Agenda

- Overview
- Building a Better Capital Program
- Program by Agency
- Funding
- Moving Forward
Our first priority is to protect the safety, reliability and quality of existing MTA service. This means replacing and repairing trains, buses, and subway cars, and maintaining track, signals, yards, depots, bridges, and stations.

System and service improvements help us to better serve our customers, through initiatives such as station ADA accessibility, real-time train information, and New Fare Payment technology.

Expanding the reach of the MTA network enables us to deliver more extensive and resilient service:
- Continue East Side Access
- Start Second Avenue Subway Phase II
- Start Penn Access
2015-2019 Capital Program “Building Blocks”

Safety
- Track, signals, Help Points, etc.

Reliability
- Fleet replacement, station renewals, etc.

Service / System Improvements
- New station accessibility, new fare payment, etc.

Customer Experience
- Real time information, station signage, etc.

MTA Network Expansion
- ESA, SAS, Penn Access.

- Renew 69%
- Enhance 14%
- Expand $5.5 b

$26.5 b MTA Core Program + $24.5 b

- Renew 70%
- Enhance 11%
- Expand $4.5 b

$32.0 b Total MTA Capital Program + $29.0 b
The Efficiency Challenge

Governor Cuomo issued us a challenge of reducing costs and eliminating inefficiencies, while maintaining the benefits of our Capital Program.

Building a Better Capital Program

“The MTA will incorporate the State’s suggestions to use alternative delivery methods… our preliminary review suggests we can reduce the cost of the Capital Program by roughly 6% to 8% by adopting these State suggestions.”

-Thomas F. Prendergast
MTA Chairman and CEO
Building a Better Capital Program

*Here are some of the measures we’ve taken to reach that goal:*

**Alternate delivery methods**
- Increase design-build contracts and private-sector partnering

**Component replacement**
- Target investments to quickly reach more locations

**Better business partner**
- Coordinate with our business partners and labor unions to achieve better results
Building a Better Capital Program

Here are some of the measures we’ve taken to reach that goal:

**Project oversight & asset mgmt.**
- Project Gate reviews promote maximum benefit at minimum cost
- Improve asset investment planning, e.g. Enterprise Asset Management

**Improve standards & work rules**
- Reevaluate specifications to achieve the same benefits for less

**Improve track access**
- Continue to maximize productivity while minimizing customer impact
2015-2019 Capital Program Efficiencies

Original 2015-2019 Proposed Plan

$32.05 billion was our original proposed 2015-2019 Capital Plan

$3.09 billion or ~10% saved through efficiencies

How we achieved efficiencies:
- Alternate delivery methods
- Component replacement
- Better business partner
- Project oversight & asset mgmt.
- Improve standards & work rules
- Improve track access
- Refine construction schedules
Highlights of Other Program Changes

*Here are some examples:*

**Like-for-like**
- Swap CBTC 6th Ave for CBTC 8th Ave

**Coordination Opportunities**
- Canarsie and Rutgers Tubes impact
  - Interlockings
  - Power
  - Tunnel lighting
- Reflect updated schedule for SAS Phase 2 design and construction

**Engineering Evaluation**
- Painting on Bronx Whitestone Bridge spans
- NYCT station components
Highlights of Other Program Changes

Here are some examples:

**Opportunities & requirements**
- Capacity and mobility improvements
- Station enhancements to support the City of New York’s development goals
- Culver line CBTC
- Passenger Rail Investment and Improvement Act (PRIIA)

**Refined estimates**
- Subway and commuter rail cars
- Positive Train Control (PTC)

**New developments**
- New street stairs at two L line stations
- Junius St (3) - Livonia Ave (L) connector
- West of Hudson Yard Improvements
- Utica Avenue Subway Extension study
- North Shore Bus Rapid Transit
# 2015-2019 Capital Program Savings

<table>
<thead>
<tr>
<th>Category</th>
<th>Oct 2015</th>
<th>Efficiencies Made</th>
<th>Sept 2014</th>
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<tbody>
<tr>
<td>NYCT / MTA Bus</td>
<td>$16.2 b</td>
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<td>$17.6 b</td>
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<tr>
<td>LIRR / MNR</td>
<td>$5.2</td>
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<td>$5.7</td>
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<td>PD / Interagency</td>
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<td>$0.2</td>
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<td>CPRB Core</td>
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<td>$1.8</td>
<td>$23.5</td>
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<tr>
<td>MTACC / Expansion</td>
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<td>CPRB Total</td>
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<td>B&amp;T</td>
<td>$2.9</td>
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<td>MTA Total</td>
<td>$29.0 b</td>
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<td>$32.0</td>
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</table>

Numbers may not total due to rounding
New York City Transit
Smith 9 Sts Station
New York City Transit Efficiencies / Savings

NYCT $15.8 b $1.3

Efficiency / Savings Examples

• Coordinate 8th Avenue CBTC and interlocking modernizations
• Use design-build approach for Jamaica Depot
• Expand the component approach to other asset areas
• Extend life of shop equipment instead of full replacement
• Use standard specifications for purchasing work trains & service vehicles
New York City Transit: $15.8 billion

Replacement subway fleet (60-foot R211 cars)
Replacement standard, articulated, and express buses

CBTC: 8th Av, Queens Blvd, and Culver Lines + 6 interlocking modernizations
B-Division customer information (ISIM-B) + Help Points

Station renewals, components, ADA accessibility
New fare payment system
Grand Central – Lexington and Times Square Shuttle improvements

