

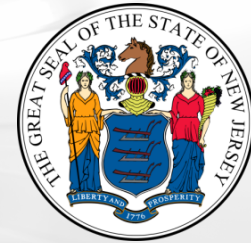
January 12, 2017

# **GATEWAY PROGRAM** OVERVIEW AND UPDATE

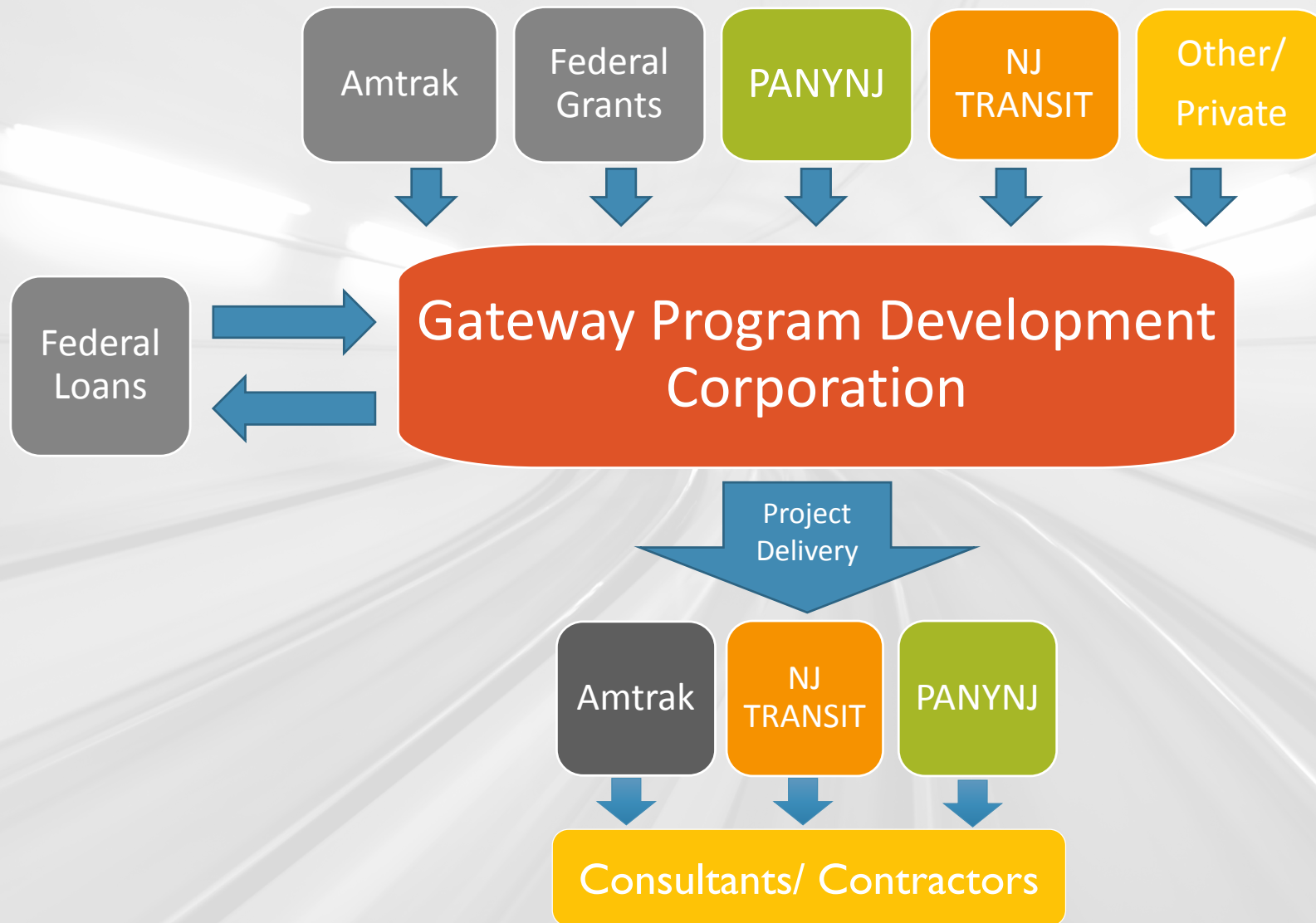
John D. Porcari, Interim Executive Director

# GATEWAY PROGRAM DEVELOPMENT CORPORATION

- » Incorporated in the state of New Jersey under Title 15A:2-8 New Jersey Domestic Nonprofit Corporation Act.
- » For coordinating, developing, operating, financing, managing, owning or otherwise engaging in activities to effectuate the transportation project between Penn Station, Newark, New Jersey, and Penn Station, New York, New York currently referred to as the “Gateway Program.”
- » Four trustees appointed by US DOT, Amtrak, NJ TRANSIT, and NYS DOT, respectively.



