separate line item in the way you're breaking it out here.

MS. McCARTHY: When we put them together, we look at-- Thank you (referring to staff); pieces of paper flying around.

SENATOR KEAN: As you're explaining it, through the Chairman, you had it as a separate line item -- as a loss.

MS. McCARTHY: Right.

SENATOR KEAN: I'm just making sure we're not double-counting where PATH fits in to the overall revenue flow.

MS. McCARTHY: No, no. Just sort of-- In my rounding up, I would say ITN is roughly 50, airports is roughly 50.

SENATOR KEAN: Okay. So therefore-- Okay; thank you.

So ports and PATH are-- I'm sorry; so PATH is within TB&T; so therefore, you just--

MS. McCARTHY: And then ports is generally right around break-even.

SENATOR KEAN: Yes; thank you.

Okay, thank you.

MS. McCARTHY: Doing some simple rounding.

SENATOR GORDON: Okay; thank you.

Sorry to interrupt.

MS. McCARTHY: No problem.

So then that gets me to our Gates Process. So the Port Authority Board has directed staff to enhance its Gates Management Process in order to determine when construction may begin on any given project. This process also helps us ensure that we keep powder dry for projects that start construction later in the plan. So we want to make sure that we don't start things that are of a lower priority and use capital up, if

we are concerned that we are going to have that capital available at the back end of the plan for some critical assets. And we do have some critical assets where the construction spend is more toward the back end of the plan than the front end of the plan. So the process works kind of both ways to support this.

The process includes, among other things, consideration of the revenue generating potential and capital capacity impact on the overall plan; the relative priority of the project and the overall capital capacity of the Port Authority. The enhanced gating process, which is outlined on slide 9, provides natural break points in a project's life cycle to either continue or modify a specific project. If, in the Board's judgement, there is not sufficient capital capacity to complete a project, or other priorities arise, then construction will not begin; other projects will be deferred, eliminated, or modified to the point that there is sufficient capital capacity; at which point the construction may begin. Or the Board will consider other fiscally prudent -- or alternatives, taking into account such factors as revenues, expenses, and anticipated project costs.

The Port Authority Board's Committee on Finance and Committee on Capital Planning, Execution, and Asset Management will continue to monitor Port Authority capital expenditures and capital capacity on a quarterly basis. In addition, at least every two years, the Board will reassess the capital plan in light of then-current information as to capital capacity and the progress of capital projects, and determine whether there are sufficient resources to invest in the capital plan projects during the remaining period of the plan, at roughly the pace and the cost that were originally assumed; and to fund necessary expenditures in the subsequent

10-year period. And if the Board cannot make this determination, it will modify the capital plan in order to ensure that these two conditions can be met in order to maintain a balanced plan.

This disciplined project onboarding and gates process, together with the regular monitoring, is critical to ensuring a financially balanced plan in a fiscally responsible way; and that the Port Authority is able to serve its stakeholders, both today and tomorrow.

Wrapping up: Given our role, the Port Authority is continuously investing in our vital facilities, renewing and expanding them. This ambitious slate of work is part of that ongoing investment, and requires the assistance of our local, regional, and Federal partners, both public and private. For the major projects and facilities, the Port Authority applies a guiding vision and long-term holistic plan for the role that that facility will play in the future as part of the region's interconnected transportation network.

I've discussed just a few highlights of the many infrastructure projects set forth in this proposed capital plan, the Port Authority's largest ever. And while there are many highlights, we iterate that this proposed plan required difficult choices as we sought to achieve a fiscally responsible, financially balanced plan.

We encourage you and the public to thoroughly review this proposal and to voice your comments and questions as you can. Consistent with our commitment to transparency, we have developed a comprehensive public comment process. As you noted, the full detailed draft of the proposed 2017 through 2026 capital plan was released to the public on the Port Authority's website on January 11. Final materials include a 100-page

downloadable PDF document, accompanied with downloadable XL files containing the detailed project lists. We are planning an extended comment period, which will run through Wednesday, February 15, 2017. We invite the public to review and share their comments, either online or at the public meetings we will be holding. Comments can be made at the e-mail address that is put forth on our website; it's publiccomments@panynj.gov.

And there will be two public meetings, one in each state, with Commissioners representing each state, as well as staff, present at both. The public meetings will be held at PA offices: On January 31, 2017, from 5:00 p.m. to 8:00 p.m., at 4 World Trade Center, in New York; and then February 7, from 5:00 p.m. to 8:00 p.m., at 2 Montgomery Street, in Jersey City.

The Board will consider the comments prior to its final deliberation on the plan, which is scheduled for February 16, 2017.

All of this information regarding our process is available, both on our website and in the capital plan book.

Thank you, again, for the opportunity to present the proposed \$32 billion, 2017 through 2026 capital plan. And I'm happy to address any additional questions.

SENATOR GORDON: Thank you, Ms. McCarthy.

Any questions for Ms. McCarthy?

Senator Weinberg.

SENATOR WEINBERG: Thank you very much, Ms. McCarthy.

Do we have any guarantees, or any kind of projected roads, to get the \$500 million Federal grant for the Bus Terminal that's projected in here?

MS. McCARTHY: So we don't have any guarantees, as you know. And seeking a Federal grant does require putting through the process. I think the first starting point will be, obviously, the additional planning that Steve is going to be kicking off to get a sense of the available options.

We do believe that the Port Authority Bus Terminal, being a critical transportation asset, is well positioned to qualify for some Federal grants. That being said, the Gates process and the monitoring process will allow us -- if in fact, those dollars do not materialize -- to evaluate the Bus Terminal priority -- which is a high priority project -- against other projects, and find alternatives as to how to move that project forward.

SENATOR WEINBERG: Well, to use your terms, it's a *critical need* and a *high priority*. So I would ask, why is it the only project in the capital plan that doesn't have a projected construction start date?

MS. McCARTHY: I think Steve could probably address that better; but we are still very early in the community engagement process and the planning and design -- early planning and design process to be able to project a hard start date. So that is why it is not reflected, at this point, in the book.

SENATOR GORDON: Senator, just a thought.

We could move right into the Port Authority Bus Terminal testimony, and then we could focus our questions on that.

SENATOR WEINBERG: Okay; all right. That might be better; yes.

SENATOR GORDON: Yes.

Senator Kean.

SENATOR KEAN: I was going to let Senator Ruiz ask her question first.

SENATOR RUIZ: Go ahead; I'll follow.

SENATOR KEAN: Thank you.

Through you, Mr. Chairman.

Getting into -- I guess this is an overall question, going forward. It must be awfully difficult to operate without a CEO, within the context of the agency. And I would urge this chamber to move forward on oversight in getting a piece of legislation through, because of the pressure from New York regarding both the Inspector General, as well as every other action. I think it's very important. So I think you should be praised for your hard work so far.

SENATOR WEINBERG: There is a CEO there.

SENATOR KEAN: A permanent one. The one-- We need to get our legislation done to provide the actual--

SENATOR WEINBERG: He seems pretty permanent, by the way--

SENATOR KEAN: So moving on--

SENATOR WEINBERG: --for somebody who's temporary.
(laughter)

SENATOR KEAN: --in that, through the Chair.

From a revenue flow, you have the question here -- the one I asked earlier about your tolls. Do you anticipate additional toll increases for buses or for trucks in the next four or five -- in the next couple of years?

MS. McCARTHY: We do not anticipate any, beyond the inflationary adjustments, for trucks; we do not anticipate auto or truck general toll changes. The Board is looking at a number of different things, as it relates to revenue alternatives -- across the remainder of the facilities -- that it's considering to help fund this plan. And so that would be something that could be considered; but there's no -- nothing that is definitive on that perspective.

SENATOR KEAN: So a potential for buses; but no potential for autos or trucks.

MS. McCARTHY: That's correct.

SENATOR KEAN: Is that how I interpret that, then?

MS. McCARTHY: Yes.

SENATOR KEAN: So how about regarding-- You stated earlier that aviation is already 50 percent of the revenues, 31 percent of the expenditures. Is there going to be additional airport facility fee proposals, to your knowledge?

MS. McCARTHY: Again, the Board is looking at a whole host of possible approaches to help fully fund this plan. And there are a number of things that are being considered.

SENATOR KEAN: So if I may, through the Chair -- as you know, when the Transportation Trust Fund went through this chamber, there was an airport facilities fee that was deemed to be unconstitutional in the context; and illegal, I guess, under the context of New Jersey law.

You're anticipating that that fee may very well be imposed on the three airports?

MS. McCARTHY: If I'm understanding the fee you are referring to, that is something that we can be looking at, legally, to see. We're always looking to find the right balance of fees and charges for all of our stakeholders, across all of our facilities. And that's part of the process that will be ongoing as we look to make sure that we have the sufficient funding to fund this plan.

I can't speak specifically that that's -- that project -- that has been ruled in, ruled out.

SENATOR KEAN: Okay. All of our constituents have been taxed terribly. And we just need to keep that in mind as we're looking at effectiveness at all levels of government.

Thank you.

SENATOR GORDON: Thank you.

Senator Ruiz.

SENATOR RUIZ: Thank you, Chairman.

I'll just follow up, through you, with another question on the airport.

I think the Chairman, early in this discussion, was asking about potential revenue sources coming out of the airport. And I'm not sure if I heard you correctly. It sounded like you were looking at things. My concern is that it's not fees or revenue raisers that impact the actual person who's travelling; that we're looking at more creative ways.

I don't know -- there's a lot of advertising that goes on inside of the airport facilities. I'm not sure if the Port accrues any of that funding

and gets it back. It would be great, through the Chair, if we can kind of see a breakdown of where the revenue sources comes from; whether it's the new vendors that are coming in; the rental space -- however it is, so that I can get more familiarized with how you all set up your budgets with revenue line items that come in, through the Chair.

A follow-up question -- and this may not go towards you; maybe we'll ask it later in the presentation. The PATH extension project hinges on a good portion of Federal funds. If, in fact that doesn't materialize, I'm just concerned as to what happens to the fate of that project.

MS. McCARTHY: Once again, that project -- if those Federal funds do not materialize -- the evaluation will be done holistically, on the plan, of the priority of that project versus the other priorities, to make a determination of whether or not that project should be value engineered, should proceed versus something else or not. We always have to come back to that financially balanced plan.

SENATOR GORDON: If there are no other questions, let's move on to Steve Plate.

I'm sorry; Senator.

SENATOR WEINBERG: Sorry.

Just a couple of quick questions on the overall--

You said that the \$650 million from what was euphemistically called the *Regional Development Funds* was repurposed. Was it just divided up among all the projects, or was it repurposed toward one project?

MS. McCARTHY: It was put into the -- it was taken out of the uses; and therefore, was available to help fund the whole program.

SENATOR WEINBERG: Okay. So it's just represented throughout.

MS. McCARTHY: Just-- Yes.

SENATOR WEINBERG: And was there any consideration, in terms of the Bus Terminal, of potential revenue of air rights over the existing Bus Terminal; or if it were actually moved, selling that property?

MS. McCARTHY: So we have been monitoring the potential for -- across all of our facilities -- of non-core real estate, where we may be able to monetize.

Because of the timing of when the construction would be happening, where the location is, etc., it is difficult to assume a level of air rights realization in this period. But it is certainly something we are pursuing, and will be pursuing, as we go forward.

SENATOR WEINBERG: Okay, thank you.

SENATOR GORDON: Okay. Let's proceed on to the subject of the Port Authority Bus Terminal replacement.

I know I have a lot of questions; and what I would suggest is that we-- I know others do as well. Let's hold our questions until both -- all of our witnesses have testified on the subject.

We're going to begin with Steven Plate.

Mr. Plate.

S T E V E N P. P L A T E: Yes, thank you, Chairman Gordon; and good morning, members of the Committee.

My name is Steven Plate, and I am the Chief of Major Capital Projects. I have been with the Port Authority for over 30 years; and most

recently been the Chief of World Trade Center construction for the past 11 years.

I'm happy to provide you with an overview of the Port Authority Bus Terminal project as we see it today.

As you are well aware, the existing Port Authority Bus Terminal was opened in 1950, and was expanded in 1981. As you well know, currently, it is a challenge to meet the passenger demand. My colleague, Diannae Ehler, will go further into the details.

The new Terminal will meet current and future projected passenger capacity, provide for a safe and reliable commute, and enhance the customer experience. At present, the Bus Terminal accommodates approximately 232,000 passenger trips, and more than 7,800 bus movements per average weekday. But demand is expected to increase to as many as 270,000 daily peak-hour passengers by the year 2020; and as many as 337,000 daily peak-hour passengers by the year 2040.

The existing facility is also incompatible with current bus configurations, which require enhanced bus staging and storage.

The overall proposed program will replace the existing Bus Terminal, which is nearing the end of its useful life, with a state-of-the-art bus terminal in a location to be selected by a robust community outreach program and stakeholder engagement.

As members of the working group, you know how important this initial work will be. It will allow us to lay the groundwork for the various Federal, State, local regulatory review processes that are a part of such a project, including the federally mandated NEPA environmental review process.

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

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

The public outreach, planning, and environmental review phases will inform the requirements, design, and construction of the new Bus Terminal on the West Side of Manhattan. I anticipate that this phase of work will take approximately two to three years to complete. That process will include a robust alternatives analysis, which informs the NEPA review.

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

For the next 10 years, the \$3.5 billion budgeted project amount will be used towards all the preliminary work I spoke of earlier: planning, initial and final engineering design, environmental and other regulatory review, communications and outreach efforts, and initial construction phases.

Being a construction engineer and having decades of experience building large projects in urban environments, I can tell you that the staging of a project is critical to maintaining the balance of construction progress and project impacts to the surrounding community. There will be numerous challenges to building a replacement Bus Terminal including, but not limited to, neighborhood quality of life concerns, traffic management, phasing and implementation plan for construction of the new Bus Terminal, staging areas, available work times, and coordination of multiple contracting entities. And this will be developed based on the result of the planning and environmental review phases, as well as an extensive public outreach, and participation from the region's stakeholders.

Construction will be staged to minimize disruption to existing terminal operations with the development of a Master Schedule that facilitates coordination with regional transportation partners; and other construction programs, such as those at the Lincoln and Holland tunnels, as well as the George Washington Bridge.

I welcome the project and the challenges; but I also remain cautious that this project not only is completed and serves the needs, but also enhances the Port Authority's reputation as a master builder of regional transportation infrastructure.

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

SENATOR GORDON: Thank you, Mr. Plate.

I think we're going to hold the questions until we've heard from all three witnesses on the subject.

And Ms. Ehler, can you present your material?

D I A N N A E C. E H L E R: Good morning; and thank you, Chairman Gordon and members of the Committee, for this opportunity to speak about the Bus Terminal.

My name is Diannae Ehler, and I am the General Manager of the Port Authority Bus Terminal and Lincoln Tunnel. I have been with the Port Authority for 33 years; and have held positions of responsibility in the Tunnels, Bridges, and Terminals Department; Aviation; Port Commerce; and the Engineering Department.

I am responsible for the operations and maintenance, and, together with the Port Authority Police, the security of both the Port Authority Bus Terminal in Midtown Manhattan and the Lincoln Tunnel. In this role, I advocate for resources to maintain our assets and systems, ensure the best level of customer service possible, and establish programs that recognize that our facilities operate within the local communities of New York and New Jersey.

I'd like to especially thank Senator Gordon, and Senator Weinberg, and all the members of the New Jersey State Legislative Oversight Committee, for your support of the Port Authority Bus Terminal.

It's my understanding that the focus of this Committee is mainly on the capital plan; so I offer, at the end of this, if anyone has any questions about what I consider the key challenges, or updates on the Quality of Commute, go ahead and ask me questions.

Focusing on the capital plan itself: The Port Authority's proposed 2017-2026 capital plan includes \$370 million for projects associated with the Bus Terminal; \$28 million is for work already in construction. So significant projects that are already in construction

include upgrades to the electrical service and the replacement of the South Wing HVAC systems; \$60 million out of the \$370 million is for the remaining work associated with the Quality of Commute program.

The last portion of the \$370 million amounts to \$282 million, and that is allocated for projects that were identified as *priorities* through a very strict vetting process that took place over the entire 2016 year. A sample of the more significant interim investment projects includes projects associated with fire protection systems, concrete and masonry repairs, rehabilitation of standing platforms and stationary stairs, and work associated with ceiling leak repairs.

As you know, the Port Authority Bus Terminal is a seven-day-a-week operation; it requires attention, investment, and careful management. My work, and that of a dedicated staff that work with me, is focused on providing a safe, reliable commuting experience for the customers today and tomorrow.

And I welcome any questions you have.

SENATOR GORDON: Thank you.

You know, I was reading your testimony; I just want to ask one point of clarification.

MS. EHLER: Sure.

SENATOR GORDON: You make reference to *interstate bus system*. Is that-- Could you define *interstate*? Is it long distance buses, or is it New York-New Jersey buses, or anything other than intra-New York City?

MS. EHLER: Well, we don't have-- Our Bus Terminal doesn't handle anything with -- that's all within the City itself, for example. So we

have both commuter operations, which is just not New Jersey; it's New Jersey, some parts of Pennsylvania, Connecticut, for example; there are some commuter routes. But then we also have our long-haul operations that extend way beyond that. So it's both.

SENATOR GORDON: Okay; thank you.

Mr. Venech, do you want to proceed?

LOUIS P. VENECH: Thank you.

Good morning, Chairman Gordon and members of the Committee. My name is Lou Venech; I'm Manager of Regional Transportation Policy Development in the Port Authority Planning Department.

SENATOR WEINBERG: Turn the other mike off, please.
(referring to PA microphone)

SENATOR GORDON: Yes, you need to turn it off. Thank you.

MR. VENECH: In over 32 years at the Port Authority, I've worked continually on interstate transportation planning and policy issues. And I'll talk today about the Commuting Capacity Study, which was released last September, after an assignment requested by the Board.

Port Authority's capital program isn't a collection of isolated projects; but it reflects an ongoing effort among the Port Authority, our partner agencies in both states, North Jersey Transportation Planning Authority, and others to manage the regional transit and roadway network, and support sustainable growth.

More than a year ago, as our Board of Commissioners weighed options for the Bus Terminal and other capital investments, they called for

an overview of future prospects for trans-Hudson commuting. This was to provide a planning context for their deliberations on the program and Bus Terminal options. That led to the Trans-Hudson Commuting Capacity Study Assessment, which I managed, with input from a broad staff team, and independent consultants, and outside experts for their input as well.

I'm happy to provide the Committee with an overview of our effort. The study report and backup appendices are available for public review, and I'll also be referring to some materials that we provided to the Committee in my comments this morning.

The Bus Terminal project: The Commuting Capacity Study started with a Board Resolution in October 2015. The project concepts for a new Bus Terminal that had been presented to the Board used a projection of very robust growth, as you've heard. That growth compounds the complexity of siting and building a new terminal. It also raises obvious questions about the capacity to the west-of-Hudson bus network to handle the level of increased peak-period bus activity that was forecast for the Bus Terminal as a long-term need.

So the Board directed staff to study broadly what strategies would be available to meet and manage trans-Hudson demand over the next 30 years; less of a focus on the Bus Terminal itself, than on the west-of-Hudson network -- buses and all other modes. They were very specific about the issues to be investigated, which included looking at other modes; looking at improvements to existing infrastructure; the impact of new technologies on bus operations and commuter choices; ways to mitigate congestion; what role more workplace schedule flexibility might play; and to look at the relative benefits of different trans-Hudson alternatives.

So we shaped a quick turnaround effort; we focused on all the trans-Hudson transit modes. We worked from the 2040 (indiscernible) forecast that had been used in the Bus Terminal Master Plan. And growth, then, is generally tracked -- those expectations, I should say. We put an early emphasis on the interstate bus network to inform preliminary planning for the Bus Terminal and other bus corridor improvements. You're hearing about some of that in the discussion today. We concluded that the capacity of that west-of-Hudson bus network could be expanded to match the capacity forecast for the new Bus Terminal by 2040, but that would rely on an ongoing effort to address bottlenecks in the system, to improve the capacity to use different types of bus equipment, to introduce new bus technologies that would allow scaling up of capacity in a reliable and safe way.

Then we took a fresh look at the overall trans-Hudson commuter market; the current transit network, prospects for improved connections in other modes west of the Hudson, and factors influencing the commuter patterns and choices. The materials we've submitted include a graph that gives you a profile of trends in trans-Hudson commuting, from 1980 through 2015. It gives you a quick portrait of how those trends have changed.

The typical weekday volume of trips across the Hudson to Manhattan Central Business District grew from less than 700,000 in 1980, to well over a million daily round trips by 2015. Auto and truck volume has been flat during this period, which is a surprise to many people. Bus commuting has grown in volume and share; PATH volume has grown as well. Rail transit trips on New Jersey Transit system has grown also, as the

railroads have improved the network west of the Hudson and upgraded service to Penn Station, New York. Ferries comprise about 4 percent of the trans-Hudson commuting total.

To explain that pattern and to consider where we go from here, it's important to understand that commuters' choices are based on what services are available to them from their communities to reach jobs in Manhattan. You have a map that shows where Manhattan-bound commuters live in the metropolitan area, and by density and color gives you a sense of concentrations of trips and the modes they use.

Rail commuting -- in blue on your map -- is heavily used, where it's available. And you could almost trace the rail corridors west of the Hudson. You can also see the rail services have much deeper penetration in the northern suburbs of Long Island, relative to the west-of-Hudson communities.

New Jersey, and Rockland, and Orange commuters north of the border in New York, are much more dependent on bus commuting than their suburban neighbors in other parts of the region. PATH riders stand out in Hudson County, especially; and actually about 46 percent of Port Authority commuters come from Bergen and Hudson counties.

With this backdrop, and working closely with New Jersey Transit and others, we scanned nearly two dozen planned or proposed initiatives that could offer alternatives to trans-Hudson commuters.

The team looked at opportunities to improve transit capacity and connectivity west of the Hudson. That included looking at projects like the Hudson-Bergen Light Rail Northern Branch extension, expanded commuter ferry services, and New Jersey Transit's plans to expand rail

capacity at Hoboken terminal. Each has potential to create additional options for commuters to take advantage of new capacity or new connections among existing services. Collectively, they also continue progress towards a more resilient transit network that can keep people moving in the event of extreme weather or other emergencies that disrupt service.

We also looked at alternative trans-Hudson bus services. Studying the current market closely, we saw potential to draw some commuters using the Bus Terminal routes to alternative services that would use the George Washington Bridge Bus Station or, for example, a far West Side bus loop -- that might enter through one terminal and exit through the other -- to access growing areas of development on the far West Side of Manhattan.

We also looked at more -- potentially more service through the Holland Tunnel to Lower Manhattan.

The next steps would be working with New York agencies on specific routes and convenient transfers to transit nodes in Manhattan; and with bus carriers to test the market with pilot services.

Gateway is the project that has the greatest potential to provide additional trans-Hudson capacity, though that new capacity is perhaps many years away. If plans to expand trans-Hudson rail service to an enlarged Penn Station allow New Jersey Transit to double its peak-hour rail service to Manhattan, that would meet the demand forecast for the portion of the trans-Hudson market that has access to rail service. Based on prior analysis, it could also draw off about 60 peak-hour buses worth of forecast growth and demand for the Bus Terminal, in the long term. That would be

about 7 percent of the bus movements anticipated by 2040, based on the forecast.

We reviewed and affirmed the generation of trans-Hudson studies that point to the need for modernizing transit infrastructure and increasing capacity on the interstate bus network, the commuter rail system, and PATH, to balance and absorb growth and demand.

So summarizing our findings: Our report last September affirmed the forecast of robust growth in overall demand of the trans-Hudson network. These projections will be refreshed as formal planning for the Bus Terminal and Gateway get underway. We concluded that the interstate bus network could be expanded to meet the steady growth and projected demand -- again depending on progress beginning in the next few years, in relieving bottlenecks and introducing new bus technologies -- working together with carriers and other agencies. If we are successful, across the board, in creating more multi-modal alternatives, we see the potential to temper long-term Bus Terminal demand by perhaps 10 to 20 percent, with new commuter rail capacity being the biggest factor. That eases, a bit, the challenge of growing the bus network and siting an adequate Bus Terminal for our long-term needs.

But we also caution that there were factors that could keep up the pressure on Bus Terminal demand, including delays in advancing other strategies; the potential for latent demand west of the Hudson, given the strong continued job growth in New York; and the flexibility of bus service to respond to changes in development patterns and job growth in the region.

In closing, our recommendations, in summary, were to pursue a phased strategy for bus network improvements; and especially to mobilize our partners to take advantage of emerging technologies. That's a complex task; it will take years to achieve the full benefit of technologies, like bus platooning, that could allow a significant increase in peak-period service approaching the Lincoln Tunnel and the new Bus Terminal.

We also concluded -- as you've heard Steve say -- that planning for a new Bus Terminal should explore scalable options. Some of that -- the long-term demand could be met if it grew to the level in the Master Plan forecast. And we also suggested looking, with other agencies, at promotion of alternative work schedules. And again, just reaffirming -- as I think you're seeing in the capital program that's put forward -- also continuing to plan and invest in expanded rail service across the Hudson, expanded PATH capacity so that we continue to grow the network in a balanced way to meet future demand, through this 10-year period and beyond.

We've been presenting this work to agencies in both states, to NJTPA and other metropolitan planning organizations -- and starting to have the initial meetings that would help us move forward on many of these strategies.

Thank you for the opportunity to summarize this work for you.

SENATOR GORDON: Thank you very much, Mr. Venech.

I know there are a number of questions focused on the Bus Terminal. I'd like to start with a few, and whoever can best answer, I would appreciate a response.

I'd like to start with the cost estimates for this project. I understand there are still some uncertainties, which has led the agency to

present a range of costs -- \$7.5 billion to \$10 billion, you mentioned. Are there things that can be done to bring us to the lower end of the range, or even a figure less than \$7.5 billion? I know if you go into the existing Bus Terminal, there is a lot of retail space. Are there things that can be done, in terms of the design of the Bus Terminal, to just make it a facility that's based on functionality and capacity, as opposed to what I'll call *extras*? Are there things that can be done to get us below the \$7.5 billion number?

MR. PLATE: Well, Senator, that's an excellent question. That will be part of the process that we're just about to embark on. Once the Board finalizes the approval of the capital program, then we're planning to have a meeting with you, with the New York side of the house, as well as our own professionals, to sit down and have that discussion. Because right now, everything's on the table; and following the EIS process, that's the nature of how it is.

So we'll have to make some hard decisions; what we call them is *nice to haves* -- you know, things that aren't mandatory. I mean, we can't forget our core mission is to move people, and move buses, and get them in and out. And then, secondarily, some of the other experience is relative to the facility, which are nice to have and may not be as critical.

And then, back to your question earlier about scalability -- that's something, if we do it smartly, I've done on other projects. The term I like to use is *do not preclude*. If we're really smart about it, we can either build to the size we need today, or sometime in the future. And then say, if we need -- if our estimates are correct -- which they are estimates and projections for all of us -- then we could add more to the building, and be prepared to do that by putting some extra concrete or steel into the facility,

saving space. So it gives you a lot more flexibility, and we could kind of phase it in such a way, to answer your question.

SENATOR GORDON: Well, I actually have a question about the scalability. But before I get there-- So what I'm hearing is that it may well be possible to get below the \$7.5 billion number, depending on what decisions are made regarding those *nice to haves*, but we can't afford them.

MR. PLATE: Senator, I'll put a perspective-- We really don't know -- we have to go through -- we're beginning a process. And for me, we're looking, in the next few months, to go for planning authorization and start putting pencil to paper and start defining where, when, and what we're building. It's very hard to say; people throwing numbers around.

Just to give you a little background. Some of you know a lot of this, but just for everybody else. The original number came some time ago, a couple of years ago, from my engineering department -- an over \$10 billion number; the \$7.5 billion came from more this design and deliverability, which showed ranges all over the place, but the lower numbers came out to the \$7.5 billion. To say less than that, at this point -- I don't think I'm in a position to say that yet.

SENATOR GORDON: Okay.

MR. PLATE: But that would be in that process of hard decisions. But obviously, we have to meet the demand for growth. That's the primary function.

SENATOR GORDON: Thank you.

By the way, I would just like to recognize Senator Sarlo has joined us.

Getting back to the \$7.5 billion number -- there has been discussions about the opportunity to sell either the existing Bus Terminal site, or the air rights.

MR. PLATE: Yes.

SENATOR GORDON: Does the \$7.5 billion -- is the \$7.5 billion number net of those revenues?

MR. PLATE: No; no, that's the absolute cost of it. It doesn't include grant potential-- You asked earlier about grant money, from Libby. And that is not included in the \$7.5 billion. So it's -- the gross number is the \$7.5 billion.

SENATOR GORDON: Good.

MR. PLATE: And if there are air rights, at some point sold, that would also reduce the exposure, financially, for the Port Authority.

SENATOR GORDON: Okay.

And getting back to this scalability issue -- some of us who don't have the benefit of your engineering expertise have been throwing some ideas around, such as building -- starting the process by building on the new site a facility that could accommodate just that 50 percent increase in ridership that we're projecting, while we keep the existing facility in operation as kind of a shortcut to satisfying our capacity needs. Or alternatively, building on the existing terminal while it's still in operation. I have no idea whether there are technical constraints.

Are those sorts of things possible? And maybe Diannae can comment on those as well.

MR. PLATE: Actually we haven't kicked it off, but those are the kinds of things -- like you're thinking out loud, and we're doing the

same thing. But again, it has to follow a formal process. But I just completed World Trade; we moved 100,000 people in and out all day. And as you know, for anybody who lived that experience, we moved you all over the place to keep you safe and keep the place operational. I don't think I ever worked on a project I wasn't surrounded by hundreds of thousands and millions of people underfoot, trying to build these things. (laughter)

One scenario you've laid out, Senator, is where you build a new facility; you get it to a point where it can be minimally operational, but satisfactory to Diannae and her expectations of what is a good experience, as well as your own; that's one scenario. And then you could go back and start doing something with the existing one; or you would -- you saw in the design and deliverability representation by that Committee -- a Blue Ribbon Committee -- they suggested even taking a look at the existing facility. And that would potentially look at, maybe, building some additional capacity into that building, yet maintain the level of service. We'd have to look -- I call it the *sweet spot* -- we'd have to look at that exact spot where we could balance all that. We've done that a number of times; it's not our first project of this nature. This is what we do, and what we've been very successful with.

So both options would be on the table; and part of this process that we're just about to embark on, with yourselves and the New York side of the house, the community, and all the stakeholders involved -- that can all be addressed. And it's actually pretty intriguing and exciting, because it really gets a good sense-- You know, we start throwing all our thoughts on the table, and we try and meld it into something that's really a pretty ingenious plan when it all plays out.

SENATOR GORDON: Ms. Ehler, can you comment on the -- whether building on the existing facilities is an option? What challenges you would face if we tried to do that?

MS. EHLER: It is one of the options Steve and I have talked about. But as Steve had mentioned, Senator, there's a formal process that we must go through. But it did come out-- I believe the panel report that was delivered to the Port Authority Board in October had mentioned this concept, and it's definitely something that we'll have on the table and we'll explore it as part of the formal process.

SENATOR GORDON: Okay.

I've heard you also refer to the Bus Terminal as a *critically important piece of infrastructure*. We, on this side, certainly have been saying that. And yet we see this project getting, I think, it's only \$650 million -- *only* -- allocated for the first five years; and \$2.85 billion in the second five years. It seems to us that if this was such an important priority, there would be a greater front-loading of funds; there might be more thought given to a start-up date for construction.

We get the impression that there are things holding this back. I don't know whether you can comment on that, but--

MR. PLATE: I think I can comment on the steps forward, if that helps provide some clarity.

The first few years are just going through the FEIS process, the NEPA process; it's very prescriptive and very demanding. In fact, I happen to be involved also with the Gateway project, which is going through it now, which is, at an accelerated basis, looking at two years. I mean, as you well experienced, it could take much longer than that.

So prior to that being completed, you really can't start putting anything in the ground because that's not what the procedure and process calls for.

But while that's going on, we're going to be looking at a number of things; and this kind of bridges off your earlier question: How do you keep the costs down? Well, you look at everything -- design-bid-build, we could look at design-build, we could look at private partnerships; and then a combination of all of the above. So what we're doing -- and I've done this a number of times -- is to move a project along. As we get to that point, I'm going to have to work very closely with the people who are the experts. I mean, I'm a pseudo-expert, but there are really people who have a fine point on exactly when you could look at a particular -- you start zeroing in as a group, collectively; that we're comfortable moving ahead with a particular alternative. Then we could start, at some point, mobilizing things like utility relocation; because obviously, New York City has a lot -- or the area has a lot of utilities, foundations, superstructure -- of that nature. And then, the Board is committed -- and Libby has been very insistent on this -- to refresh this quite frequently. So if this project is moving ahead rather nicely -- or any other project -- there could be a mid-course correction at some point during that process.

But the key is to get started. And I've been kind of chomping at the bit, but I can't start until we get this authorized to go forward.

SENATOR GORDON: You know, we're reading that Gateway has been -- it seems that it's been given a little extra push, given the risks of the failure of our 100-year-old-plus rail tunnels. One gets the impression that the EIS and all the early planning has been accelerated. And one

wonders whether the same could be done with this project; or whether raising the investment to \$3 billion or \$4 billion in, say, the first five years, would move the process along faster. Can any of you comment on that?

MR. PLATE: I'm involved with both projects, Senator. And the proforma that I'm looking at for the Bus Terminal is almost identical to what we've done for the Gateway project, as far as timeframes for the FEIS, the NEPA process. We're beginning a little later because -- approximately a year later -- because the project had to go through the process of a capital refresh.

But the durations are identical; the type consultants we're looking at are very similar; the people doing the EIS process, the firms doing-- And we'll be going out for that tender in the next few months. So right now, they're on the same prototype, the same schedule, per se, in the sense of using it as a model, as a prototype; using Gateway as a model for the Bus Terminal. And we are pushing; we are pushing.

SENATOR GORDON: Okay.

Let me turn to some of my colleagues, if they have any questions.

Senator Weinberg; Senator Kean?

SENATOR WEINBERG: Yes.

Thank you.

I want to point out one thing in -- well, one thing among many in your testimony, Mr. Plate.

The year 2020 is only three years from now; and you're projecting, if I figure this out correctly, more than a 10 percent increase in ridership over the next three years -- or passenger trips through the Bus

Terminal. So we have a long way to go; this is an already overcrowded, overused facility. How are we going to accommodate this over the next three years?