New component repair program

SIR replacement fleet

Eng. Services & Regional Mobility
Long Island Rail Road

Atlantic Ave Viaduct
Long Island Rail Road Efficiency / Savings

LIRR $2.8 b $0.3

Efficiency / Savings Examples

- Partner with municipalities and private developers to reduce costs
- Implement mid-day station closures at Nostrand, Babylon, and Hunterspoint to streamline construction activities
- Improve track access for signal work at Babylon and Ronkonkoma
- Refine power component strategy to ensure priority needs are addressed
Long Island Rail Road: $2.8 billion

- Jamaica Capacity Improvements Phase 2
- Main Line Double Track Phase 2
- Positive Train Control (PTC) + signal component renewals
- M-9 fleet procurement
- New Elmhurst station
- Station rehabs at Nostrand and Hunterspoint Ave
- Priority station improvements, including Penn Station
- Begin Huntington/Port Jefferson Yard
- Component repairs

Bar chart showing the breakdown of costs:

- Track Capacity: $518
- Rolling Stock: $500
- Signals/Comms: $390
- Track SGR: $342
- Stations/Parking: $296
- Power: $250
- Shops/Yards: $211
- Line Struct.: $164
- Other: $165
Metro-North Railroad Efficiency / Savings

Efficiency / Savings Examples

- Use a design-build approach for Harmon Shop improvements
- Use component approach to address prioritized needs for underground bridges
- Partner with municipalities and private developers to reduce costs
- Coordinate capital and maintenance activities to maximize work windows

MNR $2.3 b $0.2
Metro-North Railroad: $2.3 billion

- M-3 fleet replacement: $532 m
- Harmon Shop replacement Phase V
- Cyclical investments in rail, track ties, switches, drainage
- Renew bridges and viaducts
- GCT trainshed / tunnel structure rehabilitation
- Positive Train Control (PTC)
  - Upper Hudson signal improvements
- Customer communications
  - Priority station improvements
- Renew substations/3rd rail
- Rolling Stock: $472
- Shops/Yards: $240
- Track: $218
- Line Struct.: $217
- GCT: $194
- Signals/Comms: $177
- Stations/Parking: $101
- Power: $171
- Other: $171
Efficiencies at MTA Bus depots include:

- Expanding the component approach to depot components
- Coordinating procurement across multiple depots
- Utilizing life extension techniques
- Applying standard specifications
MTA Bus: $0.4 billion

- Replacement express buses: $196 m
- On-board customer information
  - New bus radio system
- Introduction of articulated buses
- Depot component rehab.
- Radio/Systems: $58
- Articulated Buses: $48
- Depots: $43
- Other: $31
Bridges & Tunnels

Robert F. Kennedy Bridge
Bridges & Tunnels Efficiency / Savings

- Utilization of design-build approach for 17 projects
- 2010-2014 efficiency savings were applied to 2015-2019 structural work
- Improved coordination of lane closures at RFK bridge to minimize disruptions
Bridges & Tunnels: $2.9 billion

- RFK Bridge Manhattan Toll Plaza structure and approach reconstruction
- Throgs Neck Bridge suspended span deck replacement
- VN Bridge anchorage decks and Brooklyn approach reconstruction
- Throgs Neck Bridge approach viaduct rehabilitation
- Robert F. Kennedy (RFK) Bridge seismic and wind retrofits rehab
- Structural rehabilitation at Bronx-Whitestone, RFK, Verrazano-Narrows (VN), Marine Parkway and Henry Hudson Bridges
- Hugh L. Carey Tunnel rehabilitation of ventilation systems
- Queens-Midtown Tunnel controls and communication systems rehabilitation
- Advanced traveler information systems
- Henry Hudson Bridge toll plazas reconstruction
Network Expansion Priorities

Expand

• Provide new network connections that enhance mobility and regional economic activity
• Continue progress made in earlier programs on existing mega projects
• Launch new projects to enhance resiliency and reach of service
MTA Capital Construction: $4.5 billion

- Funding to complete East Side Access to Grand Central Terminal: $2,881 m
  - ESA/Regional Investments: $310
  - Penn Station Access: $695
  - Second Ave Subway Phase 2: $535
  - Other: $344
- Design and early Construction of SAS Phase II
### 2015-2019 Capital Program Funding ($ millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td><strong>Total 2015-2019 Program Costs</strong></td>
<td>$28,956</td>
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<td><strong>Funding Currently Projected</strong></td>
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<tr>
<td>Federal Formula, Flexible and Misc.</td>
<td>$6,275</td>
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<td>Federal Core Capacity</td>
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<td>MTA Bonds</td>
<td>5,889</td>
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<td>Pay-as-you-go Capital (PAYGO)</td>
<td>1,846</td>
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<td>State of New York Capital ($1 Billion Existing, $7.3 Billion Governor’s Commitment)</td>
<td>8,336</td>
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<tr>
<td>City of New York Capital ($657 Million Existing, $1.835 Billion Mayoral Commitment)</td>
<td>2,492</td>
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<tr>
<td>Asset Sales / Leases</td>
<td>600</td>
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<tr>
<td>Other MTA Sources (Assumes bonding of PMT)</td>
<td>562</td>
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<tr>
<td>Bridges and Tunnels Bonds ($2.3 Billion) &amp; PAYGO ($580 Million)</td>
<td>$2,856</td>
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<tr>
<td><strong>Total 2015-2019 Funds Available</strong></td>
<td>$28,956</td>
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<td><strong>Funding Gap</strong></td>
<td>$0</td>
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Moving Forward

- **Oct 2015**: Submit revised plan to MTA Board for approval
- **Nov 2015**: Submit revised plan to CPRB for approval
- **Dec 2015**: 30-day CPRB review period ends
For more information:
mta.info/capital