# HOW IT WILL WORK





# WHAT IS THE GATEWAY PROGRAM?

- » Hudson Tunnel Project
  - » New Hudson River Tunnel
  - » Rehabilitation of Existing North River Tunnel
- » Replacement of Portal Bridge
- » Expansion of Penn Station, New York
- » Capacity and Renewal Projects in New Jersey
  - » Sawtooth Bridges/ Harrison
  - » Portal South Bridge
  - » Secaucus Station and Loops
  - » Operating Rail Yard in NJ
  - » Newark-Secaucus Improvements



# WHY DO WE NEED GATEWAY?

» Existing North River Tunnel, Completed in 1910





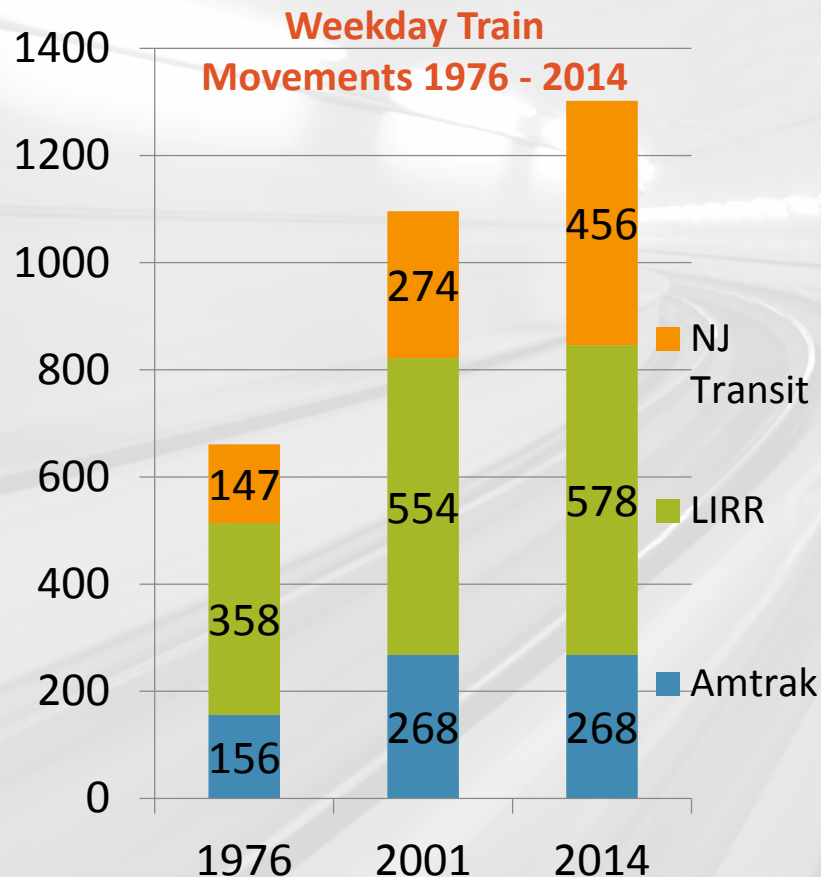
# SUPERSTORM SANDY CAUSED IRREPARABLE DAMAGE

- » Superstorm Sandy forced 4-day closure of the NEC in October 2012.
- » Ongoing damage to internal components requires complete renewal of inundated tunnels.
- » Tunnel reconstruction requires closure of each tube for outages of ~1.5 years.
- » Without new tunnel in place, closure would devastate service.
- » Rebuilding of the existing North River Tunnel will not begin until the new Hudson Tunnel is built and commissioned.



# PENN STATION, NEW YORK – BUSIEST RAIL STATION IN NORTH AMERICA

» Penn Station train and passenger volumes have doubled since 1976.





# NEW YORK – NEW JERSEY ECONOMIC CONTEXT

- » Key regional economic factors strongly point to the need for the Gateway program.
- » Trans-Hudson commuting options are at capacity.
- » Manhattan employers rely on west of Hudson workforce.
- » NJ housing market plays important role in regional economy.