MR. PLATE: That's an excellent question; and what we've started to look at -- and I separate the two very distinctly -- what you're defining is a base-case problem; something that's right around the corner, and we have to look at it. So Diannae, and I, and the team have started to look at what do we need to do to deal with the short-term issue that you've just explained. And this will be the longer-term solution.

So we're going to have to do something in the interim; and we've acknowledged that, and started to proceed with that.

I didn't know if you wanted to jump in.

MR. VENECH: I would just add that, by design, some of the strategies that we looked at in the Commuting Capacity Study were intended to be things like alternative bus routes, possible additional ferry services. And then we looked at it through the lens of -- what is the potential, looking at where commuters are coming from, to possibly bleed off a little bit of that forecasted growth and Bus Terminal demand even over the next few years, before we get to the point of having a new facility. So that's an ongoing challenge for us and New Jersey Transit, our partners.

SENATOR WEINBERG: What does that mean, *alternative bus routes*?

MR. VENECH: Well, as indicated in the report -- and I just touched on it briefly in my comments -- if we can work with carriers to pilot bus routes that serve markets that now bring people via bus to the Bus Terminal, and offer them an alternative to use another bus route that comes

to the George Washington Bridge Bus Station or the loop that we suggested is our West Side option-- To the extent that those routes prove in trial operations to be attractive alternatives for some commuters, that's one, or two, or three less peak-hour buses into the Bus Terminal. Similarly, projects like the Northern Branch Extension -- a little farther out, but New Jersey Transit will be saying more about that shortly. But by creating some additional connections and options, that could also bleed off a little bit of -- a few percent of the forecasted demand for the Bus Terminal.

So there's a set of things out there on the chess board that we would anticipate working with, with New Jersey Transit and other carriers -- ferry operators, and others.

SENATOR WEINBERG: When we will hear about that? I mean, this is a pretty short window we're talking about here. So when will we hear about these alternatives?

MR. VENECH: Well, having laid these out in the report -- and some of these are not new -- we continue to work with New Jersey Transit and other partners to try to move forward on these as opportunities -- as we can create opportunities to do so.

MS. EHLER: Yes, and if I might add, Senator Weinberg -- you know, it's a great question.

So just trying to reduce the crowd in the Terminal, we've actually implemented, as part of a team, six significant operational changes which have really had a pretty dramatic impact on the ability of the Bus Terminal to function today. So two of the ones that we did in 2016 -- one had to do with allocating the eastbound 495 in the afternoon--

SENATOR WEINBERG: Talk a little closer to your mike (referring to PA microphone), Ms. Diannae.

SENATOR GORDON: Yes.

MS. EHLER: It had to do with a new bus pattern at the Lincoln Tunnel in the afternoon, which helped facilitate the movement of buses. That was pretty dramatic.

And then just this September, we implemented a pilot program -- working very closely with Greyhound and New Jersey Transit -- where we allocated five gates for commuter operation at PM peak; which ended up taking 40 movements off of the third and fourth floor and putting them on the lower level, which improved on-time capacity.

We're looking to expand on those operational changes that we put into place, especially since by this summer we should have some new technologies in place -- a bus tracking system -- that should help us try to come up with new ideas as to what we can do.

So technology is going to be one of the solutions in the short term; and then the other really would be to explore all options that would allow us to stage and store buses in Manhattan. We opened two very small lots recently, Lot D and E; they amount to only about 20 bus parking spaces. But even with those, we are able to come up with operational changes that have improved the building itself.

So from my perspective, use of additional routes, as Lou had mentioned -- you know, better use of the Bus Terminal at the George Washington Bridge, for example, right?

SENATOR WEINBERG: Of course, that has to -- in order to be able to accommodate better use, it has to be completed. (laughter)

MS. EHLER: I understand. But that's one of the ideas there; use of technology and then a bus staging storage. Those would be the things I would focus on.

SENATOR WEINBERG: Diannae, keep the microphone a moment, if you would.

MS. EHLER: Okay. .

SENATOR WEINBERG: We have gotten good questions about the backup already at the Lincoln Tunnel. What will this mean in the future, as capacity is increased -- as needed capacity is increased to the Bus Terminal?

MS. EHLER: Senator, as always, a very astute question.
(laughter)

So really, the afternoon PM peak -- it's really about delivering the buses just in time, and keeping buses flowing. So the changes we've had have had a big impact.

But, you know, what's interesting about it, as well, is that changes we've put in place have actually helped overall movement through the Lincoln Tunnel. So not only are we doing a better job getting buses through, but the overall movements being through. But as you look into the future, that's one of the key focuses -- is how do we get the buses through? Bus staging and storage in Manhattan is part of the solution; because in the morning, as you know, we have to send a lot of empty buses to stage and store in New Jersey. And then we have to get them back in -- those empty buses have to come back in. If we can find a place to stage them in Manhattan, that improves reliability, it improves the morning and

the afternoon peak, and we'll have less congestion in the afternoon on Route 495 eastbound.

SENATOR WEINBERG: So if I understand you correctly, just having the staging in New York -- or places to store the buses -- will go a great deal toward alleviating that problem and the potential problem?

MS. EHLER: Yes, that's correct. Because we're talking about hundreds of buses, you know? And also staging and storage in Manhattan, when we do get that, it should help the efficiency of the building itself; combined with technology. We should be able to get more turns on the existing gates, which would improve the efficiency of the terminal.

SENATOR WEINBERG: Okay, thank you.

I'd like to go back to Mr. Plate's testimony.

You said in your testimony that in the next 10 years, the \$3.5 billion budgeted will be used toward all the preliminary work -- planning, initial, and final engineering design, environmental, and other regulatory review. So the \$3.5 billion is not going toward building a building.

MR. PLATE: Maybe I wasn't clear.

Yes, there would be some construction involved with that. I can't define exactly how much; but we were looking at, basically, the core of the building, the core infrastructure. And how far we get precisely, is too early to tell you. But awarding of contracts, mobilization, utility relocation, foundation work, superstructure; and then we'll go from there, as we get more specificity and clarity around where we are at a given time.

SENATOR WEINBERG: So at the end of 10 years, we will have a foundation? Is that what you're saying?

MR. PLATE: I'm not saying-- It's just we will have the-- Again, looking forward, we anticipate having all the environmental approvals in place; all the permitting, all the design, and construction well underway.

SENATOR WEINBERG: Well, I guess you're not making us all feel comfortable--

MR. PLATE: Okay.

SENATOR WEINBERG: --that we're actually going to get a new Bus Terminal--

MR. PLATE: Okay.

SENATOR WEINBERG: --some time in the foreseeable future. I know you're answering just what your capacity is, as the Chief Engineer here. But perhaps I can compare it-- The uptown bus terminal -- how far overdo is that; does anybody know?

MS. EHLER: I believe it's about two years late, Senator.

SENATOR WEINBERG: It gives me a lot of confidence. It is about two years overdue; I've made several visits to the Port Authority -- with the signs you had up that began about a year-and-a-half ago.

By the way, I did take a tour very recently. And it is quite a facility. It will be terrific for the travelers who go through there; and a real help, I think, to the New York community around it. It will be a real community center in many ways. But it is two years overdue. And one of the answers that we got from, I guess, the Port Authority engineers, as well as the private developer was, "Well, when a facility is in use, it is much more complex to build it," which, of course, everybody knew it was *in use* when the building plans were projected.

And I would hope that you take a good, hard look at what happened there so that we don't repeat the same mistakes when we go onto a much bigger project that will probably be that much more complex. And if this one was two years overdue -- and it's not open yet -- we're looking toward April as the opening date. And as I said, it's a great facility; and I'm sure bus passengers, when they finally get there, will enjoy it. But hopefully you're looking at what went wrong there.

MR. PLATE: Yes; yes, Senator, we will; and I will, personally. We've been involved with -- often, in my career -- a countless number of projects such as this. And you do have to factor that in.

But you will be a partner, as we move forward -- when I say *you*, you, yourself, as well as this Committee -- to see what we're doing, and help us prioritize, and get back and answer, more specifically, the questions you've raised: You know, what's the short-term impact, and how do we manage that? Diannae and I are already discussing, yes, we have a short-term problem; she's going to do some things in her facility; I'm going to look at places that maybe she could stage buses off of in the short term.

As far as the issue you raised, we're going to push as hard as we can to move this project along. I've been very successful on all my projects to deliver them in a timely manner. And I think you could see a number of the projects -- the AirTrain at Newark, the AirTrain at Kennedy Airport, as well as World Trade Center -- we've been very successful in moving them along.

And you know, we had these moments where -- like we're having now -- that we all want to see things going, and we want to make a difference. And we're all on the same page as far as that goes.

SENATOR WEINBERG: Can you give us some idea of projected ridership on the Newark Air Link, as well as Kennedy and LaGuardia?

MR. PLATE: Not on LaGuardia; on Newark, we're actually just beginning to look at that. But the thing I can point out -- on Newark -- that people often look at it as a train to a plane, which it does provide that capacity. But it also provides a tremendous capacity to Union County, Essex County, and a number of counties because you can drive on the roadway network, and there will be -- we anticipate tremendous interest in building a garage, and we're looking at that as a private partnership with a firm.

SENATOR WEINBERG: Building a garage where?

SENATOR GORDON: I think we're going to try to-- We're going to be focusing a whole series of questions on the Newark facility--

MR. PLATE: It's up to you.

SENATOR GORDON: Can we--

SENATOR WEINBERG: All right; okay. Sorry about that.

MR. PLATE: I'm sorry. I'd be happy to answer the question; whatever you prefer.

SENATOR GORDON: Senator Sarlo or Senator Kean, any other questions?

SENATOR KEAN: I just have a couple quick--

SENATOR GORDON: Senator Kean.

SENATOR KEAN: Thank you, Mr. Chairman.

A couple of quick definitions, because I know that we -- you want to focus on some of the Union and Essex County issues in the next panel.

Specifically, when you talk about -- and this is for the panel -- the PATH; individuals will get off the PATH and onto the buses. I think you were saying that the -- 46 percent of the riders were Hudson and Bergen County; that statistic?

MR. VENECH: Actually, that statistic is -- about 46 percent of the Bus Terminal commuters are from Hudson County--

SENATOR KEAN: Right.

MR. VENECH: --and Bergen County.

SENATOR KEAN: Okay. If you can clarify that, is that by residence or by embarkation point?

MR. VENECH: Residence; it's based on census survey data, I believe so.

SENATOR KEAN: Okay.

MR. VENECH: And other resources -- survey resources, and so on.

SENATOR KEAN: Okay; so where -- I would assume Union, or Essex, or just below that -- where are the next two or three counties, if you're looking beneath the 46 percent. Where are the next two counties?

MR. VENECH: I don't have all of those numbers in front of me; we can break them down more thoroughly. But Essex County -- there's also a strong percentage from central New Jersey -- Middlesex County and so forth -- again, are a bus-dependent market. And not to forget the bus-dependent market in Orange and Rockland counties north of the border.

SENATOR KEAN: Okay.

And now getting to the issue -- 4 percent of the overall capacity is ferry right now?

MR. VENECH: The current use -- it's, roughly, 4 percent.

SENATOR KEAN: What do you anticipate that -- the max capacity, as a percentage, for ferry service?

MR. VENECH: Well, obviously, the ferry network has significant capacity to expand. In terms of picking up large numbers of trans-Hudson commuters, the access issues are a limiting factor. People need to take some mode, in most cases, to get to the ferry; and then across the river, especially to Midtown, take another mode to reach their final destination.

In the study we looked at specific areas, like South Amboy, which is investing in improved ferry services; additional potential for service from eastern Bergen County would be another potential location where you might have a service that would be an attractive (indiscernible) more growth in Hudson Yards, the far West Side. Again, that's a convenient location to access by ferry from across the Hudson.

So we have some ability to grow ferries. It probably still is a fairly small percentage, but it's a place where we can add capacity quickly.

SENATOR KEAN: Okay. Because I know we're going to get into this issue in the next panel, but it's, again, getting to the access to get on these limited access points. It's a frustrating thing for commuters frequently.

So thank you for your testimony; and thank you for your hard work -- for the entire panel.

SENATOR GORDON: Thank you.

Senator Sarlo.

SENATOR SARLO: Yes. So we're staying on the Bus Terminal for now, right; we're on the Bus Terminal?

SENATOR GORDON: Yes.

SENATOR SARLO: Okay.

Good afternoon, everybody. Thank you for your testimony.

I just want to walk through some of these numbers so I have an understanding, in general terms. I guess, as a licensed professional-- I mean, I left design and permitting years ago and went to the construction side, because of my frustration with how long it takes on the engineering and permitting side, and the bureaucracy sometimes. Which is beyond all your control; I'm not blaming any of you. I, kind of, left that a long time ago to move on to the construction side of things.

But if I understand this correctly, 2017 to 2021, the Port Authority Board of Commissioners has allotted \$650 million for the Port Authority Bus Terminal, correct?

MS. McCARTHY: That's correct.

MR. PLATE: That's correct.

SENATOR SARLO: And that is purely EIS, permitting, environmental studies; all--

SENATOR GORDON: Soft costs.

SENATOR SARLO: --soft costs.

MR. PLATE: We're anticipating in the 2021 period to start construction.

SENATOR SARLO: Physical construction?

MR. PLATE: Yes, sir.

SENATOR SARLO: Piles, foundation stuff?

MR. PLATE: Exactly.

SENATOR SARLO: Foundations--

MR. PLATE: Utility relocations--

SENATOR SARLO: --utility relocations--

MR. PLATE: Water and superstructure; if we go steel or concrete. We have to decide.

SENATOR SARLO: Okay. So you will -- you expect a shovel in the ground by the end 2021.

MR. PLATE: Yes.

SENATOR SARLO: And that could be either at a new site, or at the current site, correct?

MR. PLATE: That's correct.

SENATOR SARLO: So in the next three years, in addition to determining where we're going to build it--

MR. PLATE: Exactly.

SENATOR SARLO: --what we're going to build, you expect a shovel in the ground; okay.

MR. PLATE: As you being an engineer, we'll probably start breaking out foundation -- doing separate packages to start releasing them, rather than wait for the whole design to be done.

SENATOR SARLO: Correct. And then by 2026, the total spend that's been committed by the Port Authority is \$3.5 billion for this project.

MR. PLATE: It's about \$600 million a year, is the rough number from-- It starts in 2021, our estimation about \$300 million; and then doubles up. It goes to, like, \$570 million for the next four years.

SENATOR SARLO: Right. And then at that point in time, in 2046 (*sic*) we're way out of the ground, structural steel, and stuff in the air, hopefully?

MR. PLATE: Yes; yes, yes. I mean, again, we're speculating and visualizing--

SENATOR SARLO: Right.

MR. PLATE: --a 5-D question: what, where, when, how, and how much. So yes, the answer is "yes;" that's what I'm visualizing.

SENATOR SARLO: And then we're probably, at that point in time, three years, two to three years to--

MR. PLATE: Fit it out--

SENATOR SARLO: --fit it out, close it up, and--

MR. PLATE: All the finishes and all that.

SENATOR SARLO: Okay. So we're looking at 2000 -- opening up some time in 2029, 2030.

MR. PLATE: Yes.

SENATOR SARLO: Okay.

In somebody's testimony -- I think it was Diannae's testimony -- you had indicated \$370 million -- the 2017 to 2026 capital plan includes \$370 million for projects associated with the Port Authority Bus Terminal. That's additional monies?

MS. EHLER: Yes.

SENATOR SARLO: Is that just to keep the existing building operational?

MS. EHLER: Right. Those are interim investments. That includes ongoing construction; some of the projects are still remaining in the Quality of Commute program; plus another 282,000 projects that are not in construction yet.

SENATOR SARLO: So we're going to spend -- I'm not criticizing this -- we're going to spend \$370 million on the existing-- Even if we take it down in 2030, we need to spend \$370 million just to keep it operational and safe for the millions and millions of commuters who use the buses every day. Is that correct?

MS. EHLER: That is correct.

SENATOR SARLO: Okay. That \$370 million--

MS. EHLER: Some of that--

SENATOR SARLO: --is not lost in the \$3.5 billion, though. That's a separate pot of--

MS. EHLER: That's correct. And with some of the \$370 million, we're hoping to be able to increase some level of demand and capacity.

MR. PLATE: Capacity.

SENATOR SARLO: Okay. Operational, right? So you're going to use some--

MR. PLATE: Yes, operational capacity.

SENATOR SARLO: Because if you're going to wait around until 2026, our capacity is going to be going up incrementally.

MR. PLATE: That's correct.

MS. EHLER: Correct.

SENATOR SARLO: Should any of us up here -- you know, who are not in the weeds of this project, who sort of have the pulpit to be able to advocate to our constituents through the press, through the media, about this project and what this means to the region -- should any of us, at this point in time, give any pause or concern that, at the end of 2021, we're not going to spend down the \$650 million, and we're not going to see shovels in the ground? Should there be any pause or concern up here that, in 2021, we're going to be sitting around here, and we're still going to be looking at designs and competitions? Should any of us have concern up here?

SENATOR GORDON: And if I could just amplify that -- that very good question of Senator Sarlo.

Some of us are concerned that -- share the same concerns as Commissioner Lipper that the ridership levels projected for some of these AirTrain projects are too low to attract the Federal grants that we're anticipating. And that the money that has been earmarked for the Bus Terminal is going to get diverted to those projects, and we're going to see a defunding of the Bus Terminal -- getting back to the Bus Terminal (laughter) -- and we're going to see a stretching out of this construction process. I mean, I think those are the concerns that many of us have.

SENATOR SARLO: Well, and I'm not going to-- Since I'm not the Chairman on this Committee, I'm Chairman of the Budget Committee, I get a lot of leeway. So I'm going to respect you and I'm going to stay on the Bus Terminal for the moment. (laughter)

SENATOR WEINBERG: Good.

SENATOR SARLO: But your capital plan-- There are a lot of big projects in here, in 2017 to 2026, on the capital plan. And over that period of time, some projects could be the monorail; the monorail could fail a lot sooner, God forbid, than anticipated, and that replacement may happen a lot sooner.

Getting back to my initial question. Should any of us have any concern, or should pause for the moment, to say that at the end of 2021, we have not relocated one utility; we have not penetrated the ground in any area for either -- for a new Bus Terminal? Should we have any cause here?

MR. PLATE: The process is rather prescriptive; again, the two years, like we're using on Gateway -- we'll have to go through it. Once we get through that, the design is released, and then we start to break out packages. So at this point, the biggest hurdle right now is to get us all in agreement on where we're building, what we're building. Once we get that, then the engineers can be cut free to start looking at how we can accelerate; and design selected portions of the project, like you alluded to -- piles, if it's needed -- probably not piles, because it's rock up there -- so it will be foundations, ordering the steel; because that, obviously, takes quite a bit of time; or if we go reinforced concrete.

So the answer is, once we're over where and what we're building, then it goes into the engineers' hands and they start the push and look at ways to accelerate. You do not step down; you're still involved with the process, challenging us and questioning what we're doing.

SENATOR SARLO: And maybe I should know this, and I apologize if I don't; or maybe it's been discussed. Is there a parcel of land

nearby, right now, that has been -- that we're looking at? There's a parcel of land on the West Side there that we're looking at right now, right?

MR. PLATE: Well, there's a number--

SENATOR SARLO: That's owned by the Port Authority.

MR. PLATE: There are a number of options-- Again, I have to be very precise how I answer this question. Because when you go through EIS, everything is pretty much defined as being on the table. But the answer to your question: Yes, there's a portion of land--

SENATOR SARLO: Well, I think it's a no-brainer that if we're going to really -- if we're real serious about doing this, and we're trying to control the out-costs -- retrofitting that existing, 1950's-style design is going to be extremely costly and extremely difficult. No different than renovating a 2,000- or 1,500-square-foot Cape Cod, single family home -- you all know what it's like when you take off the sheetrock, you have no idea what you're going to find. It makes -- it's in the best interest of New York and New Jersey to take a new pod, a new parcel, to build vertically there. The real estate will still be available in 2028, 2030. And I think it's incumbent upon us; we can't put it on them. That's really the real answer here. If we're going to sit around until 2021, we're never going to see this project in our lifetimes.

So that's my frustration; I'm not blaming anybody at this table. I hear you, but I think -- and I think you all agree with me; I don't know if you can answer me or not. But the way to go here: fresh piece of parcel of land; start vertical, instead of retrofitting a 1950's design.

I don't know if anybody wants to answer me or not, but you're welcome to.

MR. PLATE: Well, the only thing I can answer to that is we have to, by design, be very open-minded to all options. And there's only-- Right now, we have to work closely with all the participants -- the residents, and stakeholders on the New York side of the house, and yourselves -- and see what comes out of it.

But I know exactly what you're saying. I happened to buy an over 100-year-old home that I'm rebuilding for the fifth time. (laughter) But it's a labor of love.

SENATOR SARLO: Thank you.

MR. PLATE: But they all are feasible.

SENATOR GORDON: Okay.

Any other questions for this panel? (no response)

Okay; thank you all very much.

We're going to move, next, into the subject of PATH. And I think our panel will consist of Mr. Plate and Clarelle DeGraffe on that.

Okay, Mr. Plate and Ms. DeGraffe; thank you for being here today.

Mr. Plate, do you want to proceed?

MR. PLATE: Yes, Senator.

Again, I'm happy to provide an overview of the PATH Rail extension to Newark Liberty Rail Link Station project. The proposed 10-year capital plan allocated \$1 billion towards the project, with an estimated total cost of \$1.7 billion. We have made an assumption that to fill the balance the Port Authority will apply for Federal funds.

Today, PATH's Newark-to-World Trade Center line currently operates and begins at Newark Penn Station. Extending the PATH system

from Newark Penn Station to the Northeast Corridor Rail Link Station would improve transit access for commuters, as well as airport customers coming from many of the communities currently served by PATH, including lower Manhattan, Bergen, Hudson, and Essex counties in New Jersey.

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

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

The proposed program would extend the PATH rail infrastructure at Newark Penn Station to the Northeast Corridor Rail Link Station at Newark Liberty Airport. Included in this program is an extension of the system by approximately 1.2 miles, a new passenger station infrastructure to the Northeast Corridor Rail Link Station, and construction of a new railyard facility.

In addition, the project would be designated to accommodate the future construction of a parking garage and multi-modal transportation facility, through a potential public-private partnership. A successful triple-P

would provide the potential for improving and broadening trans-Hudson transit options and access for our commuters.

As with other major infrastructure projects, there is a substantial planning, environmental, and other regulatory review; engineering, design, public outreach, and participation processes to occur. As I testified earlier regarding the bus station and Bus Terminal, new construction progress must be balanced with the project's impacts to the quality of life for the surrounding community. A robust stakeholder communications and outreach effort will be necessary to ensure the success of this overall project.

As we continue, we will seek to apply for Federal grant funding and private value capture opportunities. Construction is anticipated to start in 2020, and will be completed with the full revenue service operations available to PATH in 2026.

Senators, I'm happy to answer any questions you may have.

SENATOR GORDON: Okay; thank you, Mr. Plate.

Ms. DeGraffe.

CLARELLE DeGRAFFE: Good afternoon, Chairman Gordon and members of the Committee.

My name is Clarelle DeGraffe, and I am the Deputy Director for the PATH Rail System. In this role, I assist Director Mike Marino in the daily management and operation of the PATH Rail System.

I'm a graduate of Stevens Institute of Technology, and have been with the Port Authority for 28 years; and have had the opportunity to work on a variety of construction projects, including the rebuilding of the World Trade Center, under Steve Plate.

So right now what I'd like to do -- I'd like to recall some brief facts for you about the PATH system, just to reorient you.

PATH is a 108-year-old system, with a fleet of 350 rail cars. And our revenue operations occur over 13.8 miles in four tunnels between New York and New Jersey that serve riders in stations in Newark, Harrison, Jersey City; as well as the World Trade Center in Lower Manhattan and Midtown Manhattan.

PATH is regulated by the FRA, and executes approximately 1,200 train moves per day. And in 2016, we served over 78.6 million passengers, and we've averaged approximately 270,000 passengers on our weekdays.

PATH is the seventh busiest, but second densest rail system in America.

Mike and I manage approximately 1,300 PATH employees, of which about 1,100 are represented staff.

The Port Authority's proposed 10-year capital plan includes spending of approximately \$4.4 billion over the course of the 2017 to 2026 timeframe to deliver PATH capital projects.

And some of the projects include a Sandy program, which makes up approximately \$1.2 billion of PATH's capital portfolio, to restore significant damages sustained by PATH after Superstorm Sandy, and to make it more resilient for speedier recovery in the event of future storms.

Such Sandy projects include the new substations that were damaged during the storm; major repairs to our tracks, as well as to the power, communication, and signal systems of our Tunnels E and F, which lead into the World Trade Center; new vertical circulation at impacted

stations; and replacement of various electrical and mechanical systems that were damaged.

There's also maintenance and renewal of aging infrastructure for PATH in the capital program. Elements such as tracks, substations, signals and power equipment, and cables inside and outside of the tunnel infrastructure, to ensure safe and reliable service for our riders.

There's also the new signal system that will provide the federally mandated PTC by December 2018; and CBTC to enhance system capacity. PATH has just successfully completed 17 weekends of outages where both the Tunnels A and B, that operate from Christopher to 33rd Street, were taken out of service on weekends for the installation of infrastructure to implement PTC. PATH was able to complete close to 20 percent more work because of these closures that were planned during the outages. And PATH continues to work closely with the FRA, and is on track to meet the December 2018 schedule mandate, with more than half the infrastructure in place and testing.

Coupled with the new signal system of PTC and CBTC, which will enhance PATH's capacity, the procurement of an additional 50 cars -- 50 PATH rail cars is also in the capital plan. And this helps us to meet the continued growing ridership demand on PATH, especially at our Harrison, Jersey City, and Hoboken Stations.

Also in the capital plan is the completion of the Harrison Station upgrade project; as well as ADA compliance at Grove Street, which is expected to be completed later on this year. And PATH continues to serve commuters as a vital part of the region's larger transportation network by cooperating with our agency partners.

PATH has also engaged in an open dialogue with representatives of local municipalities and the county to discuss the growing strain on PATH as a result of the growth of ridership from the numerous developments in the surrounding areas. These discussions are at the ground level, and are intended to focus on initiatives that will support the need for the increasing PATH capacity.

We believe that only through collaboration with our local host communities can we plan intelligently and make the necessary improvements and achieve success in providing a safe, reliable, and comfortable commute for our PATH riders.

Thank you, Chairman, and thank you Committee for the opportunity to appear today. And I'm happy to answer any questions that you may have.

SENATOR GORDON: Thank you very much.

I see Ms. Cronin is there as well. Ms. Cronin, do you have anything to add on this subject?

CATHERINE CRONIN: No, not on this.

SENATOR GORDON: We'll be getting to you when we get to the Terminal.

MS. CRONIN: I'm going to speak on Terminal A and the AirTrain itself.

SENATOR GORDON: Okay, great. Thanks.

I'm a little confused about something.

Mr. Plate, in your testimony you said we're still at the stage where we need to do some ridership studies to determine potential numbers of users; we're also not sure where they're coming from. It strikes me that

we have many of the same kinds of questions we have about the Bus Terminal; but we're somehow able to say, "Okay, on this project, it's \$1.7 billion; and we can start by 2020." It just seems as if this project is more definitive, but we still don't even know what the ridership is. Am I missing something?

MR. PLATE: Well, in fairness to this project, it's been started several times, as you well know. (laughter) And there's been a lot of thought that went into it, and a lot of commitments. So there have been a number of different studies that have been done, over the years. In fact, some people tell me it's close to 10 years, and a lot of that can be used as a basis to move forward. So if that answers your question--

But they will have to go through the same process, to some extent; plus you're looking at a lot less expenditure. I mean, in one you're talking about \$7.5 billion to \$10 billion. That's just so much-- And you have to keep the facility operational -- the Bus Terminal; where this is, essentially -- I won't say a *grassroots* site, because nothing in this region is ever grassroots. But you have more of a right-of-way that's defined, and almost existing, to some extent, in the area -- in Dayton is pretty much open area; I actually spent time over there.

So I hope that answers your question, a little more clearer of focus, on the options here, on the PATH to Newark.

SENATOR GORDON: What are the-- I know Commissioner Lipper was raising some concerns about ridership levels in one of the recent Board meetings. What are the latest projections for ridership on the new line?

MR. PLATE: Well, we haven't finalized it; but we should have something to you relatively quickly.

But what Commissioner Lipper was referring to -- he and I had a conversation -- he's looking at more the airport portion. But as I alluded to earlier, there's also a catchment area from Union, and Somerset, Morris, and Essex counties -- primarily Union. And, as you go down-- I mean, those of us who live around -- in that area, you take I-78, you get off at Exit 56, and then you jump on the PATH. So you can actually reduce-- What it does is, you start looking at it from a loop point of view, which starts to relieve that corridor -- the Northeast Corridor load that's taking it, and it starts to redistribute it somewhat.

SENATOR GORDON: Senator Weinberg.

SENATOR WEINBERG: Yes.

MR. PLATE: I'm sorry.

SENATOR WEINBERG: Could you be a little bit more explicit? Is this AirTrain link going to have stops in Union and Essex? Can you--

MR. PLATE: No, no, no, no; I'm sorry, I'm sorry. I apologize.

It will have-- You know where the existing train station is at the airport?

SENATOR GORDON: Yes.

SENATOR WEINBERG: Right.

MR. PLATE: So that whole intermodal facility-- Adjacent to that, we will build a new station for PATH. So from Penn Station Newark, along the right-of-way on the Route 21 side, you run along there and, ultimately, end at that terminal station. We would be acquiring property to

have a yard there; and then what will happen is, there will be a garage -- potentially a garage above it where people could park and ride.

So what I was alluding to is, the anticipation of not just the airport users, but also people using the roadways and parking their vehicles at that garage--

SENATOR WEINBERG: And taking -- and doing what?

MR. PLATE: --and taking the PATH right into--

SENATOR GORDON: Then taking the PATH into the City from there.

MR. PLATE: Taking the PATH from there; because now it's all connected to the system.

SENATOR RUIZ: And it's--

SENATOR GORDON: It becomes another trans-Hudson point.

MR. PLATE: I'm sorry; I might have not been clear on that.

SENATOR GORDON: One question I have about that -- and I think it was Commissioner Bagger, at one of the Board meetings, where he was talking about this. And maybe Ms. DeGraffe, you could comment on this.

Aren't we already at 95 percent capacity, in terms of the through-put? If we build this garage, and we draw commuters from Union County, and Essex, and surrounding counties, people working on Wall Street -- aren't we going to drive those people into a chokepoint in the existing PATH system? I mean--

MR. PLATE: Well, I'll start; and I'm sure Clarelle could jump in.

But what we're doing in part of the study is looking at exactly that: What does that do to capacity? Now, from a vehicle point of view, we'll be adding approximately 22 cars to provide for that additional length of travel. And then PATH, keep in mind, is rushing to get the Positive Train Control--

SENATOR GORDON: Right.

MR. PLATE: --operational; which will add, if I have it right, about 48 or 50 vehicles once that's operational. So that will start to relieve some of the chokepoint that the Commissioner has alluded to.

SENATOR GORDON: And in a related question, and I think many of us have been talking about this as we pretend to be transportation experts (laughter).

We see that -- I think it's in the second 10-year portion of the capital plan -- there's a proposal for a \$400 million investment to widen the platforms at the PATH facility to allow 10-car train sets, as opposed to 8. Wouldn't that be a -- it strikes us, as compared to building garages and so many other complex projects -- it strikes us as a relatively easier and more cost-effective way to increase trans-Hudson capacity. Why has that -- why was the decision made to put that in the second 10-year period, as opposed to upfront, when that-- Our impression is that would be a relatively easier way of increasing capacity.

I would appreciate your reaction to that.

MS. DeGRAFFE: Sure, Commissioner (*sic*).

As we look at the projections for PATH, what we're seeing is -- it is at 95 percent capacity during the peak of the peak hour, today. With CBTC, that we are looking to put into place by December 2018, and the

addition of the 50 cars, we're looking to increase our system capacity anywhere between 15 to 20 percent.

SENATOR GORDON: Okay.

MS. DeGRAFFE: The additional 10-car trains, we don't see needing prior to the 2026, 2025-2026 timeframe. That is when our projection in our analysis would require the additional 10-car capacity--

SENATOR GORDON: Okay.

MS. DeGRAFFE: --based on our current projections.

SENATOR GORDON: Even if you do the major park and ride?

MS. DeGRAFFE: Our projections don't include those numbers because, as I believe Steve has said before, those numbers are not available as of now. So we're just looking at today's numbers; we're looking at our stations. Our analysis does not include the Rail Link Station, so we don't have those numbers in our analysis.

SENATOR GORDON: This project has been touted as being -- having some good economic development potential for Newark. And I know that Senator Ruiz is concerned about that. I thought there was a reference in the capital plan itself to an intermediate station on this 1.2-mile line between Penn Station and the airport. But I haven't seen any other reference to that.

MR. PLATE: That's, I believe-- I'm sorry.

SENATOR GORDON: I would think that that could, in fact, generate some economic development benefits. But, I mean, is there, in fact, an intermediate station planned?

MR. PLATE: I presume, Senator, that it would refer to the South Street Station; is that what we're referring to? There is nothing included in the plan for that. We would work with you, though, at some point, to not preclude, if somebody decided to do that later on. But right now, we're looking at trying to triage the money that's available.

SENATOR GORDON: Because I'm concerned -- and I'm sure Senator Ruiz and the Essex delegation is -- that if we just have a line from *A* to *B*, ending in the airport, the trains are going to go over the neighborhood.

SENATOR RUIZ: May I follow up?

SENATOR GORDON: Yes; Senator Ruiz.

SENATOR RUIZ: May I follow up?

So I think Senator Weinberg asked this question to you, through the Chair. Can we, just for my purposes, can we just move slowly so I can visualize what this line would like?

So if I hop on-- I'm assuming it will have WTC Express and 33rd line accessibility, both, the same way that the Newark Penn Station has?

MS. DeGRAFFE: Well, what the person would have to do, from the airport, is they would have to transfer at Journal Square. That's our operations today.

SENATOR RUIZ: Always--

MS. DeGRAFFE: Correct; there is no--

SENATOR RUIZ: --regardless, unless they hopped off at Penn Station, and then hopped on a WTC Express.

MS. DeGRAFFE: Yes.

SENATOR RUIZ: So if I'm coming back in from Manhattan, I stop at Newark Penn; the next stop will be this new extension.

