Metropolitan Transportation Authority

Annual Report Narrative 2021

Submitted as part of the MTA 2021 Annual Report
Pursuant to New York State Public Authorities Law Section 2800(1)

Metropolitan Transportation Authority

2021 Annual Report to the Governor

Pursuant to New York State Public Authorities Law §2800

MTA 2021 ANNUAL REPORT NARRATIVE

Pursuant to New York Public Authorities Law Sections 2800 (1)(a)(1), (6), (11), (13), and (17)

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2021 ANNUAL REPORT—SECTION 1

Operations and Performance

Performance

This section of the Metropolitan Transportation Authority (MTA) Annual Report to the Governor, pursuant to PAL §2800, summarizes ridership and other performance data for the 12-month period ending December 31, 2021. To place the year in context, it is important to emphasize the unprecedented, ongoing impacts of the Covid-19 pandemic. Prior to the crisis, ridership on MTA trains, subways, and buses was pushing a sustained upward trend. In January 2020, both LIRR and Metro-North achieved record volume, with 7.2 million rides and 7.0 million rides respectively. Bridges and Tunnels also logged record volume at 21.1 million for the month. Monthly ridership on NYCT subways in January 2020 was 138.5 million, nearing the records levels of 2015, while a long-declining bus ridership had stabilized and begun to recover.

When the pandemic first hit in April 2020, subway ridership dropped by 93 percent, from over 5 million riders on a typical weekday to a historic low of about 300,000. From their record highs just months before, LIRR and Metro-North ridership plummeted by 97 percent and 95 percent respectively. The MTA's responses to the crisis in 2020, the heroism of MTA frontline workers, the arduous recovery, and the lingering financial repercussions have been summarized in last year's PAL §2800 report and elsewhere. A turning point came in March 2021 when vaccine eligibility in New York was extended to anyone 30 years of age or older, and a regional recovery began. During this critical period, the MTA's efforts to safeguard customers and employees included safety protocols throughout the system, rigorous disinfection programs, PPE distribution, employee hotlines, public safety messaging, free vaccinations, and other measures cited in this report. As more businesses reopened and workers began returning to offices, MTA safety protocols included a September 2021 mandate, still in effect, requiring all returning MTA employees to show proof of vaccination or undergo weekly testing.

Ridership Recovery Hits Omicron Surge

On Feb. 22, 2021, in a sign of sustained recovery, the MTA cut its four-hour overnight shutdowns of subway service to two hours, from 2 a.m. to 4 a.m., and on May 17, full 24-hour subway service resumed, ending the first scheduled overnight shutdown in the system's 117-year history. That same month, the MTA launched a regionwide, multimedia "Welcome Back" campaign, one of several outreach efforts to rebuild ridership. On March 15, 2021, subway weekday ridership hit 1.9 million trips, while bus operations neared 1.2 million. By June 18, 2021, subways logged a pandemic-era record of 2.57 million weekday riders. Combined subway and bus weekday ridership was 3.7 million, about half of prepandemic levels. LIRR carried about 123,000 weekday riders and Metro-North over 104,000. By early November 2021 subway weekday ridership hit 3.3 million riders, while the combined MTA agencies topped 5 million riders. Bridges and Tunnels, meanwhile, had recovered to nearly full volume by the end of 2021, enabling the agency to provide over $1.37 billion is support to mass transit for the year. The onset of the Omicron surge in December 2021 once again suppressed subway ridership, which fell to a low of 2.0 million riders by the end of the year, before rebounding to again top 3.0 million riders on February 8, 2022.

Federal Funds Stave of Systemwide Crisis

These ridership declines produced a severe financial crisis for the MTA and continuing financial uncertainties. Federal funds from three separate Covid-19 relief packages helped to stabilize the situation during 2021. The "CARES" Act in March 2020 provided the MTA with just over $4.0 billion in aid. A second appropriation in December 2020 brought the MTA an additional $4.0 billion. Finally, the American Rescue Plan Act, signed by President Biden in March 2021, included $30 billion in direct federal aid to transportation agencies, of which the MTA will receive around $6.5 billion, preventing layoffs, fare hikes, and drastic service cuts for the immediate future. Throughout 2021, the MTA continued to be guided the McKinsey Financial Impact Assessment of May 2020, which lays out a worst-case/best-case scenario for ridership and financial impacts. Taking the midpoint of these scenarios, the report projects ridership returning to about 86 percent of prepandemic levels by the end of 2024 and stabilizing there at a "new normal." These

financial uncertainties have variously impacted the performance data in this report. For example, a hiring freeze together with normal employee attrition resulted in staffing shortages for bus and subway operations, which the MTA began aggressively addressing in 2021 with an accelerated program of recruitment and training, particularly of bus and train operators. In some cases, paradoxically, the lower ridership together with ongoing agency initiatives and upgrades has contributed to record improvements in such areas as on-time performance (OTP), as indicated in this report.

Capital Programs Advance

Despite the year's ongoing challenges, the MTA advanced many of its key goals and capital projects in 2021, often accelerating projects to take advantage of lower ridership and traffic. Bridges and Tunnels, for example, completed projects worth $386 million, over 100 percent of goal, including several major projects on the Verrazzano-Narrows Bridge completed months ahead of schedule. All external capital construction projects for the agencies are now handled by MTA Construction & Development (MTA C&D), which is using new technologies, design-build contracts, and other methods to speed completions and reduce costs. The agency advanced an aggressive schedule of projects related to the LIRR expansion, a regional gamechanger that will culminate in the opening of the LIRR terminal in Grand Central Terminal expected in late 2022. In December of 2021, the MTA approved a design-build contract for the Penn Station Access Project, which will bring Metro-North into Penn Station and construct four new rail stations in the Bronx, connecting transit-starved communities with transportation regionwide. The year also saw the rebuild of the 42nd Street Shuttle, approval of Bronx Bus Network Redesign, advancement of the Central Business District Tolling Program (CBDTP), the opening of East End Gateway at Penn Station, an unprecedent number of ADA accessibility completions, and many other projects summarized in this report and in the Projects section of the MTA website at new.mta.info.

New Structure and Leadership

Finally, a number of organizational changes in 2021 are transforming the way the MTA does business. The year saw the implementation and winding down of the MTA Transformation Plan, an agencywide reorganization of MTA functions mandated by the

New York State Legislature. The plan oversaw a consolidation of administrative functions across all agencies designed to eliminate overlaps, pool scarce resources, and coordinate systemwide oversight, enabling the MTA's operating agencies to concentrate on core transportation services. The succession of Lt. Governor Kathy Hochul to the position of New York State governor in August 2021 was followed in January 2022 by the New York State Senate's confirmation of Janno Lieber, formerly president of MTA C&D, as the MTA's fifteenth Chair and CEO, thus ending 2021 with a substantially new MTA structure and leadership team. For details, see page 93 of this report, "Governance of the MTA." The immediate task ahead, as the new leadership team has repeatedly emphasized, is to rebuild MTA ridership and secure the MTA's financial future in the continuing aftermath of the Covid-19 crisis. At the same time, the MTA is continuing to advance major projects in its historic 2020-2024 Capital Plan that are transforming, modernizing, and integrating public transportation across the MTA travel region.

The balance of Section 1, below, reports the 2021 performance measurements for each of the MTA agencies providing subway, bus, paratransit, commuter rail, and bridge-and-tunnel crossing services. Due to the pandemic, many of these 2021 performance indicators cannot be meaningfully compared to prior years or to the agencies' original targets for the year. In some cases, actual data from the prior year is substituted for agency targets for purposes of comparison. Both LIRR and Metro-North adjusted 2021 targets downward to align with the McKinsey report midpoint projects. Agency performance targets will resume in 2022, and changes to 2021 targets are footnoted in each agency's data charts. As part of its public transparency mission, the MTA regularly updates these data on the MTA website at new.mta.info under the Performance Metrics Dashboards. Additional information can be found on the website under the Capital Program Dashboard, the System Modernization page, and the February 2021 Financial Plan. Data reported in this document may be subject to later adjustment and reconciliation.

New York City Transit—2021 Performance

NYCT Subways

Subway performance in 2021 continued to be diversely affected by the ongoing Covid-19 pandemic. While ridership remained well below prepandemic levels, it increased over the course of the year, as Covid restrictions were relaxed, more employees returned to offices, and tourism revived. Ridership also benefited from the restoration of overnight service. Overnight closures were reduced from four hours to two hours (2 a.m. to 4 a.m.) in February 2021, and full 24-hour service was restored in May. Ridership peaked in November 2021 at 58.5 percent of prepandemic levels before declining slightly in December during the Omicron surge.

Subway service performance remained strong in 2021. While some service indicators declined from the previous year, many exceeded prepandemic levels. Weekday "on-time performance" (OTP) for the year was 85.2 percent, 4.9 percentage points better than in 2019, the last full year before the pandemic. Combined "additional platform time" (APT) and "additional train time" (ATT) was 15 seconds faster than in 2019, reflecting the continued commitment to improving subway speeds. "Major incidents" (those delaying 50 or more trains) were 26 percent lower in 2021 than in 2019. Subway car "mean distance between failures" (MDBF) improved by 17.7 percent to 150,363 miles in 2021 from 127,743 miles in 2019.