# GATEWAY IS A PROGRAM OF PROJECTS ...



Hudson Yards Concrete Casing



Sawtooth Bridges



Portal South Bridge



Hudson Tunnel Project



Harrison Fourth Track



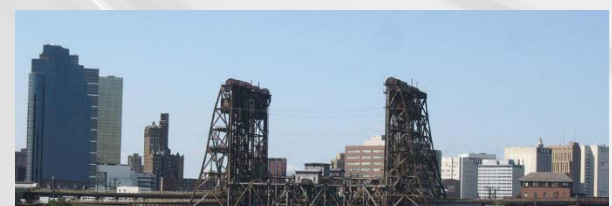
Secaucus Station and Loop Tracks



Portal North Bridge



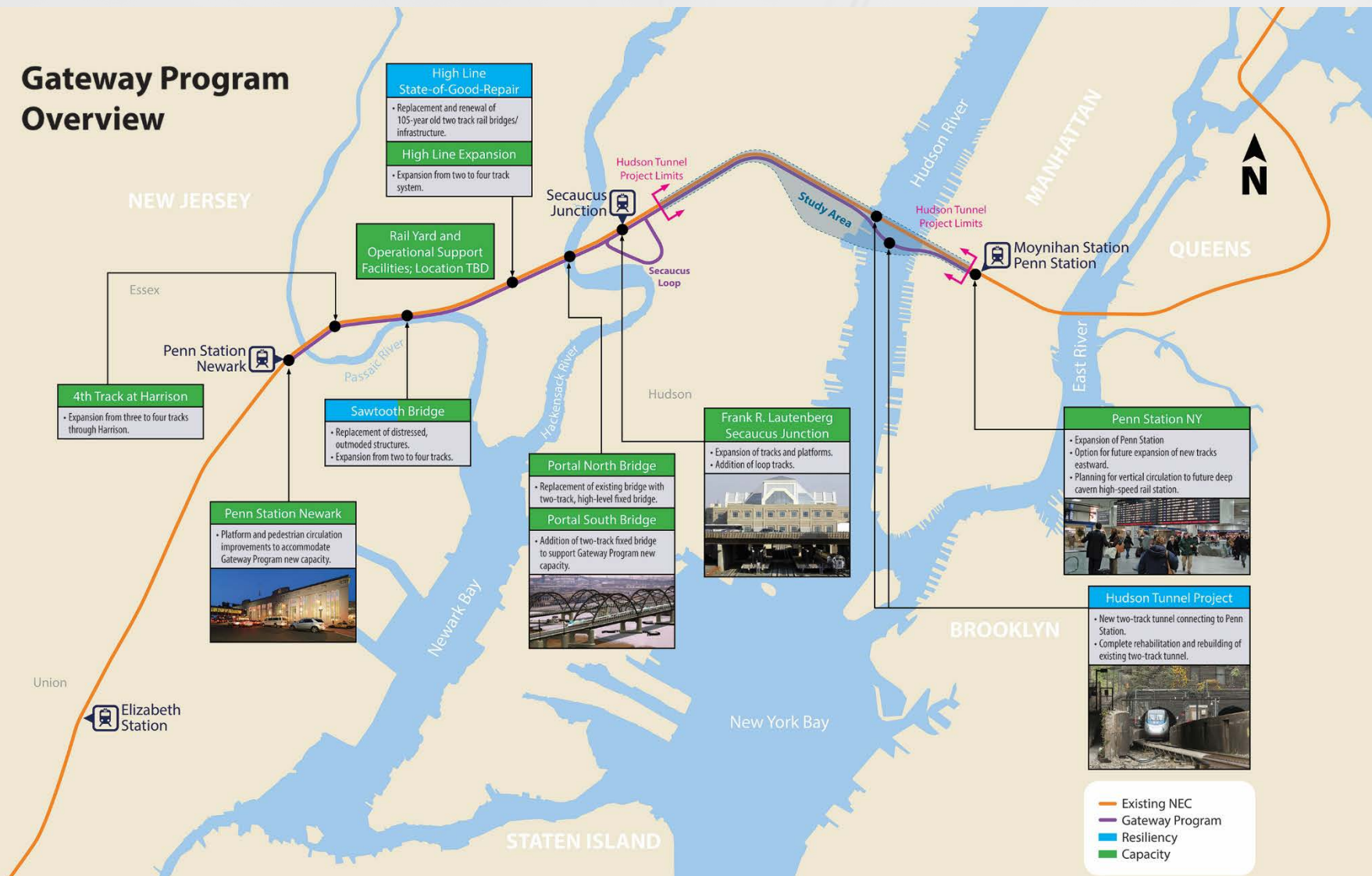
Penn Station Expansion



Highline State of Good Repair

# ...EXTENDING FROM NEWARK, NJ TO PENN STATION, NY

## Gateway Program Overview





# THE GATEWAY PROGRAM WILL DELIVER...

## » Service Preservation and Resiliency

- » Preserve existing service to Penn Station, New York
- » Rebuild Existing Infrastructure
- » Provide Resiliency/Storm Protection
- » Bring infrastructure assets to a state of good repair