MR. PLATE: Yes.

SENATOR RUIZ: Where is this located, exactly?

MR. PLATE: Immediately-- I could show you, after, on the drawing--

SENATOR RUIZ: Right.

MR. PLATE: --but immediately adjacent to the terminal station at the airport, to the north side -- if I have my *north* right -- adjacent to the Dayton area.

SENATOR RUIZ: I just -- I don't know if anybody else-- Maybe it's because I've been out of the loop -- no pun intended -- for a while, that I was under the impression that we were going to get an actual extension stop in the South Ward of Newark that would be a part of this. That was in the original plan, if, you know -- what I understood. And now I think I'm hearing something different.

SENATOR GORDON: Yes.

SENATOR WEINBERG: You are hearing something different.

SENATOR GORDON: That was in the RPA plan, certainly.

SENATOR RUIZ: I just -- you know, my (indiscernible), so I want to be sure.

SENATOR GORDON: I don't know if it was--

MR. MAGYAR (Committee Aide) That was in the RPA plan; that's right.

SENATOR GORDON: --in the official Port Authority plan.

MR. PLATE: No, no. I'm just saying what I know. But that's--

SENATOR RUIZ: So yes, it was in the original RPA plan.

SENATOR GORDON: The Regional Plan Association, I think, had proposed -- and we'll hear from them later -- had proposed this intermediate stop. And from what I gather, there is no such stop now envisioned for the Port Authority project.

MR. PLATE: No, Senator.

SENATOR WEINBERG: But added to that -- if I may -- does the capital plan include any money for this garage--

MR. PLATE: No, it does not. That's assumed to be--

SENATOR WEINBERG: --or property acquisition?

MR. PLATE: The property acquisition, yes; but not the garage. Not the physical structure.

SENATOR WEINBERG: And how much is included in the capital plan for property acquisition?

MR. PLATE: I have to -- I'll have to dig it out and give it to you before I leave today.

SENATOR RUIZ: Through the Chair--

SENATOR GORDON: Senator.

SENATOR RUIZ: --what would be the cost of adding this additional stop, in the long-term, while this project--

MS. DeGRAFFE: (off mike) We don't know.

SENATOR RUIZ: You can't-- Could you, kind of, come up with a guesstimate, and provide that to us at a later timeframe--

MR. PLATE: Surely.

SENATOR RUIZ: --through the Chairman?

I am hugely disappointed. The whole while -- and I guess I don't know what happened since the RPA plan was presented, versus what is being presented today.

For some reason, I had the impression that there would be a South Ward stop; and that somehow-- Not an additional stop, but that the monorail would then link into that stop to the airport. So that would be, quite frankly-- And, you know, when we think about blueprints, long-term agendas, it would bring critical economic vitality to an area that's needed. You could do your park and ride right there; you would improve the infrastructure to the monorail; and, I guess, accomplish the bigger picture, in not having another direct stop into Newark Airport. I don't know how I feel about this project now that Newark really gets cut out; which is usually the point when it comes to Newark Airport, quite frankly.

SENATOR GORDON: Senator Kean.

SENATOR KEAN: If I may just follow up on this point, through the Chair.

I think one of the concerns that some of us non-engineers have, on occasion, is that when you look at something like the ARC Tunnel, or the ARC Project -- it started out all well and good, and then it turned into a dead end tunnel -- terminus, hundreds of feet below the surface, and wasn't a workable solution. The Gateway project is an extraordinary improvement over that; and for the first time ever, has ever funded the Bergen Loop, and all of those things. And it truly, as I've said before in this Committee, it's really a thing that will allow both regional access, and growth, and opportunity, and the ease of movement throughout.

To get to this extension -- I know we've not had as many hearings of this Committee on this very subject; I think we should have a focus on this extension. I don't want to get to the spot where we are precluding future growth and access, whether it be in Union, Essex, Somerset, or otherwise, in this effort. Because it seems to me that if you're precluding things and you're just building them, that bite will preclude a positive outcome for the commuters, the job creators, everybody in between who wants a positive, but flexible, approach to how they get into -- or get to wherever their work destination is. And so I would ask that, as you're looking at this extension, you very clearly focus on if there are other ways to make sure you're not hurting ourselves in the long run by not having this type of access.

Because it seems to me -- part of the reason I asked the question earlier about how you could identify where individuals were coming to the Bus Terminal, is that it seems -- is that as you're looking at the way that the hard assets of the Port Authority go out, and then tie in with New Jersey Transit and other -- the more mobile bus routes, is that you are-- People are driving all over the -- are driving sideways to get to their destination, because it's the only access point they have. And you very eloquently brought up the issue of driving on 78, getting off at Exit 56, and doing that. But you need to be that flexible throughout the spider web of how we connect, and I'm just not sure that the current version of this approach does that.

MR. PLATE: Okay. Well, all I can offer at this point -- and this is not, I don't believe, the venue to get into that detail. But we'd be happy to sit down and make sure we understand fully what your thoughts,

and the rest of your thoughts are, relative to this facility. I would be happy to go through that and show you. I mean, there are ways of building in do-not-preclude type stuff, as I alluded to hours ago.

SENATOR KEAN: Yes.

MR. PLATE: You know, eventually, somebody has a vision to go further, or something like that, you could--

SENATOR KEAN: Well, that's why I am excited to work with you. Because I think we do have an opportunity to, again, as I-- I prefaced my comments in saying, *as a non-engineer*.

MR. PLATE: That's fine; it's the same principle.

SENATOR KEAN: And as a non-industrial or commercial developer, understanding how we can make this extension-- My comments earlier regarding the focus of this effort, this Committee was focusing -- we have not had as much focus on the Essex, Union development -- or, not *development*, transportation infrastructure efforts to create opportunities throughout. And I think working in a partnership, I think we can find some really robust solutions.

MR. PLATE: Sure.

SENATOR KEAN: Thank you.

MR. PLATE: Thank you.

SENATOR GORDON: Senator Ruiz, did you--

SENATOR RUIZ: I just-- So I guess I need to come to terms with this.

I just don't understand, then, what ends up being the-- There appears to be a better long-term benefit for New Jersey residents if we include a South Ward stop. I don't know what -- how great the benefit is of

doing this all at the airport, if not for more -- the folks in New York than us here in New Jersey. And again, you don't have to respond to that; but it's frustrating to be under the impression that there was a more comprehensive plan in place; and then, somehow, it fell off the radar screen, I'm sure with-- I'm just completely confused.

SENATOR GORDON: There has been -- my impression is that there has been a debate going on--

SENATOR RUIZ: And the traffic at the airport -- to put a park and ride there, and just-- It just doesn't--

SENATOR KEAN: If I may, through the Chair.

SENATOR GORDON: Senator Kean.

SENATOR KEAN: Just to clarify for purposes. This is a very important project for the New Jersey side.

Let's take a step back. That extension, of \$1.7 billion, is an extraordinarily important project for the entirety of the State of New Jersey, because it will provide -- it will alleviate some congestion at certain points. I know we have to figure out how it fits into the overall plan. But it's extraordinarily important that it gets done, but that it also gets done right. And so please don't take anything that this Committee is now stating to -- not to focus on the importance of that important project, and getting it done in a timely fashion. Because it is very timely and important to all of New Jersey.

SENATOR GORDON: But to just, I think, echo Senator Ruiz's comments. If we're going to do this right, I think we should take advantage of the economic development opportunity we have. This shouldn't be just a convenient route for investment bankers, from Wall

Street to the airport. There should be a way that this can have a very salutary impact on neighborhoods in the South Ward, and I think that needs to be explored. We certainly would like to see this as an option.

SENATOR KEAN: Through the Chair, if I may.

That was my point--

SENATOR GORDON: Yes.

SENATOR KEAN: --that while the Port Authority should not be focusing on economic growth as a mission statement, they should not -- and I think we can agree on that -- the ease of transportation and the ability for both commuters and job creators to be -- whether it's in Newark or whether it's throughout -- and have that additional access point, is a very important part of the conversation, if you're looking at the entirety of the \$1.7 billion.

SENATOR GORDON: Senator Weinberg.

SENATOR WEINBERG: So backing up, or reemphasizing what Commissioner Lipper said -- since, right now, all we have in this capital budget is a link from Wall Street to Newark Airport -- is that correct?

MR. PLATE: That's correct.

SENATOR WEINBERG: And this, somehow, is a development that's good for New Jersey? It's an editorial comment that I don't expect that you'll be able to answer.

MR. PLATE: That's fine, that's fine.

SENATOR WEINBERG: But when are we going to get ridership? I mean, don't we know what the potential ridership is since, as you alluded to, this project has been around for quite some time?

MR. PLATE: We should have that in short order, Senator. I'll be happy to have a working meeting with you, or your staff, or anybody who wants to attend, and walk you through, with the experts who are in the process of developing it, whenever it is convenient for you.

SENATOR WEINBERG: I think-- You know, I don't know; but it's probably very appropriate, just to this Committee, to continue getting that information--

MR. PLATE: Surely.

SENATOR WEINBERG: --which I think is important to us. And I think time is very short here.

MR. PLATE: Okay.

SENATOR WEINBERG: The Port Authority is planning to adopt this capital budget, I think, in less--

SENATOR GORDON: February 16.

SENATOR WEINBERG: Yes; so it's just about four weeks from today. So I think that this is extremely important, in terms of the upcoming public comment period. And it just proves, again, how important legislative oversight is, Senator Kean. (laughter)

SENATOR KEAN: I said you're right.

SENATOR WEINBERG: Thank you very much. Which is why we wrote it into the original Port Authority reform plan that was vetoed by both Governors. And I think that this Committee, in a bipartisan way -- even though I made that partisan comment, I didn't make-- It's a bipartisan comment; *both* Governors vetoed it (laughter) -- before you correct me.

But it really proves the necessity for building this into some kind of a law; and really eking out this information, on behalf of the people who we're representing -- the real people who travel on these lines, or attempt to.

Thank you.

SENATOR KEAN: And a nonpartisan response--

SENATOR WEINBERG: Bipartisan.

SENATOR KEAN: --bipartisan response, if I may.

With respect, these witnesses and panelists showed up without subpoena. (laughter) Number two, we are exercising oversight right now, in a very productive way.

SENATOR GORDON: Yes.

SENATOR KEAN: And number three, the inability for this chamber to get passed the reform structure in the right way is impeding the ability of New Jersey to compete evenly at the Port Authority. And with respect, we need to get that job done.

SENATOR WEINBERG: You and I might disagree on that.

SENATOR KEAN: Apparently.

SENATOR WEINBERG: Yes.

SENATOR GORDON: Given the-- Yes, let's go back to policy. (laughter)

Given, I think, the importance of this issue -- one, it may well be in our interests to delve into this matter in another hearing. And I think it certainly leads me to urge the Board of Commissioners to postpone the scheduled vote on the capital plan, from February to March or some later

date, until we can really have a better understanding of these projects, and the costs, and the potential benefits of them.

I have a follow-up question for Ms. DeGraffe; I may have missed this. I know you were talking about the capacity improvements expected with the installation of Positive Train Control. Did you cite the impact of extending the platforms? Was there a capacity -- an increase in capacity projected as a result of that?

MS. DeGRAFFE: Yes, we did. We believe that our overall -- our system will be increased anywhere between 15 to 20 percent in capacity--

SENATOR GORDON: That's -- okay, that's--

MS. DeGRAFFE: --as a result of the implementation of PTC and CBTC on our system.

SENATOR GORDON: Okay.

And I had one final question. There have been questions raised about whether the ridership projected would be adequate to compete for Federal funds. We have a very successful Hudson-Bergen Light Rail system, although some of us call it a *Bergen-Hudson* Light Rail. If the -- if this project doesn't qualify for Federal grants, are you able to tell us where you think the funds might be redeployed?

MS. DeGRAFFE: The funds for--

SENATOR GORDON: Well, I'm sorry. I guess underlying that is the assumption that if the Federal grant is not available, that funds will either come from some other place, or the project will reach a gate and there will be a reconsideration of the project -- what might happen. I realize I'm asking for a lot of speculation here.

MS. McCARTHY: That is, essentially, what this gate process and monitoring process is all about. So if, as we work our way through this life cycle for this particular project -- first being, really, confirming the ridership numbers, understanding the sources of those riders, understanding the business case, pursuing the Federal funds -- and then, if we get to that point-- And we have to fund that process, and that's important to get started. Then if we get to the point where that funding -- which we know we're competing against a lot of projects in the region; and Gateway is also a large project in the region; the Bus Terminal; we have a lot of very critical projects -- if we get to the point where our funding assumptions are different than what we thought, then we're going to have to look at the whole plan again; look at our priorities and make the decisions about what we can either value engineer, defer, what additional revenues we can find, what other sources, what expenses we can cut to be able to accommodate our critical projects.

So it's, again, always that holistic loop of coming back to what is our affordable capacity and how do we allocate that to our critical assets.

SENATOR SARLO: Let's ask the question differently.

SENATOR GORDON: Senator Sarlo.

SENATOR SARLO: So the capital plan, right now, has it from the extension -- the PATH extension from Wall Street to Newark, right? That's the extension right now, essentially. What is the economic benefit to the Port Authority, or the economic benefit to the airlines? I am assuming there's a huge economic benefit to the airlines for those who are in lower Manhattan and others who can't get across town or get out to LaGuardia or Kennedy. Is that what the purpose -- really, the purpose is to

attract people to Newark Airport on this PATH extension? That's what it seems to me; and if that's the reasoning behind it, so be it. But I'm just trying to get a handle on--

SENATOR GORDON: It's the Goldman Sachs route.

SENATOR SARLO: Well, but I'm not even being cynical. I'm just trying to -- what is the benefit, dollar-wise, to the Port Authority and to Newark Airport?

MR. PLATE: Well, what it first would do is obviously connect the airport, and make essentially a direct link. In addition to that, it would provide another relief valve, or opportunity to handle traffic coming from several counties, and with a park and ride situation. And then, as the Chairman alluded to, that would be something that would be pursued by Newark, as far as potential development; because the Dayton area may have some opportunities there.

So it provides for at least three opportunities, and maybe some others that we're not seeing.

SENATOR RUIZ: But I'm-- Through the Chair; I'm sorry. So you keep talking about the old Dayton Street projects, right? That's the area; the Dayton Street area?

MR. PLATE: Yes.

MS. DeGRAFFE: Yes.

SENATOR RUIZ: Okay. You foresee park and ride structures going up there?

MR. PLATE: No, it would be, actually, in-- I mean, we haven't worked out all the details, but it would be in the area of the storage yard for

the PATH trains. So it would be above it -- above that. So the rest of the area would be available for--

SENATOR RUIZ: So if I parked there, how do I then get on the PATH?

MR. PLATE: You go right onto--

SENATOR RUIZ: Right on the PATH from there?

MR. PLATE: Yes.

SENATOR GORDON: Senator Weinberg.

SENATOR WEINBERG: Yes; again, I think you said earlier that there is money in the capital plan for property acquisition for this park and ride?

MR. PLATE: Yes. And I owe you that answer; yes.

SENATOR WEINBERG: So if it's going to be built over the current-- Who owns--

SENATOR RUIZ: It's a new--

SENATOR WEINBERG: Isn't this already owned by New Jersey Transit, or--

MR. PLATE: Yes, we'd have to purchase the property. I'm sorry, I'm not--

MS. McCARTHY: The railyard that Steve referred to is one that--

MR. PLATE: It's a newly--

MS. McCARTHY: It's a newly constructed--

MR. PLATE: It's a newly constructed rail yard to store the trains after off-peak.

SENATOR WEINBERG: Okay; now I'm confused, which I guess is not too hard.

This is a new -- a railyard that is about to be constructed; is that what you're saying?

MR. PLATE: As part of this project, yes; it would be constructed.

SENATOR WEINBERG: So this railyard -- where you're going to potentially build a park and ride -- none of this has been constructed, nor do we have property for it.

MR. PLATE: No; no, that's correct. It has to still go through the process of planning, and evaluation, the EIS process, potentially.

SENATOR WEINBERG: Okay. And generally, where would this--

MR. PLATE: Where would it be located?

SENATOR WEINBERG: Yes.

MR. PLATE: It would be adjacent to, essentially, the existing station at Newark Airport, on the other side -- I guess the north side of the tracks.

SENATOR WEINBERG: So this would be a park and ride that people would drive to Newark Airport.

MR. PLATE: Or they could walk to, or they could take a bus to. We're looking at a number of different things; there are a number of bus lines that head that direction.

SENATOR WEINBERG: Okay; thank you.

MR. PLATE: Thank you.

SENATOR GORDON: Okay. Do we have any further questions on PATH or--

SENATOR RUIZ: I do have one question.

SENATOR GORDON: Senator Ruiz.

SENATOR RUIZ: And thank you for -- thank you, Mr. Chairman; and thank you for your indulgence and my ignorance on some of the project, and not being an engineer like my colleague here to the right of me.

Would there be a way -- there has been talk about doing some improvements to the monorail at the airport. And then there have been other sidebar conversations about what's the need of making those improvements if, in fact, we need to have an entire new system. Would it be plausible to extend the monorail to a South Ward and have the PATH stop there? I don't know -- I'm just thinking creatively here -- where it would still--

MS. CRONIN: I would say it's not something that we've looked at, but we can look at that. Obviously it would then take the AirTrain off the airport, which would cause us to go into the same EIS process that Steve has been talking about. So the timeliness of that, would have to consider that--

SENATOR RUIZ: I'm just--

MS. CRONIN: Yes.

SENATOR RUIZ: Yes, it would just--

MS. CRONIN: Yes; it would be a very different process than just replace the current AirTrain, since that is on airport property proper.

But if something -- when we're looking forward with the AirTrain, we could be looking at an alternative.

SENATOR RUIZ: So when I get off in Newark Penn -- through the Chair, again, if you'll allow me -- when I get off at Newark Penn Station from New York, and I'm going to Newark Liberty Airport, can you walk me through what that looks like for me, as a commuter? What are the possible-- I could catch a cab, I know; I can call an Uber; I can--

MS. DeGRAFFE: This is to get to the new station we're talking about?

SENATOR RUIZ: No, this is to get to the airport.

MS. DeGRAFFE: Okay.

MR. PLATE: As to the--

SENATOR RUIZ: So I come from 33rd Street; I've made my change at Journal Square; I've stopped at Newark Penn Station; and then, what's next?

MS. DeGRAFFE: You would then transfer today to New Jersey Transit, or possibly Amtrak; and you would take it approximately an additional two miles.

SENATOR RUIZ: Right; one stop.

MS. McCARTHY: Right; one stop to Newark Liberty Airport Station, and then from there you would take vertical circulation that would traverse you across the tracks; and then you would get on to the monorail, that would then lead you onto the airport.

SENATOR RUIZ: Okay; thank you.

SENATOR GORDON: Okay.

Unless there are other questions regarding PATH, I think we can actually move on to the third and last Port Authority panel; which will consist of Ms. Cronin and Ms. McCarthy. The focus here will be on the Terminal A Redevelopment Project, as well as any questions we have on the monorail project.

I don't know who would like to start; but Ms. Cronin.

MS. CRONIN: Yes, thank you, Chairman; and good morning to the members of the Committee -- actually, good afternoon, at this point.

My name is Catherine Cronin; I am the Program Director for Redevelopment out at Newark International Airport. I've been with the Port Authority since 2008; but prior to joining the Port Authority, I have over 20 years of experience in procurement and delivery of infrastructure projects worldwide, both in the public and in the private sectors.

I'm going to speak first about Terminal A; and then I think, given the time, I'll roll it right into the AirTrain conversation. Please feel free to interrupt me at any point, if there's anything specific you want to talk about more, (indiscernible).

So the existing Terminal A is actually a 1973 asset; it was built when the airport was first built out. It, like many of our assets, is now capacity-constrained; it was designed for about 9 million annual passengers to come through it. In 2015, we saw over 10 million annual passengers; and we're trending for even more than that in 2016, once we get the December numbers.

We have sufficient deficiencies in that Terminal; anybody who has gone through Terminal A at Newark Airport, I think, can attest to many of the pinch points that exist in the infrastructure, whether it's on the

roadway system leading up to it, or trying to get through security into the hold room space.

In addition, much of the infrastructure and building systems are no longer in an acceptable state of good repair. And in the future, as we continue to grow and see larger aircraft, we have airside constraints to get the larger aircraft into these gates, and the frontage congestion continues to increase.

So you can see, on slide 3, just the normal crowding conditions that exist day-to-day. There's nothing abnormal going on here -- there's no irregular operation, there's no problem -- just due to the way the concourses were designed in that very, very narrow corridor that leads you down into the hold room space. Even if you're not late, you're going to have some feelings of panic when you get into Terminal A and you see people out in the concession area. So that's one of the key things that we are trying to address with the replacement of Terminal A.

The new terminal -- if you look on slide 4 -- is being designed to have ample check-in, security, and hold room concession spaces. To a point that was brought up earlier, we do have mother rooms required in the design criteria. And also, just so you know, the airport has put five mother pods in, in the short term, for Terminal A, B, and C.

The program itself includes four main elements: We have airfield work; we have eight bridges going in; we have a new parking garage facility that would be about 3,000 spaces; and then there's the terminal itself.

We go over to slide 6. The terminal location and the design was optimized during the previous studies and planning that we've done.

We talked at length about the Port Authority Bus Terminal, about building on ourselves. One of the things that we are very fortunate about with this program is we are able to build it off to the south portion of the airfield. So, to a certain extent, we can put a fence up and make this land-side, so we're not interfering with ongoing airport operations. When we looked at this during the planning, it changed from building on ourselves at the current location of Terminal A, that was going to take 8 to 10 years; to what we predict to be a 4- to 5-year construction duration for this new terminal.

The total program is \$2.4 billion; the terminal itself is approximately one million square feet; 33 gates, which will be expandable in the future to go up to 45 gates. The design (indiscernible) has 13.6 million annual passengers. We've included a very flexible design to accommodate future technology, ensuring that it's a LEED Silver Design, as well as meets all the resiliency requirements that have recently come about.

This program is a design-build program; it will allow for the industry to come forward with innovation. We've had performance requirements that will set the baseline. The current plan builds off some infrastructure work that's already ongoing at the airport; we're currently doing an infrastructure renewal electrical distribution project. PSE&G is building a 345kv switching station on the airport; and we're doing work to relocate fuel lines.

So in this year, we will see three bridges going up, starting to be constructed at the airport in support of this terminal; next year, we anticipate that we will actually be awarding to a design build contractor and starting actual foundation work in 2018. Between 2018 and 2020, we

envision finishing the parking garage; finishing the south portion of the airfield, which is shown in yellow. That would then support the end of 2020 opening about 70 percent of the terminal. So the concept is that we would move A1 and A2 tenants into the new terminal; allow us to then demolish A1 and A2; finish the paving on that side; and then move A3 tenants into the new terminal. So by the end of 2022, we anticipate having the full terminal operational.

On the next page, you'll see some of the initial construction contracts that you'll see activity this year on. Right now, this contract is on the street; bids are going to come in January 25; and it's three bridges to support the new terminal roadways. We did get our DEP permit for that, so that is one hurdle that we have passed.

Additional activities that have also been ongoing: We've hired program management consultants, design services; and construction management services will be coming out shortly. We did extensive industry outreach; we put out a request for industry feedback in the summer. In October, we held an industry conference out at Newark, and about 400 people were there. We're anticipating that in the spring we're going to have an MBE/WBE forum so that we can get the smaller and local contractors involved. They also showed up at the Industry Outreach in October, but we want to have a more targeted conference for them once we've shortlisted who will be going after the design build.

So the program, overall, will produce 9,000 job years; \$600 million in wages; and \$3.3 billion in economic activity.

That is a very quick summary of what Terminal A is. And if you want to flip through, we'll start talking about the AirTrain.

SENATOR GORDON: Yes, please proceed.

MS. CRONIN: So the provisions for the Newark AirTrain -- and I'm glad to hear people calling it the *monorail*, because I still refer to it as the monorail (laughter); it shows that we were involved in it in the beginning -- were made back in 1970, when Terminal A, and B, and C went in. However, construction didn't begin until the 1990s on the technology.

Now, if you look at slide 2, you can see that what they did do when they built the terminals, however, was to be forward-thinking and create a notch so that the AirTrain could come into that notch. That was a good thing and a bad thing, because then we picked a technology that fit into the notch. And that really explains how we ended up with the monorail technology that we have. It's who proposed on the system that could fit within the notch, without requiring demolition of a relatively newly constructed terminal.

In the 1980s and 1990s, it became very clear that the airport needed an airport access program to help reduce the roadway congestion and improve the connectivity on the airport, as well as the desire to provide a regional rail connection. So planning began in 1987; in 1990, the contract was originally awarded to design, build, operate, and maintain this. The first phase was on the airport only; the second phase of it then extended out to the Northeast Corridor.

On slide 3, you can see a map of the current AirTrain. The *bay system*, we call it -- it opened, from P4 to P1, in 1996. The NEC extension -- the Northeast Corridor extension, out to Amtrak and New Jersey Transit - - opened in October 2001. The AirTrain services A, B, and C as an inter-terminal transfer. It services the rental cars that are at P1 and P2; it

services parking at P1, P3, and P4; as well as allowed us to take all of the hotel courtesy shuttle and other vans off the airport frontage and put them over at P4; and as I mentioned, New Jersey Transit and Amtrak out at the NEC station.

The AirTrain actually carries 33,000 passengers a day. It's a very large number of passengers for an airport people-mover type system. About 30 percent of that ridership is just connecting between the terminals. It has allowed us to operate Terminals A, B, and C more as one terminal; 45 percent of our ridership is accessing P1, P2, P3, and P4. That's a combination of parking and rental cars. And about 25 percent of our ridership goes out to the Northeast Corridor.

It runs every 3 to 4 minutes, from 5:00 a.m. to midnight; from midnight to 5:00 a.m. it goes every 15 minutes. It has a shuttle service to allow for maintenance to happen overnight. And as the system has aged, we now have one weekend a month where we have a total shut down for a few hours in order to be able to do some maintenance that we don't want to have occurring while there's a train running.

Slide 4: I'm going to talk just a little bit about the technology itself, because it is unique and it does speak a little bit to some of the interim repairs.

It's a 3-mile elevated guideway, using 18 vehicles on monorail technology. It's a dual-tired system, so there are tires that come out the side of it and run along the beams; as well as tires that are running on the running surface. Each vehicle is six-car trains; they're permanently coupled. So if there's a problem with one of the cars, you can't switch it out and put it on another vehicle, unfortunately.

It uses complete automatic train control. There are no drivers; it's all operated from central control.

The monorail itself is a steel box beam guideway structure; and it was built with a composite running surface that has a heating system in it. There are two other of these systems in the world; they are both in Australia, and they do not have the heating issue. (laughter)

And then there are large rotary switches that allow the train to move from one track to another.

There is \$380 million allocated in the capital plan for interim repairs for the system. It includes work on the vehicle bodies themselves, as well as components of the vehicle. There is money in there for the switches, the running surface structure, and heating system repairs; as well as replacement of the automatic train control.

There are some pictures on slide 5 that give you an idea of -- particularly the one in the middle -- the rotary switches, some of the significant issues we have with them; as well as over to the right-hand side, you can see some of the degradation of the running surface. It actually does pothole, similar to a roadway would, and creates very dangerous situations. Back in 2014, you may remember, we shut down for six weeks in order to do emergency repairs on a portion of this running surface.

There is also, in the plan, \$40 million for planning for the AirTrain replacement. The goals of this replacement would be to not only replace this age-expired system, but to meet the growing ridership demands that we're seeing; as well as address the changing airport layout. I talked about how Terminal A -- we fortunately can build it off to the side, but that also means that it's in a slightly different location. We have professional

services hired working on this now -- the planning aspects. They're doing concept alignments; and coordinating with the Terminal A Redevelopment Team, so that we have saved a right-of-way for the future AirTrain Replacement Project, and we're not going to end up taking down something that we just put in.

They're doing technology assessments, doing industry benchmarking, looking at ridership projections. We'll be working quite closely with Steve and his team on ridership projections to look at how that all fits together. And then we're developing final budgets and scheduling, as well as figuring out what environmental documents we need to do.

Thank you very much for the opportunity to review these programs with you; and I am happy to answer any questions that anybody has.

SENATOR GORDON: Okay.

One question I have is, are you able to talk about what the new technology would be like? I mean, have we made any decisions about the kind of system that will go in as a replacement?

MS. CRONIN: We haven't yet. One of the things we've done is asked the consultant, who we have on board, to be doing an industry review of what technologies are out there right now; what's being used, not just in the airport people-mover in the United States, but worldwide; look specifically at the kind of environment that we have here; and the numbers that we see. So we're trying to keep it very open at this point; and we're going to try to not preclude anything as we put the concepts together.

SENATOR GORDON: Thank you.

One question I have is, how confident are you that the existing system can be patched up and kept running for 10 years? I would think it's a pretty critical thing, particularly if we build this PATH extension to the airport and bring more riders. Could you comment on that?

MS. CRONIN: Sure.

I think one of our greatest priorities at the airport is to ensure the safety of all of our passengers and our riders. To that end, we are constantly assessing the condition of the AirTrain. We caught the running surface issues back in 2014, and made sure that we did proactively do repairs. We're currently undertaking a program, right now, looking at the structural integrity of the rest of the running surface, as well as the guideway itself. And we're doing additional inspections on the vehicle bodies to ensure that they continue to be safe.

I think, as I had mentioned, this is one of three of these systems worldwide. There's not a lot of historical data, unlike, unfortunately, a lot of our commuter transit systems. We know that the design life was specified to be between 20 and 25 years; but we are putting money into it to address those critical areas that we can predict. And we'll have to continue to reassess that; use the gate process that exists within the Port Authority; and make adjustments, as may be necessary, based on the findings we have.

SENATOR GORDON: Well, that raises a question I think that, in fact, was broached by Chairman Degnan in a recent meeting.

You say we're about to spend \$380 million on this renovation-refitting of the existing facility. I think he asked the question -- wouldn't it make sense, rather than investing this money in something we're going to

replace, to just -- and that's the question that occurs to all of us -- wouldn't it make more sense just to build something new right now?

MS. CRONIN: I think in an unconstrained environment, you would probably choose to do that. But in a constrained environment, what we're going to try to do is-- There are certain amounts of that \$380 million that are ongoing now; that we need to keep it going to 2022. There are other components of that that we're saying -- we wouldn't start that until, maybe, 2018. And at that point, I think, as Libby has spoken to, people will-- It's a dynamic capital plan, and it will continue to be assessed prior to us committing to any large chunks of that money.

SENATOR GORDON: Any other questions?

Senator Ruiz.

SENATOR RUIZ: Switching over to-- Thank you; through the Chairman -- switching over to the Newark Terminal A. I'm just very excited by it, and not having to see the duct tape on the--

MS. CRONIN: On the rugs?

SENATOR RUIZ: --the rugs--

MS. CRONIN: And the chairs?

SENATOR RUIZ: --any longer.

You know, part of the frustration, I guess, is -- that's really the business terminal, when you're going to D.C. and for the Northeast Corridor. And so when we get a bad rap -- and Newark International Airport, I think it's because of what Terminal A has looked like.

I know that you're describing some of the features of it. There are a lot of vendors outside of the security checkpoint right now. I would suspect that with the new terminal, there are going to be more

opportunities for the same -- somewhat similar to Terminal C. It's obviously not as big, but the same kind of outline, almost?

MS. CRONIN: Yes. The concept is that -- while we always want to make sure that there are some concessions for people who are seeing you off, etc. -- the majority of the concession space will be post-security, and would allow much more ample opportunity for whoever ends up coming in as our concessionaire.

SENATOR RUIZ: Sounds great.

And, through the Chair, I would love a tour of Terminal A to see what it would look like. It's a very tight space currently, so it would be nice to see how the entranceways will get expanded, and how we're going to make commuting much easier.

MS. CRONIN: And I'm available at any time. I have taken people previously; we have models, we have some fly-throughs--

SENATOR RUIZ: Great.

MS. CRONIN: --and animation. I'd be happy to have you come out.

SENATOR RUIZ: Thank you very much.

Thank you, Chairman.

SENATOR GORDON: I'd be all for an Oversight Committee field trip to do that. I think it would be very instructional.

I want to thank all of our--

I'm sorry; Senator Sarlo.

SENATOR SARLO: Just one quick question.

Yes; just one quick-- Ms. Cronin, you said there are only three systems left in the country, or in the world, that have the old technology for the AirTrain. Is that correct?

MS. CRONIN: The current Von Roll technology; yes. There are monorails that exist; Bombardier has a number of them, but they are a different technology. Bombardier inherited this; it's not their own proprietary technology.

SENATOR SARLO: Right. And Newark Airport-- I mean, right now, Newark Airport is working with Bombardier for new technology that's currently being used in other airports around the world, or--

MS. CRONIN: It would be an open procurement solicitation. We're working with Bombardier continually to maintain the current system. They have the operations and maintenance contract through 2022 right now; we'll have to look at what we do with that. But when we go for a new system, it would be available for whoever in the industry is able to respond to that.

SENATOR SARLO: Bombardier has the rights to that system for-- They own the system.

MS. CRONIN: They own the -- they would have bought the technology; the software is in escrow; but yes.

SENATOR SARLO: They own the brick-and-mortar of that system, or do we own it -- the Port Authority owns it, the brick-and-mortar?

MS. CRONIN: We own it; we own it.

SENATOR SARLO: Okay.

SENATOR GORDON: Okay. I want to-- Unless there are other questions, I want to thank all of our witnesses from the Port

Authority for being here. I want to thank you, especially, for your candor; the level of detail you've provided. We are grateful for the careers you've devoted in service of the public interest, and look forward to continuing to work with you as we start getting some of these projects online and underway.

Thank you all very much for your patience and endurance today.

MS. McCARTHY: Thank you, Mr. Chairman.

MR. PLATE: Thank you.

SENATOR GORDON: I would like to move on, at this point, to our last panel, which will provide the perspective of outsiders or, at least, non-Port Authority personnel; the people who have been close observers of transportation issues in the region.

We're going to hear from two transportation organizations. We're going to first hear from Mark Lohbauer, the Director of the Regional Plan Association, whose focus is on New Jersey; and his counterpart, Janna Chernetz, who is the Senior New Jersey Policy Analyst at the Tri-State Transportation Campaign.

I believe Mr. Lohbauer indicated a desire to go first. And we'd certainly welcome your observations, comments, and critique.

M A R K L O H B A U E R: Thank you, and good afternoon, Mr. Chairman.