The strong performance in 2021 indicates the continued effectiveness of the Subway Action Plan (SAP). The plan dramatically improved operating conditions between 2017 and 2019, and continued efforts in maintenance and emergency response are preserving those gains. Examples include more frequent cleaning of street vents to reduce water infiltration; vacuum trains to expand track cleaning; rail grinding to improve ride quality; new equipment to improve power and signal reliability; and more rapid response teams to address incidents. To improve subway speeds, nearly 1,600 outmoded mechanical timers have been replaced by digital devices; over 460 slow-clearing signal devices have been recalibrated; and the agency has safely increased the speed limits at over 300 locations to better reflect today's true operating capabilities.

NYCT Department of Buses (DOB)

The MTA's bus operations include both NYCT Department of Buses (DOB) and MTA Bus Company, which is also covered on page 19 of this report. In some instances, performance data is combined for both operations. Bus operations continued to be impacted by the Covid-19 pandemic and the 2021 Omicron surge. Both agencies continued distribution of free masks and an unprecedented disinfection campaign, along with onsite vaccination and testing programs for employees. The agencies completed the installation of protective barriers on all buses in 2021 to help safeguard both customers and employees. In addition, the deployment of real-time capacity tracking on MTA buses helped promote social distancing and safer choices for customers.

These efforts include an accelerated program of recruiting, training, and onboarding new bus operators to refill positions lost during the fiscal uncertainties of the pandemic. While still well below prepandemic levels, bus ridership trended upward in 2021. The actual combined ridership for all bus operations ticked up by 6.6 percent from 359.3 million in 2020 to about 383.1 million in 2021. Actual NYCT DOB ridership remained relatively unchanged at 311.7 million in 2021. Due to the statistical anomalies of the pandemic, actual 2020 ridership data is used in the chart below as a substitute "target" for purposes of comparison. Despite the many challenges of the pandemic, other performance indicators remained relatively stable during 2021. "Additional travel time," the estimated extra time customers spend onboard compared to the scheduled time, improved slightly during the year. "Customer journey time performance," which estimates the percentage of customers who complete their journey within five minutes of scheduled time, fell by 1.8 percentage points to 75.5 percent. "Bus speeds" decreased by 2.4 percent from the prior year, yet maintained an average of 8.2 mph. Performance was positively impacted by NYCDOT's addition of 17 miles of new bus lanes and busways in 2021, bringing the total to 142 miles of bus lanes in the MTA network.

Bus service has been a critical lifeline for New Yorkers throughout the pandemic, for essential workers in particular, and MTA bus operations have made every effort to maximize service at all 16,000 bus stops and 329 routes across five boroughs. Thanks

to a dedicated workforce, MTA bus operations carried more customers at the height of the pandemic than any other public transit agency in North America.

MTA Access-a-Rise (ARR)

MTA's Access-a-Ride (AAR), managed by MTA DOB, also saw significant changes in 2021 service due to the pandemic. Thanks to the dedication of the Paratransit team, the agency continued to provide full service throughout the pandemic and faced a significant increase in demand as the pandemic subsided. The number of trips increased 30 percent above levels at the height of the pandemic crisis and subsequently rebounded to about 70 percent of typical levels. Aggressive safety actions were implemented to protect customers and operators, including daily disinfection of vehicles, onboard safety protocols, suspension of shared ride services, and other measures.

New York City Transit

Performance Key
- At or above target
- Below target by less than 5%
- Below target by 5% or more

	2021 Target*	2021 Actual	Change from Target
NYCT Subway Service Indicators			
Weekday Major Incidents – Subways (monthly average)	24.3*	33.5	**+37.9**
Weekday Service Delivered – Subways	96.4%	92.2%	**-4.2%**
Weekday Terminal On-Time Performance – Subways	88.6%	85.2%	**-3.4%**
Weekday Terminal Delays – Subways (monthly average)	17,150	25,370	**+47.9%**
Customer Journey Time Perf. (% within 5 min. of scheduled)	85.8%	83.8%	**-2.0%**
Additional Platform Time (average beyond scheduled)	0:01:07	0:01:26	**+17.8%**
Additional Train Time (average beyond scheduled)	0:00:20	0:00:12	**-40.0%**
Mean Distance Between Failures – Subways (miles)	146,297	150,363	**+2.8%**
Weekday Wait Assessment – Subways	75.6%	68.3%	**-7.3%**
Elevator Availability – Subways	96.8%	96.6%	**-0.2%**
Escalator Availability – Subways	92.4%	91.3%	**-1.1%**
Total Ridership – Subways	639,536,812	759,810,246 **	**+18.8**
Weekday On-Time Performance – SIR***	97.6%	96.6%	**-1.0%**
Mean Distance Between Failures – SIR (miles)	53,946	29,343	**-45.6%**

Notes: * Due to the anomalies of performance during the Covid-19 pandemic, NYCT Subways did not publish 2021 target goals. Instead, 2020 Actual Metrics are being substituted in this column for purposes of comparison only. The agency is setting targets for 2022. In addition, 2021 targets were not determined for several new service indicators. *Major incidents exclude March and April 2020 due to the use of projections. **NYCT Subways operates SIR but does not include SIR in ridership totals. Subway 2021 ridership including SIR is 761,142,069.

New York City Transit, cont.

Performance Key
- At or above target
- Below target by less than 5%
- Below target by 5% or more

	2021 Target*	2021 Actual	Change from Target
NYCT Bus Service Indicators			
Percent of Completed Trips – NYCT Bus	98.1%	95.3%	**-2.8%**
Customer Journey Time Perf. (% within 5 min. of scheduled)	N/A	75.5%	N/A
Additional Bus Stop Time (average beyond scheduled)	N/A	0:01:58	N/A
Additional Travel Time (average beyond scheduled)	N/A	0:00:00	N/A
Bus Customer Wheelchair Lift Usage – NYCT Bus	969,485	,952,720	**-1.7%**
Service Delivered NYCT & MTA Bus (% scheduled, peak)	97.5%	93.8%	**-3.7%**
Bus Speeds NYCT & MTA (avg. route speed, end-to-end)	N/A	8.2	N/A
Total Ridership – NYCT Bus	313,361,162	311,711,871	**-0.5**
Mean Distance Between Failures – NYCT Bus (miles)	7,866	7,480	**-4.9%**
Wait Assessment – NYCT & MTA Bus	78.0%	75.9%	**-2.1%**
NYCT Paratransit Service Indicators**			
Total Paratransit Ridership – NYCT Bus	8,277,208	7,835,975	**-5.3%**
AAR On-Time-Performance Pick up (30 min.) / Drop off (15 min.)	30 min: 94% 15 min: 85%	30 min: 93% 15 min: 80%	**-1%** **-5%**
AAR Appointment OTP Trips -30 Min Early to <1 Min Late	N/A	N/A	N/A
AAR Provider No-Shows (per 1,000 trips)	3.0	7.01	**133.7%**
AAR Ride Time, Actual Trip Duration vs. Planned	80%	83%	**3.0%**
AAR Customer Experience – Frequent Rider Experience	N/A	N/A	N/A
AAR Call Center (% of calls answered)	95%	90%	**-5.0%**
AAR Passenger Complaints (per 1000 trips)	3.0	7.4	**146.7%**
AAR Registrants	N/A	166,100	N/A
NYCT Safety Indicators			
Cust. Injury Rate – Subways (per million cust.)	4.19	4.06	**-3.10%**
Cust. Accident Injury Rate – NYCT Bus (per million cust.)	1.94	2.19	**+12.9%**
Collisions with Injury Rate – NYCT Bus (per million vehicle miles)	5.81	5.71	**-1.6%**
Employee Lost Time and Restricted-Duty Rate NYCT Subways (per 100 employees)	3.63	4.05	**+15.70%**
Employee Lost Time and Restricted-Duty Rate NYCT Bus (per 100 employees)	5.93	6.36	**+7.25%**

Notes: All indicators were severely impact by the Covid-19 pandemic. *Due to the pandemic, bus operations did not publish 2021 targets. Instead, 2020 actual metrics have been used in this column for purposes of comparison only. NYCT Bus will resume targets in 2022. **Collection of data from AAR services was suspended due to the pandemic.

Long Island Rail Road—2021 Performance

MTA Long Island Rail Road (LIRR) faced significantly decreased ridership in 2021 as the Covid-19 pandemic continued. Large segments of LIRR's customer base continued to work from home and discretionary travel demand remained low. As the year went on and some pandemic measures relaxed, LIRR did see an upward trend in ridership. Total ridership for 2021 was 35.0 million customers, an increase of 15.6 percent above the lows of the previous year, though still far below prepandemic levels. During the summer and fall of 2021, LIRR saw continued increase in weekend ridership, with evidence of leisure and discretionary demand. Significantly, non-commutation ridership increased 58.6 percent to 25.3 million passengers in 2021, outperforming commutation ridership, which declined by 9.7 million passengers, down 32.3 percent.