## » Capacity

- » Roughly double trans-Hudson capacity
- » Expand Penn Station, NY
- » Build Redundancy for stable operations

# GATEWAY PROGRAM BENEFITS OUTWEIGH COSTS

- » A benefit cost analysis (BCA) found the benefits of the Gateway Program greatly exceed its costs even under the most conservative discount rate assumptions.
- » The BCA ranges from 2.2 at a very conservative 7% USDOT prescribed discount rate to 3.9 at a more favorable 3% discount rate.

	Gateway Program (2025-2058)	
	7% Discount Rate	3% Discount Rate
Benefit Cost Ratio	2.16	3.87



# MAJOR PROJECTS UPDATE: HUDSON RIVER TUNNEL PROJECT

- » Construct new two-track Hudson River tunnel in order to rehabilitate existing two-track tunnel while preserving NJ TRANSIT and Amtrak services without interruption.
- » Environmental process underway. Preferred alignment selected. Draft EIS anticipated in Summer 2017. ROD anticipated March 2018.
- » Accepted into project development pipeline for FTA New Starts grant.



**Preservation/ Resiliency**

# HUDSON YARDS CONCRETE CASING - UNDERWAY

- » Preserve Right-of-Way for Hudson Tunnel Project in Manhattan.
- » Environmental process complete.
- » Phases I and II complete.
- » Construction can begin on Phase III – Western Yard - in 2017. Funding/ financing needed for construction.





# PORTAL NORTH BRIDGE

- » Replace century-old swing bridge over the Hackensack River in NJ with new, high-level, fixed bridge, enhancing capacity.
- » Final design and environmental review complete.
- » Accepted into project development pipeline for FTA Core Capacity grant.
- » Early work will begin in 2017 funded by \$16 million TIGER grant + \$4 million NJT match.



Existing Portal Bridge in Open Position



Rendering of the replacement bridge – “Portal North” – a high-level fixed span bridge

## Capacity

# SAWTOOTH BRIDGES AND HARRISON FOURTH TRACK

- » Replace seriously distressed structures east of Newark, NJ with four track railroad bridge, spanning NJ TRANSIT, PATH, and Conrail active railroads.
- » Create four tracks through Harrison along the former PATH track alignment, as PATH relocates its westbound track to a new alignment.
- » Funding/financing needed for construction.
- » Environmental clearance is imminent. Design to begin in 2017.



Sawtooth Bridge structures of the NEC spanning NJ TRANSIT, PATH, and Conrail Tracks below

**Preservation/ Resiliency**



# PENN STATION EXPANSION

- » Expand Penn Station, NY tracks and platforms to accommodate a doubling of service capacity.
- » Environmental Impact Statement will be required.
- » Funding/financing needed for design and construction. Potential for public private partnerships to offset infrastructure costs.