I am Mark Lohbauer, the New Jersey Director of the Regional Plan Association. RPA has prepared long-range strategic plans for the tristate New York, Connecticut, and New Jersey metropolitan region since 1929. And I'm pleased to tell you that we're currently in the final stages of

wrapping up our Fourth Regional Plan -- which should be published later this year -- and will actually have a lot of information that will bring to bear on the subject that we're discussing today.

But I would like to thank you all for giving RPA this opportunity to testify about what we consider should be the most important goals of the Port Authority of New York and New Jersey regarding trans-Hudson regional transit.

We applaud this Committee for demanding enhanced public transportation for New Jerseyans; that's a cause that we strongly support. In our view, not enough spending is dedicated to public transportation in our state, particularly in that part of the Northeast Corridor that falls within the jurisdiction of the Port Authority. We believe that a significant increase in investment is justified in that area to support economic growth for New Jersey; an enhanced environment that will be less impacted by motor vehicles; better access for New Jersey residents to jobs in the New York City market; and greater mobility for New Jerseyans throughout the region.

There are three Port Authority projects that I would like to discuss with you today: the Gateway project, the Port Authority Bus Terminal project, and the PATH extension to Newark. I have three basic points, that I'll highlight upfront for you, about those projects.

Number one: RPA believes that the Gateway project and the Port Authority Bus Terminal project are of paramount importance. These projects are significant not only to New Jersey, but also to the national economy, because of the number of jobs and the level of dollars that those jobs generate as a portion of our GDP.

The PATH extension project is similarly very important, especially to New Jersey, for its impact on the regional economy and the benefits that it could provide to New Jersey residents.

The second point I would like to make is that we also believe that any new Port Authority Bus Terminal needs to be planned in an integrated way with the Gateway project and the new Penn Station train terminal. Together, the Gateway and the Port Authority Bus Terminal projects will provide virtually all access into Manhattan for New Jersey commuters; and they should not be planned in isolation from one another, as they are being done today.

Third, we think there needs to be resources to make sure these investments can carry forward. The economic multipliers that each of them provide for us make each project a good project, and we shouldn't accept a future where we are constrained by our current underinvestment in public transportation in that area.

Now, I brought some slides along to share with you. I guess they're not up on the computer, but hopefully you have them in your package. And if you do have them, you can follow along with me as I describe them for you.

All right; the first slide shows a map of the region and the commuter railroads. I guess we're getting some help to get these-- That's it; excellent. Thank you.

Okay; so this map illustrates the rail service lines -- oh, thank you very much -- that exist in the 31 counties of our region. And when I say *our region*, this is the region that the Regional Plan Association plans, with regard to -- 14 of those counties are in North jersey. And like the

spokes of a wheel, all of those rail lines radiate outward from a central hub, which is the island of Manhattan, the heart of our metropolitan region and the concentration where most of the jobs are for the region.

Moving on, this is a dot-density map, on slide No. 2, produced by a U.S. Census travel survey -- well, actually produced by the Port Authority -- and it graphs the results of the most recent U.S. Census travel survey, showing the various modes of transportation used by commuters in this region. People who commute by car are represented by red dots; and you can see that those are distributed virtually everywhere throughout the region, with the exception of Manhattan. Very little car-transit happening on the island of Manhattan.

Purple dots are shown for ferry riders; green for subway riders; yellow dots for bus commuters; and blue for rail passengers. And what these dots represent is the mode of transit that people use, based on where they live. And if you just look at the counties of New Jersey, you can see that the yellow of bus commuters and the blue color of rail passengers are both striking in their dominance. It's also important to note that many of these bus riders are originating from denser parts of the state -- Hudson, Essex, Bergen, and Passaic counties; that's where they're coming from. New Jerseyans clearly rely heavily upon public transit to get to Manhattan.

Moving to the next slide -- we'd like to talk a little bit about how we all get to Manhattan. Manhattan is an island; the only way to get there is by crossing rivers. It's necessary to cross the Hudson for New Jerseyans; or the East River or Harlem River for people coming from other parts of the region. This chart shows that, by far, the least number of crossing options are available to cross the Hudson River from New Jersey.

There are only six crossing structures: one bridge and five tunnels. There are, however, 15 crossing structures that cross the Harlem River and 18 of them that cross the East River. So the East River and Harlem River both have about three times more crossing structures than the Hudson. Put another way, that means 15 percent of all of the crossing structures that are available for people to use to get into Manhattan are available for people across the Hudson; just 15 percent of all the crossings.

Also, most of these crossings are designed for rubber-tired vehicles -- autos, trucks--

SENATOR GORDON: Excuse me.

MR. LOHBAUER: Yes.

SENATOR GORDON: Could I just get some clarification?

The five tunnels are the Holland, Lincoln, and the tunnels that the PATH system--

MR. LOHBAUER: Two PATH tunnels and the Amtrak; yes.

SENATOR GORDON: --and the Amtrak ones; okay.

MR. LOHBAUER: Okay.

So, moving on.

The imbalance that we have in crossing structures is exacerbated when you consider the level of traffic that is flowing across each of these rivers. There are over 9,300 express buses per day that enter downtown Manhattan. Over 82 percent of these buses -- 7,389 in total -- are coming from New Jersey and crossing the Hudson River. That's quite a disparity.

Moving on, this shows a survey that was completed in 2013, showing that of all the daily transit riders who crossed the Hudson River,

47 percent of them traveled by bus. In fact, of all the transit choices that are available to New Jerseyans -- PATH, New Jersey Transit, Amtrak, ferry boats, and buses -- the single largest rider choice was buses across the Lincoln Tunnel; 43 percent of all New Jersey commuters were using that. Bus transit is clearly an extremely significant component for New Jersey transit riders.

As we know, the existing Port Authority Bus Terminal is deteriorated, and it's inadequate to comfortably serve current ridership demand. Nor does it connect the majority of New Jersey's bus commuters to their ultimate destinations in the city. Most of the bus commuters have to rely on New York City's subway; and from there, there are no easy connections to subway from the Bus Terminal.

A new bus terminal, and more balanced service, is critical to better serve the 43 percent of New Jersey commuters who are using that mode.

One of our key goals at RPA for 2017 is to determine a plan and a funding scheme for the new Port Authority Bus Terminal, and to get the environmental approvals process underway. We intend to work with public officials, and business and civic groups to develop an integrated plan that meets the future travel needs across the Hudson River, including the size and location of a new bus terminal, and other improvements. We recognize that the Port Authority has set aside \$3.5 billion in its current capital plan for this project; and that a design competition has produced several alternate plans for the Port Authority to consider. We respectfully suggest that further planning needs to be done before the bus terminal designs are attempted or selected. We believe that any new Port Authority

Bus Terminal needs to be planned in an integrated way with the Gateway project, and the planning for a new Penn Station train terminal as well. Together, these projects will determine virtually all access into Manhattan for New Jersey commuters; and they need to be integrated well, and planned in integrated fashion, rather than in isolation from one another.

Now this slide -- it goes further on into the disparity that exists today in terms of access for New Jersey commuters into Manhattan; and points out that it is only going to get worse, if measures are not taken to improve access and provide better alternatives. The slide shows that over the past two decades, from 1990 to 2010, transit ridership into Manhattan grew slightly in Connecticut and in the Hudson River Valley, and it stayed flat on Long Island; while ridership increased by 65,000 people coming from New Jersey over that time. You may wonder whether that trend will continue, and we're at work now on numbers to give you some accurate projections of that.

And while I don't have specific projections to share with you on that today, we can say that preliminarily we project a growth of about 100,000 New Jersey riders, in addition to what we have today, by year 2040. We'll have more specific projection data in our Fourth Regional Plan; and, hopefully, sometime prior to the plan's release in the fall, we'll be able to return to you with that data.

Next, we'd like to point out that all of this growth is occurring at a time when we face a looming crisis in conveying transit passengers between New York and New Jersey. There are two tunnels that provide New Jersey Transit train service between Manhattan and Newark. Both are over 100 years old, and both were damaged by floodwaters during

Superstorm Sandy. Salt and mineral deposits that coated the tracks and tunnel walls from those flood waters are still present, corroding the infrastructure. We need to stop that deterioration, but it will require closing each tunnel to do the work. This slide shows that closing just one tunnel will reduce our rail capacity from the current 24 trains per hour, maximum, to a maximum of only 6 trains per hour. That's one-fourth of what it should be. You can imagine what a disaster it would be to close a tunnel for one day or one week, let alone for a year or more, in order to fix a tunnel.

To prevent that disaster, we recommend the Gateway project, which proposes to build a new, two-track tunnel under the Hudson River, and to support that new tunnel with related replacements of aging rail bridges--

SENATOR GORDON: May I just break in with a question?

MR. LOHBAUER: Yes, certainly.

SENATOR GORDON: I've heard mixed things about this. I realize that you can't predict when one of these tunnels will fail. But what -- can we attach probabilities for a given time period? Are we looking at 5 years, 10 years? What can we say, if anything, about this problem?

MR. LOHBAUER: That's obviously a critical question, Mr. Chairman. And I apologize; I don't have an answer for you about that here today. I could consult--

SENATOR GORDON: You know, obviously, do we have enough time to build a Gateway set of tunnels before we have the 75 percent reduction?

MR. LOHBAUER: Yes, we have to; I hope so. We have to hope that we do.

There may be a specific answer to your question that our transportation experts would be able to supply for you. And I'll certainly share that question with them so I can respond to the Committee at a later date to try to give you that information.

Personally, I don't know. But obviously, every passing day makes the situation more dire. And so it's important to have that replacement tunnel in place as soon as possible.

In any event, once completed, the new Gateway project would allow for existing rail traffic to move through the new tunnel, while we close and repair the existing tunnels. As you know, the Gateway project is currently underway with the support of both Governors Christie and Cuomo, the support of the Federal government, Amtrak, New Jersey Transit, and the New York Department of Transportation. The Port Authority has already set aside \$2.7 billion in their current capital plan -- as you just heard -- for this project, which has been described by the Federal Transportation Department as "the most important rail project in the United States." Indeed, they see it as critical to our national economy, not just our regional economy.

So if I could move on, now, to the PATH extension project.

The one other Port Authority project that features in the capital plan -- a note to RPA -- is important not only to enhance trans-Hudson access, but would also provide better rail access to an underserved urban neighborhood -- the South Ward of the City of Newark -- is the Newark PATH extension. It would continue the PATH rail line south from its

current terminus at Newark Penn Station, and extend nearly two miles -- we have it as 1.85 miles -- to Newark Liberty Airport.

And I obviously heard the discussion that just went on, as you were talking about, "Wasn't there also a plan for a second station in the South Ward?" And the answer is "yes," there is. It doesn't show on my drawing there; but I can tell you that this was a proposed station that has been discussed for New Street near Lincoln Park in the South Ward, roughly halfway between Penn Station and the Newark Airport.

SENATOR WEINBERG: Well, if I may--

MR. LOHBAUER: Yes.

SENATOR WEINBERG: --it doesn't show on your map.

MR. LOHBAUER: Yes.

SENATOR WEINBERG: That's okay, because it doesn't show on the capital plan either. (laughter)

MR. LOHBAUER: I understand that, Senator Weinberg. And I believe that the reason for that is that there is concern about whether there will be sufficient ridership to justify a station there at New Street.

SENATOR GORDON: Excuse me; can we just -- I'd just like to get something clarified.

MR. LOHBAUER: Yes, sir.

SENATOR GORDON: Whose idea-- When you say there was a plan.

MR. LOHBAUER: Yes.

SENATOR GORDON: Was it an RPA proposal, or was it an actual Port Authority concept that was evaluated within the agency? How official was this?

MR. LOHBAUER: Senator, I believe that's a Port Authority concept that RPA supports.

SENATOR GORDON: Okay.

MR. LOHBAUER: I was simply going to add that, with regard to the ridership question -- and frankly, as Janna put this earlier, as we were discussing it -- it's really a chicken-and-egg problem. If we wait to see if ridership will justify the station, we may wait to a point where it's more difficult to build the station. On the other hand, if we build the station and there's no ridership for it, we may rue the fact that we went into that extra expenditure. So the debate is ongoing now as to what would it take to justify putting that other station there.

At RPA, we believe in the importance of providing station access to neighborhoods, and the economic value that that has, in terms of growing -- bringing more residents into a neighborhood, bringing more businesses into a neighborhood, providing greater mobility for the people in that neighborhood. And you know that it's always a better thing to provide access to public transit, rather than simply leaving people to their own devices in cars and whatever else they can manage to get around in. We support the idea of growth in public transit.

But it's not showing on our map, and it's not showing on the Port Authority's map, either, at the moment.

If I could go on.

SENATOR GORDON: Sure.

MR. LOHBAUER: Yes.

We'd like to point out that bringing PATH into Newark's South Ward -- whether it's one station or two -- would provide improved

access and frequency of service to Liberty Airport for residents of the entire region, as well as to residents of the South Ward. It will provide that access at much lower cost than is currently available from the Northeast Corridor train; and at greater frequency than the Northeast Corridor train, which makes it much more accessible.

New access to better transit for residents of the South Ward, by creating either one or both of those stations, is critical because, right now, they have no transit access. The Northeast Corridor line that stops at Newark Airport does not provide public access to that station. So opening up this station -- even if it were just at the Liberty Airport -- would provide new rail access to the residents of the South Ward. So that's a value.

It would also provide better access to jobs around the region for all Newark residents, because it will not only provide a more frequent, faster, cheaper access into Manhattan, it will provide a new access point into Manhattan, at lower Manhattan, in addition to the access point that already exists at Penn Station.

And finally, enhanced PATH train frequency will be provided by this because there would be a new rail yard that would be a part of this project that will allow storage of more PATH trains. This, in conjunction with the Positive Train Control feature -- which is already in the process of being installed on PATH trains -- will allow for maximum train frequency on that line.

I wanted to point out one other thing. This slide-- Oh, I didn't advance to it; sorry. Or did I? No, I guess I did.

Well, the last slide in that group pointed out what we anticipated would be new development growth features, not just for the

South Ward, if we open a station there; but also for the other New Jersey stations along the line between the airport and the Exchange Place Station. We see redevelopment opportunity there -- actually, this slide was cut off, that's why the numbers don't show. I apologize; I don't have them right here, but I will forward them to you. We provided actual projections of the additional jobs, the added residents, and the added square footage of both commercial and residential space that would occur at the airport; in the South Ward; at Newark Penn Station; at Harrison; at Journal Square; at Grove Street; and at Exchange Place -- by virtue of doing this PATH extension -- which would bring more ridership, more riders, and more dollars, more spenditure, more interest, and more value in the line.

So I will just close by saying that we'd like to thank you, Chairman and the other members of the Committee, for maintaining your vigilance in this most important area. We urge you to continue your support and scrutiny of these critical projects of the Port Authority, without which both our national and our regional economies might experience serious reversal.

Thank you very much.

SENATOR GORDON: Thank you, Mr. Lohbauer, very much for this.

I always find RPA presentations very, very interesting. And unfortunately, we're talking about benefits for a project that apparently didn't make the list, and I think is certainly worthy of further scrutiny by this Committee.

Ms. Chernetz, would you like to make your presentation?

JANNA CHERNETZ, Esq.: Yes, thank you, Chairman.

I'm Janna Chernetz; I'm the Director of New Jersey Policy for the Tri-State Transportation Campaign. As you know, Tri-State is a nonprofit, nonpartisan transportation policy advocacy organization.

And I'd like to thank the Chairman and members of this Committee for extending yet another invitation to our organization to come and appear before you. I know it's been a very long morning -- into the afternoon -- for four hours. So if you would just oblige me for a little bit, I will try to be as brief as possible.

But I have to say that I did have prepared remarks, and I'm going to present those to you. But the fabulous questions that have come from this Committee, and the information that was elicited from the Port Authority has -- I have pages of notes on some things that I'd like to address.

So again, thank you for extending the invitation to us.

"We are so out of our league; we don't know what we're doing. If the Board does not seek ideas from others, we're going to make the wrong decision, as we have done before."

These are the words of Commissioner -- the Port Authority Commissioner, David Steiner, spoken at the September 2015 Board meeting, when voicing his position to delay a Board vote on replacing the Port Authority Bus Terminal, and to move forward with the International Design Competition.

Well, that design competition has come and gone, and we are nowhere closer to a final product. Given the allocation of \$3.5 billion in the current draft 10-year capital program, it would appear that the Port Authority still doesn't have all its ducks in a row. In fact, this whole process

has been more like herding cats; and, quite frankly, after the testimony today, it sounds like each of these cats has had an additional litter. (laughter)

Certainly, there are many factors that go into the process of preparing a capital plan for an agency of this magnitude. And with the limited budget, this process is even more involved, and we heard some great detail from the presenters from the Port Authority as to how that process worked. But it is for that reason that Tri-State suggests this Committee -- and I invite the Commissioners of the Port Authority, as well, who are going to ultimately making the decision to pass this plan -- to approach the projects in this plan and ask, "What would be the impact of this project if it was not done?" or, at least, "What would be the impact if the project were to be delayed?"

It is Tri-State's position that the 10-year capital program falls short in terms of prioritizing the needs of the region. We direct this Committee to the following allocation of funds and projects to illustrate this point.

The \$1.7 billion on the Newark PATH extension. An estimated ridership of 2.5 million at opening, and 4 million projected out 20 years. What would happen if this project was delayed? Travelers could still comfortably use existing rail and bus connections, New Jersey rail and four additional bus lines; and express bus from Newark Penn.

But from the testimony that we've heard, we now have additional concerns. This is express, going from the Newark Penn to the airport. Where are the economic development opportunities if we have (*sic*) the station that Senator Ruiz had thought was in this plan? Additionally,

there was some testimony that this would provide a park and ride and additional trans-Hudson capacity. Sure, we like redundancy; we saw what happened with Superstorm Sandy when we don't have redundancy and something fails -- the catastrophic consequences of that, and the economic consequences of that. However, adding more cars to the Parkway, to 78, to Route 22, to 1 and 9, to all those roadways -- that should not be the goal of having additional transit. We need points-of-origin access for commuters, not having them to sit in traffic for longer periods of time, adding congestion to the wear and tear on our roads. That should never be the goal.

As far as the \$1.5 billion LaGuardia AirTrain. The ridership is currently unknown. And while ridership is unknown, we can look to similar transit to Newark and JFK; with those comparisons, we can assume that ridership would be just a few million.

And what would happen if this project was delayed? Travelers could still comfortably use existing bus connections; there are currently five bus lines. And it should also be noted that other experts have opined that building the AirTrain will offer very little in terms of reduced travel time to the airport.

The \$2.7 billion for Gateway. This would serve 55.8 million passengers annually, and it's projected to double in capacity of the existing -- of the current existing capacity. Given the current state of the existing 106-year-old tunnels -- as my colleague has pointed out -- the damage sustained from Superstorm Sandy, rail capacity in the corridor would be decreased by 75 percent as each tunnel is taken out of service for repairs. And I believe that that has been projected within the next 20 years or so; at

least, that's where the part of the discussion comes into play when we're talking about the timeline for Gateway -- having it fully up and functioning, and having the full capacity by 2030.

If we don't have this redundancy, if this project is not done, we are creating a substantial chokepoint in the Northeast Corridor, which supports a \$2.6 trillion economy. We're also talking about an area of the country where -- especially in New Jersey, where we have residents who have the biggest -- the most megacommutes of all commuters in the country; *megacommutes* being 90 minutes or more. Without this redundancy, if this fails as a project that moves forward, it's just going to get worse. And in fact, we can look at the contingency plan that New Jersey Transit had in play when we were talking about a potential rail strike. Only 40 percent of commuters would have been taken care of, stranding 65,000 commuters to figure out how they're going to get to work on their own. For some people, they have the option to telecommute; but for others -- hospitality, health care -- you have to be there. And this puts a significant strain on the quality of life for our residents, and to make sure they will be able to put food on their table for their families.

And finally, the \$3.5 billion for the Port Authority Bus Terminal; 230,000 daily customers with an expected growth of doubling by 2040. There is no debate that the current Terminal has surpassed its useful life and it is structurally deficient. The ramps can no longer support the buses of the 21st century; and, with the increase in ridership, more gates of capacity are needed.

And Senator Weinberg, I want to thank you for initiating your line of questioning regarding this timeline. I think some of the things I

heard are extremely alarming. If I understood correctly, in the 10-year capital plan we have only progressed 3 years; and that's a problem. A meager \$3.5 billion in the 10-year capital plan hardly reflects the expectations of a completed Bus Terminal in a 7- to 10-year timeframe. *Wall Street Journal* reported that the Bus Terminal costs between \$8 billion and \$11 billion; we heard today it was between \$7.5 billion and \$10 billion, so we're not too far off.

If the Port Authority were to put off the two airport transit projects and allocate the roughly \$3.2 billion to the Bus Terminal, it would bring the total allocation to \$6.7 billion, and a new Port Authority Bus Terminal closer to realization.

The Legislators here today have been strong advocates for a completed Port Authority Bus Terminal. And we urge you to continue to put the pressure on the Port Authority Bus Terminal, as well as Chairman Degnan -- who has emerged as a leader in making sure that this Terminal is built. But we need to continue to be steadfast in assuring the completion of this project over the course of the 2017-2026 capital plan.

I would ask you to put pen to paper and have the 10-year capital plan adequately reflect funding for a completed Bus Terminal. After all, on May 24, 2016, Chairman Degnan sat before this very Committee -- and I believe it was in Fair Lawn -- at a special hearing and answered the million-dollar question: When can commuters, and New York and New Jersey residents expect a new Port Authority Bus Terminal? His response: Nobody wants to answer that question. At best, 7 years; at worst, 10. So why not put it in now?

I just did a few calculations, again, given the testimony -- I mean, the questions that Senator Weinberg posed and the testimony elicited. So in the 10-year program, by 2026, we will have advanced only 3 years into this project. We have a 10 percent increase in ridership expected by then; and then, almost double by 2040. So if you put the remaining 4 to 7 years into the next 10-year capital plan, we are now building for 2040, and delivering in 2040. We have already reached capacity when we open the doors. This is not prioritization and planning.

And Tri-State is not alone in its concern about the priorities reflected in the draft 10-year capital plan. Commissioner Lipper has described a list of projects as “among the most ill-conceived projects that (I) have experienced in government, and an absolute waste of the public funds.” If you look at the answers to the questions posed -- that is, the impact to each project if not completed -- I think Mr. Lipper has won his case.

In the discussion about the PATH extension, one of the presenters stated, “We’re growing in a balanced way.” I challenge that statement by the Port Authority. It is not Tri-State’s position that PATH service should be ignored in this 10-year plan. If Port Authority is really intent on addressing the needs of PATH, and “growing in a balanced way,” riders would be much better served by increasing current system capacity, rather than expanding an already-overburdened system.

The signal system replacement program and new car program -- the CBT project -- aims to reduce headway and add cars to increase capacity. This is a worthy project, as any PATH rider can tell you, for a system that operates above capacity. However, a component to fully

address existing capacity needs is missing. The specific project I'm talking about expands the platforms at key stations -- particularly Grove and Exchange Place -- to allow a 10-car service from Newark to World Trade Center. That would be a 25 percent increase in capacity. This project is not in the 10-year plan, and was reiterated again today that it's not planning to be put into the 10-year plan.

We think that that's a big mistake. This PATH project must be prioritized, over the next 10 years, in order to fully reap the benefits of the CBTC project. Port Authority's efforts and dollars are better spent focusing on the existing PATH service needs, rather than creating new PATH service right now. New service without first addressing current capacity issues will only attract more riders to an already-overburdened system. And just to be clear, we're not passing any particular judgment of the worthiness of these projects. We're merely pointing out that their worth is limited in the larger scope of the need.

Sure, the 10-year capital plan is fluid, and it's a living document. That has been made very clear at the Port Authority Board meetings. And it's true for any capital plan; changes happen, especially over 10 years. But that is not an excuse to underfund the region's most pressing needs at the outset.

So again, I thank you for the opportunity to present today; and I am happy to answer any questions you may have.

SENATOR GORDON: Thank you.

Senator Weinberg.

SENATOR WEINBERG: I don't have any questions. You've just summed everything up. (laughter)

SENATOR GORDON: Yes, I thought that was a pretty good summary.

MR. LOHBAUER: Good job.

SENATOR WEINBERG: Thank you very much.

SENATOR GORDON: Yes, I really do think what we heard from both of you was a summary of the findings of this hearing today.

We see the wrong priorities in this capital plan; we should be expanding capacity. We're doing so with Gateway, but we need to do that with a new Port Authority Bus Terminal. We should not be investing over \$4 billion, I think, in the expansion of PATH to Newark Airport, or to LaGuardia-JFK, given the ridership that we've -- it appears to be limited; the higher priority of expanding capacity. And by my calculations -- I actually put pen to paper last night -- and I come up with about \$4.2 billion that could be redeployed into an accelerated Port Authority Bus Terminal project that certainly could get completed a lot of faster than under the current plan.

And you know, that's where I'm coming out. I'm willing to -- I'm looking for some additional analyses by the Port Authority. But in my mind, we have misplaced priorities here that will have -- if some of the scenarios described by you two should materialize, we could see an economic depression in North Jersey, given the dependence of North Jersey commuters on these trans-Hudson facilities. People are simply going to leave New Jersey. Senator Weinberg hates it when I say that. (laughter) But the reality is, those 300,000 new jobs that you're projecting are going to be filled by people who are either moving to Westchester, and

Connecticut, or Long Island; or moving from New Jersey to those locations because they have a shorter commute or a less onerous commute.

So I think it's incumbent on us, as policymakers, to advance policies that are going to protect our regional economy. I really think this is one of the most important issues facing the State, and I thank you both for articulating it so clearly.

SENATOR WEINBERG: If I may.

Generically, in terms of the PATH extension to Newark Airport, it would be a good program if, in fact, it was a complete program. It is not. And I venture a guess that if a link is built between Wall Street and Newark Airport, somebody, 20 years from now, might bring this up as a good idea to help the City of Newark.

Having said that, I'd also like to make a point of personal privilege, if I may.

I've written a letter to all of the gubernatorial candidates, on both sides of the aisle; both-- At least, those who have been identified thus far, both Democrat and Republican, asking them to get involved with this issue. This is of the utmost importance to the development of the State of New Jersey, as well as our region. And I would hope that we will hear a commitment from all of those people who want to lead the State of New Jersey about these proposals.

So I did get a reply, I think, from one person; and I posted that on Facebook. But I haven't heard from any of the others. So maybe the mail is taking a little time. (laughter)

But I just want to put that on the record; and hopefully, all of those gubernatorial candidates -- both Democrat, Republican, and any

independents who might be out there -- will listen to the testimony that we've heard today, as well as your terrific summing it up for us.

So, thank you.

SENATOR GORDON: Do any-- Senator Sarlo, any comments? (no response)

This has been a long but, I think, a very productive exercise for us. There are some issues that need to be explored further; I think this whole subject of the PATH extension to the airport is certainly one. we will remain focused on the Port Authority Bus Terminal. I hope we can convince the Port Authority Commissioners to delay a final vote on the capital plan until we have a further discussion of the priorities.

But I want to thank you both for appearing here; thank my colleagues and staff for the support that you've provided. This is a continuing story, and we will continue working on this.

So thank you all very much.

I'm going to adjourn the meeting. Thank you.

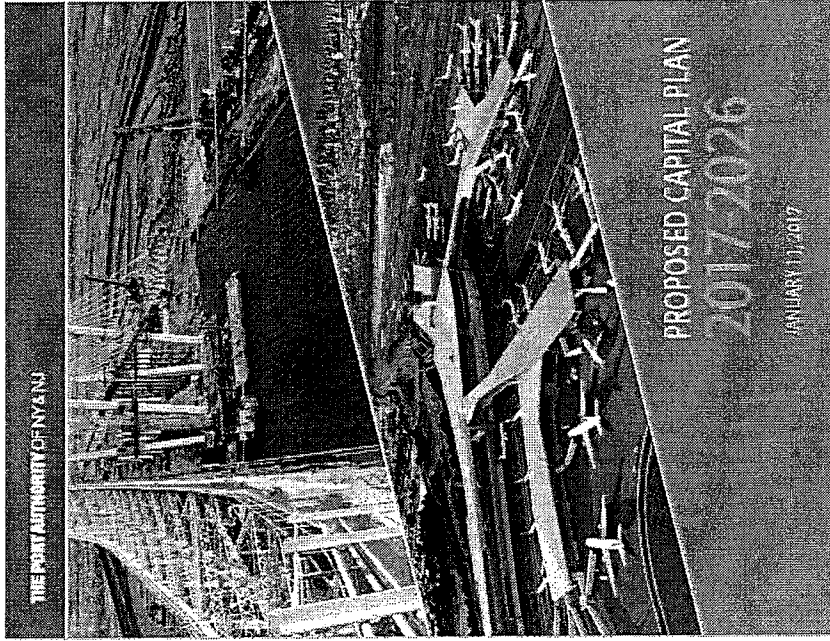
(MEETING CONCLUDED)

APPENDIX

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

New Jersey Senate Legislative Oversight
Committee

January 17, 2017



THE PORT AUTHORITY OF NY & NJ

Developing the Plan

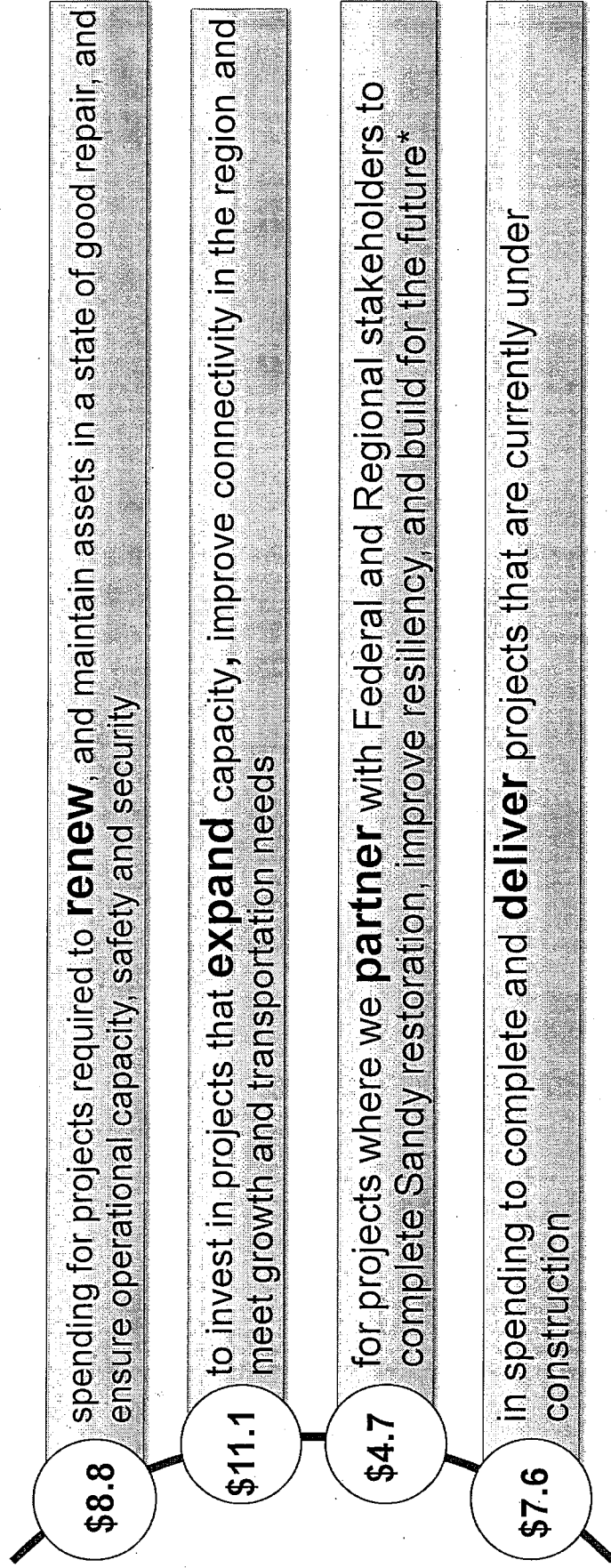
Guiding Principles

The plan adheres to three guiding principles:

- To apply the agency's financial capacity and full resources toward modernizing and expanding the region's aging airports, seaports, mass transit facilities, and other vital trans-Hudson transportation assets;
- To continue serving our customers efficiently, focusing on maintaining our facilities in a state of good repair, while ensuring safety, security and resiliency; and,
- To allocate the agency's affordable capital to its highest priority needs in a fiscally responsible manner so as to achieve a financially balanced plan.