The railroad saw significant improvements in several performance indicators. "On-time performance" (OTP) for 2021 was the best since modern record-keeping began in the 1970s. The total number of trains operating on time in 2021 was 96.3 percent, which breaks the previous record of 95.9 percent set in 2020. These historic improvements resulted from ongoing efforts to identify and address the root causes of train delays systemwide, along with infrastructure improvements. The agency's "mean distance between failures" (MDBF) was 231,337 miles, or 36.1 percent above the target of 170,000 miles. The MDBF for both diesel and electric fleets performed well above the expected targets. The railroad continues to optimize fleet performance through a number of operational initiatives, including Reliability Centered Maintenance (RCM); thorough utilization of its Enterprise Asset Management System (EAM); and acquisition of the new M-9 fleet.

Despite the pandemic, LIRR and MTA C&D achieved significant progress in LIRR Capital Program projects during 2021, with an unprecedent 100 projects underway in a historic transformation and modernization of the railroad's infrastructure and performance. These and other 2021 advances are covered elsewhere in this report and updated regularly on the Performance Dashboard and the Capital Program Dashboard under "Transparency" at www.mta.info.

Long Island Rail Road

Performance Key
- At or above target
- Below target by less than 5%
- Below target by 5% or more

	2021 Target*	2021 Actual	Change from Target
Service Indicators			
On-Time Performance	94.0%	96.3%	**+2.3%**
Elevator Availability	98.0%	98.7%	**+0.7%**
Escalator Availability	97.0%	95.3%	**-1.7%**
Total Ridership**	34,420,049	35,036,746	+1.8%
Mean Distance Between Failures (miles)	170,000	231,337	**+36.1%**
Safety Indicators			
FRA-Reportable Customer Injury Rate* (per million)	2.4	2.2	-8.3
FRA-Reportable Employee Lost-Time Case Rate (per 200,000 worker hours)	3.0	4.0	+33.3

Notes: Performance indicators were impacted by the Covid-19 pandemic and do not allow for consistent year-over-year comparisons. *Targets are based on final estimates from the Nov. 2021 Financial Plan, as projected by the "mid-case" scenario in the 2020 McKinsey report. **While 2021 ridership was still well below the 2019 (pre-Covid) ridership totals, it did begin to increase again. LIRR ridership is calculated based on the number of tickets sold, multiplied by a factor related to each type of ticket. Monthly/weekly factor is based on the number of weekdays and weekend days per month. The 2021 ridership increased by 15.6% and the 2021 injury rate decreased by 29% from the previous year (2020). MTA performance data are subject to periodic adjustment. Some data may have been updated subsequent to the 2021 "Mission Statements" PAL §1269-f report and earlier documents.

Metro-North 2021 Performance

Metro-North's systemwide ridership increased to 30.7 million in 2021 from 27.2 million in 2020. Ridership remains significantly impacted by the pandemic and was 65.3 percent lower in 2021 than the railroad's 2019 prepandemic ridership of 86.6 million. Ridership on the railroad's connecting services—Haverstraw-Ossining Ferry, the Newburgh-Beacon Ferry, and the Hudson Rail Link— fell even further in 2021 to a combined low of 106,375.

Metro-North's systemwide "on-time performance" (OTP) for 2021 was above goal at 97.1 percent. This marks only the second time since the railroad's founding in 1983 that OTP has exceeded 97 percent for two consecutive years. The railroad modified its operating schedule in June and August of 2021 in response to growing ridership. The August schedule change brought service levels up to 82 percent of prepandemic levels. The Hudson Line performed at 97.4 percent OTP, the Harlem Line at 97.2 percent, and the New Haven Line at 96.9 percent. West-of-Hudson OTP for 2021 was just below the goal at 93.4 percent.

The railroad's "mean distance between failures" (MDBF) for 2021 was 8.8 percent above the adjusted target at 190,518 miles. The decrease in actual MDBF from 2020 was primarily caused by a Positive Train Control (PTC) system software issue, which resulted in delays on the M-8 fleet in the first half of 2021. Once corrected, MDBF improved in the second half of 2021. Discounting the delays caused by that software issue, the MDBF for the M-8 fleet would have been 729,316, which would have brought the overall fleet MDBF up to 272,169 instead of 190,518. Car availability was excellent, resulting in a 100 percent "consist compliance rate," which is the percentage of cars required for daily service and customer seating.

Metro-North Railroad

Performance Key
- At or above target
- Below target by less than 5% Below
- target by 5% or more

	2021 Target *	2021 Actual	Change from Target
Service Indicators			
On-Time Performance (East of Hudson)	94.0	97.1	+3.1
On-Time Performance (West of Hudson)	94.0	93.4	-0.7%
Elevator Availability	99%	99.8%	+0.8%
Escalator Availability	99%	99.9%	+0.9%
Total Ridership ** (includes connecting services)	**23,428,000	30,722,008	+31.1%
Mean Distance Between Failures (miles)	175,000	190,518	+8.8%
Safety Indicators			
FRA Reportable Customer Injury Rate (per million)	1.00	1.79	+79%
FRA Reportable Employee Lost-Time Case Rate (per 200,000 worker hours)	2.38	1.97	17.%

Notes: All performance indicators were impacted by the Covid-19 pandemic. Data in many instances is preliminary and subject to adjustment. *Targets are based on final estimates from the Nov. 2021 Financial Plan, as projected by the "mid-case" scenario in the 2020 McKinsey Report. Total Ridership does not include connecting services. This is East and West of Hudson Metro-North Railroad ridership only. Metro-North ridership is calculated based on the number of tickets sold, multiplied by a factor related to each type of ticket. Monthly/weekly factor is based on the number of weekdays and weekend days per month.

MTA Bus Company—2021 Performance

Performance data for MTA Bus and NYCT DOB are combined in some instances. See page 14 of this report for combined indicators. Actual ridership at MTA Bus increased in 2021 by 55.5 percent compared to the prior year. Due to the statistical anomalies caused by the pandemic, actual ridership data from 2020 is used in place of a 2021 target in the chart below for comparison purposes. The agency is resuming target indictors for 2022. The bus fleet's combined "mean distance between failures" (MDBF) for both agencies decreased in 2021 to 7,480 or 4.9 percent below the previous year, which served as target for comparison purposes. The decline for the year was impacted by an over-age fleet and an increase in weather-related road calls. The "percentage of trips completed," which depends on both vehicle and operator availability, was 1.8 percent below target for the year, due in part to staffing and logistics challenges during the pandemic. Both bus operations have undertaken aggressive recruitment and training efforts to address staff shortages.

The delivery of new bus fleets continued at both agencies during 2021. MTA Bus took delivery of 106 Prevost coach buses in 2021 out of an order of 257 buses. In addition, NYCT DOB took delivery of 97 out of 110 New Flyer hybrid buses; 123 out of 165 Nova hybrid buses; 40 out of 126 Nova hybrid buses, and 30 out of 50 Prevost coach buses. Safety remained the primary focus in 2021, including ongoing, agencywide efforts to protect the health and well-being of customers and the workforce during the pandemic. The agency's "collisions with injury" rate increased by 5.8 percent from 4.29 to 5.54 per million vehicle miles. The "customer accident injury rate" decreased by approximately 8.5 percent from 1.42 to 1.30. This was primarily due to an increase in ridership while number of customer injuries remained the same. The agency continues to analyze and utilize accident trends to improve safety training programs and safety communications.

MTA Bus Company

Performance Key

- At or above target
- Below target by less than 5%
- Below target by 5% or more

	2021 Target*	2021 Actual	Change from Target
Service Indicators			
% of Completed Trips	97.4%	95.6%	**-1.8%**
Bus Customer Wheelchair Lift Usage	64,134	66,881	**+4.3%**
Total Ridership	45,916,750	71,426,526	**+55.5%**
Safety Indicators			
Customer Accident Injury Rate (per million customers)	1.42	1.30	**-8.5%**
Collisions with Injury Rate (per million miles)	4.29	4.54	**+5.8%**
Employee Lost-Time Rate (per 100 employees)	6.67	7.82	**+10.2%**

Notes: Some performance indicators are combined for NYCT and MTA Bus (see page 14). The Covid-19 pandemic impacted all performance metrics in 2021. *Due to the anomalous effects of the pandemic, MTA Bus did not publish 2021 Targets for most indicators. Instead, 2020 Actual data is provided in this column for comparison only. MTA performance data are subject to periodic adjustment. Some data may have been updated subsequent to the 2019 PAL §1269-f report and earlier documents.

Bridges and Tunnels—2021 Performance

In 2021, traffic volume at MTA Bridges and Tunnels crossings continued its recovery from the impact of the ongoing Covid-19 pandemic, exceeding prior expectations. The agency recorded 307.3 million vehicle crossings in 2021, a significant increase of 21.4 percent over the 253.2 million actual crossings recorded in 2020. That was a full 40.6 percent above the adjusted 2021 target of 218.6 million used in the chart below, which was based on the estimates of the 2021 November Financial Plan and the midpoint agency projections in the 2020 McKinsey report. The E-ZPass market share remained constant year-over-year, accounting for 94.9 percent of transactions in 2021. Despite the rebounding volume, the ongoing operational and financial effects of the Covid-19 crisis remain uncertain, given the pandemic's unpredictable nature.

As a result of the increase in traffic volume and a toll increase implemented in April 2021, the support Bridges and Tunnels provided to mass transit increased by 65.9 percent in 2021, to $1,377.0 million. The previous year's support was $830.2 million. This level of support for mass transit is also attributed to steps taken by MTA Bridges and Tunnels to contain costs and reduce expenses, resulting in a saving of $458.6 million in operational costs for the year. This represents a decrease in operational costs of 15.9 percent below the agency's original 2021 Adopted Budget.

