

MTA CAPITAL PROGRAM OVERVIEW

2020-2024

Rebuilding
New York's
Transportation
System

September 2019





86th Street Station, SAS

Here's what New Yorkers will receive:

A faster, accessible, and more reliable transportation network

More frequent service and reduced crowding

Accelerated program of state of the art subway signal projects

More stations accessible for people of all abilities

Improved reliability and faster travel times

Expanded network capacity to more communities region-wide

Increased environmental sustainability and resiliency

MTA Capital Plan Highlights

The 2020-2024 Capital Program is:

- The MTA's **largest-ever capital plan** by far – 70% larger than the 2015-2019 Program – making unprecedented investments in the region
 - An **unprecedented investment of \$51.5 billion, including more than \$40 billion for New York City Transit** – revitalizing the system and building on the successful investment of the Subway Action Plan
 - The Program will **deliver major benefits**, including:
 - More frequent and reliable service on 6 line segments, including the Lexington Avenue Line, serving over 50% of riders through modernized signaling
 - 70 new ADA-accessible stations, beginning now. Stations serving over 60% of passengers will be ADA-accessible.
 - Over 1,900 new subway cars, more than 2,400 new buses and hundreds of new commuter rail cars
 - Full funding for Second Avenue Subway Phase 2 and construction of four new Metro-North stations in the Bronx
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NYCT Subways & Staten Island Railway

2020-2024 Investment
\$37.3 Billion Total

4

Priority Initiatives



Signal Modernization

\$7.1 billion

- 6 new line segments with modernized signaling, including the Lexington Avenue Line, doubling the track miles with modernized signals
- Over 50% of passengers will be served by modernized signals on a total of 11 lines
- New power substations and contact rail to support advanced signaling



Subway Cars

\$6.1 billion

- Over 1,000 new B-Division and over 900 new A-Division subway cars, equipped for modernized signaling
- Mean Distance Between Failure (MDBF) increases from 65,000 miles for the oldest cars to at least 150,000 miles for new replacement cars, mitigating up to 10% of delays



Track

\$2.6 billion

- Approx. 60 miles of track replaced and 20 miles of Continuous Welded Rail (CWR) installed
- CWR has a longer useful life, less than half the rate of rail breaks, and creates a quieter, smoother ride
- CWR will reach 90% coverage of all possible locations



Station Accessibility

\$5.2 billion

- Stations serving over 60% of passengers will be ADA-accessible
- New elevators/ramps at up to 66 more stations
- 4 more stations accelerated into 2015-2019 Program
- Customers will be no more than 2 stations away from an accessible station



Station Improvements

\$4.1 billion

- Renewing stations and addressing components in need of critical repair at about 175 stations (37% of system)
- Includes replacement of up to 65 escalators and up to 78 elevators at the end of their useful life



Second Avenue Subway (SAS) to 125th Street

SAS Phase 2 will add 3 new fully accessible stations, and a connection with Metro-North. Serving 300,000 daily riders together with Phase 1, it will further relieve congestion on the 4/5/6 trains, and strengthen access to jobs and education for Harlem and East Harlem residents. Together with 2015-2019 program funding, the 2020-2024 plan provides the entire \$6.9B project cost, shared approx. 50/50 between federal and local sources.

Priority Initiatives



Replacement Buses

\$2.3 billion

- Replace over 2,200 of the oldest buses throughout the network (39% of current fleet), including electric, hybrid and Compressed Natural Gas buses
- New buses have a Mean Distance Between Failure (MDBF) of 12,700 miles vs. a fleet-wide average of 6,300 miles
- Average age of NYCT fleet will decrease from 5.5 to 5.1 years by 2024; MTA Bus Co. fleet will decrease from 10.5 to 3.4



Additional Buses

\$217 million

- Expand fleet by over 175 buses
- Allows network redesign to provide more and better service
- Improves service reliability and ability to increase service



Electric Buses

\$1.1 billion

- Purchase 500 All Electric Buses, including some replacement and additional buses
- Begin transition to zero-emission fleet throughout the network
- Reduce greenhouse gases and improve air quality
- After 2029, all purchases will be AEBs
- Modify up to 8 depots for electric bus fleet



Improve Customer Experience

\$109 million

- On-board digital information screens to provide real-time service information
- Improved traffic enforcement using bus lane cameras
- Traffic signal priority for faster service



Depots

\$880 million

- Reconstruct Jamaica Depot
- Replacement of maintenance equipment keeps more buses in service



Priority Initiatives



Signals & Communications

\$364 million

- Replace 32% of switches, 21% of track circuits and 11% of grade crossing equipment at locations with highest maintenance needs
- Upgrade signals and interlockings on 3 branches due to age and technological obsolescence
- Upgrades will improve signal state of good repair by 22%



Rolling Stock

\$487 million

- 160 new electric cars expands fleet by 13% for East Side Access
- Fleet growth allows for at least 25,000 more seats into GCT during AM rush
- Purchase nearly 20 coaches and over 10 locomotives
- New fleet Mean Distance Between Failure (MDBF) performs 6x better than retiring cars, mitigating up to 11% of delays



East Side Access (ESA)

Scheduled for completion in December 2022, ESA will allow more than 160,000 daily LIRR customers to travel to Grand Central Terminal, saving commuters up to 40 minutes per day and creating room in Penn Station for MNR service via the Hell Gate Line.