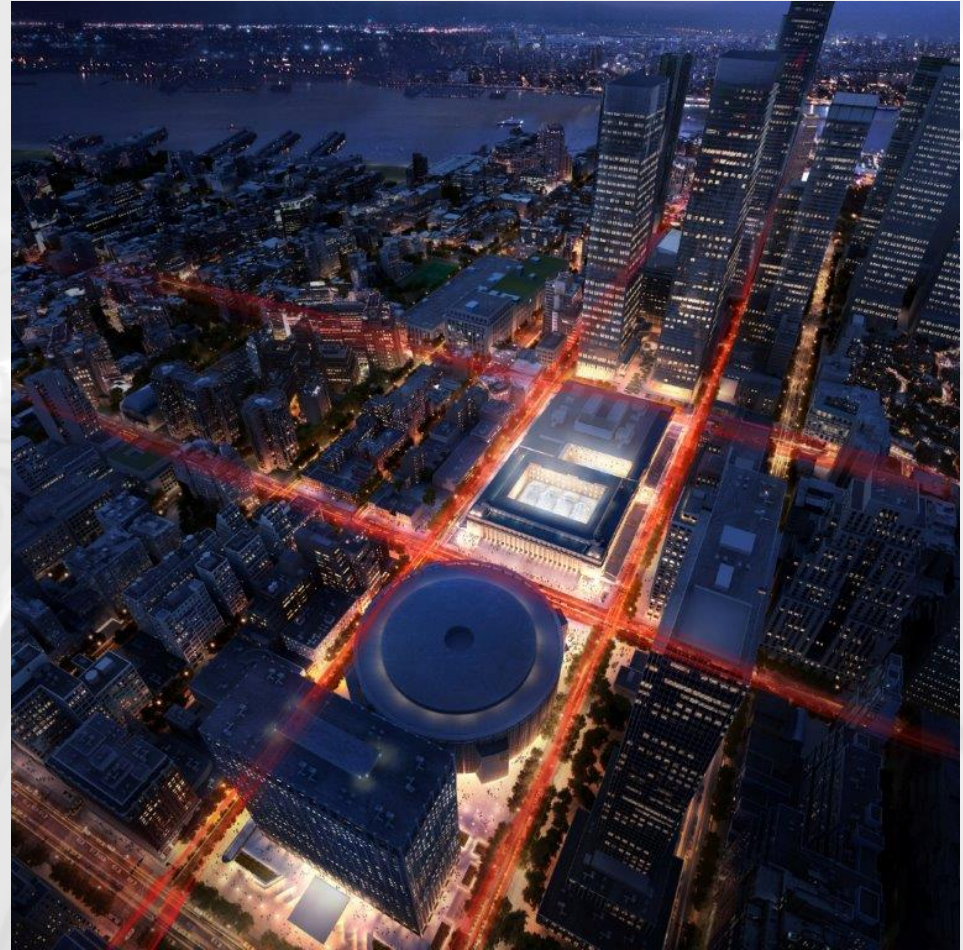


Image courtesy of State of New York.

# PORTAL SOUTH BRIDGE

- » Add second two-track high-level fixed bridge over the Hackensack River parallel to Portal North Bridge to create a total of four tracks over the river.
- » 2011 NEPA approval to be updated.
- » Funding/financing needed for construction.



Rendering of two Portal Bridges over the Hackensack River. Current concept is for twin, two-track fixed bridges.



# SECAUCUS STATION AND LOOP TRACKS

- » Expansion and reconfiguration of tracks at Secaucus Junction to support doubling of train movements through this territory.
- » Construction of loop tracks to allow a one-seat ride for MTA Metro-North Port Jervis Line and NJ TRANSIT Main/Bergen and Pascack Valley line services.
- » Funding/ financing needed for design and construction.

Frank R. Lautenberg Secaucus Station

Image credit: Jmm1713 at en.wikipedia





# HIGHLINE RENEWAL AND STATE OF GOOD REPAIR

- » Bring the existing two-track right-of-way between Newark, NJ and the Hudson Tunnel portals to a state of good repair, including Dock Bridge and Newark Penn Station pedestrian improvements.
- » Funding / financing needed for design and construction.



Dock Bridge, just east of Newark Penn Station, would undergo an electrical and mechanical overhaul as part of this project.

# GATEWAY PROGRAM OUTCOMES

- » Full build out of the Gateway Program will give the region:
  - » Replacement of obsolete, century-old, critical infrastructure and single-points of failure.
  - » Improved resiliency and redundancy to weather-related and man-made events.
  - » Existing passenger rail infrastructure brought to a state of good repair.
  - » Elimination of two-track bottleneck at the NJ/NY heart of the Northeast Corridor.
  - » Expansion of track, signal, bridge, tunnel, and Penn Station, NY capacity to go from today's 24 trains per hour in peak direction to roughly 48 trains per hour, meeting current and near-future demand for growth in service.



## FINANCIAL STEPS TO DATE

- » Hudson Tunnel and Portal North Projects entered first phase (Project Development) of New Starts /Core Capacity grant program.
- » Gateway partners submitted a Portal North Bridge Core Capacity rating package to the Federal Transit Administration for evaluation, for inclusion in the President's F18 budget.
- » PANYNJ board resolution supported payment of debt service on \$284 million federal loan for Portal North Bridge.
- » PANYNJ included \$2.7 billion for the Gateway Program in its draft 10-year capital plan.
- » Gateway Program Development Corporation to sign Emerging Projects Agreement with U.S. DOT – an important first step to unlock billions of dollars in low cost federal loans.

The background is a photograph of a tunnel with a curved ceiling and floor, illuminated by a series of bright lights along the walls. Overlaid on this image are several large, semi-transparent geometric shapes: a large orange arrow pointing right, a large light blue arrow pointing right, and a large light yellow arrow pointing right. These arrows are layered on top of each other and the tunnel image.

# THANK YOU



# MOVING GATEWAY *FORWARD*