Throughout the year, Bridges and Tunnels undertook several measures to protect the agency's workforce, including safety messaging, distribution of Personal Protective Equipment (PPE), teleworking where possible, regular on-site Covid-19 screenings, social distancing protocols, and other safety initiatives. The agency's proactive engineering projects, safety enforcement, new technology installations, and educational safety strategies resulted in improved safety indicators in 2021 as compared to the previous year.

Bridges and Tunnels

Performance Key
- At or above target
- Below target by less than 5% Below target by 5% or more

	2021 Target*	2021 Actual	Change from Target
Service Indicators			
Paid Tolled Traffic	218.6 million	307.3 million	**+40.6%**
Safety Indicators			
Collisions with Injury Rate (per million vehicles)	0.80	0.67	**+16.3%**
Employee Lost-Time Injury Rate (per 200,000 work hours)	5.8	5.6	**+3.4%**

Notes: Performance indicators were impacted by the Covid-19 pandemic and do not allow for consistent year-over-year comparisons. * Due to the statistical anomalies of the pandemic, 2021 Targets were adjusted downward to 218.6 million according to the 2021 Nov. Financial Plan estimates, based on the agency projections in the 2020 McKinsey Report. By way of comparison, actual traffic for 2020 was 253.2 million or 13.6 percent above the revised target. MTA performance data are subject to periodic adjustment. Some data may have been updated subsequent to the 2021 "Mission Statements" PAL §1269-f report and earlier documents. *See Section II, Safety/Security Initiatives for more details.

2021 ANNUAL REPORT—SECTION 2

Accomplishmentsand Initiatives

Customer Service Initiatives

Interagency—Customer Service Initiatives

- Supported the continued rollout of One Metro New York (OMNY), the MTA's new contactless fare payment system, across the transit system. The rollout was completed by January 2021, with 15,000 OMNY readers at all 472 subway stations, readers on all 5,800 buses, and at all Staten Island Railway stations. In July 2021, OMNY surpassed 100 million "taps." The MTA also began introducing OMNY cards at retail locations and integrating additional fare options, such as reduced fares for seniors. (See also, Technology/Operation Initiatives.)
- Developed and implemented all-agency customer campaigns relating to the Covid-19 pandemic. These included an award-winning campaign of digital and onboard safety information; social distancing markers; public announcements; press conferences; expanded service updates and advisories; and distribution of free masks to customers via the monthly "Mask Force" team of volunteers, among other initiatives. The MTA also provided support for "pop-up" walk-in vaccination sites at MTA locations.
- Continued to work with local officials, MTAPD, and the New York City Police Department (NYPD) to enforce state-mandated mask requirements and other safety rules at all rail and subway stations and on all MTA buses, subways, railcars, and Access-a-Ride vehicles. The authority also worked with local officials and NYPD in 2021 to expand crime prevention and to assist in the relocation of homeless people sheltering on the subways.
- Continued to support and expand the MTA Licensing Program, which secures MTA intellectual properties and generates revenue through licensing of popular

MTA icons, graphics, images, and more, through sublicense agreements worldwide. Also, developed a new MTA Licensing Program Style Guide to detail usage rules for licensees and generate ideas for MTA-themed products

- Continued to add new features and functionality, based on customer feedback, to the MTA's public website at www.mta.info and the MYmta app, including new content types and several Covid-19 resources. The website logs around 1.5 million visits per month, while the app has around 25,000 active users.
- Delivered MTA news and information 24/7 to customers, news organizations, and the general public through a variety of media, including the MTA website; press briefings; press releases; press conferences; and real-time feeds to social media, including Twitter, Tumblr, Flickr, Instagram, and Facebook. As of 2021, the MTA's YouTube Channel archived more than 1,600 service videos on MTA agency initiatives, campaigns, and projects.
- Administered MTA Arts & Design's acclaimed "Percent for Art" program, which commissions permanent public artworks for MTA properties, with more than 50 projects currently in planning or fabrication. Despite the pandemic, Arts & Design was able to meet critical milestones for several Capital Program projects in 2021, including new art installation at subway stations in three boroughs and at several LIRR and Metro-North stations.
- Completed new Percent for Art installations at the following stations in 2021. For NYCT: Grand Central-42 St (4,5,6,7, S); 1 Ave. (L); Bedford Ave. (L), and 138 St (6). For Metro-North: 3 Ave. Bridge (Mt. Vernon); 6 Ave. Bridge (Mt. Vernon); 10 Ave. Bridge (Mt. Vernon) Port Jervis; White Plains. Installed new artwork at the following LIRR stations, not yet opened: Carle Place (3rd Track); New Hyde Park (3rd Track), Sandy Litchfield; and Merillon Ave (3rd Track).
- Created "TRAVELS FAR," a digital memorial honoring our MTA colleagues lost to Covid-19. The memorial, which debuted in January 2021, is the product of a collaboration between Arts & Design, NYCT, and families of the employees. In addition to photographs of 112 individuals, the memorial includes an original poem in multiple languages and an original musical composition. The memorial

debuted on January 2021 on digital screens at 109 stations and is now archived on the MTA website.

- Participated in several online panel discussions in 2021, including “WTC Cortlandt: 20 Years After 9/11;” “Mind the Gap: Women Designing for Transit;” and “Public Art on Public Transit,” as well as presentations to the MFA Graphics Program at the School of Visual. Led one in-person art tour at the 34 St-Hudson Yards station and along the 42 St.
- Won recognition by the Society of Illustrators, which selected three MTA Arts & Design graphic works for their “American Illustration 40” annual award book.

NYC Transit (Subways)—Customer Service Initiatives

- Continued to provide critical subway service throughout the pandemic, despite ridership and revenue losses, carrying essential workers and returning riders as the city reopened in 2021. Measures to safeguard customers included the systemwide, twice-daily cleaning and disinfection of subways cars and station touchpoints; systemwide social distancing markers; distribution of hand disinfectant sanitizers; and monthly “Mask Force” volunteers offering free masks to customers across the system. (See also, Safety Initiatives)
- Maintained a robust program of Covid-19 safety messaging and outreach systemwide throughout 2021, including digital, onboard, and platform campaigns; communications and wayfinding for pop-up vaccination centers; and much more. The agency’s “Safe Travels” campaign was recognized nationally and earned a first-place advertising award from the American Public Transit Association (APTA).
- Created a 2021 “Welcome Back to Transit” multimedia marketing campaign, encouraging customers returning to work to use MTA buses, subways, and railroads. Messaging emphasized the benefits of transit in terms of speed, efficiency, cost, and environmental impacts. This campaign became the foundation for other local recovery initiatives, including “Welcome Back Broadway” and “Welcome Back New York.”

- Implemented a MetroCard Bulk Sales program in conjunction with the nonprofit Partnership for New York. This public-private incentive program encourages businesses and nonprofits to use MetroCards as a way to bring staff back to offices, while supporting transit and regional recovery.
- Completed the implementation of OMNY, the MTA's new contactless fare payment system, across the NYCT network in 2021. There are now 15,000 OMNY readers at all 472 subway stations and readers on all 5,800 buses. During 2021, the OMNY system surpassed 100 million customer "taps." (See also, Interagency Customer Service Initiatives; NYCT Technology/Operation Initiatives.)
- Provided additional services to accommodate customers during overnight suspension of subway services for full car cleanings. These included a 24/7 call center; an overnight information webpage; supplementary linking bus services; and temporary, free for-hire vehicles (FHV) service for essential workers unable to use the bus routes.
- Produced and implemented several public awareness campaigns relating to health and safety. These included a "Let's Look Out For Each Other" campaign on how to report homeless persons in the NYCT system; a "Rules of the Ride" safety compliance campaign; promotion of the citywide "Fair Fares" MetroCard; and a campaign to combat hate crimes, which ran on 4,000 screens in the subway system and 2,600 bus screens.
- Continued a number of IT-related customer service initiatives, including enhancement of NYCT's award-winning interactive Live Subway Map with real-time data; implementation of new QR-code claim filing for NYCT's upgraded Lost and Found system; the adoption of Apple Business Chat, Google Translation, and other commercial apps for a variety of customer service messaging; and a partnership with the Transit Tech Lab to explore app-based solutions for transit customers with vision or hearing disabilities.