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

Spending in Proposed 2017-2026 Capital Plan of \$32.2 billion includes: (\$s in Billions)



* Includes PA support of the Gateway Development Program

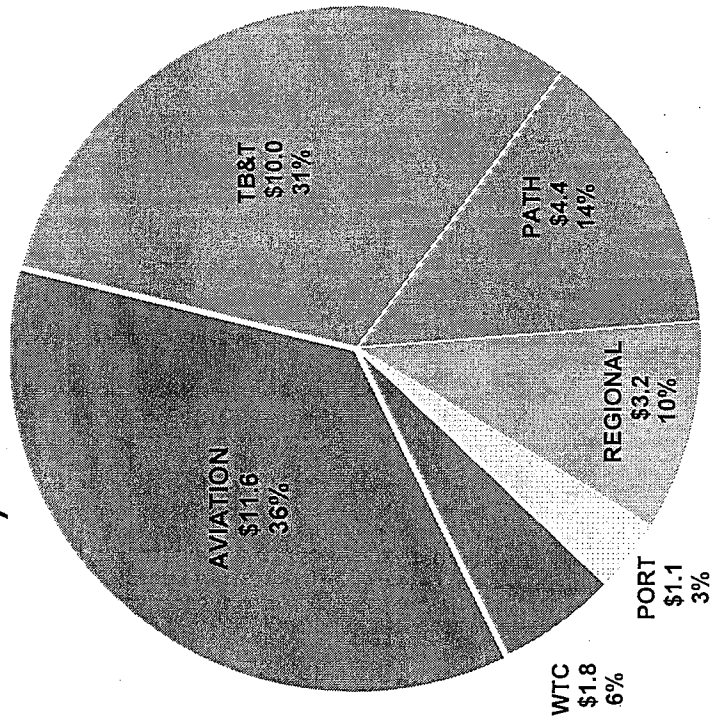
Capital Spending Summary (\$s in Billions)

CATEGORY	PROJECTS	2017-2026 SPENDING
Renew	State of Good Repair (SGR)	\$ 8.3
	Other: Mandatory, Security	0.5
Expand and Connect	EWR Terminal A Redevelopment	2.3
	Bus Terminal Replacement	3.5*
	Extension of PATH to Newark Rail Station	1.7**
	LGA AirTrain and JFK Redevelopment	2.5**
	LGA Terminal C&D Redevelopment	0.6
	Other System Enhancing	0.4
Partner	Sandy Projects	1.8
	Other Partner	0.3
Deliver	Projects in Construction	5.1
	LGA Terminal B Redevelopment	2.5
Total PA Direct Spending		\$29.5
Partner	Port Authority Support of Gateway Program	\$ 2.7***

- * Corresponds to projected spend in the period. Project assumed to receive third party funding of \$500 million in the period.
- ** Corresponds to total project cost. Project assumed to receive third party funding of \$700 million and \$500 million, respectively
- *** Subject to gates review, as are all projects

Preliminary, subject to change

Proposed \$32.2 billion Capital Spending by Department (\$in billions)



5x

Comprehensive Budget and Capital Planning Process

Annual assessment of various factors impacting the Port Authority

- Operational requirements for facilities
- Significant regional needs
- Customer demands
- Industry trends in each line of business
- Port Authority relies on its own credit

Port Authority Facilities and Revenue Base

Given its wide span of facilities critical and essential to the vitality and growth of the regional economy,

the Port Authority benefits from a large and diverse user pool, which provides its revenue base

Major Airports

John F. Kennedy, LaGuardia, Newark Liberty, Stewart, Teterboro

Tunnels and Bridges

Holland Tunnel, Lincoln Tunnel, George Washington Bridge, Bayonne Bridge, Goethals Bridge, Outerbridge Crossing

Bus Terminals

PATH Rail Transportation

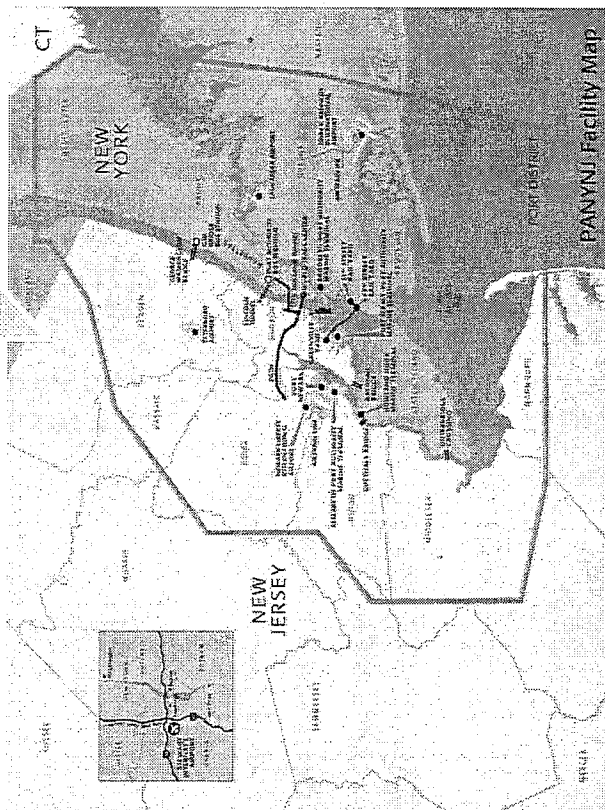
Marine Terminals

Port Newark, Elizabeth PA Marine Terminal, Greenville Yard, Port Jersey, Brooklyn, Howland Hook

Economic/Waterfront Development

Industrial Parks, Teleport, Hoboken and Queens West Waterfront

The World Trade Center Site



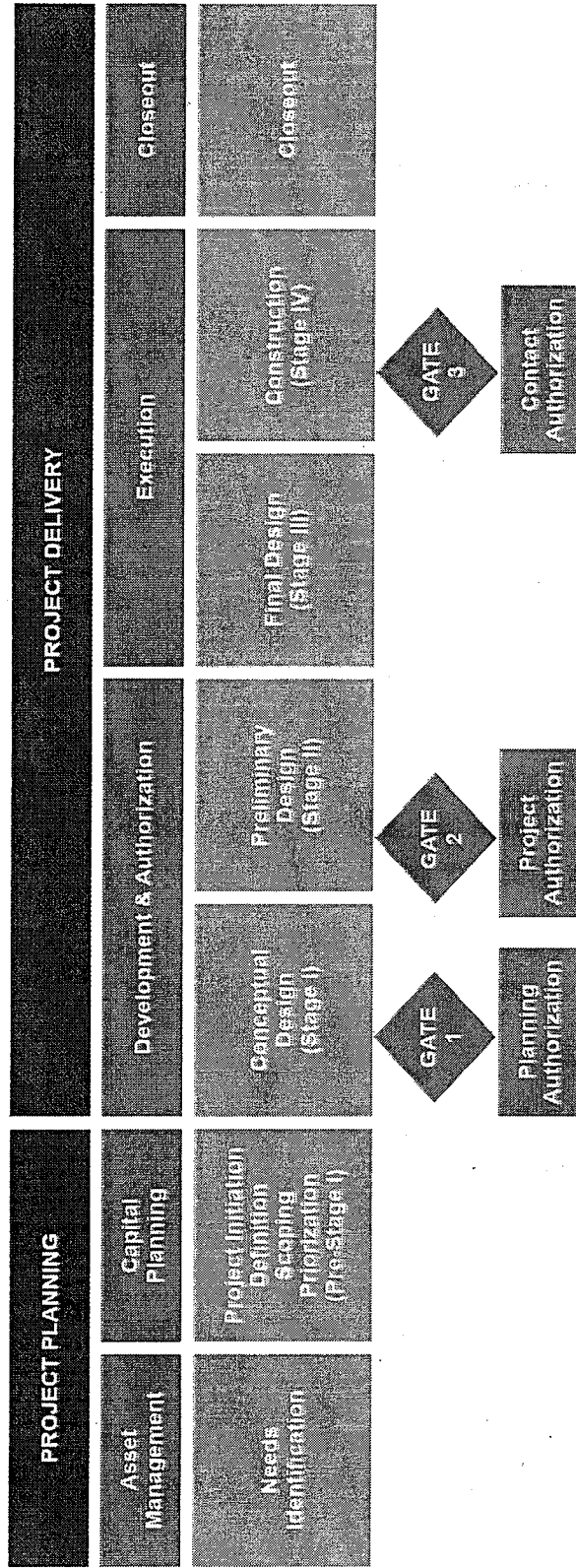
Preliminary, subject to change

THE PORT AUTHORITY OF NY & NJ

Sources for the Capital Plan

Proposed Funding Sources	\$s in millions
Proposed Capital Program – Direct Port Authority Spending	\$29,500
Port Authority Support of the Gateway Program	2,700
Total Proposed Capital Program	\$32,200
Currently Projected Sources	
Consolidated Bond Proceeds	\$11,275
Pay-as-you-go Capital Investment	11,315
Other Special Obligations	2,700
Federal Funding for Storm recovery and resilience	1,600
Passenger Facility Charges – Aviation	2,800
Other currently awarded federal grants	530
New federal grants or other third party funding	1,730
Non-core real estate asset sales or net-leases	250
Total Funds Projected to be Available	\$32,200
Funding Gap	\$0

A Rigorous “Gates Process” will be used to Manage the Plan



Gate 1 ensures: Proper Project definition, scoping and prioritization

Gate 2 ensures: Appropriate level of Project Development (cost, schedule and scope).

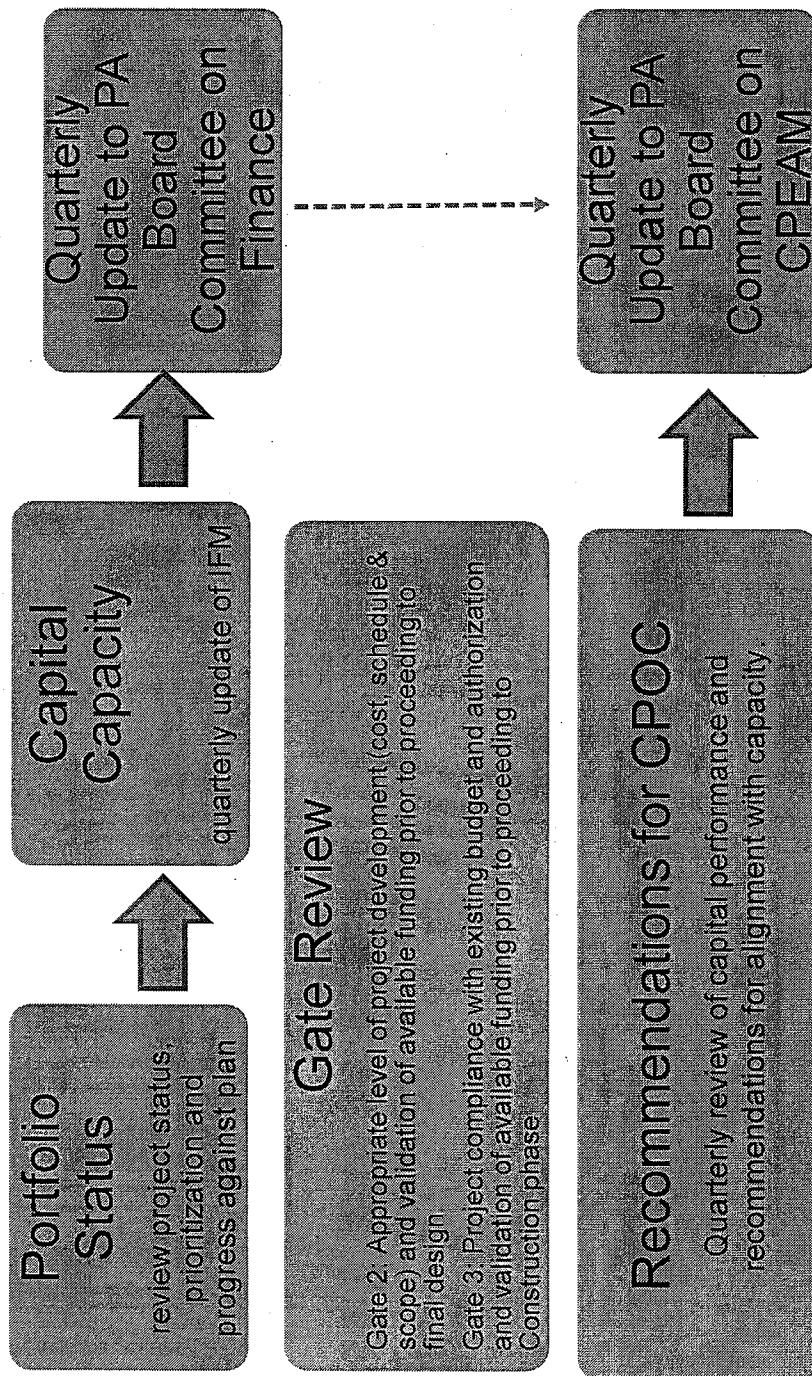
Validation of available capacity prior to proceeding to Final Design

Gate 3 ensures: Project Compliance with existing budget & authorization

Validation of available capacity prior to proceeding to Construction Phase

Preliminary, subject to change

Monitoring and Delivering the Plan



CPEAM: Capital Planning, Execution, and Asset Management
CPOC: Capital Planning Oversight Committee

The Public Review and Comment Period has Begun

Available for Public Comment

- Proposed Plan was published on January 11, 2017 is available online at PA website www.panynj.gov

Comment Period

- Runs through **February 15, 2017**
- Comments to be made at: publiccomments@panynj.gov

Public Meetings (At PA offices in each state)

- **January 31, 2017** – 5pm to 8pm
4 World Trade Center, 150 Greenwich St, New York, NY 10007
- **February 7, 2017** – 5pm to 8pm
2 Montgomery Street, Jersey City, NJ 07302

Board Consideration of Final Plan

- Board to consider any appropriate modifications based on comments
- Consideration of final plan scheduled for **February 16, 2017 Board Meeting**

Preliminary, subject to change

**NJ Senate Legislative Oversight Committee
January 17, 2017**

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

PATH Extension of North East Corridor (NEC) Rail Link Station (RLS)

Thank you Chairman Gordon and members of the Committee,

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

Today, PATH's Newark to World Trade Center Line currently operates, and begins at Newark-Penn Station. Extending the PATH system from Newark Penn Station to the Northeast Corridor Rail Link Station would improve transit access for commuters and airport customers coming from many of the communities currently served by PATH including Lower Manhattan, Bergen, Hudson, and Essex Counties in New Jersey.

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

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

The proposed program would extend the PATH rail infrastructure from Newark Penn Station at Newark-Penn Station to the Northeast Corridor Rail Link Station at Newark Liberty Airport. Included in this program is an extension of the system by 1.2 miles, a new passenger station infrastructure at the Northeast Corridor Rail Link Station and construction of a new rail yard facility.

In addition, the project would be designed to accommodate the future construction of a parking garage and multi-modal transportation facility, through a potential public-private partnership. A successful P3 would provide the potential for improving and broadening trans-Hudson transit options and access for commuters

As with other major infrastructure projects, there is substantial planning, environmental and other regulatory review, engineering design, public outreach and participation processes to occur. As I testified earlier regarding the Bus Station, new construction progress must be balanced with the project's impacts to the quality of life of

**NJ Senate Legislative Oversight Committee
January 17, 2017**

2

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

the surrounding community. A robust stakeholder communications and outreach effort will be necessary to ensure the success of the overall project.

As we continue, we will seek to apply for federal grant funding and private value capture opportunities. Construction is anticipated to start in 2020 and be completed with full revenue service operations available to PATH in 2026.

I am happy to answer any questions you have.

Excerpts From Capital Plan on Major Projects

2017-2026 Proposed Capital Projects - Expand and Connect

Sorted by Department, Facility and Program (in thousands)

PROJECT ID	PROJECT TITLE	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
TUNNELS BRIDGES & TERMINALS						
LINCOLN TUNNEL						
CB03-269	REPLACEMENT OF ROUTE 1 AND 9	Planning / Design	Paving & Roadways	\$ 239,000	\$ 1,000	\$ 240,000
LINCOLN TUNNEL, Subtotal				239,000	1,000	240,000
GOETHALS BRIDGE						
CB07-145	CONSTRUCTION OF INTERCHANGE RAMPS	Planning	Bridges	119,000	1,000	120,000
GOETHALS BRIDGE, Subtotal				119,000	1,000	120,000
PORT AUTHORITY BUS TERMINAL						
CT06-285	REPLACEMENT OF PORT AUTHORITY BUS TERMINAL	Planning	Buildings & Garages	650,000	2,850,000	3,500,000
PORT AUTHORITY BUS TERMINAL, Subtotal				650,000	2,850,000	3,500,000
TUNNELS, BRIDGES AND TERMINALS, Total				1,008,000	2,852,000	3,860,000
PATH						
PATH						
CR02-290	CONSTRUCTION OF PATH RAIL EXTENSION TO NEWARK LIBERTY RAIL LINK STATION	Planning	Rail Systems	856,000	874,000	1,730,000
CR02-457	PATH RAILCAR FLEET EXPANSION	Planning	Rail Systems	150,000	-	150,000
PATH, Subtotal				1,006,000	874,000	1,880,000
PATH, Total				1,006,000	874,000	1,880,000
AVIATION						
LAGUARDIA AIRPORT						
CA02-347	CONSTRUCTION OF RESTRICTED VEHICLE SERVICE ROAD (RVSR) AND RUNWAY DRIVE	Design	Runway-Taxiway	53,000	700	53,700
CA02-487	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	10,500	-	10,500
CA02-496	INSTALLATION OF PILE SUPPORTED STRUCTURE FOR RUNWAY 4 LOCALIZER	Planning	Runway-Taxiway	5,700	-	5,700
CA02-503	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEM	Planning	Runway-Taxiway	9,900	-	9,900
JFK REDEVELOPMENT & LGA AIRTRAIN						
CA22-005	CONSTRUCTION OF AIRTRAIN	Planning	Rail Systems	700,000	800,000	1,500,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal				700,000	800,000	1,500,000
LGA NEW TERMINAL C						
CA22-006	DELTA REDEVELOPMENT PROGRAM - EAST CONNECTOR	Planning	Buildings & Garages	75,000	75,000	150,000

2017-2026 Proposed Capital Projects - Expand and Connect

Sorted by Department, Facility and Program (in thousands)

PROJECT ID	PROJECT TITLE	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CA22-007	DELTA REDEVELOPMENT PROGRAM - TERMINAL	Planning	Buildings & Garages	112,000	38,000	150,000
CA22-008	DELTA REDEVELOPMENT PROGRAM - SUPPORTING INFRASTRUCTURE	Planning	Paving & Roadways	224,000	76,000	300,000
LGA NEW TERMINAL C, Subtotal				411,000	189,000	600,000
LAGUARDIA AIRPORT, Subtotal				1,190,100	989,700	2,179,800
JOHN F. KENNEDY INTERNATIONAL AIRPORT						
CA03-640	REDEVELOPMENT OF NORTH CARGO AREA	Planning	Buildings & Garages	900	-	900
CA03-669	ENHANCEMENT OF TAXIWAYS CA & CB	Planning	Runway-Taxiway	23,000	900	23,900
CA03-776	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	4,400	-	4,400
CA03-788	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEMS FOR AIRPORTS	Planning	Runway-Taxiway	9,900	-	9,900
JFK REDEVELOPMENT & LGA AIRTRAIN						
CA03-802	JFK REDEVELOPMENT	Planning	Paving & Roadways	560,000	440,000	1,000,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal				560,000	440,000	1,000,000
JOHN F. KENNEDY INTERNATIONAL AIRPORT, Subtotal				598,200	440,900	1,039,100
NEWARK LIBERTY INTERNATIONAL AIRPORT						
CA04-597	REHABILITATION OF FACILITY DATA ROOM	Planning	Control Systems	700	4,600	5,300
CA04-642	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	2,800	-	2,800
EWK TERMINAL A REDEVELOPMENT						
CA44-037	TERMINAL A REDEVELOPMENT - TERMINAL	Planning / Design	Buildings & Garages	1,200,000	174,000	1,374,000
CA44-038	TERMINAL A REDEVELOPMENT - AIRSIDE	Planning / Design	Buildings & Garages	240,000	96,000	336,000
CA44-039	TERMINAL A REDEVELOPMENT - LANDSIDE INFRASTRUCTURE	Planning / Design	Paving & Roadways	441,000	19,000	460,000
CA44-040	TERMINAL A REDEVELOPMENT - PARKING	Planning	Buildings & Garages	170,000	-	170,000
EWK TERMINAL A REDEVELOPMENT, Subtotal				2,051,000	289,000	2,340,000
NEWARK LIBERTY INTERNATIONAL AIRPORT, Subtotal				2,054,500	293,600	2,348,100
TETERBORO AIRPORT						
CA05-158	INSTALLATION OF AUGMENTATION OF GROUND BASED SYSTEMS	Planning	Runway-Taxiway	9,900	-	9,900
TETERBORO AIRPORT, Subtotal				9,900	-	9,900
AVIATION, Total				3,852,700	1,724,200	5,576,900

Expand and Connect

PROJECTS THAT EXPAND CAPACITY, IMPROVE CONNECTIVITY, MEET THE GROWTH OF THE REGION, AND ADVANCE THE REGION'S TRANSPORTATION NEEDS

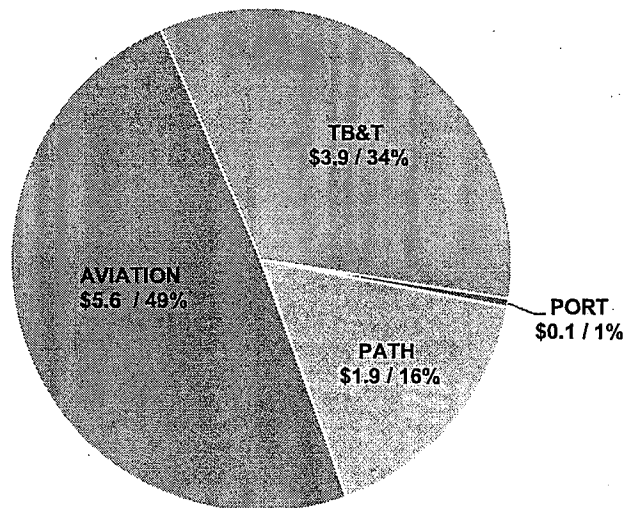
Projects that expand the capacity of the Port Authority's transportation network and systems while improving connectivity throughout the region serve as cornerstones of the proposed capital plan. They also support further regional economic growth throughout the entire Port District. This expansion enables greater use of our facilities by the region's citizens and improves the overall customer experience of using Port Authority assets.

Expand and Connect projects represent **\$11.1 billion (34 percent)** of overall programmed spending in the proposed 2017-2026 plan. Significant projects in this category include:

Highlights

<i>(estimated \$ in millions)</i>	2017-2026
Port Authority Bus Terminal Replacement	\$ 3,500
John F. Kennedy Airport Redevelopment and LaGuardia Airport AirTrain	\$ 2,500
Newark Liberty International Airport – Terminal A Redevelopment	\$ 2,340
PATH Rail Extension to Newark Liberty Rail Link Station	\$ 1,730
LaGuardia Airport – New Terminal C	\$ 600
PATH Railcar Fleet Expansion	\$ 150

EXPAND AND CONNECT BY BUSINESS SEGMENT



Port Authority Bus Terminal Replacement Program

Overview: The existing Port Authority Bus Terminal (PABT), which opened in 1950 and was expanded in 1981, currently operates beyond its reasonable passenger carrying capacity. It therefore offers a negative experience for both daily commuters and first-time visitors. At present, PABT accommodates approximately 220,000 passenger trips and more than 7,000 bus movements per average weekday. But demand is expected to increase to as many as 270,000 daily peak-hour passengers by 2020, and as many as 337,000 daily peak-hour passengers by 2040. The existing facility is also incompatible with current bus configurations; it lacks adequate bus staging and storage, and cannot adequately accommodate customers with disabilities.

TOTAL PROJECT COST	\$7.5-10.0 BILLION
2017-2026 COST	\$3.5 BILLION
CURRENT STAGE	PLANNING

Purpose: The overall program will replace the existing PABT, which has neared the end of its useful life, with a state-of-the-art bus terminal in a location to be selected following robust community outreach and stakeholder engagement. Importantly, the new facility will be constructed so as to be scalable, and therefore prepared to meet the 35 to 51 percent growth in passenger traffic forecasted by 2040 while meeting all contemporary standards and code requirements.

Scope: The PABT Replacement Program includes funding for planning, environmental review, public outreach and participation, design and permitting, and construction. The planning, environmental review, and public outreach phases will inform the requirements, design, and construction of the new bus terminal on the West Side of Manhattan. As a result, the estimated total project cost (TPC) is expressed as a range. The agency's goal is to complete the program at the lower end of the range. The TPC will be refined as the planning, environmental review, and public outreach phases are completed. This program also allows for construction of a bus staging/storage facility to assist in creating direct connectivity to and from the Lincoln Tunnel for buses via the XBL, and a dedicated ramp system. The Port Authority will seek federal grant funding to assist in the funding of this critical mass-transportation asset.

Implementation Plan: The phasing and implementation plan for construction of the new PABT depends on the results of the planning and environmental review phases, as well as a campaign of extensive public outreach and participation from the region's stakeholders. Also, the agency will seek to secure federal grant funding. Construction will be staged to minimize disruption to existing terminal operations with the development of a master schedule that facilitates coordination with regional transportation partners and other construction programs, such as those at the Lincoln and Holland tunnels, and the George Washington Bridge.



PATH Rail Extension to Newark Liberty Rail Link Station

Overview: PATH's Newark to World Trade Center Line currently terminates at Newark-Penn Station. Extending the PATH system from its current terminus to the Northeast Corridor Rail Link Station at Newark Liberty International Airport would improve transit access for airport customers and commuters coming from many of the communities currently served by PATH including Lower Manhattan, Bergen, Hudson, and Essex Counties in New Jersey.

TOTAL PROJECT COST	\$1.7 BILLION (\$1 BILLION PA SHARE)
2017-2026 COST	\$1.7 BILLION
CURRENT STAGE	PLANNING

Purpose: To facilitate transit access to Newark Liberty International Airport (EWR) and Newark's South Ward, by extending the PATH Newark to World Trade Center line to NJ TRANSIT, Amtrak, and the Newark AirTrain at the Northeast Corridor Rail Link Station at EWR. The extension provides substantial benefits in reduced travel times, increased travel time predictability and lower costs for air travelers making use of EWR from lower Manhattan as well as commuter access from New Jersey cities to lower Manhattan.

Scope: The program will extend PATH rail infrastructure from its existing terminus at Newark-Penn Station to the Northeast Corridor Rail Link Station at Newark Liberty Airport. Included in this program is a new passenger station infrastructure at the Northeast Corridor Rail Link Station, construction of a new rail yard facility, and modification of existing platforms at Newark-Penn Station to accommodate passenger flow. While its construction is not included in the scope of this project, the new PATH station at the Northeast Corridor Rail Link Station will be designed to allow for the construction of a parking garage and multi-modal facility through a potential public-private partnership, thereby providing the potential for improved trans-Hudson transit access for commuters.

Implementation Plan: As the planning, environmental review, design, and public outreach and participation processes continue, the program will seek to secure federal grant funding and value capture opportunities. Construction is expected to start in 2020 and be completed with full revenue service operations available in 2026.



Newark Liberty International Airport – Terminal A Redevelopment Program

Overview: The existing Terminal A at Newark Liberty International Airport opened in 1973; it is the oldest terminal at the airport. It is nearing the end of its useful life. It does not support modern airline operational requirements and strains to serve more passengers than provided under its original design capacity. This program will create a new terminal building equipped to serve the forecasted increase in passengers while providing an open, modern terminal that customers find easy to access. Importantly, the new terminal will, by design, adapt to increasing demands, including evolving requirements for air travel. The accompanying improved airfield layout will increase flow and allow for larger aircraft with dual taxi-lanes serving all gates.

TOTAL PROJECT COST	\$2.4 BILLION
2017-2026 COST	\$2.3 BILLION
CURRENT STAGE	PLANNING/DESIGN

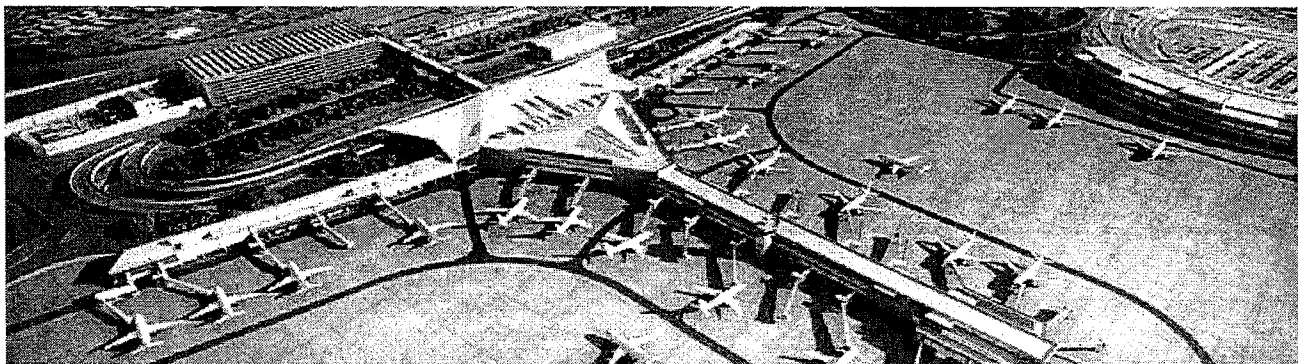
Purpose: This program will replace the outmoded Terminal A building with a modern facility that meets increasing passenger levels, accommodates larger aircrafts, and upgrades all supporting infrastructure while providing a configuration whose layout can adapt and expand to allow for unforeseen changes in demand.

Scope: The Terminal A Redevelopment Program includes four key elements:

- A new, 1-million-square-foot common use terminal with 33 gates that can accommodate 13.6 million annual passengers and future growth (the terminal could be expandable to 45 gates).
- Airfield paving on 140 acres contiguous to the new terminal, plus demolition of the existing Terminal A concourse.
- A new road system that connects the new terminal building to the existing Central Terminal Area, including eight new bridges and frontage roads.
- An "open," tiered, and naturally ventilated garage and surface lot featuring approximately 3,000 parking spaces.

Implementation Plan: This program is currently in the planning and design stage. A Request for Qualifications was issued at the end of 2016. A Request for Proposals will be likely issued for qualified proposals by the second quarter of 2017, with the preferred designer/builder to be selected by the end of 2017. Current estimates state that the new terminal will be partially opened for operations by the end of 2020, with the full terminal opening by the end of 2022.

For more project information, please visit: <https://www.panynj.gov/airports/ewr-redevelopment/index.html>



PATH Railcar Fleet Expansion

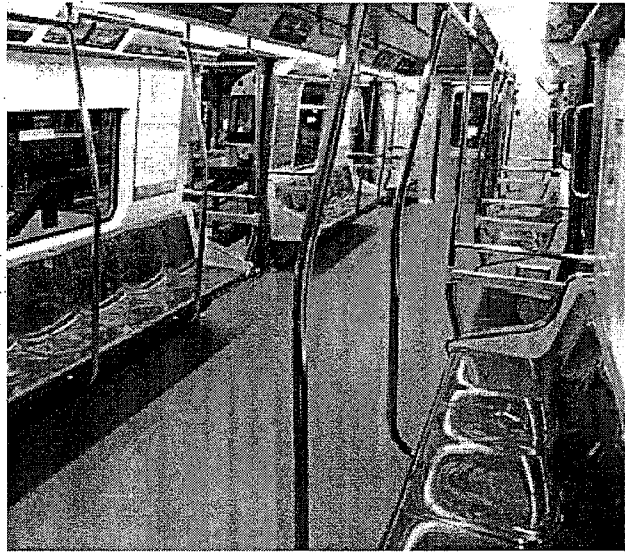
Overview: Completion of the new PATH Communications Based Train Control (CBTC) and Positive Train Control (PTC) Signal System (see page 56) will allow for the operation of trains with reduced headways during the peak period, thus increasing the system's capacity. To make use of the capacity and service benefits of the CBTC/PTC signal system, approximately 50 new PA-5 railcars are required to complement the existing 350 PA-5 railcar fleet in service.

TOTAL PROJECT COST	\$150 MILLION
2017-2026 COST	\$150 MILLION
CURRENT STAGE	PLANNING

Purpose: This project will purchase approximately 50 new PA-5 railcars to increase train frequency and system-wide capacity. The increased frequency of trains during the peak period is estimated to increase peak hour capacity system wide by approximately 18 percent, or 7,500 passengers per hour. The expanded capacity provides the ability to relieve near-term forecasted increased trans-Hudson travel demand.

Scope: Purchase approximately 50 new PA-5 railcars to take full advantage of the new PATH CBTC and PTC Signal System that allows for the operation of trains with reduced headways during the peak period

Implementation Plan: Railcar delivery is anticipated to commence in 2018, coincident with the completion of the new PATH PTC Signal System, and all new railcars will be in service by 2021.



LaGuardia Airport – New Terminal C

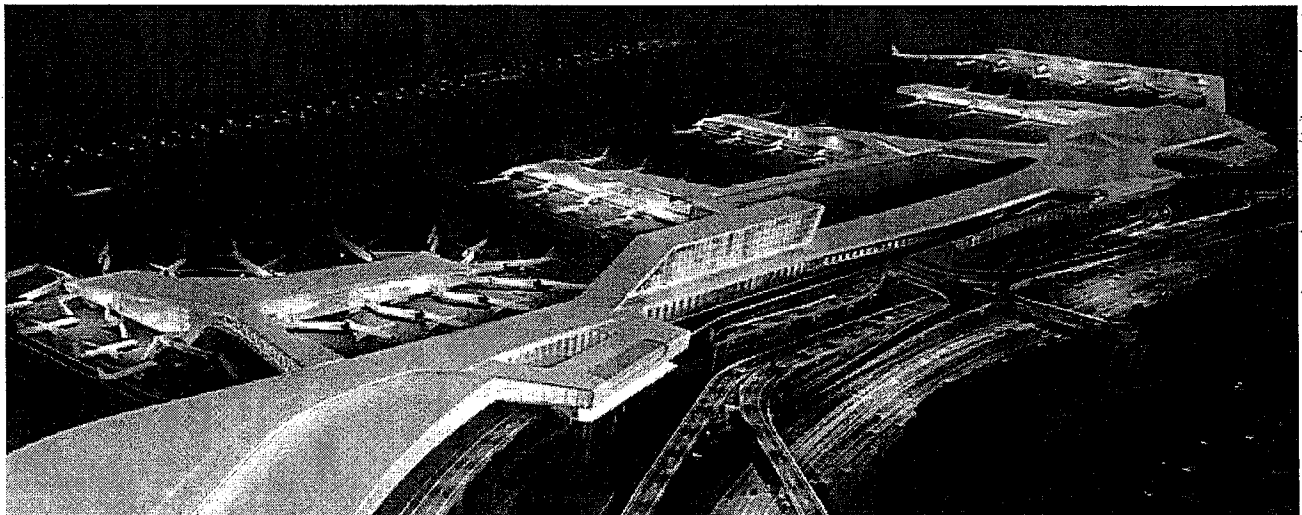
Overview: As part of the overall redesign of LaGuardia Airport (LGA), Terminals C and D will be redeveloped by Delta Air Lines and its development partner, Empire State Terminal Group, (ESTG), in order to provide a single, structurally unified airport terminal with improved transportation access, increased airside space, and a world-class passenger experience.

TOTAL PROJECT COST	\$4.5 BILLION (\$600 MILLION PA SHARE)
2017-2026 COST	\$600 MILLION
CURRENT STAGE	PLANNING

Purpose: LGA's current terminal layout is composed of multiple, fragmented terminals. This program will replace it with one main, architecturally unified terminal building that connects a new Terminal C with the new Terminal B (see page 53). Redevelopment of Terminals C and D will help provide an improved passenger experience by accommodating projected passenger increases and reducing delays.

Scope: The Port Authority's fixed contribution to the program is capped at \$600 million; which includes an amount for Port Authority costs incurred to support the project. The Port Authority's contribution supports work on the new terminal's related infrastructure, including roadways and utilities, the expansion of the East Garage, and concourse and ramp work, in addition to work on the terminals themselves. ESTG will perform and manage construction of the new 37-gate Terminal C and related infrastructure. As previously stated, the new Terminal will connect with the new Central Hall and Terminal B at LaGuardia.