Track

\$1 billion

- Install concrete ties and continuous welded rail to increase durability, reliability and customer comfort
- Upgrades and reconfigurations of infrastructure at Jamaica Station will improve reliability and reduce service impacts
- Upgrades will bring over 90% of track assets to a state of good repair



Station Improvements

\$910 million

- Up to 7 additional ADA-accessible stations
- 93% of stations, serving 97% of customers, will be accessible
- Component work and upgrades at 20+ stations, including platform, elevator and escalator replacements
- Work benefits up to 50% of riders



LIRR Mainline Expansion

Scheduled for revenue service by December 2022, this project will add a third track on 10 miles of the Main Line corridor, used by 40% of LIRR customers. Along with ESA and Jamaica Capacity Improvements, a 60% increase in reverse commute and a 50% increase in peak service between Manhattan and Long Island will be enabled.

Priority Initiatives



Grand Central Terminal Trainshed and Park Avenue Tunnel & Viaduct \$895 million

- 100+ year old structures used by 700+ trains per day and over 80% of customers
- Phase 1 of replacement of 75-acre GCT Trainshed and 1.8-mile Park Avenue Viaduct, and four new emergency exits in Park Avenue Tunnel



Rolling Stock: M-3 Replacement \$485 million

- Begin replacement of 140 M-3 electric cars
- New electric cars are expected to have a Mean Distance Between Failure (MDBF) of over 150,000 miles, a 100% increase over the existing M-3s to mitigate up to 27% of delays



Stations \$621 million

- 78% of stations will be wheelchair accessible serving 93% of ridership
- Accessibility improvements at up to 4 stations
- Station renewals on the Harlem Line in the Bronx and Lower Westchester
- Priority component repairs at Upper Hudson and Harlem lines
- Stations work will benefit 60% of customers



Harlem Line Capacity Improvements \$184 million

- Progress infrastructure work to improve reliability and support a future third track
- Construct 2 new substations, design 3 more
- Relocate/expand parking at Southeast Station to allow for future Brewster Yard expansion



West of Hudson Improvements \$187 million

- Phased construction of core infrastructure needed to allow reverse-peak and better off-peak service, including state of good repair needs
- Supports potential future increase in daily service of up to 60%



Penn Station Access

This new route for the New Haven Line will carry up to 50,000 Metro-North customers directly to Penn Station per day, reducing travel times to Manhattan's West Side. It includes four new stations in the Bronx: Hunts Point, Parkchester/Van Nest, Morris Park, and Co-op City.

Priority Initiatives



Verrazzano Bridge

\$1,127 million

- Approach ramps will be rebuilt and the non-standard left-hand exits will be modernized and reconfigured to right-hand exits
- These approach ramp projects will reduce annual collisions by up to 25%
- Replace and widen 2 miles of the eastbound Belt Parkway



Hugh L Carey and Queens Midtown Tunnels

\$99 million

- Rehabilitation of ventilation/service buildings at both tunnels
- Design for the installation of a water mist/fire suppression system in the tunnels, improving safety for the over 137,000 daily weekday customers



CBD Tolling

- Design, build, operate and maintain a Central Business District tolling system and infrastructure
- Increasing mobility in the CBD will reduce congestion, improve air quality and enhance quality of life



RFK Bridge

\$719 million

- Reconstruct Randall's Island access ramps, and designs for widening the southbound FDR Drive between 125th St. and 116th St. and a new access ramp from the Bruckner to the RFK
- Completed projects will save the 170,000 daily customers 400,000 hours in travel time annually



Henry Hudson Bridge

\$135 million

- In combination with the implementation of Open Road Tolling, the continuing reconstruction of the Henry Hudson Bridge will save 73,000 daily customers up to 100,000 hours in annual travel time
- Potential collisions reduced by up to 41%



Throgs Neck Bridge

\$241 million

- New fender systems at the suspended span's 2 towers will protect the bridge from accidental marine vessel collisions

Proposed 2020-2024 Capital Program

Investing in the future of New York

Agency*	(\$m)
NYCT Subways	\$ 37,303
Buses	\$ 3,512
Long Island Rail Road	\$ 5,714
Metro-North Railroad	\$ 4,689
Other	\$ 254
CPRB Capital Program Total	\$ 51,472

Bridges & Tunnels**	\$ 3,327
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* Includes capacity projects budgeted in MTACC

** B&T does not require CPRB approval

Funding the Capital Program

We will deliver the proposed 2020-2024 Capital Program through a combination of State, City, Federal and local resources.

Program Funding Plan	(\$m)
Capital from Central Business District Tolling	\$ 15,000
Capital from New Revenue Sources	\$ 10,000
MTA Bonds & PAYGO	\$ 9,792
Federal Formula	\$ 7,500
State of New York	\$ 3,000
City of New York	\$ 3,000
Federal New Starts (Second Ave Subway Ph. 2)	\$ 2,905
Federal Flexible	\$ 275
CPRB Capital Program Total	\$ 51,472

Bridges & Tunnels Self-Funded	\$ 3,327
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Capital Generated from New Revenues (\$25B)

- Central Business District (CBD) Tolling (\$15B)
 - 80% NYC Transit/Bus; 10% LIRR; 10% MNR
- New Revenues (\$10B)
 - Progressive Mansion Tax
 - Elimination of the Internet Tax Advantage

Federal Funds (\$10.7B)

- Federal Formula & Flex – based on recent levels (\$7.8B)
- Federal New Starts for SAS Ph. 2 – (\$2.9B)

NYS/NYC Capital (\$6B)

- State of New York (\$3B)
- City of New York (\$3B)

MTA Bonds & PAYGO (\$9.8B)

B&T Self-Funded (\$3.3B)

Next Steps

Plan Approval

- Prepare more in-depth briefings for State, City and legislative partners
- Prepare for MTA Board review
- Prepare for Capital Program Review Board submission