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)—Customer Service Initiatives

- Continued an extensive program of Covid-19 safety measures, including disinfection of buses every 24 hours (with over 1.4 million bus cleanings to date); distribution of masks through the MTA's "Mask Force" volunteers; use of onboard free mask dispensers for customers; and a variety of multimedia messaging campaigns to support compliance with health rules and customer safety. (See also, Safety/Security Initiatives)
- Utilized the new bus capacity tracking feature on the MYmta app, which enables customers to track the number of passengers on an arriving bus in real time. This information, currently available about 58 percent of the bus fleet, enables customers to decide whether to board or wait for the next bus, further promoting safe social distancing.
- Advanced the Bronx Local Bus Network Redesign, with the final plan approved by the MTA Board in December 2021. The Bronx plan is part of the largest overhaul of New York's bus system since the 1950s, which involves a borough-by-borough redesign of bus networks to address changing demographics and service needs across the region based on direct community input. The agency expects borough-wide implementation of the Bronx plan in summer of 2022.
- Worked with the NYCDOT to add new dedicated bus lanes and busways across the city. In 2021, NYCDOT implemented 17 new miles of bus lanes and busways in all five boroughs. The agency continued utilizing the Automated Bus Lane Enforcement (ABLE) system, which reports bus-lane violations using bus-mounted cameras, triggering fines from $50 to $250. The ABLE system operates on 123 buses serving seven routes. By the end of 2021, the system had captured over 123,500 violations.
- Advanced the agency's goal of a zero-emissions bus fleet by 2040. The MTA Board approved the federally funded purchase of 60 low-floor 40-foot all-electric buses in 2021. The new buses are equipped with USB chargers, Wi-Fi, camera systems, and other customer amenities. The agency is partnering the local power authority to install

new charging infrastructure, including in-depot overhead pantograph down charging. The MTA expects to have the first buses in service towards the end of 2022.

Access-a-Ride (AAR)

- Implemented critical safety measures to protect customers and drivers during the Covid-19 pandemic. All dedicated vehicles are disinfected daily, and temperature checks are required for drivers. Face coverings are required on all trips for both customers and drivers, and shared rides are currently suspended.
- Undertook additional Covid-19 safety measures, including temporary curtailment of feeder service; reduction of the prescribed time interval between drop-off and return trips; and the use of special transportation for customers who are Covid-19 positive or symptomatic. We have also extended Phase 1 of the On-Demand E-hail Pilot Program due to the pandemic.
- Awarded three five-year service contracts for AAR customer Eligibility Assessment Services, with new Assessment Centers to be located in Staten Island, Brooklyn, Queens, and the Bronx, with ongoing plans for an additional center in Manhattan.

Long Island Rail Road—Customer Service Initiatives

- Continued the railroad's comprehensive measures to safeguard customers during the Covid-19 pandemic, including systemwide safety messaging; installation of Personal Protective Equipment (PPE) vending machines at Penn Station; improvement of onboard distancing protocols; expanded cleaning and disinfection efforts; implementation of off-peak fares during peak hours; and more. (See also, Safety Initiatives.)
- Replaced or upgrade electronic signs at selected stations to provide real-time seating. The new digital platform signs display available seating in each car of an arriving train, as well as the observer's relative position along the platform. This allows customers to position themselves along the platform to align with less crowded cars.

- Continued the railroad's popular LIRR Care Program, which provides personalized attention for first-time LIRR travelers and customers requiring special assistance when boarding or exiting trains. The program, which was adapted to include Covid-19 protocols, is one of the new initiatives LIRR is exploring to better accommodate ADA customers. Program "ambassadors" also offer masks to all traveling customers.
- Completed elevator and escalator renewals at Penn Station, which improved reliability and incorporated enhanced safety features and functionality into the elevators and escalators serving the LIRR area of Penn Station.
- Completed station component renewal at St. Albans Station in Queens. Work included rehabilitation of the concrete platform, installation of a new platform shelter shed, installation of new signage, upgraded LED platform lighting, and new staircase treads.

Metro-North—Customer Service Initiatives

- Maintained the most aggressive cleaning and disinfection program in the railroad's history, with stations sanitized twice every 24 hours and train cars once every 24 hours to help protect customers and employees during the Covid-19 pandemic. The agency also continued distribution of masks and hand sanitizers, including Personal Protective Equipment (PPE) dispensers at many stations. (See also, Safety/Security Initiatives)
- Continued extensive safety messaging for Metro-North customers, including information on current safety measures in stations and aboard trains; advance notification of any service changes; and innovative social media campaigns with Covid-related news, rules, and advisories.
- Completed roll out of TrainTime™ technology on all Metro-North M-7, M-8, and Shoreliner trains. The agency's popular TrainTime™ app provides real-time passenger and seating estimates for arriving trains, enabling customers to predict best travel times and better plan for social distancing. The app was made available on the Apple Smart Watch in 2021, with an Android version to follow in early 2022.

- Finalized the agency's Stations Ambassador Program in late 2021. The program integrates ticket selling and ambassador positions, allowing more complete and seamless customer service for ticket sales, information, ADA assistance, monitoring station conditions, mask distribution, and other customer service functions. There are currently 60 Metro-North "ambassador" positions deployed across ten key outlying stations.
- Completed the third full year of the railroad's "Way Ahead" plan to enhance safety, service, infrastructure, and communications, while rebuilding ridership as pandemic restrictions ease. Thematically, the plan prioritizes "Our Customers, Our People, Our Infrastructure" with a focus on the key principles of safety, integrity, and innovation.
- Revived several public outreach initiatives in 2021 that had been suspended due to the pandemic. These include "Connect with Us" public forums, in which customers can meet informally with the railroad's senior executives and the new "Station Talk" program, in which Station Ambassadors meet with customers at different stations to get feedback and answer questions.
- Implemented a number of customer-messaging initiatives in 2021, including installation of Outfront Media Displays at Grand Central terminal and outlying stations, along with field testing of displays onboard M-7 and M-8 cars. The agency also offset the reduction of print messaging and live customer contact during the pandemic with expanded use of creative digital communications, including videos, social media posts, emails, and more.
- Continued Metro-North's Accessibility Task Force, which focuses on transportation services and facilities as they relate to persons with disabilities. Quarterly meetings in 2021 generated support for accessibility initiatives through the participation of various Metro-North departments, governmental agencies, NJTransit, the CTDOT, and others.

Bridges and Tunnels—Customer Service Initiatives

- Continued E-ZPass communications throughout the pandemic to educate customers about cashless tolling, payment options, and ways to avoid violations. E-ZPass usage stayed effectively flat at approximately 94.9 percent throughout the year due to the Covid-19 pandemic's impact on traffic.
- Achieved more than 1 million installs and processed over $120.3 million in customer payments through the Tolls NY app for E-ZPass and Tolls by Mail. The app has maintained a consistent customer satisfaction rating of 4.7 out of 5 in the Apple App Store and holds a Top 90 ranking in the Apple travel category.
- Maintained cash replenishments for the MTA Reload Card totaling $2.7 million in 2021, an increase from the previous year. In addition, 145,341 expired E-ZPass tags were exchanged to ensure a high rate of scanning performance. This represents an increase in the number of transponders exchanged, which is attributable to the resumption of the E-ZPass tag exchange program at the beginning of March 2021.

Operations/Technology Initiatives

Interagency—Operations/Technology Initiatives

- Completed the roll out of OMNY, the MTA's new contactless fare payment system, across the transit system. There are now 15,000 OMNY readers at all 472 subway stations, readers on all 5,800 buses, and at all Staten Island Railway stations. In July 2021, the MTA surpassed 100 million customer "taps" on the OMNY system. The MTA began introducing contactless cards at retail locations and integrate additional fare options, such as reduced fares for seniors.
- Provided in-house app development for an Apple Watch companion to Metro-North's Train Time, which debuted in October 2021. Also, expanded the real-time seating capacity feature of the Train Time app to Google Maps, enabling customers without

the app to access train seating information for more informed decisions and social distancing.

- Introduced a chat function, developed by an in-house IT team, for the LIRR Train Time app. The new function enables customers to chat with LIRR customer service staff in real time. Customers can ask questions, report problems, submit photos, and more. Service staff can send links that instantly direct customers to the relevant app features.
- Provided IT and technical support and data tracking for four employee Covid-19 vaccination sites and 127 testing locations across MTA properties. Also, maintained an online Employee Covid-19 Resource Center for accessing information, documents, and video tutorials, as well as uploading vax status and submitting test results. The employee site logged more than 1.5 million visits per month.

- Completed the final phase of migrating NYCT's legacy Workers Compensation information system to a cloud-based COTS product. The solution is configured to connect with multiple internal and third-party systems, including processing Workers Compensation claims for MTA employees through an EDI interface to the New York State Workers Compensation Board.
- Completed the reorganization, consolidation, and streamlining of agency administrative support functions through the MTA Transformation Plan, mandated by the New York State Legislature. This centralization of functions is designed achieve more cost-efficient support, better resource allocation, and clearer strategic oversight, while enabling the MTA agencies to focus on core transportation functions. (See also, Cost-Saving/Revenue Initiatives)
- Continued the Enterprise Asset Management (EAM) Six Sigma program which trains and certifies employees in EAM project design and development. Project teams submit and develop approval-ready projects designed to improve efficiency and reduce costs in agency workflows, from administrative functions to large-scale power and maintenance projects. The program certified 17 projects in 2020. Over 30

projects and more than 60 employees are currently active in the program, with some 200 employees waitlisted for 2021.

- Initiated an IT Security "Incident Response Plan" in December 2021, following a directive from the Transportation Security Administration (TSA) requiring critical actions to safeguard mass transit. This comprehensive plan covers both IT and Operational Technology (OT). It entails close communication with the TSA and other partners; rapid incident reporting and documentation; a detailed response and recovery plan; ongoing risk assessments; and more. These initiatives also include an agencywide "Vulnerability Assessment" covering both IT and OT.