Implementation Plan: Construction is expected to begin in 2017, with program completion anticipated for 2026. The program requires significant staging coordination with the Terminal B redevelopment projects. Timing for the full delivery of this program will require coordination with the schedule for the redevelopment of Terminal B as well as the development of a comprehensive traffic management program.



John F. Kennedy Airport Redevelopment and LaGuardia Airport AirTrain

JFK Overview: John F. Kennedy Airport (JFK) is the region's largest airport and the nation's busiest in terms of international passengers, receiving over 430,000 flights and accommodating 60 million passengers in 2016. JFK is expected to reach capacity by mid-2020 without expansion to its terminals and supporting infrastructure to accommodate passenger growth. The airport, which generates \$15 billion in wages and supports nearly 285,000 jobs throughout the region, is routinely given poor marks by passengers due to an inconsistent, sub-par passenger experience and increasingly cramped facilities.

TOTAL PROJECT COST	TBD
2017-2026 COST	\$2.5 BILLION (\$2.0 BILLION PA SHARE)
CURRENT STAGE	PLANNING

Purpose: For JFK, the program will allocate funding towards the high priority projects that provide airport-wide infrastructure enhancements to support the modernization and transformation at JFK International Airport. Port Authority funds will be used towards supporting infrastructure such as on-airport roadway improvements, utilities, and other landside and airside infrastructure necessary to support and catalyze terminal redevelopment at the airport, which is envisioned to be privately financed by airlines or private terminal operators, under public-private models such as those that are currently employed for the modernization of LaGuardia Airport.

Scope: The JFK program consists of infrastructure improvements to enable private-investment terminal expansion, including airside enhancements to improve efficiency and reduce delays, airport roadway improvements to address existing bottlenecks and chokepoints, and to accommodate additional vehicular traffic, utility and landside modifications, and JFK AirTrain enhancements. The JFK redevelopment program is in planning and design, with construction expected to start in 2019 or earlier. The program requires staging coordination with other projects underway at the airport as well as close coordination with the airlines and existing terminal lessees.

LGA AirTrain Overview: LaGuardia Airport (LGA) is the only major airport in New York City/Northern New Jersey, without direct rail transit access. Under current traffic conditions, travel time to LGA by road is unpredictable. From Manhattan, travel time can vary from 35 minutes without traffic to an hour or more with traffic. Such variability and uncertainty makes it difficult for travelers to plan, while also carrying a potential risk of missed flights. Roadway congestion is greatly intensified due to the nearly 90 percent of LGA's passengers accessing the airport by car. The Grand Central Parkway, which provides primary road access to and from the airport, already operates at service level F for major parts of the day – which contributes to the unpredictable airport travel times and constraining further long-term passenger growth. Providing train access would relieve stress on LaGuardia's already over-crowded roadways and terminal frontages. With the number of passengers at LaGuardia expected to grow by 25 percent and the region's population continuing to grow, congestion to and from the airport will only get worse, increasing travel times for passengers and employees.

Purpose: The LaGuardia AirTrain Program is expected to reduce auto congestion and travel time delays and improve the predictability of travel time for air travelers, airport employees, and others having airport-related business. With passenger demand at LGA expected to reach 34 million passengers annually in 2030, reliable and efficient rail service to and from the airport is critical to manage on-site parking, improve drop off and pick up activities at the terminal frontages, and reduce congestion on and off the airport, including its nearby neighborhood streets. Port Authority funds will be used to support an AirTrain connection between the airport and a new intermodal station at Willets Point connecting to existing Long Island Railroad (LIRR) and NYC Transit (NYCT) subway service, together

John. F Kennedy Airport Redevelopment and LaGuardia Airport AirTrain

(continued)

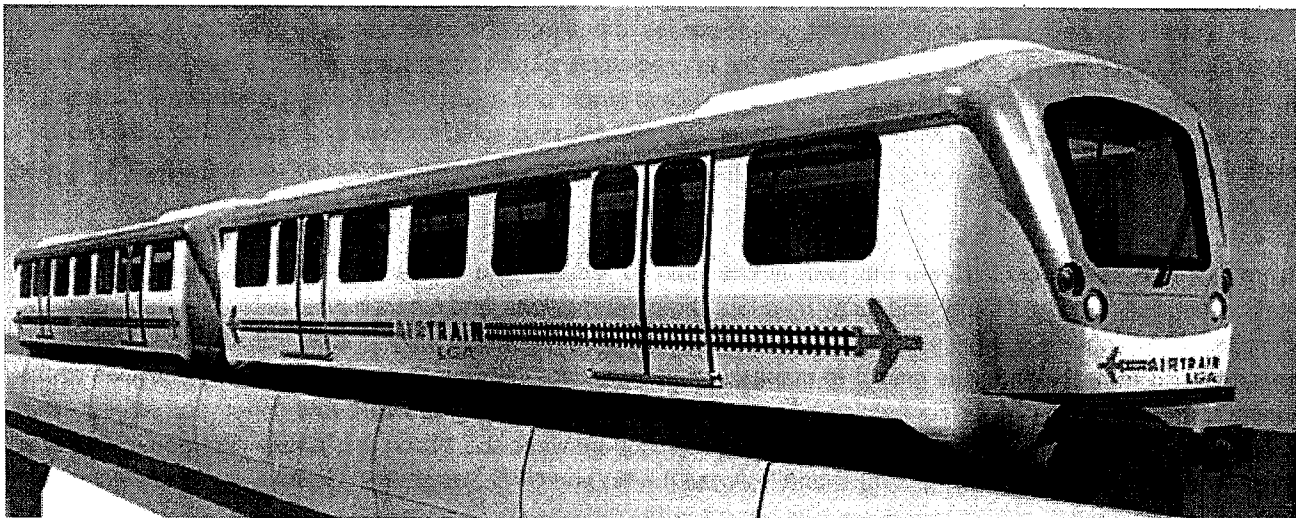
with potential ancillary airport functions and other connections such as a Consolidated Rent-a-Car facility (CONRAC) and employee parking.

Scope: LaGuardia AirTrain will serve air travelers, airport employees, and others having airport-related business. The program will include convenient pedestrian connections to both the LIRR and NYCT stations, and to the airport facilities located at Willets Point. The program is inclusive of the associated facilities and infrastructure (stations, guideway, maintenance/control facility, etc.) as well as the systems (vehicles, train control, power distribution system, etc.) for the AirTrain. These improvements will significantly improve the passengers' experience, address the constrained operations and severe traffic congestion that currently exists, and support economic opportunities in the region. The CONRAC and ancillary airport facilities described above are not included in the existing scope, but are being included in the planning process as not-to-preclude elements requiring further study.

Implementation Plan for LGA AirTrain and JFK Redevelopment: After undergoing a formal planning and design process, the agency will seek to secure federal grant funding and/or identification of an equity partner for a portion of the amounts beyond the \$1 billion for AirTrain LaGuardia. AirTrain LaGuardia construction is expected to start in 2019. Testing and commissioning is expected to start in 2021 with passenger service anticipated by 2023. The phasing and implementation plan for the construction of the new LGA AirTrain is dependent on the results of the planning and environmental review phases, as well as extensive public outreach and participation.

Similarly, the JFK redevelopment program is currently in planning and design, and construction is slated to start in 2019 or earlier. The program requires staging coordination with other projects underway at the airport as well as close coordination with JFK's operating airlines.

The programs are linked as part of an overall program to redevelop both LGA and JFK. Subject to prior Board approval, capital funds not needed to execute a component of this program at one airport can be redirected to high priority needs at the other airport.



NJ Senate Legislative Oversight Committee Testimony

January 17, 2017

Diannae C. Ehler

General Manager, Lincoln Tunnel and Port Authority Bus Terminal

Good morning and thank you Chairman Gordon and members of the Committee. My name is Diannae Ehler, and I am the General Manager of the Port Authority Bus Terminal (PABT) and Lincoln Tunnel; I have been with the Port Authority for 33 years and have worked within the Tunnels Bridges and Terminals, Aviation, Port Commerce and Engineering Departments. I am responsible for the operations and maintenance and together with the Port Authority Police the security of the Lincoln Tunnel and PABT in midtown Manhattan. In this role, I advocate for the resources to maintain our assets and systems, ensure the best level of customer service possible, and establish programs that recognize that our facilities operate within local communities in NY and NJ. I would like to especially thank Senator Gordon, Senator Weinberg and the members of the NJ State Legislative Oversight Committee for your support of the PABT.

Role in Interstate Mass Transit and the Transportation Network

More than a bus terminal, the PABT is one of New York City's preeminent intermodal facilities by virtue of its location, directly connected to the Lincoln Tunnel, 11 subway lines, 5 City transit bus lines, and unparalleled pedestrian access to Manhattan. The Lincoln Tunnel, in tandem with the PABT, brings 92,000 bus commuters across the Hudson River during the morning peak period, which is more than any other trans-Hudson transit connection, including commuter rail to New York's Penn Station. During the 6-10 a.m. weekday peak, 82% of all passenger trips through the Lincoln Tunnel are made by bus.

The interstate commuter bus system is an essential trans-Hudson transit link for commuters to Midtown, supporting a flexible and growing network of services. These services rely on interconnected infrastructure comprised of the contra-flow Exclusive Bus Lane on NJ Route 495, dedicated bus lanes in the Lincoln Tunnel, direct ramps and street-level connections between the Lincoln Tunnel and the Port Authority Bus Terminal, and configurable NY roadways for handling Lincoln Tunnel traffic. The PABT and Lincoln Tunnel function as part of a network. The performance of these facilities depends greatly on the performance of the NJ highway network to move traffic to and from the Lincoln Tunnel.

It is important to note, that the Interstate bus system and its terminals have proven to be a critical resource during severe weather and other emergency events. Buses offer a very flexible and resilient

resource when the other elements of the transportation network are unavailable. During the terrorist attacks of September 11, 2001, the 2003 blackout, and Super-storm Sandy, the PABT played an important role in moving people when other modes, particularly trains, were unavailable, and offers redundancy in the transportation network.

Today's Operating and Terminal Management Challenges

Not unlike much of the interstate network, the PABT suffers from the pressures of accommodating growing travel demand with aging infrastructure and systems, increasing functional and physical obsolescence of assets and facilities, and fundamental capacity shortfalls. As you know, the Bus Terminal, built in 1950 is now 66 years old. Daily operations are a delicate balance of fragile elements, and reliability is difficult to sustain.

Inadequate Capacity for Today's Peak Demands - Despite its critical role in interstate mass transit, the PABT operates beyond its capacity limits in the peak hours both for bus movements to and within the Terminal, as well as passenger handling capacity at the bus gates. The lack of adequate capacity presents an ongoing challenge to address traffic congestion, delays, crowding, and service reliability failures. Significant new investment is needed to adequately serve today's customers and prepare for growing interstate bus travel demand. The current state of operations presents challenges to us including:

- **Functional and Physical Obsolescence** - Bus operators are seeking to employ new motor coach designs that provide efficiency and customer amenities, but result in larger and heavier vehicles that are currently constrained from accessing portions of the Terminal and its ramp structures, due to the height, length and weight of these new bus designs.
- **Aging Building Systems** - The 66-year-old PABT requires investment in basic building systems: escalators and elevators that are functional and safe, HVAC systems that are reliable and efficient, building management systems that ensure safety and security, signing that provides customer information and effective pedestrian flows, etc. Unfortunately, investments in many of these basic building needs that are fundamental to customer satisfaction are presently underfunded due to the agency's financial constraints. Ongoing and increased resource commitments to operating and capital maintenance are essential to sustain the current operations while a replacement terminal is planned, designed and constructed.
- **Bus Parking and Staging** - The scarcity of bus parking and staging capacity in West Midtown Manhattan requires that hundreds of buses must now park in NJ during weekday midday hours. This exacerbates eastbound evening traffic congestion at the Lincoln Tunnel by requiring hundreds of empty buses to move across the Hudson River at a time when the Lincoln Tunnel peak operation runs only two inbound tunnel lanes. PABT operations would benefit from a bus parking and staging facility. By eliminating unnecessary bus staging inside the Terminal by early arriving buses, PABT efficiency and capacity would be enhanced.

- *Amenities and Appearance* - The Port Authority Bus Terminal is perhaps the agency's most publicly recognized facility. Yet the Terminal's appearance, amenities and passenger environment have not kept pace with the rejuvenation of the surrounding Times Square neighborhood. The Board's \$90 million commitment in the Quality of Commute Program is addressing critical needs in building improvements, communications enhancements, and transportation and reliability advances.
- *Financial Deficits* - The PABT was originally intended by the Port Authority to be a financially self-sustaining operation, but currently runs at a net operating deficit of approximately \$100 million per year.

PABT - Quality of Commute (QoC) Improvement Program

We have heard loud and clear from customers, and stakeholders about today's growing concern over deteriorating terminal conditions, service reliability, and terminal services.

To improve the current conditions at the Terminal, as you know in September 2014 the Port Authority's Board of Commissioners committed \$90 million. The \$90 million is being used to begin immediate and short-term actions to address better communications, building improvements, and operating enhancements that will keep our passengers better informed, enhance the passenger environment and improve traffic congestion, facility access, and reliability. Some of the QoC initiatives have already paid dividends for our passengers.

An Update on QoC Enhancements –

Communication: The Port Authority hosts quarterly "Commuter Chat" forums where customers have the opportunity to meet and discuss their issues and concerns with representatives from the Port Authority, NJ Transit as well as several other PABT carriers. In response to customer requests for more specific messaging the Port Authority has worked to improve the quality of e-Alerts and public address messages. Customer information kiosks were installed through the terminal to provide a convenient means for customers to get information about the terminals amenities, services and gate departure information. The agency has improved the cellular signal strength throughout the terminal and now provides Wi-Fi access on the main and second floors of the terminal. It is anticipated that Wi-Fi on the lower level, 3rd and 4th floors will be completed by the end of the year.

Building Improvements - The majority of the \$90 million QoC Improvement Program has been allocated to improving the physical conditions of the terminal. To date, all the pull-through platforms located on the 3rd and 4th were equipped with supplemental A/C units and all sixteen public restrooms have been renovated and work was completed 9-months ahead of schedule. The rehabilitation of the pavement wearing course on the 3rd floor have dramatically reduced the ceiling leaks on the 2nd floor of the south wing. Ceiling and lighting improvements on the lower level of the south wing of the terminal are underway and will be completed by this summer. This year the 8th

Avenue doors in the north wing and the subway doors in the north and south wings will be replaced which will result in easier access to/from the terminal as well as a reduced number of doors out of service. In addition, work will commence this year to replace the visual paging and master clock system, to rehabilitate several escalators and elevators, and to improve the vertical circulation on the subway level of the south wing to both the main and lower levels.

Operating Enhancements - The \$90 million QoC Improvement Program included several initiatives to improve the movement of buses during the AM and PM Peaks. We completed the construction of a by-pass ramp to enhance operational flexibility of the ramps serving the 3rd and 4th floors of the PABT, and also completed two bus parking and staging parking lots has helped provide much needed bus staging and storage enabling the terminal to operate more efficiently during the PM Peak. At the Lincoln Tunnel, the replacement of the Exclusive Bus Lane (XBL) signal system is underway which ensures the reliability of the lane indicators enabling the XBL to open and serve more than 1850 buses each weekday. Also underway is the installation of a bus tracking system that extends from the NJ Turnpike to the entrances/exits of the PABT. This new bus tracking system will provide the data needed to aid in the development of new network operational enhancements.

PM Peak – Operational Improvements

The majority of the PABT and LT management's focus has been on reducing traffic congestion, and improving facility access and the reliability of the operation. Since June 2014, PA staff have been tirelessly working with NJ Transit and the other bus carriers to identify and implement operational changes to the Terminal's evening peak operation.

PM Peak Operational Changes – September 2014 - The team focused on reducing bus traffic congestion in the LT, on the neighborhood streets, on the bus ramps and in the PABT. These changes involved a close partnership with the carriers, particularly with NJ Transit. There were many moving parts to these operational changes and I'm pleased to tell you that we received great cooperation and a lot of "out of the box" thinking.

Our shared goal has been to improve the operation of the Bus Terminal. Our customer's experience, in terms of better reliability, customer queuing/congestion has been substantially reduced for most gates. Bus riders saw shorter lines and more on-time departures. One strong indication of these improvements can be found in the On Time Performance (OTP) of NJT. Prior to the above changes, NJT's OTP averaged 85.1% for 2014. In 2016, the OTP averaged 89.4%, including 5 months where the OTP was above 90%! OTP improvements fail to capture the true magnitude of the improvements since a bus must be less than 6 minutes late to be considered "on-time". If a bus was routinely 15 minutes last and is not 6 minutes late, the improvement is not captured.

AM Peak – Operational Improvements

AM Peak - Operating Enhancements –The AM peak period also presents challenges to providing safe reliable service for commuters. **This work included not only bus operators, but also the NJ Turnpike Authority who has assisted us with work on traffic flow and management.**

PABT – Proposed 10 Year Capital Plan Improvements

The draft 2017 – 2026 Capital Plan includes \$370 million for projects associated with the PABT. \$28 million of the \$370 million in the draft plan is allocated to work already in construction. Significant (non-QoC) projects in construction include project to upgrade the electric service and to replace the south wing HVAC units. The draft plan includes \$ 60 million for QoC Improvement Program projects that will be completed in the next two years. The remaining \$282 million is allocated for projects that were identified as priorities as the result of a strict vetting process that took place in 2016. A sample of the more significant interim investment projects include projects associated with fire protection systems, concrete and masonry repairs, rehabilitation of standing platforms and stationary stairs, and work associated with leak repairs.

As you know, the Bus Terminal is a 7 day a week operation which requires attention, investment and management. My work and that of a very dedicated staff is focused on providing a safe, reliable commuting experience for customers today and tomorrow. I am happy to answer any questions you may have.

**NJ Senate Legislative Oversight Committee
January 17, 2017**

**Statement by Lou Venech, Manager of Regional
Transportation Policy Development
The Port Authority of NY & NJ**

**Trans-Hudson Commuting Capacity Study
Summary of Findings & Recommendations**

PANYNJ Board Resolution – Oct. 22, 2015

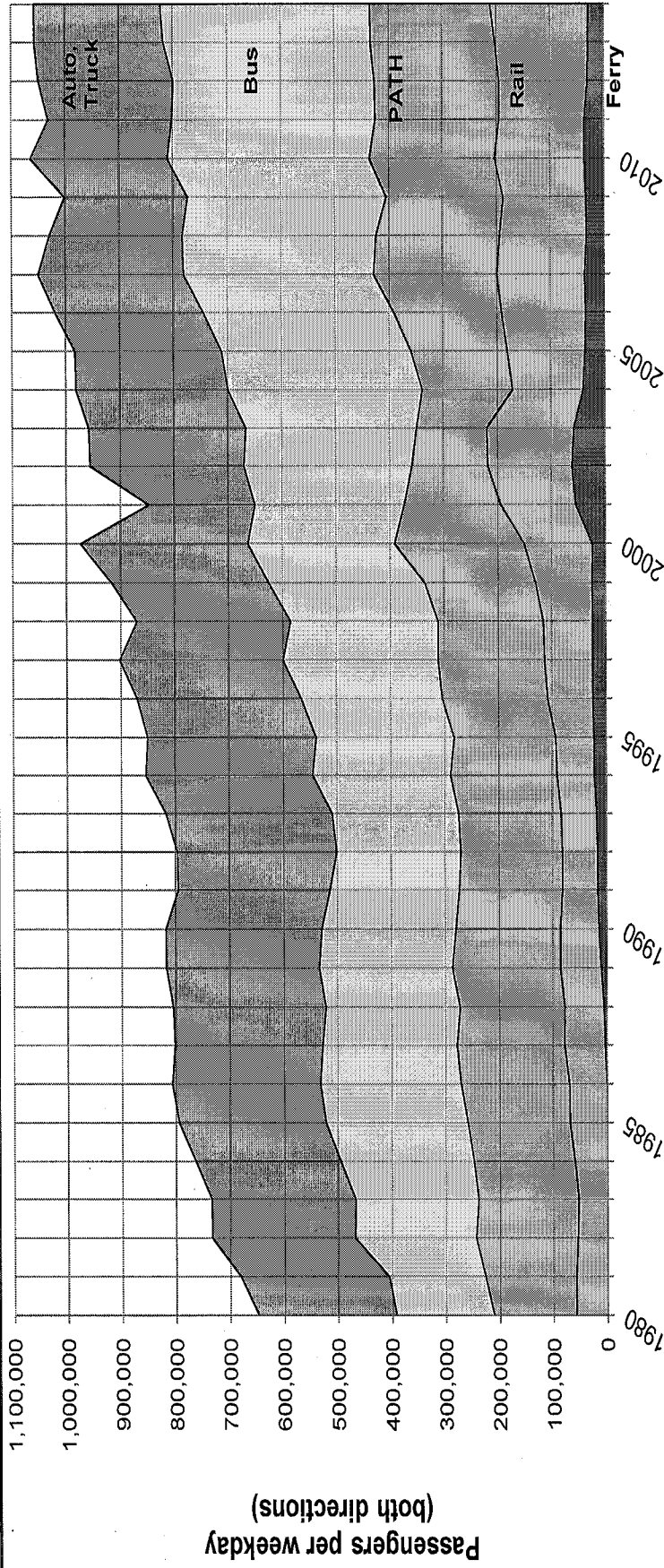
- Evaluate “Available Strategies to Meet and Manage Trans-Hudson Demand Over Next 30 Years...” Consider –
 - Rail, Ferry, and Other Modes
 - Improvements to Existing Infrastructure
 - Impact of New Technologies
 - Congestion Mitigation
 - Workplace Flexibility
 - Relative benefits of Trans-Hudson Alternatives

Study Approach

- Focus on West-of-Hudson Transit Network – All Modes
- Early Focus on Interstate Bus System:
 - Corridor Operations
 - Infrastructure Constraints
 - Technology Opportunities
- Potential Factors Affecting Benchmark PABT 2040 Forecast:
 - Bus Diversion Opportunities
 - Potential Diversion to Other Modes
 - Improved Transit Connections West-of-Hudson
 - Factors Affecting Commuter Behavior

The Regional Interstate Transportation Network

Trans-Hudson Trips Below 60th Street



Source: NYMTC Hub Bound Travel Report


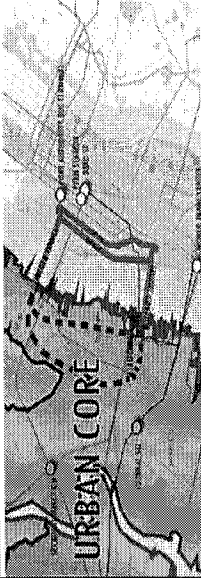
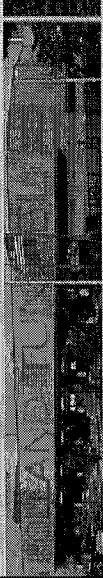
Transit Options Shape Commuter Choices



THE PORT AUTHORITY OF NY & NJ




Alternative Trans-Hudson Bus Services

- Evaluate Potential for New/Expanded Bus-Route Alternatives to PABT Service
- Develop Pilot Services With Bus Carriers to Test Commuter Market
- Collaborate With NYCDOT and MTA on Routes and Transfers

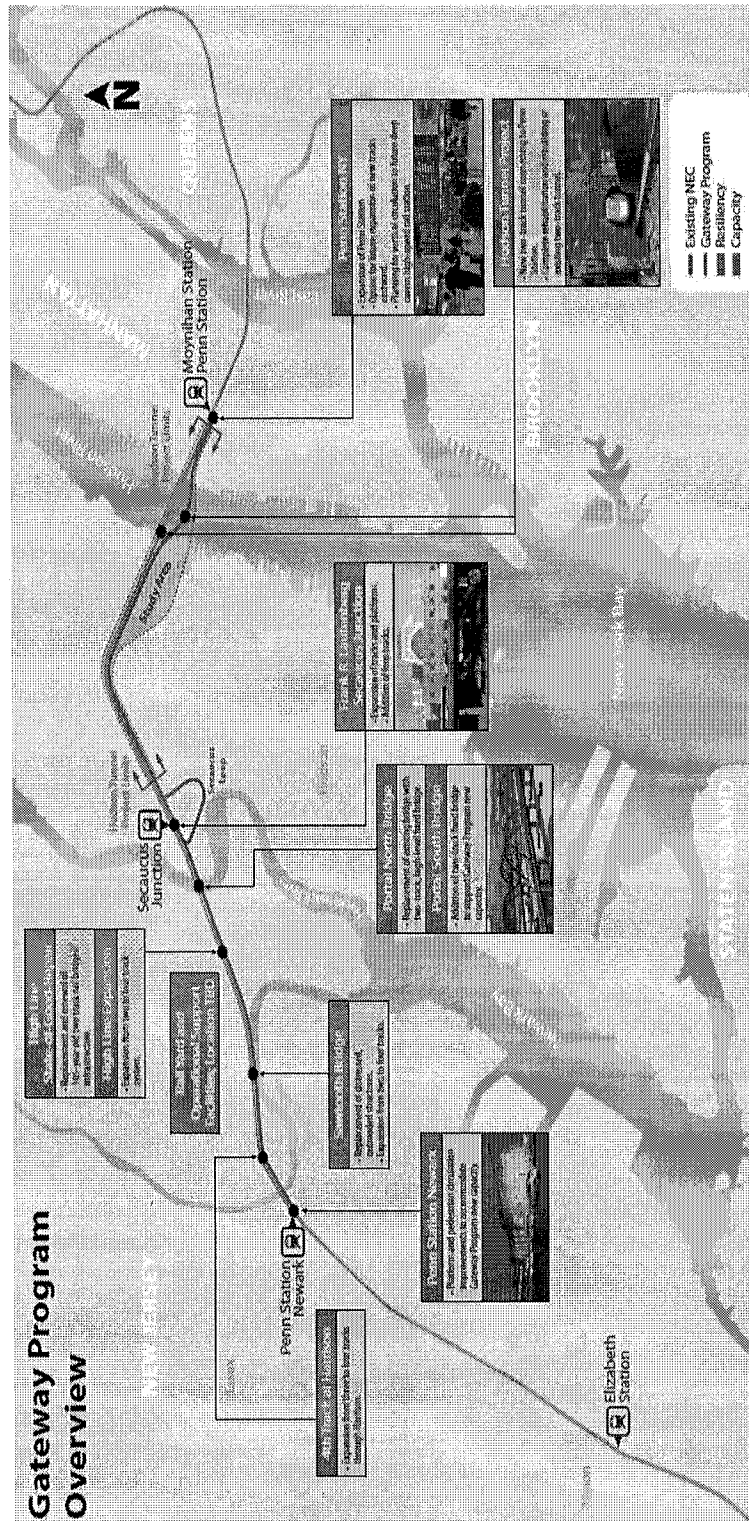
Expanded Bus Services to the GWBBS	
Holland Tunnel/ Lincoln Tunnel Bus Loop	
Increase Use of the Holland Tunnel for Direct Downtown Service	

Transit Capacity/Connectivity Enhancements

- Advance short- and mid-term initiatives to enhance peak-period service capacity on West-of-Hudson network
- Step Up Coordination With Transit Operators, Localities
- Promote Commuting Alternatives Where New or Expanded Service Becomes Available

HBLR Transit Extension	
Expanded Trans-Hudson Ferry Services	
Hoboken Terminal Rail Expansion	

Gateway Program of Projects



THE PORT AUTHORITY OF NY & NJ

Commuting Capacity Study Findings

- Robust Demand on Overall Trans-Hudson Network
- Infrastructure *and* Technology Investments Needed to Upgrade Interstate Bus Network
- Potential to Reduce PABT Demand 10-20 % -- Assuming Full Benefit of Gateway Expansion for NJT Rail and other Multi-Modal Improvements
- Factors Affecting Pressure on Interstate Bus Network:
 - Delays in Advancing Other Strategies
 - Changes in Commuting Patterns – Latent Demand
 - Flexibility of Bus Service to Absorb Market Changes

Summary Recommendations

- Pursue Phased Improvements to Interstate Bus Network With Partner Agencies and Carriers
 - Identify early options for bus staging and storage in NYC and NJ
 - Test and Deploy New Technologies for Bus Operations
 - Manage Network for Bus Priority Operations and Congestion Relief
- Ensure New PABT Can Serve 2040 Forecast If Needed
 - Seek “Scalable and Modular” Approaches
 - Provide flexibility to Handle Evolving mix of Bus Fleets, Sizes
- Support Demand Management Strategies
- Advance Rail Capacity Investments with Partner Agencies

Questions?

Report and Appendices Available for Download:

http://www.panynj.gov/about/pdf/Trans-Hudson_Commuting_Capacity_Study-Summary_Report_9-21-16.pdf

http://www.panynj.gov/about/pdf/Trans-Hudson_Commuting_Capacity_Study-All_Appendices_9-21-16.pdf

NJ Senate Legislative Oversight Committee
January 17, 2017

Statement of Clarelle DeGraffe, Deputy Director, PATH Rail
The Port Authority of NY & NJ

PATH Report to NJSLO Committee

Good morning and thank you Chairman Gordon and members of the Committee. My name is Clarelle DeGraffe and I am the Deputy Director of the PATH Rail System. In that role, I assist Director Mike Marino in daily management and operation of the PATH Rail System. I

Graduated the Stevens Inst of Tech with a Civil Engineer Degree and have 28 years with the Port Authority having had the opportunity to work on a variety of construction projects, including the rebuilding of the WTC.

- *Brief description of PATH*
 - + 108-yr old system
 - + 13.8 revenue miles
 - + 4 tunnels between NY & NJ
 - + Approx. 1,200 train moves per day
 - + Regulated by FRA
 - + Carried 78.6M in 2016, average approx. 270K per weekday
 - + 7th busiest but 2nd densest rail system in America
 - + Just over 1,300 PATH employees; of which, about 1,100 are represented staff
- *PA's Proposed 10-Year Capital Plan Includes spending approximately \$4.4B over the 2017-2026 time frame to deliver PATH capital projects such as:*
 - + The Sandy Program makes up \$1.2B of PATH's capital portfolio to restore the significant damages sustained by PATH after Superstorm Sandy and to make the system more resilient for speedier recovery in the event of future storms. Such Sandy projects include new substations that were damaged during the storm, major repairs to the tracks as well as the power, communication and signal systems of tunnels E&F which lead into the WTC, new vertical circulation at impacted stations, and replacement of various electrical and mechanical systems that had been damaged.
 - + Maintenance of aging infrastructure such as tracks, substations, signals and power equipment and cables inside and outside of the tunnels to ensure safe, reliable service for our riders

2

**NJ Senate Legislative Oversight Committee
January 17, 2017**

**Statement of Clarelle DeGraffe, Deputy Director, PATH Rail
The Port Authority of NY & NJ**

- + A new Signal System that will provide the federally mandated PTC System by December 2018. PATH just successfully completed 17 weekends of outages where both tunnels A&B that operate from Christopher Street to 33rd Street were taken out of service for the installation of infrastructure to implement PTC. PATH was able to complete more (19%) work than was planned during these outages, and work continues throughout our system. PATH continues to work closely with the FRA and is on track to meet this December 2018 schedule mandate with more than half the infrastructure and testing currently in place.
- + Coupled with the new Signal System of PTC/CBTC, which will enhance PATH's capacity the procurement of an additional 50 cars will facilitate this enhancement) to meet the continued growing ridership demand on PATH, especially at our Harrison, Jersey City and Hoboken Stations.
- + Completion of the Harrison Station upgrade
- + Completion of ADA Compliance at Grove Street Station in 2017.
- Through cooperation with our partner agencies, PATH continues to serve commuters as a vital part of the region's larger transportation network.
- PATH has also engaged in an open dialog with representatives of local municipalities and the county to discuss the growing strain on PATH as a result of the growing ridership from the numerous developments in their towns. These discussions are on the ground floor and are intended to focus on initiatives that will support the need for increasing capacity on PATH.
- We believe that only through collaboration with our local host communities can we plan intelligently, make necessary improvements and achieve success in providing a safe, reliable, comfortable commute for PATH riders.

Thank you for the opportunity to appear today and I am happy to answer your questions.

Newark Liberty International Airport Terminal A Redevelopment Program

New Jersey State Senate Legislative Oversight Committee



January 17, 2017

THE PORT AUTHORITY OF NY & NJ

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

Capacity Constrained

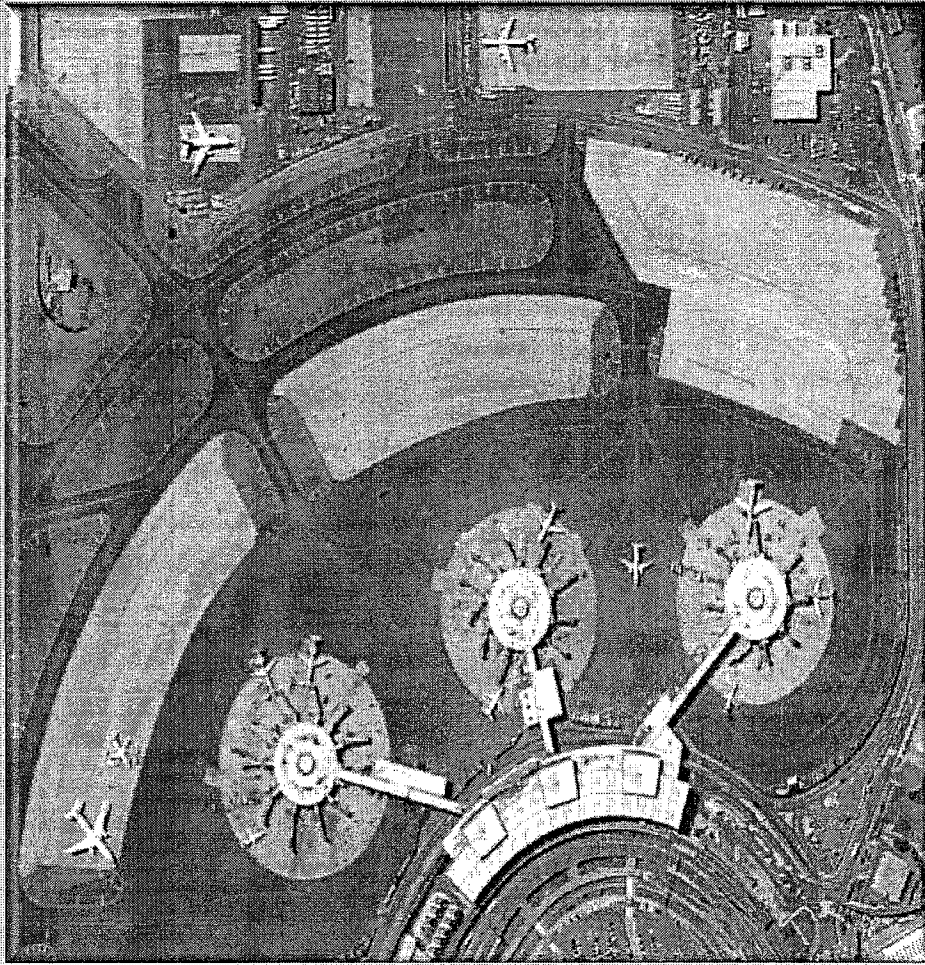
- Designed for ~9 MAP
- Over 10 MAP in 2015

Current Deficiencies

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

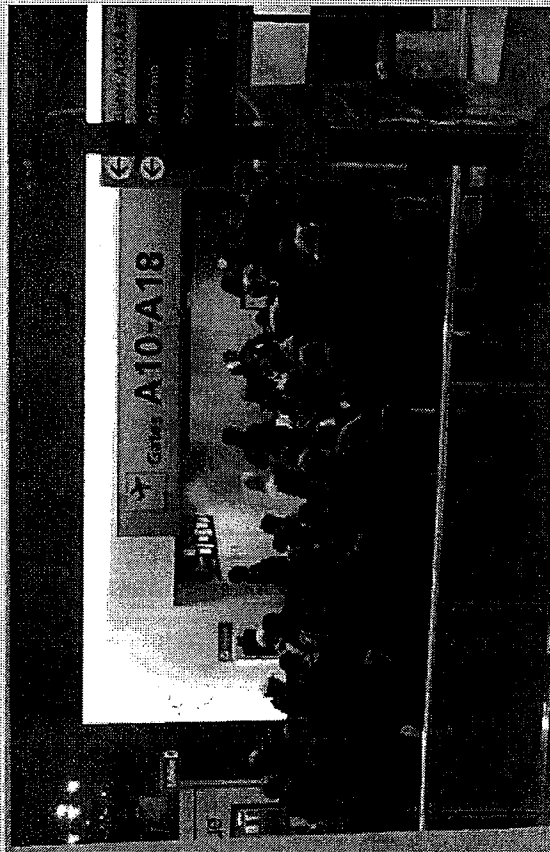
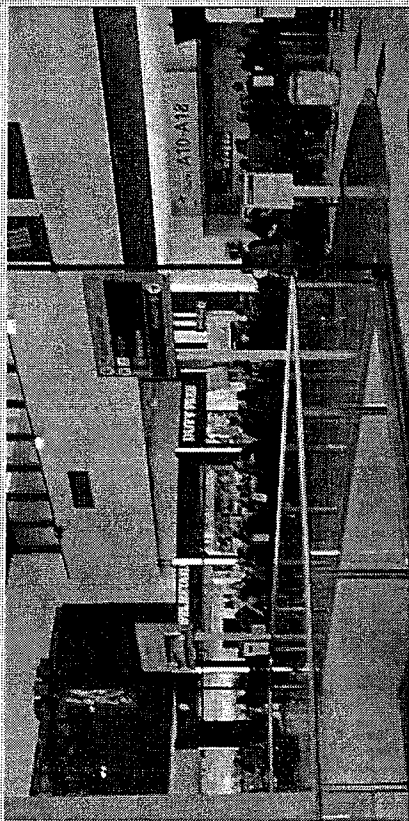
Future Constraints

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



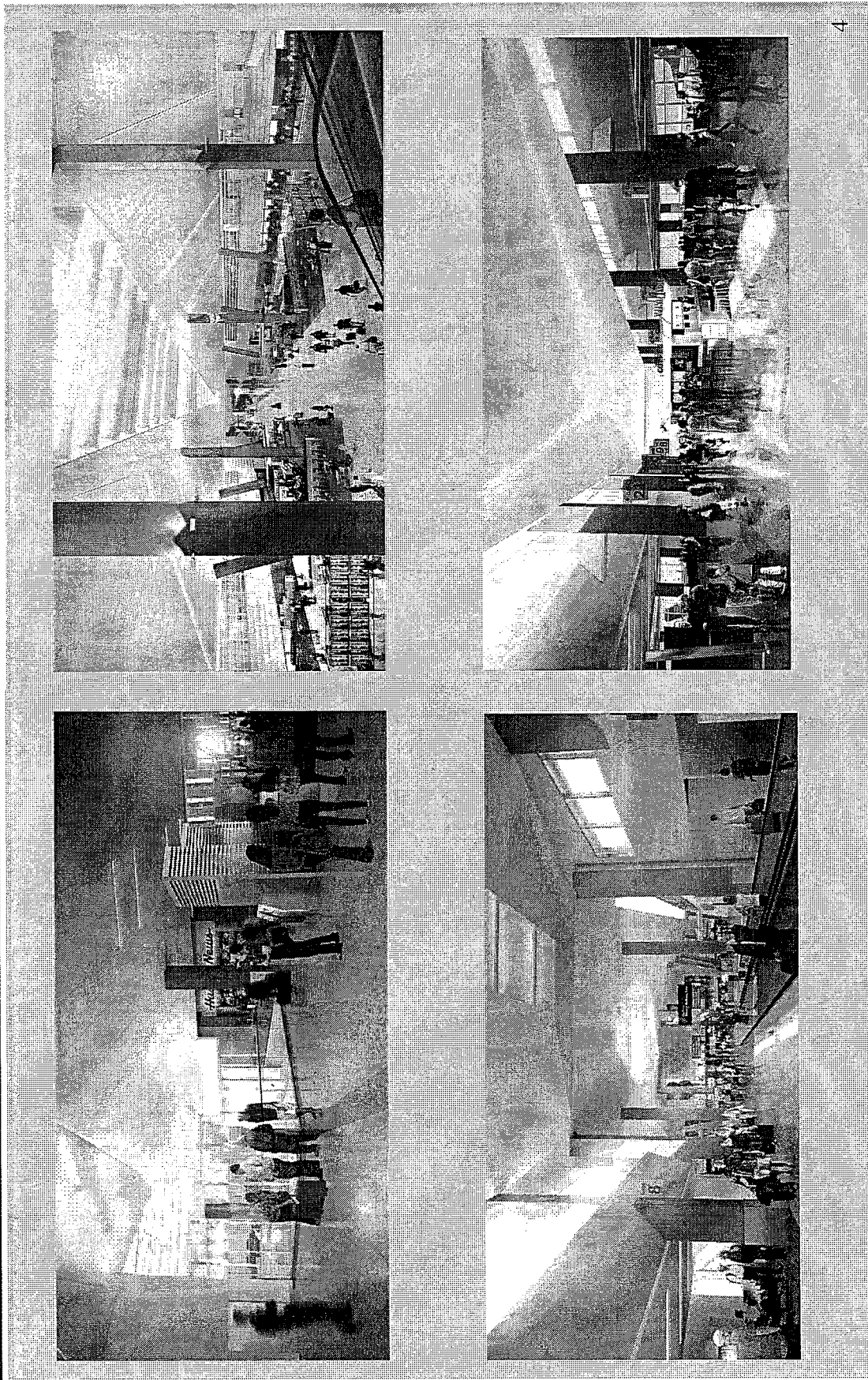
2

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



3

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



45x

Program includes four main elements

Airfield

- 140 Acres paving & demo of existing bldgs, concourses, satellites
- Traditional Design – Bid – Build
- Two contract packages

Landside/Roadway

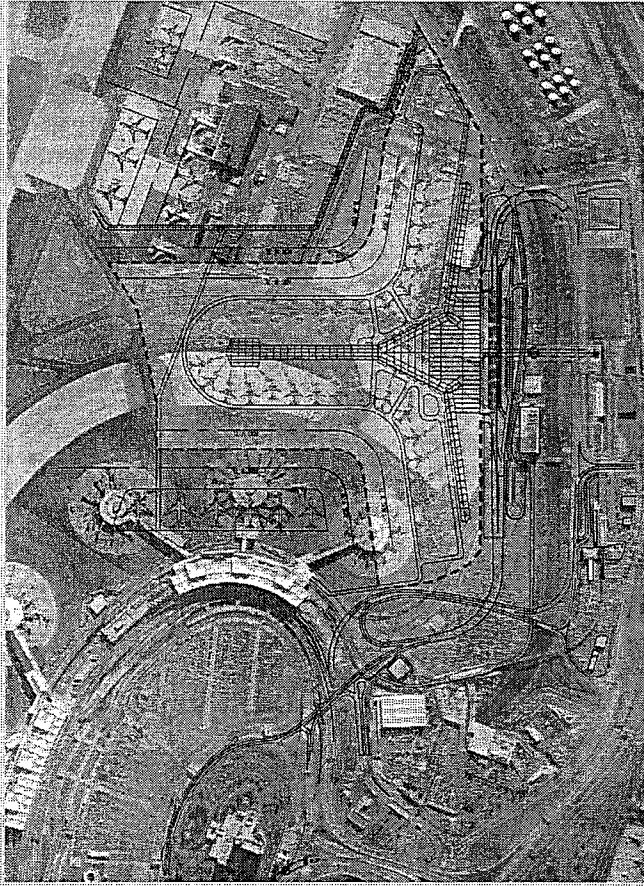
- 8 new bridge structures, roadway work, pedestrian walkway and peripheral ditch work
- Traditional Design – Bid – Build
- Four contract packages

Parking Garage

- ~3,000 spaces & toll plaza
- Design - Build

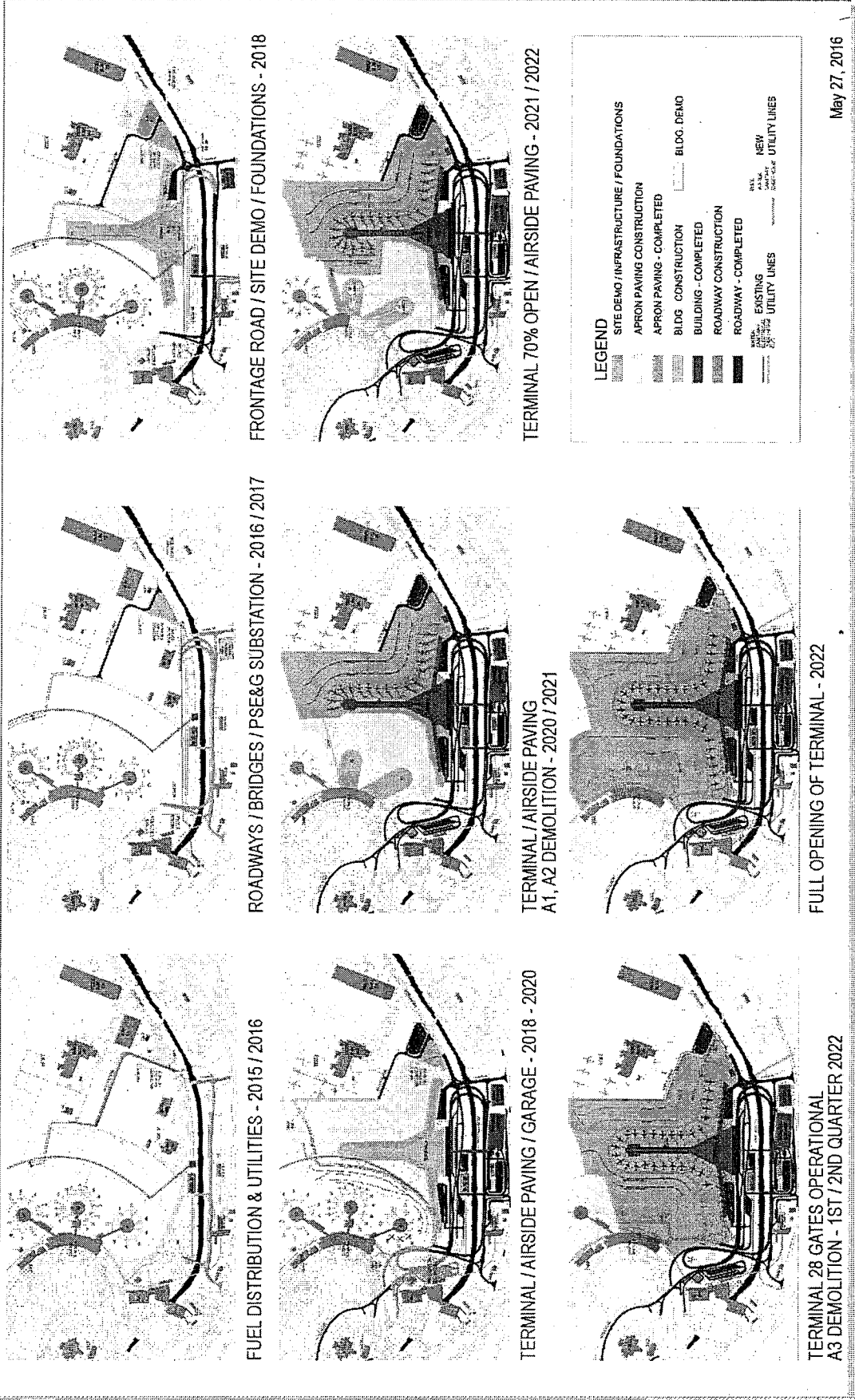
Terminal

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

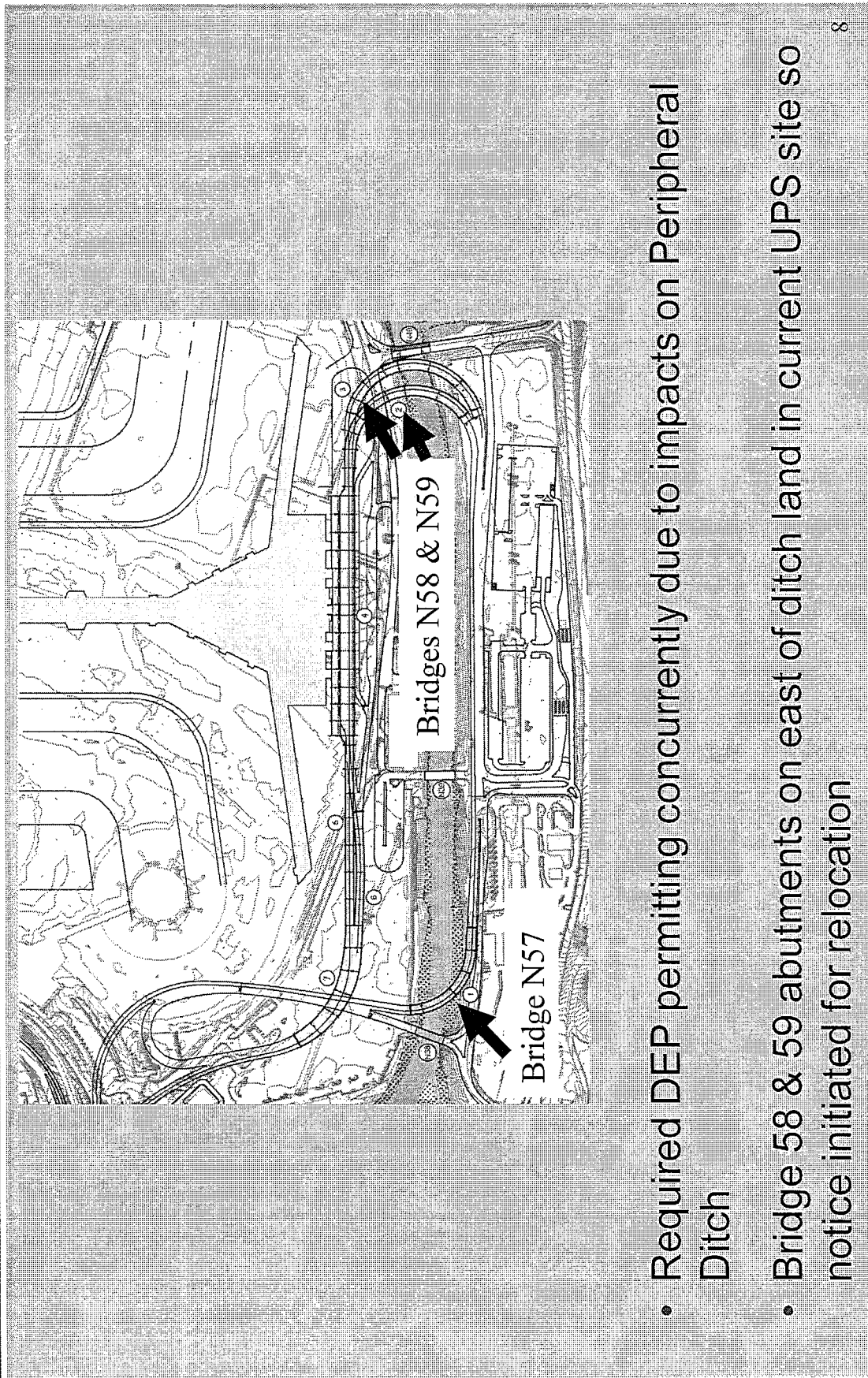


5

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



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



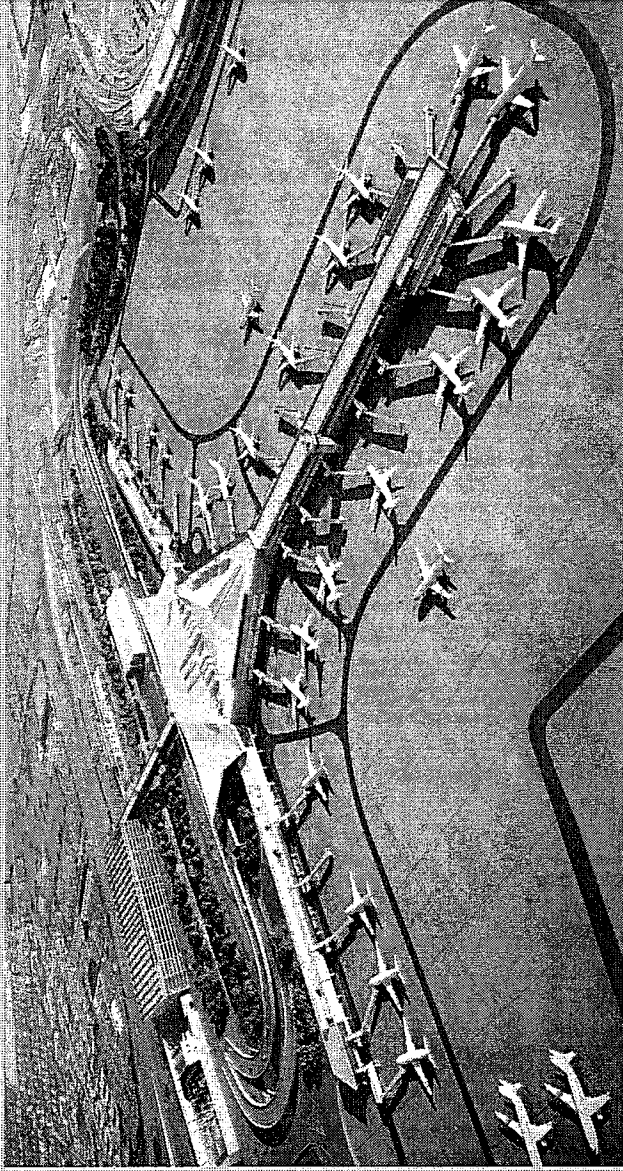
Additional activities also engaging industry to further Terminal A Redevelopment

Professional Service Contracts

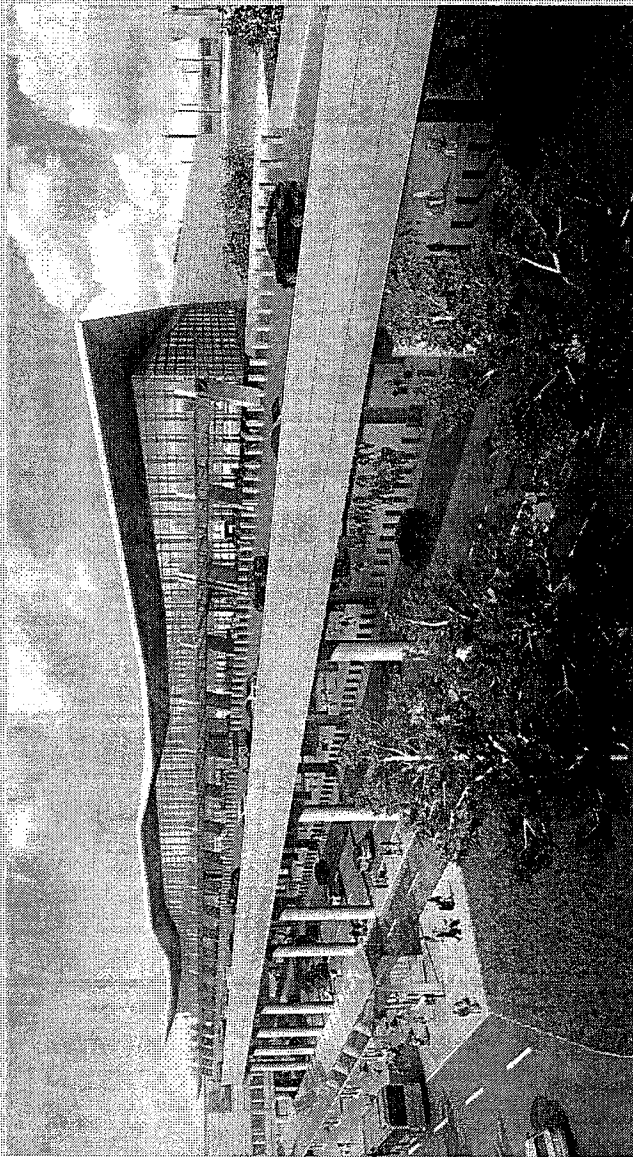
- PM services
- Design services
- CM services

Industry Outreach

- RFI and RFQ documents issued for Terminal
- Industry conference – October 2016
- MBE/WBE conference planned for spring 2017



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

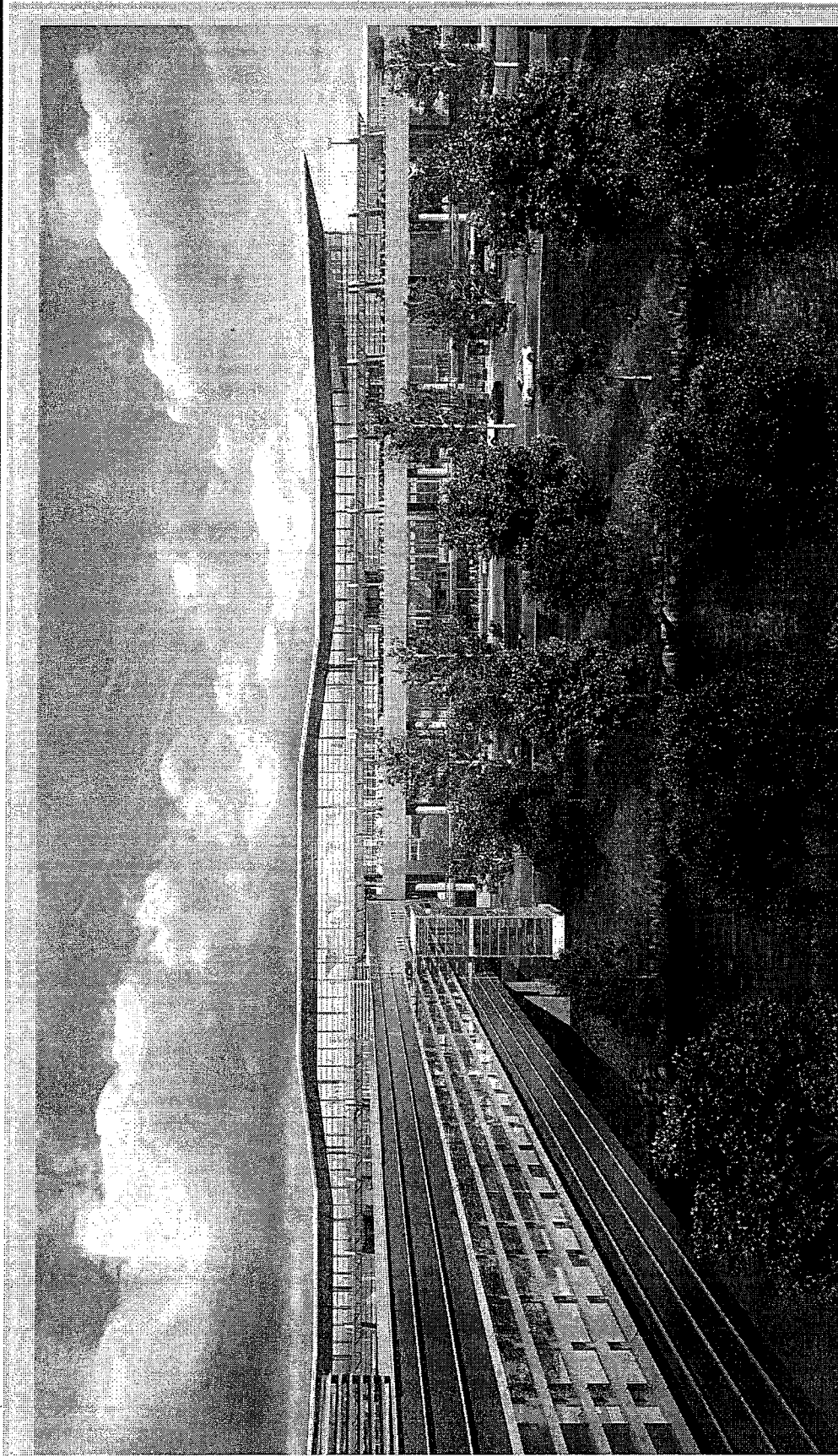


- 9,000 job-years
- \$600 million in wages
- \$3.3 billion in economic activity

Jobs	2017	2018	2019	2020	2021	2022
Direct	80	480	640	910	640	110
Total	200	1,430	1,960	2,850	1,990	430

10

Questions?



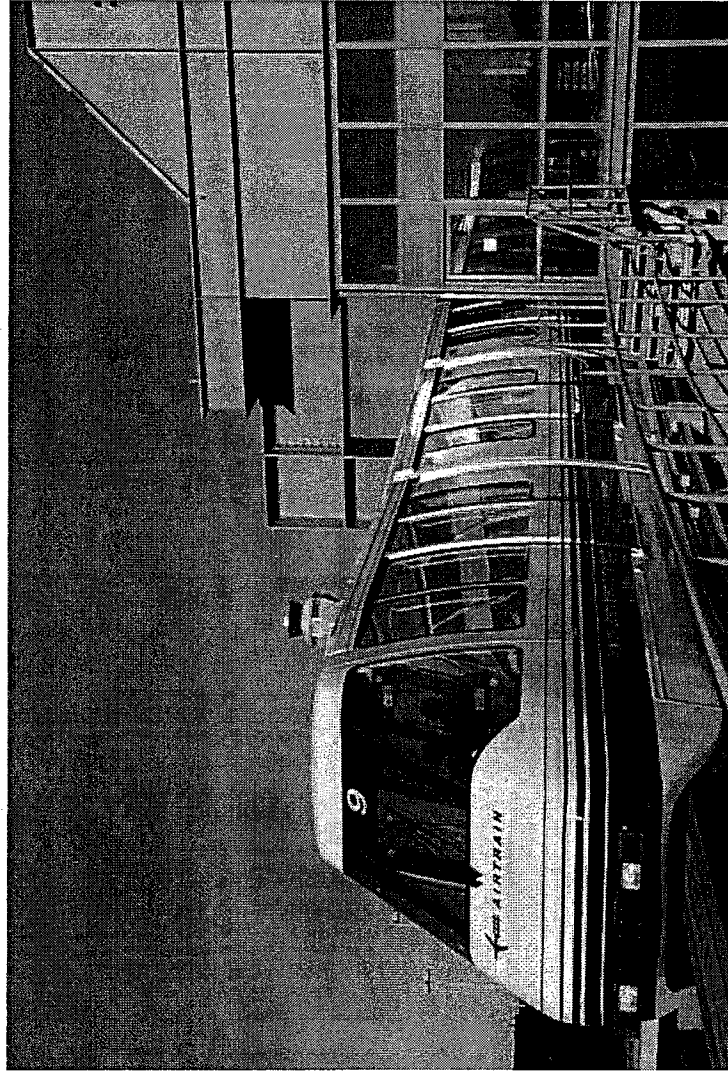
Newark Liberty International Airport ◊ Terminal A Redevelopment Program

THE PORT AUTHORITY OF NY & NJ

52x

Newark Liberty International Airport AirTrain

New Jersey State Senate Legislative Oversight Committee



January 17, 2017

THE PORT AUTHORITY OF NY & NJ

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

New Central Terminal Area:

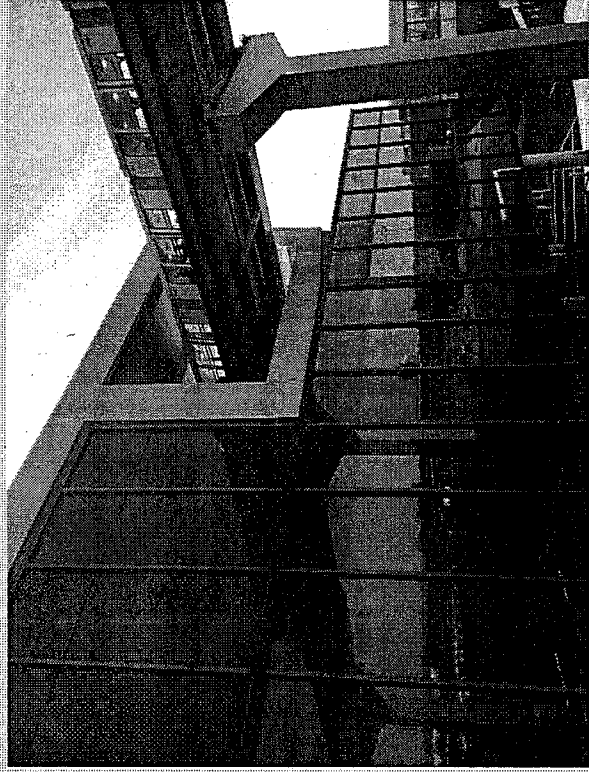
- "Notches" designed into Terminals for Stations and guideway right of way

Airport Access Program: 1980/1990s

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

Planning and Construction

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



2

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

Opening Dates

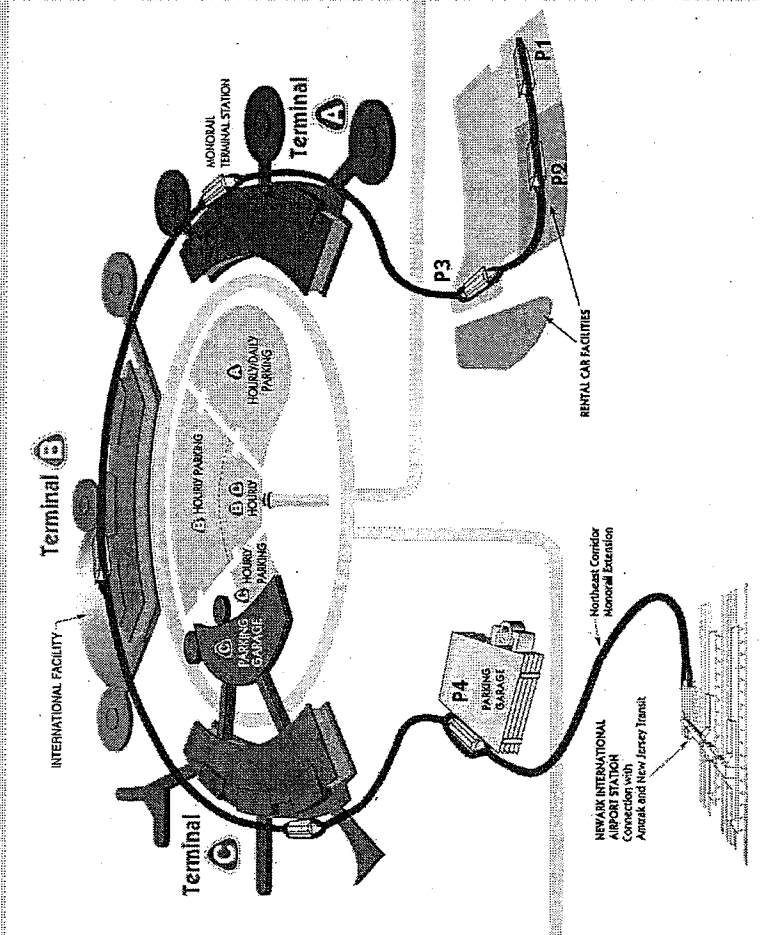
- Base System – May 1996
- NEC Extension – October 2001

Services

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

Ridership

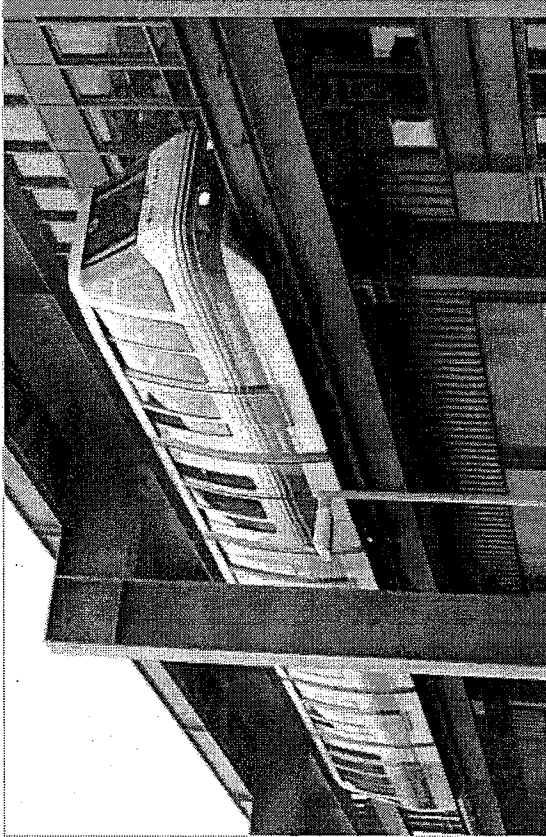
- Average 33,000 pax daily
 - ~30% A,B,C transfers
 - ~45% P1, P2, P3 & P4
 - ~25% NEC