NYC Transit (Subways)—Operations/Technology Initiatives

- Continued the agency's program to identify outmoded signals and safely increase speeds appropriate for current trains and operations. To date, the program has modified over 460 signal timers, safely increased over 300 speed limits, cleaned thousands of signs, and replaced nearly 1,600 mechanical grade timers with modern digital equipment.
- Completed the implementation of OMNY, the MTA's new contactless fare payment system, across the NYCT network. There are now 15,000 OMNY readers at all 472 subway stations and readers on all 5,800 buses. At the time of this report, the OMNY system surpassed 50 million customer "taps." (See also, Customer Service Initiatives)
- Cutover additional segments of the Queens Boulevard (E, F, M, and R) Line to communications-based train control (CBTC), with completion expected in 2022.
- Completed several major Enterprise Asset Management (EAM) projects, including system integration and rollout for additional track and signals inspections; training of thousands of employees in the use of the EAM system for documentation and record keeping; deployment of mobile devices to support inspections and maintenance; and expansion of GIS capabilities to support construction and maintenance planning.

- Continued efforts begun under the Subway Action Plan to maintain assets in a better condition, including grouting nearly 4,000 leaks, removing debris from over 40,000 street vents, cleaning of over 5,000 miles of track, and repair of thousands of defects in tracks and third rails.
- Continued management of the rapid recovery of subway service following the Covid-19 pandemic and several emergency events in 2021, including a major February snowstorm; a tropical storm; and two hurricanes, which dumped record rainfalls and caused flooding issues throughout the transit system.
- Retired the remaining cars of the R-32 fleet, NYCT's oldest, which began service in 1964, and accepted delivery of the first R-211 cars for testing.

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)—Operations/Technology Initiatives

- Worked with the NYCDOT to expand the number of intersections with Transit Signal Priority (TSP), which allows approaching buses to get an extended green light or shortened red light. The program added TSP at 626 city intersections in 2021 for a current total of 2,156 TSP-enabled intersections. By the end of the year, TSP was deployed to all eligible buses in the MTA fleet, enabling all vehicles to activate TSP on routes where applicable. With TSP, new bus lanes, and other traffic-based initiatives, buses are now completing runs up to 20 percent faster than before these initiatives.
- By the end of 2021, digital information screens were installed on 3,235 buses systemwide. These screens, which come on all new buses, offer audio-visual information on routes, next stops, service advisories, transfers, and more. In addition to customer information, the screens have the potential to generate new revenue through geo-specific advertising.
- Equipped 3,428 buses with Automatic Passenger Counters (APC) by the end of 2021, including 437 retrofits and 396 new buses. APCs count the number of passengers

boarding and alighting the bus, allowing real-time seat availability information to be provided to customers via the MYmta and BusTime apps. APCs also provide ridership data to support service planning and were the sole source of ridership data during the Covid-19 rear-door boarding policy.

Long Island Rail Road—Operations/Technology Initiatives

- Advanced LIRR's investment in the Enterprise Asset Management (EAM) initiative. EAM provides the combined planning, training, and technology to optimally manage the railroad's equipment and infrastructure. The program, which encompasses a number of projects, gives management more accurate, useful, timely information on the costs, condition, performance, location, and reliability of LIRR's assets. EAM initiatives in 2021 included new systems to manage personal fire extinguishers, security assets, Maintenance of Way (MOW) equipment, and fleet investigations.
- Monitored the operational functionality of LIRR's Positive Train Control (PTC) system, which was cutover in December 2020. The goal is to ensure PTC reliability without impacting revenue service and on-time performance. The PTC team coordinated with the Federal Railroad Administration (FRA) team to support FRA system reliability reporting and Northeast Corridor Interoperability, along with ongoing and future work.
- Rolled out a new feature on the LIRR TrainTime app to provide accessibility information by locating elevators, escalators, and ramps at specific stations. The app uses real-time data for elevators and escalators, identifying any elevators and escalators that are currently out of service.
- Completed the 2021 LIRR Annual Track Program, which included installing 42,436 concrete ties on the Port Washington and Atlantic Branch; installing 159,823 linear feet of continuous welded rail (CWR) on the Port Washington and Atlantic branches; installing five switches on the Main Line and Montauk Branch; completing 310 field welds; surfacing 30 miles of track on the Port Washington and Atlantic branches; and surfacing 14 switches systemwide.

- Completed the 2021 Concrete Tie Program, which included the following work on the Port Washington Branch: installing 6,000 ties; installing 24,636 linear feet of continuous welded rail; and surfacing two miles of track.
- Successfully deployed and operated two new laser-equipped trains for cleaning rails of greasy leaf residue during autumn, a seasonal safety and operational problem for many railroads. These LIRR laser-equipped trains are the first of their kind in the industry.
- Eliminated eight railroad crossings in two years along the railroad's busiest corridor, part of the LIRR Expansion Program managed by MTA C&D. The program has also raised the heights of seven bridges between Floral Park and Hicksville, improving safety while reducing the incidents of over-height trucks striking bridges and the associated train delays.
- Carried out an aggressive schedule of switch and signal upgrades, paired with more robust rail testing using the Sperry Rail testing car. These proactive measures enable the railroad to address problem areas before they can cause major disruptions.
- Eliminated 180 miles of overgrown vegetation near LIRR tracks and installed more weather resistant utility poles along the LIRR right of way, proactively reducing the risk of delays caused by weather events.
- Undertook an aggressive leaf-fighting strategy to reduce slippage during emergency braking. Such seasonal "slip sliding" causes wear and tear to train wheels, forcing the LIRR to take much-needed train equipment out of service for repairs. The reduced wheel damage meant that LIRR crews removed 60 fewer trains from service in 2021 as compared to 2019.

Metro-North—Operations/Technology Initiatives

Operations/Track

- Successfully implemented PTC updates across onboard, wayside, and office subsystems to improve operation in 2021. This followed the agency's full implementation of PTC functionality on its 244.3 route miles in revenue service. The

railroad also completed installation of a new signal system and PTC on the Waterbury Branch, which was not covered in the federal PTC mandate.

- Performed 138 miles of rail grinding to improve rail head surface conditions. Undercut approximately three miles of track on the New Haven Line to improve the clearance under the catenary wire. Continued track remediation at CP 266 to CP 271, replacing ties and surfacing track structure.
- Advanced systemwide track initiatives under the four-year SMARTRACK program. In 2021, the railroad replaced 54,583 ties, 8.20 miles of continuous welded rail (CWR), and 28 switches. Also, renewed one railroad crossings, surfaced 130 miles of track, and welded 990 rail joints. Rails, bracket ties, and block ties were replaced on Tracks 114 and 39 at Grand Central Terminal.
- Upgraded power and substation infrastructure at a number of locations. These included positive feeders to substations on the Harlem and Hudson lines; replaced 55 third-rail jumpers on the Sandy Project; commissioned three DC traction substations; replaced DC switchgear at three substations; and installed four new unit substations in Harmon Yard, along with other initiatives.

Technology

- Accepted and continue to test MOW inspection vehicle at various locations with the vendor.
- Continue to collect and utilize data through INFOR, the MTA's Enterprise Asset Management (EAM) software. Data is being used for car cleaning in all Metro-North yards, for better cost analysis, and for expanding a number of routine operations across the railroad. Additional data from signals, track, power, communications, and PTC have been added to INFOR.
- Continued the acquisition and replacement of components for rebuilding an additional 66 M-8 Electric Multiple Units (EMUs). The first three pairs of EMUs were received in 2020 and tested in 2021. Out of the total EMU rebuild budget of $1.4 billion, $472 million comes from the MTA and $936 million from the Connecticut DOT. Metro-North continues to increase the M-8 pool stock to support the increased material needs for

the rebuilding. Twenty-six of the new M-8s were delivered by the end of 2021, and Kawasaki is projecting delivery of the 66 cars to be completed by mid-2022.

Bridges and Tunnels—Operations/Technology Initiatives

- Undertook a number of operational adjustments in response to the Covid-19 pandemic, including suspension of biometric timekeeping; temperature screening, PPE, social distancing, and other workplace safety protocols; tracking of employee quarantines and cases; daily cleaning and disinfection of workplace touchpoints; steps to reduce interactions in traffic enforcement; and more. (See also, Safety Initiatives)
- Issued 10,134 summonses in 2021, with the most cited violations being registration related, including suspended registrations and concealed or obscured license plates; disobeying traffic signs and other traffic controls; and overweight vehicles or other Title 49 federal safety violations. The agency effectuated 97 arrests in 2021, an increase from the prior year. The primary reason for these arrests were criminal possession of a forged instrument and driving with a suspended license.
- Continued preliminary design of the tolling infrastructure and other elements of the Central Business District Tolling Program (CBDTP). The agency held over 25 meetings and logged over 7,000 public comments as part of the outreach required for the Federal Highway Administration's environmental assessment. Drafting of the assessment and a related traffic study advanced in 2021. The first program of its kind in the U.S., the CBDTP is designed to reduce traffic congestion, improve air quality, promote mass transit usage, and raise revenue for key capital projects. (See also, Sustainability/TOD Initiatives)
- Completed design of a CCTV system for Verrazzano-Narrows Bridge, on time and within budget. Also completed the procurement spec, cost estimate, and bid forms for CCTV equipment on the Henry Hudson, Cross Bay, Marine Parkway, Throgs Neck, and Verrazzano-Narrows bridges.
- Advanced a number of projects for variable message signs (VMS) at the Marine

Parkway Bridge, the Throgs Neck Bridge, the Bronx-Whitestone Bridge, the Hugh L Carey Tunnel, and other agency facilities.

Sustainability/Transit Oriented Development (TOD) Initiatives

Interagency—Sustainability/TOD Initiatives

- Continued to monitor SBTi (Science Based Target Initiative) targets towards meeting the MTA's commitment to reduction of GHGs in accordance with the Paris Agreement on Climate Change Mitigation. By moving millions of daily passengers via carbon-efficient public transportation, the MTA is one of the main reasons that New Yorkers maintain the lowest per capital GHG emissions per-capita among the 50 states.
- Continued to partner with the New York Power Authority (NYPA) to carry out energy-efficiency projects throughout the MTA system. Also, advanced the BuildSmart 2025 initiative, incorporating earlier NYS Executive Order 88 (EO88) efforts to reduce MTA's energy usage and increase efficiencies. BuildSmart 2025 established a total MTA energy reduction goal of 848 billion Btu by 2025, measured against 2015 energy use levels. An energy reduction of 518.7 billion BTU, representing 70 percent of the MTA BuildSmart goal, was completed by the beginning of 2021. Of the remaining 329.4 billion BTU needed by 2025, the MTA committed to projects representing reductions of 74.9 billion BTU, with projects reducing another 254.5 billion BTU to be identified.
- Advance preliminary design of the tolling infrastructure and software systems to support Central Business District Tolling Program (CBDTP), managed by MTA Bridges and Tunnels. The agency completed the public outreach for the project's Environmental Assessment (EA) required by the Federal Highway Administration, which is nearing final draft. The CBDTP, the first of its kind in the United States, is designed to reduce traffic congestion, improve air quality, promote mass transit

usage, and raise revenue for key capital projects. (See also, Operations/Technology Initiatives.)

- Compiled all prior-year data regarding MTA's greenhouse gas (GHS) emissions and reported all energy usage in accordance with The Climate Registry's General Reporting Protocol. Data regarding energy usage have been third-party verified and reported to The Climate Registry. The MTA's energy usage profile for prior years are publicly available through The Climate Registry website.
- Continued to collect regional climate adaptation information and case studies from the MTA agencies as an ongoing overview of the MTA's resiliency initiatives and strategies. In conjunction with this information-gathering, MTAHQ coordinates the agency-wide MTA Climate Adaptation Task Force, supporting climate-related initiatives for all MTA operating agencies.

NYC Transit (Subways)—Sustainability/TOD Initiatives

- Continued installation of flood protection devices at street-level openings (stairways, vents, etc.). As of December 2021, permanent protections have been installed at over 97 percent of roughly 3,500 street-level vulnerabilities across the system. Also, initiated a stormwater task force with New York City in 2021, which will assess over 150 subway stations for vulnerabilities to heavy rain.
- Completed a multiyear flood protection project at 148th Street and continued work at the 207th Street and Coney Island yards. These three yards are receiving perimeter flood walls and related resiliency enhancements, such as drainage improvements, tunnel portal protections, and elevated cable bridges to accommodate power cables that currently sit underground near the water table.
- Completed construction of flood protection for Staten Island Railway's St. George Terminal, including a perimeter flood wall and drainage upgrades and a new, flood-resilient Clifton Shop.
- Completed repairs to the Rutgers Tube, the final contract to repair damage to underwater tubes caused by flooding during Superstorm Sandy. The Sandy repair

projects also add resiliency features to fortify the subway system against future extreme weather events.

- Continued materials recovery, disposal, and recycling through the NYCT Asset Recovery Department. The team disposes of surplus MTA assets in the most environmentally responsible and cost-effective manner possible, returning up to $6 million dollars in scrapping and asset sales. The recover program includes everything from the last of the R-32 cars, retired in 2021, to public sales of stations signs and other subway memorabilia.
- Continued an extensive track-cleaning program using vacuum trains to reduce track fires and related environmental hazards. Also, continued a program to replace third-rail Insulators with thermoplastic to reduce maintenance and fires.

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)—Sustainability/ TOD Initiatives

- Advanced the MTA's commitment of transitioning to an all-electric bus (AEB) fleet by 2040. The transition to AEBs will require funding and close collaboration with a range of stakeholders, including NYC, Con Edison, NYPA, and private industry. Challenges include improving battery technology and the implementation of a bus-charging infrastructure. The MTA has already received 15 articulated 60-foot AEBs operating primarily on SBS routes. In 2021, the MTA Board approved the federally funded purchase of 60 low-floor, 40-foot AEB buses, with the first buses expected to go into service towards the end of 2022.
- Continued to advance a 20-percent reduction of building energy consumption mandated by EO 88. The work includes installation of LED lightings, HVAC controls, and generator upgrades throughout multiple MTA facilities, enabling the agency to monitor and reduce energy consumption, resulting in energy cost savings.
- Continued to incorporate energy-efficient measures into the rehabilitation of HVAC, roof and compressed natural gas power plant replacement at College Point and Spring Creek Depots and in the on-going roof and HVAC upgrade at Fresh Pond Depot.

- Replaced obsolete Trak fuel management system with a new “Fleetwatch” fuel management system at Mother Clara Hale depot to improve fuel efficiency across the fleet.

Long Island Rail Road—Sustainability/TOD Initiatives

Sustainability

- Continued the agency’s robust recycling program. Over the prior calendar year, LIRR recycled: 140 tons of paper, cardboard, plastic, glass, and metal (post-consumer separation); 597 tons of cardboard; 10,300 tons of wood rail ties; 50,693 tons of clean construction and demolition debris; 93 tons of yard waste; 12,995 tons of scrap metal; 7 tons of batteries; 15 tons of e-waste; 58 tons of used oil; 10 tons of water contaminated with oil; 5 tons of kitchen grease; and 4 tons of fluorescent bulbs. The LIRR recycling program also sends all small office refrigerators and air conditioners for Freon recovery to avoid releasing the refrigerants into the atmosphere.

Transit-Oriented Development (TOD)

- Continued participation with communities to pursue mixed-use development centered around LIRR stations. These included station enhancements and/or TOD planning efforts in the villages of Hempstead, Port Jefferson and Mineola, the towns of Huntington, Brookhaven, and Islip as well as Suffolk County (Ronkonkoma). Most notable in 2021 was the progress on mixed-use TOD project on an LIRR commuter parking lot in the Village of Westbury. This project supports Westbury’s vision of a vibrant, walkable downtown area around the station. This project builds upon New York State’s $10 million dollar grant to Westbury as part of New York’s Downtown Revitalization Initiative (DRI).

- Advanced the construction of the Main Line Expansion project, which furthers many local communities TOD efforts with its station enhancements, increased transportation options, and improved pedestrian walkability with grade crossing separations and the installation of new elevators.

- Continued work to support two regional Bus Rapid Transit (BRT) initiatives which connect to LIRR rail corridors. The first will provide north-south transit access along Route 110, Long Island's largest job center. It will connect the LIRR Babylon and Ronkonkoma branches, alleviate traffic congestion, and spur TOD initiatives along the corridor. The second BRT will provide north- south transportation along Nicolls Road in Suffolk County. This will connect job centers between Stony Brook and Patchogue; link three LIRR branches; alleviate traffic congestion; and spur associated TOD initiatives.

Metro-North—Sustainability/TOD Initiatives

Energy Efficiency

- Successfully passed the ISO-50001 recertification audit conducted in July 2021, recertifying the agency up to 2024. Annual surveillance audits will be conducted over the next three years to establish ongoing compliance to the international standard. The Energy Management System framework includes energy conservation and fuel-metering initiatives aimed at cutting greenhouse gases, while reducing energy and fuel costs. Metro-North became the first railroad in North America to receive ISO-50001 certification in 2018.
- Installed the MTA-wide Energy Management System (EMS) software platform to tracks all utility invoices and provides consumption data for electricity, diesel propulsion, natural gas, and other utilities. The system is now fully implemented in Metro-North's Brewster, North White Plains, and Harmon yards. Installation is scheduled for the Poughkeepsie, Mott Haven and Highbridge yards; Grand Central Terminal; and 525 North Broadway.
- Completed a number of energy efficiency measures as part of an ongoing "greening" of Grand Central Terminal, including installation of LED lighting at stations platforms and concourses; energy-saving features on elevators and escalators; motion detectors to reduce power surges in workspaces; a Building Management System (BMI) to control all powered equipment, compressors, LEDs, and pumps; efficiency upgrades to HVAC and exhaust fans; and other measures.

- Continued a number of ongoing initiatives to improve locomotive efficiency, including “regenerative braking” to recapture power lost to heat through third-rails catenary lines; new dual mode diesel-electric P32 locomotives to enable electric operation wherever possible; and other innovations in locomotive design and logistics.
- Developed an Automotive Green Fleet Action Plan for purchasing alternative fuel vehicles, as well as hybrids, PHEV, and electric vehicles. Metro-North maintains a total of 20 EV charging stations installed at four of its train station parking lots, with plans to expand EV chargers at other Metro-North properties.