Frequency

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

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



Steel box beam guideway structure

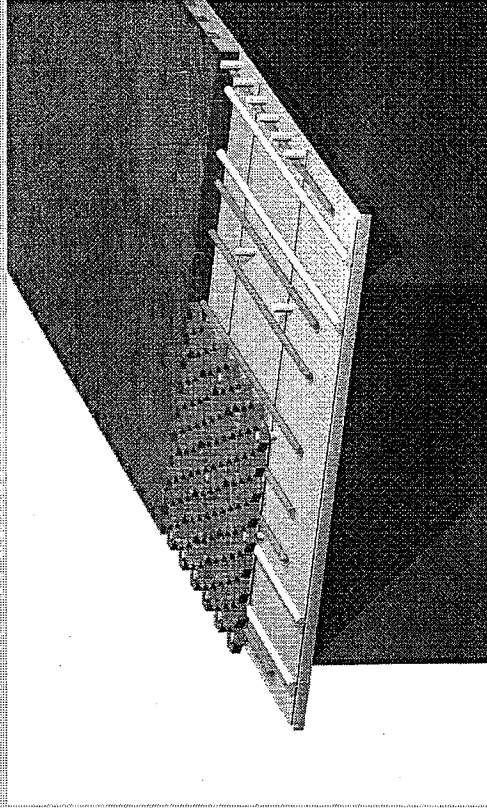
Composite running surface with heating system

Rotary switches

Dual tired system: guide wheel and drive wheel

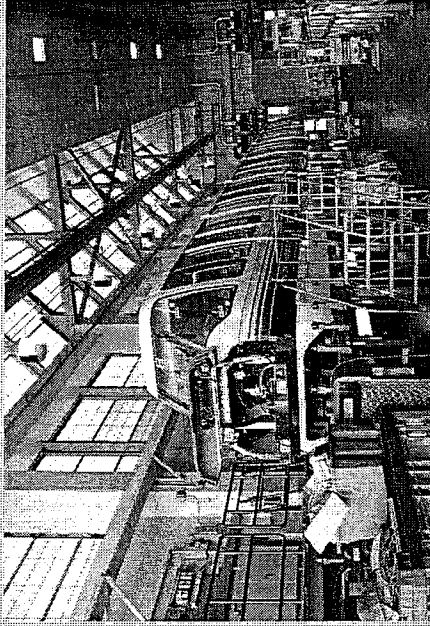
6 car trains - permanently coupled

Automatic train control



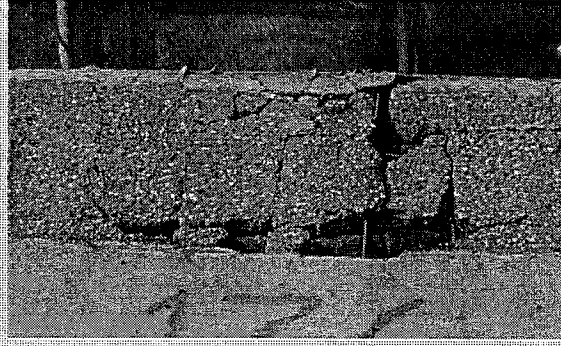
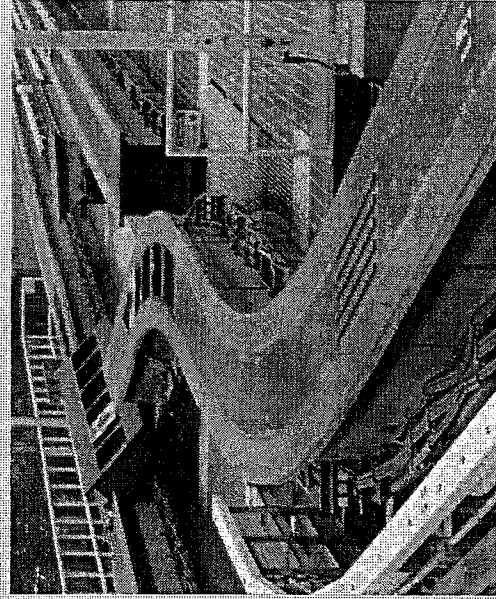
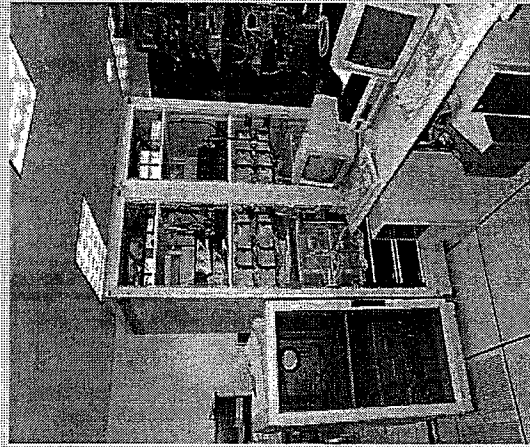
\$380 Million allocated for EWR AirTrain Interim Repairs

Vehicle Refurbishment: Bodies and Sub-components



Guideway: Switches, Structure, Running Surface & Heating Repairs

Automatic Train Control Replacement



5

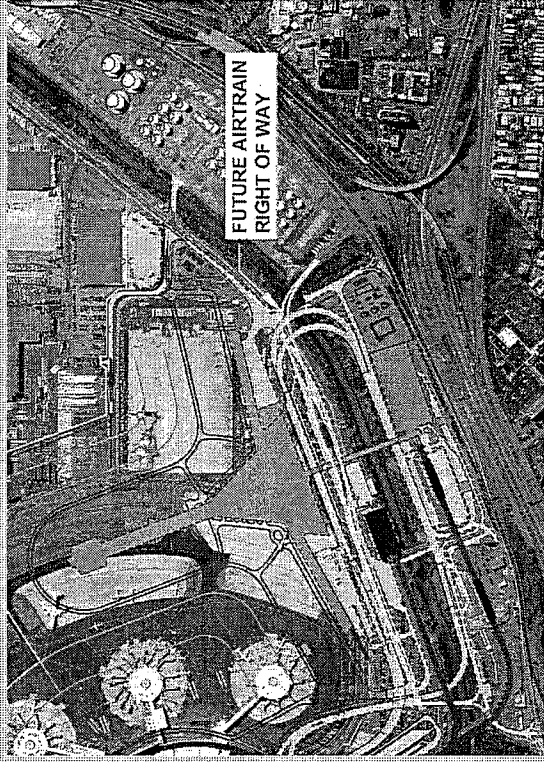
\$40 Million -Planning of an AirTrain Replacement

Goals

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

Professional Services Agreement

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





Regional Plan Association

Testimony at the NJ Senate Legislative Oversight Committee on the Port Authority of NY and NJ

January 17, 2017

Good afternoon. My name is Mark Lohbauer, and I am the NJ Director of the Regional Plan Association. RPA has prepared long-range strategic plans for the tri-state New York/Connecticut/New Jersey metropolitan region since 1929. I'm pleased to tell you that we will be publishing our Fourth Regional Plan in the fall of this year and it will offer recommendations to address the projected needs of our region over the next 25 years.

Thank you for this opportunity to testify about what we consider should be important goals of the Port Authority of NY & NJ regarding regional transit. We applaud this Committee for demanding enhanced public transportation for New Jerseyans, a cause that we strongly support.

In our view, not enough spending is dedicated to public transportation in our State, particularly in that part of the Northeast Corridor that falls within the jurisdiction of the Port Authority. I have brought some slides to illustrate why we believe that a significant increase in investment is justified in that area to support:

- Economic growth for NJ;
- An enhanced environment less impacted by motor vehicles;
- Better access for NJ residents to jobs in the NYC market; and
- Greater mobility for New Jerseyans throughout the region.

There are three Port Authority projects that I will discuss with you: Gateway, Port Authority Bus Terminal, and the PATH Extension to Newark.

I have three basic points to make about those projects:

1. RPA believes that the Gateway project and the Port Authority Bus Terminal projects are of paramount importance not only to NJ, but to the national economy. The PATH Extension project is also important to the regional economy.
2. We also believe that any new Port Authority bus terminal needs to be planned in an integrated way with the Gateway project, and the planning for a new Penn Station train terminal. Together, these projects will determine

virtually all access into Manhattan for NJ commuters, and they should not be planned in isolation from one another.

3. Finally, there need to be resources to make these investments. The economic multipliers make each of these good projects, and we shouldn't accept a future where we are constrained by our current under-investing.

By public transportation, we mean both bus and rail transit. Let me show you why:

SLIDE #1:

This map illustrates the rail service lines that exist in the 31 counties of our region. 14 of those counties are in NJ. Like the spokes of a wheel, all of these rail lines radiate outward from a central hub, which is the island of Manhattan, the heart of our metropolitan region.

SLIDE #2:

This dot-density map, produced by the Port Authority, graphs the results of the most recent U.S. Census travel survey, showing the various modes of transportation used by commuters in the region. People who commute by car are shown by red dots, and you can see that those are distributed everywhere, but for Manhattan. The other colors represent public transportation choices:

- Purple dots for ferry riders;
- Green for subway riders;
- Yellow dots for bus commuters; and
- Blue for rail passengers

If you just look at the counties of NJ, you can see that the yellow of bus commuters, and the blue of rail passengers are both striking in their dominance. It's also important to note that many of these bus riders are originating from denser parts of the state – in Hudson, Essex, Bergen and Passaic counties.

New Jerseyans clearly rely heavily upon public transit to get to Manhattan.

SLIDE #3:

Of course, Manhattan is an island, and it is necessary to cross the Hudson River from NJ to get there, or the East River and Harlem River to get there from Long Island, Connecticut, or the outer boroughs. This chart shows that by far, the least number of crossing options are available to cross the Hudson from NJ: there are only 6 crossing structures that cross the Hudson: 1 bridge (the GWB), and 5 tunnels. However, there are 15 crossing structures that cross the Harlem River, and 18 across the East River... each with about 3 times as many structures as the Hudson. Put another way, only **15%** of the crossing structures that carry people

into Manhattan cross the Hudson River into NJ. Also, most of these crossings are designed for rubber-tired vehicles – autos and trucks.

SLIDE #4:

This imbalance in crossing points is exacerbated when you consider the level of traffic flowing across each of these rivers: there are over 9,300 express buses that enter downtown Manhattan every day. Over **82%** of these—7,389—come from NJ and cross the Hudson. That's quite a disparity.

SLIDE #5:

A survey completed in 2013 (HUB BOUND) shows that of all the daily transit riders who crossed the Hudson river, 47% of them traveled by bus. In fact, of all the choices available—PATH, NJ Transit, Amtrak, ferry boats, and buses—the single largest rider choice was buses across the Lincoln Tunnel (43%). Bus transit is clearly an extremely significant component for NJ transit riders.

As we know, the existing Port Authority Bus Terminal is deteriorated, and inadequate to comfortably serve current ridership demand. Nor does it connect the majority of NJ's bus commuters to their ultimate destinations in the city. A new bus terminal and more balanced service is critical to better serve the 43% of NJ commuters that use this mode.

One of our key goals for 2017 at RPA is determine a plan and funding scheme for the new Port Authority Bus Terminal and get the environmental approvals process underway. We intend to work with public officials and business and civic groups to develop an integrated plan that meets the future travel needs across the Hudson River, including the size and location of a new bus terminal and other improvements. We recognize that the Port Authority has set aside \$3.5 Billion in its current capital plan for this project, and that a design competition has produced several alternate plans for the Port Authority to consider. We respectfully suggest that further planning needs to be done before bus terminal designs are attempted or selected. We believe that any new Port Authority bus terminal needs to be planned in an integrated way with the Gateway project, and the planning for a new Penn Station train terminal. Together, these projects will determine virtually all access into Manhattan for NJ commuters, and they should not be planned in isolation from one another.

SLIDE #6:

The disparity that exists today in terms of access for NJ commuters into Manhattan is only going to get worse, if measures are not taken to improve access and provide better alternatives. This slide shows that over the past two decades (1990-2010), transit ridership to Manhattan grew slightly in Connecticut and in the Hudson

River Valley, and stayed flat in Long Island... while ridership increased by 65,000 people coming from NJ. You may wonder whether that trend will continue. We are confident that the region will see even greater growth, and while I do not have specific projections to share with you today, we can preliminarily project a growth of NJ riders of about 100,000 between now and 2040. We will have more specific projections in our Fourth Regional Plan, later this year.

SLIDE #7:

All of this growth is occurring at a time when we are facing a looming crisis in conveying transit passengers between NY and NJ. We have 2 tunnels to provide train service between Manhattan and Newark. Both are over 100 years old, and both were damaged by floodwaters during Superstorm Sandy. Salt and mineral deposits that coated the tracks and tunnel walls from the flood waters are still present, corroding the infrastructure. We need to stop that deterioration, but it will require closing each tunnel to do the work. This slide shows that closing one tunnel will reduce our rail capacity from the current 24 trains/hour, to a maximum of 6 trains/hour—one-fourth of what it should be. You can imagine what a disaster that would be to close a tunnel for one day, let alone for a year or more.

SLIDE #8:

To prevent that disaster, we need to build a new, 2-track tunnel under the Hudson, and support that new tunnel with related replacements of aging rail bridges that will increase train capacity, and avoid delays now caused by bridge openings. Once completed, the new Gateway project would allow for existing rail traffic to move through the new tunnel, while we close and repair the existing tunnels. As you know, this project is underway with the support of Governors Christie and Cuomo, the federal government, Amtrak, NJ Transit, and the NY Department of Transportation. The Port Authority has already set aside \$2.7 Billion in their current Capital Plan for this project, which has been described by the federal Transportation Department¹ as “the most important rail project in the United States.”

SLIDE #9: Newark PATH Extension

One other Port Authority project that features in the Capital Plan, and is important not only to enhanced trans-Hudson access, but would also provide better rail access to an underserved urban neighborhood, is the Newark PATH extension. It would continue the PATH rail line south from its current terminus at Newark Penn Station, and extend nearly 2 miles south to Newark Liberty Airport.

¹ Statement of Peter Rogoff, Acting Undersecretary of Transportation, per NJ Spotlight, <http://www.njspotlight.com/stories/15/06/16/feds-call-nj-ny-gateway-tunnel-most-important-rail-project-in-u-s/>.

This slide shows the proposed line extension in pale blue.

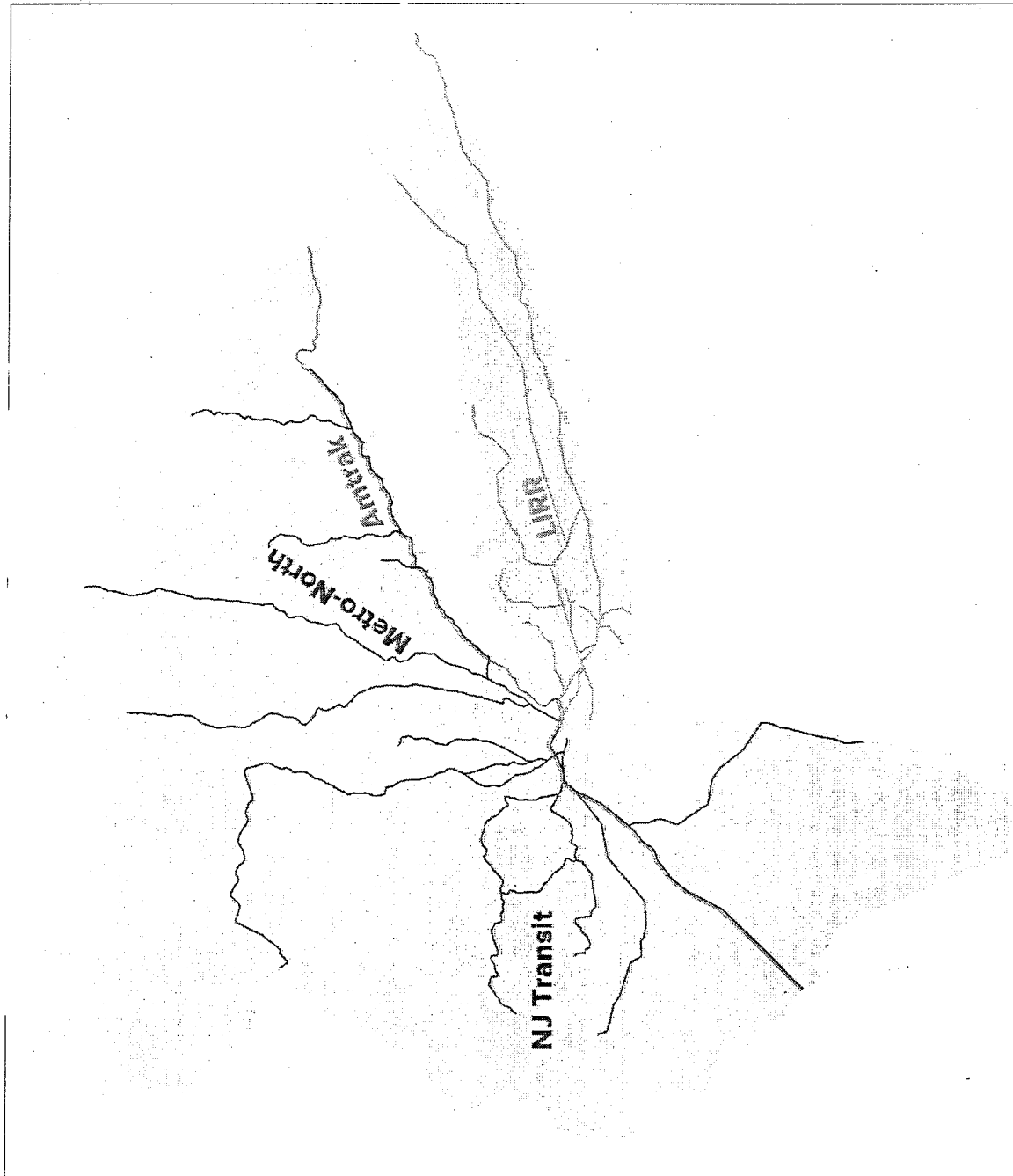
Bringing PATH into Newark's South Ward will provide:

- Improved access (and frequency of service) to Liberty Airport for residents across the region;
- New access to better transit for residents of Newark's South Ward, by creating a public train station at the Airport;
- Better access to jobs around the region for all Newark residents;
- Enhanced PATH train frequency thanks to a new rail yard that would allow for storage of more PATH trains. (This, in conjunction with Automated Train Control, which is already being installed on PATH trains, will allow maximum train frequency.)

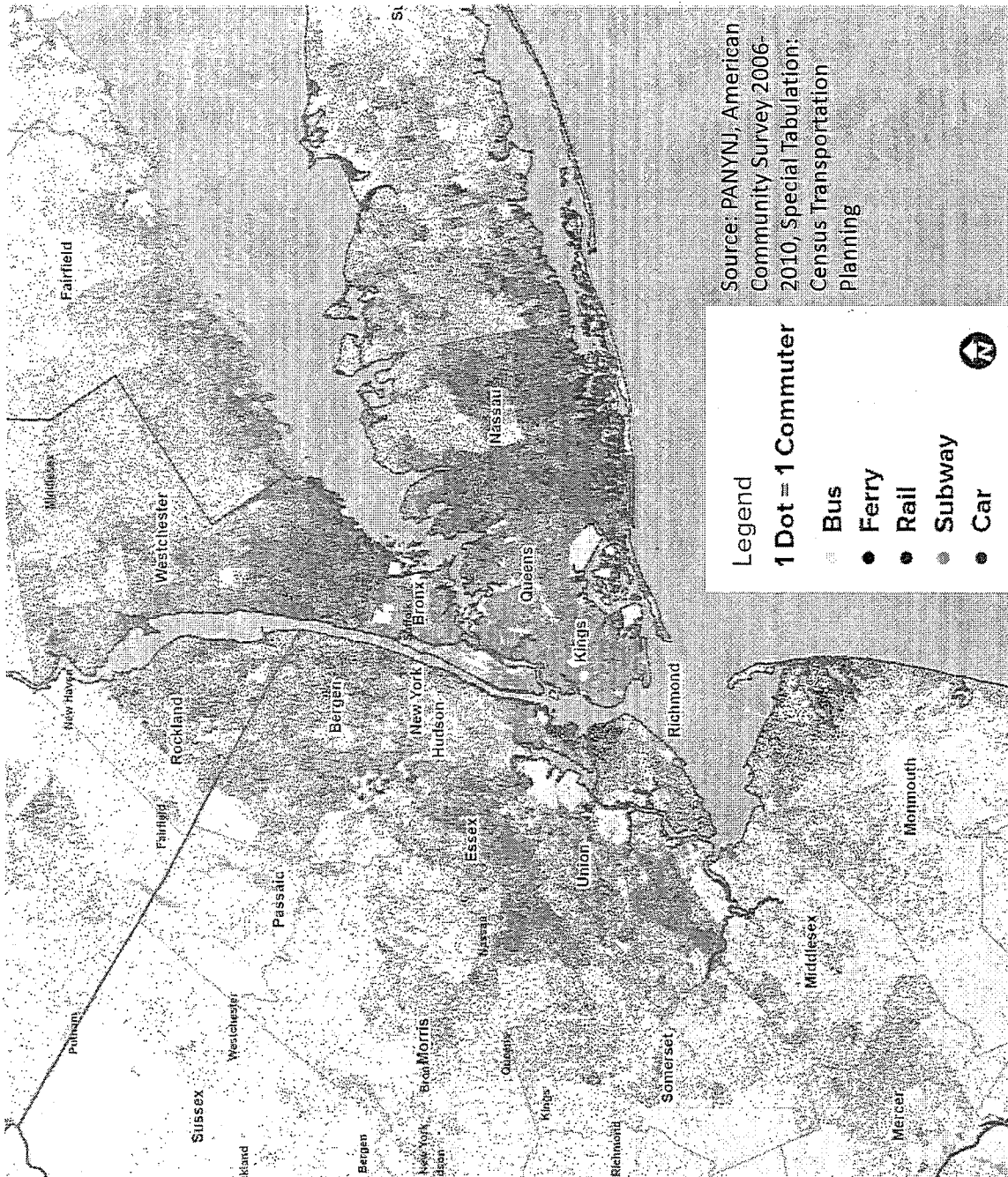
Equally important are these other consequences shown on this table that we project that the PATH extension would have for other NJ communities. As the table shows, there would be dramatic increases in development that would bring new jobs and new residents to all 5 of the NJ PATH stations along the line between Exchange Place and Newark Airport. This investment would reap real dividends.

In closing, the RPA would like to thank the Chairman and members of the Senate Legislative Oversight Committee for maintaining your vigilance in this most important area. We urge you to continue your support and scrutiny of these critical projects at the Port Authority, without which our regional economy might experience serious reversals. Thank you.

Commuter Railroads in the Region



Commuters into Manhattan, by mode



Crossings into Manhattan

6 Hudson River

1 Bridge / 5 Tunnels

15 Harlem River

12 Bridges / 3 Tunnels

18 East River

5 Bridges / 13 Tunnels

Manhattan
Central
Business
District

60th St

**Daily Express
Buses into
Manhattan CBD**

Above 60th St

589

New Jersey

7,687

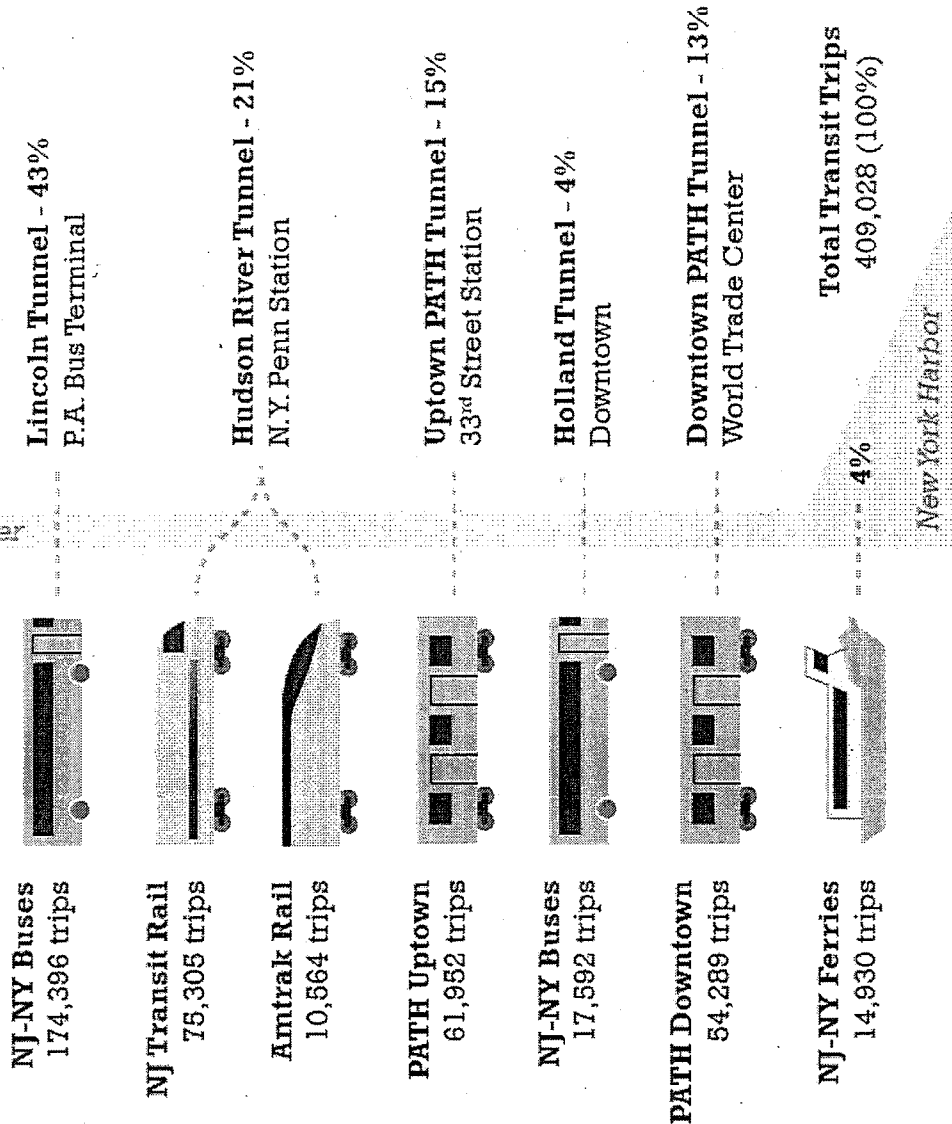
Brooklyn/Queens
(across East River)

1,068

Manhattan
Central
Business
District

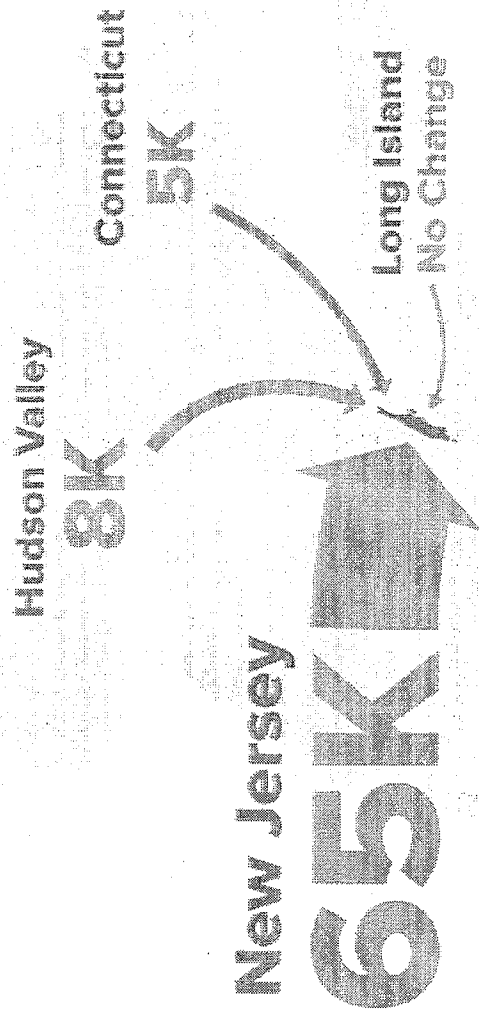
How do Transit Riders Cross the Hudson River?

Trans-Hudson Public Transit 2013 Weekday Inbound Traffic

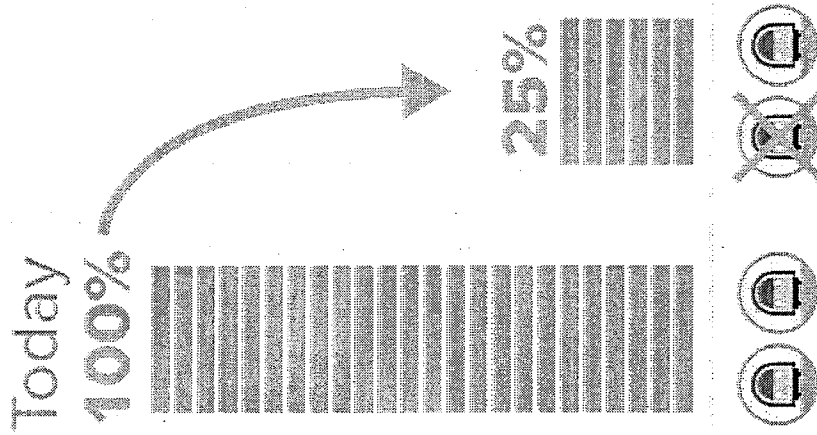


Historic Growth in trans-Hudson Travel

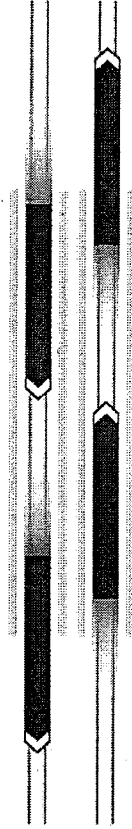
Increase in Manhattan-
bound commuters,
1990-2010



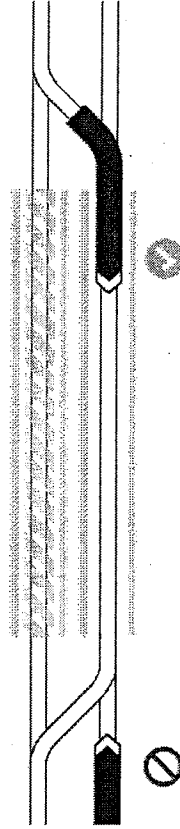
Hudson River Tunnel: Crisis Scenario



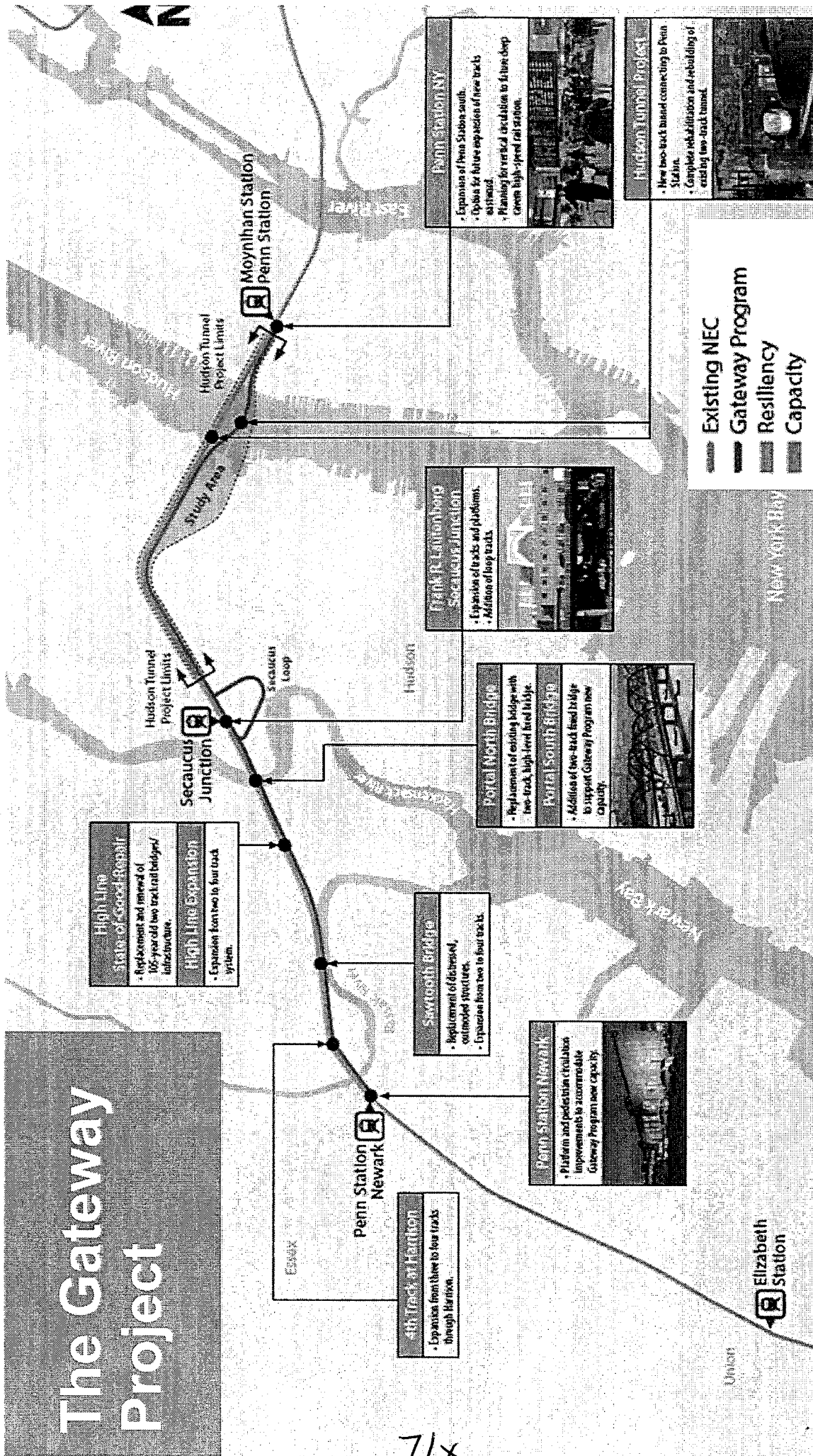
With **two tunnels**, peak hour capacity is **24 trains**



With **one tunnel**, peak hour capacity is **6 trains, or 25%**



The Gateway Project



Newark Airport PATH Extension