Transit-Oriented Development (TOD)

- Complete Phase 1 construction for the Harrison Station TOD project is located on 3.3-acres of property formerly owned by the MTA. The parking garage opened in August 2021, nearly doubling parking for rail customers. A mixed-use, residential-commercial project around the Metro-North station was completed in December 2021. The final Phase 2, which includes new landscaped pedestrian plazas and residential development, is currently under construction and scheduled for completion in December 2022.
- Advanced the construction of a new 450-space parking lot and new sidewalks at the Croton Falls Station. Asbestos abatement and demolition of all existing structures was completed in July 2021. Contracts for the parking lot and the new illuminated sidewalk were awarded in the fourth quarter of 2021 and are currently underway, with completion of the parking facility anticipated by mid-2022.
- Continued preliminary engineering studies for the multi-phased Brewster Campus expansion at the Southeast Station/Brewster Yard. Traffic and environmental analyses and conceptual phasing layouts were completed in the first quarter of 2021 and preliminary design bridging documents for the Phase 1 design-build components are in progress.

- Continued work with local partners to explore or advance various station and TOD planning efforts at the University Heights, Ludlow, Yonkers, Glenwood, Fordham, Wakefield, White Plains, and Port Chester stations, along with plans for four new ADA-compliant Metro-North stations in the Bronx related to the railroad's Penn Station Access project, an MTA megaproject managed by MTA Construction & Development.
- Worked with trail advocacy groups, including Scenic Hudson and others, to progress their projects, while also safeguarding Metro-North customers, employees, assets, and operations. Current initiatives include planned improvements to re-open the Breakneck Ridge Station until construction can begin on the Hudson Highlands Fjord Trail, as well as the Riverwalk in Westchester County, which connects a multi-use path on the Mario Cuomo Bridge to trails in Tarrytown and Irvington.

Bridges and Tunnels—Sustainability/TOD Initiatives

- Provided $1.38 billion in total support for the MTA's regional transit operations in 2021, which in turn helps the 13 million New Yorkers in the MTA service area lead carbon-efficient lives, making New York the most carbon-efficient state in the nation.
- Installed 14 electric vehicle charging stations across Bridges and Tunnels facilities. Twelve are "Level 2" chargers and two are "Fast." The agency plans to expand vehicle charging infrastructure at all facilities.
- Continued to advance preliminary design of the tolling infrastructure and software systems to support Central Business District Tolling Program (CBDTP). The agency held over 25 meetings and logged over 7,000 public comments as part of the outreach required by the Federal Highway Administration for the project's Environmental Assessment (EA). Drafting of the EA is currently in preparation for public release in Spring 2022. Drafting of the Traffic Study is underway for the Traffic Mobility Review Board being seated in Spring 2022. The CBDTP, the first of

its kind in the United States, is designed to reduce traffic congestion, improve air quality, promote mass transit usage, and raise revenue for key capital projects. (See also, Operations/Technology Initiatives)

Safety/Security Initiatives

Interagency—Safety/Security Initiatives

Safety/ Emergency Management

- Responded to the Covid-19 pandemic with multipronged, systemwide measures aimed at safeguarding MTA customers and employees. These included daily disinfections of trains, buses, stations, offices, breakrooms, operations facilities, and other workplaces; extensive, multimedia customer and employee messaging; and distribution of millions of free masks to customers.
- Acquired some 45.9 million masks for free distribution to workforce and customers. PPE distributed to the MTA workforce by the end of 2021 included 31.4 million masks, 33.5 million pairs of gloves, 156,000 gallons of hand sanitizer, 317,000 bottles of hand sanitizer, 18.7 million individual sanitizing cleaning wipes, 407,000 gallons of cleaning solution and 24,000 face shields. Additionally, the MTA volunteer Mask Force has distributed about 900,000 free masks to customers.
- Coordinated with federal, state, and local agencies and MTA Occupational Health Services to provide employees with the latest advisories and Covid-19 preventative methods, including onsite temperature checks; Covid-19 tests and antibody tests; rapid contact tracing; and Covid-19 priority vaccination programs, including dedicated onsite MTA vaccination and booster centers.
- Adapted workplace and administrative policies to maximize workforce safety, including workplace signage and distancing protocols; new travel, sick-leave,

quarantine, and return-to-work polices; and the rapid transitioning of tens of thousands of employees to remote telework, with extensive IT support for new work apps, remote access to work files and programs, video conferencing, and more. In September 2021 the MTA issued a mandate, still in effect, requiring all returning MTA employees to show proof of vaccination or undergo weekly testing.

Security

- Provided systemwide policing through the MTA Police Department (MTAPD), which has a workforce of over 1100 officers and civilian employees. Its jurisdiction, which focuses on LIRR, Metro-North, and SIR, extends across the MTA travel region to 14 counties in two states. The department continues its hiring initiative to help support NYCT homeless assistance and fare evasion initiatives. The department remains abreast of terrorism trends and monitors reports of civil unrest to protect MTA infrastructure and ensure the safety of customers.
- Conducted an MTAPD pilot program utilizing body worn cameras to provide greater transparency of interactions with the public. The success of the pilot program developed into a full-scale role out for the first quarter of 2022.
- Invested in a virtual simulator for training purposes in 2021. This state-of-the art, 300-degree simulator places officers in real life training scenarios. The scenarios are designed to teach critical concepts, such as officer presence, effective communication, situational awareness of verbal and non-verbal cues, de-escalation tactics, less than lethal use of force and more.
- Completed a NYS Law Enforcement Agency re-accreditation, a formal recognition that an agency's practices meet or exceed standards in the areas of administration, training, and operations. The department successfully completed the audit meeting the 110 standards and received re-accreditation status through 2025.

MTAPD 2021 Crime Statistics Number of reported crimes at LIRR, Metro-North, and Staten Island Railway			
Category	**2020**	**2021**	**% Change**
Murder	0	0	0%
Rape	0	0	0%
Robbery	33	17	-48%
Felony Assault	22	35	59%
Burglary	16	33	106%
Grand Larcenies	59	70	19%
Grand Larceny Auto	3	2	-33%
Total	**133**	**157**	**18%**

- Continued to address homelessness on NYCT subways and properties in partnership with the NYC Department of Homeless Services, the Office of Temporary and Disability Assistance and the MTA Homeless Outreach Services Department. The NYC Subway End of Line (EOL) outreach program, begun in mid-2019 and extending through 2021, resulted in over 173,000 contacts, 76,500 ejections, and 7,695 individuals accepting services.
- Continued to perform fare enforcement strategies at high volume subway stations as a component of the MTA Fare Evasion and Worker Safety Task Force.

NYC Transit (Subways)—Safety/Security Initiatives

- Continued efforts to replace third-rail insulators in areas with historical fire vulnerabilities at over 500 additional locations. Other fire safety initiatives included continuation of an accelerated track-cleaning program using mobile vacuum units and vacuum trains, which have substantially reduced tracks fires. (See also, Sustainability/TOD Initiatives.)
- Developed and implemented initiatives aimed at protecting customers and employees during the Covid-19 pandemic, while continuing the critical transit operations needed to support essential workers, public services, and the local economy. Some of these safety efforts are summarized below.
- Worked with federal, state, and local governments to provide public health

information, carry out emergency policies, and implement guidelines from the Centers for Disease Control (CDC) and other medical authorities.

- Developed and implemented an unprecedented cleaning program to disinfect some 6,500 subway cars at least once daily and touchpoints at 472 stations twice daily. The effort included a new IT data system to monitor cleanings, 950 cleaners working in rotating shifts, and trial technologies, such as sprayers, air filtration systems, and ultraviolet disinfection equipment.
- Rolled out a systemwide Covid-19 public messaging campaign that included regular news events; digital, onboard, and social messaging; onboard and in-station public safety announcements; social distancing markers; expanded service updates; and more.
- Suspended cash transactions at station booths; installed hand sanitizer dispensers at all stations; and installed protective personal equipment (PPE) vending machines at select stations.
- Launched a proactive outreach effort to provide masks and sanitizer directly to transit customers, including monthly forays by the “Mask Force,” an all-volunteer team of MTA employees and outside volunteers who provide free masks to transit riders.
- Implemented extensive safety measures to protect employees, including distribution of millions of masks, gloves, face shields, wipes, and hand sanitizers; workplace temperature checks, daily sanitation of facilities, and other protocols; remote teleworking where possible; an ongoing Covid-19 vaccination program; and more.
- Developed a comprehensive contact-tracing program for the subway workforce, which involved employee notifications; training hundreds of “Exposure Investigators;” responding to exposures within 48 hours or less; and monitoring employee quarantines.

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)— Safety/Security Initiatives

- Installed bus camera security systems on 4,563 buses and operator-compartment-facing cameras installed on over 3,116 buses in 2021. All new buses come with these cameras. Bus cameras are a critical tool in incident reporting, crime prevention, and improved safety for both bus operators and customers.
- Continued the Vision Zero IV program, an eight-hour training session highlighting the challenges of operating in the NYC environment and dealing with pedestrians and cyclists. The program include “de-escalation” training, which now addresses assaults on bus operators related to Covid-19 rules. All bus operators will be cycled through this new curriculum over a two-year period. A de-escalation “trailer” video is being circulated on the FYI Network at all MTA and NYCT locations. To monitor bus operators, the agency uses indicators such as speed-camera violations, red-light violations, cellphone infractions, and customer complaints.
- Continued a “zero- tolerance” policy on use of cellphones and electronic devices while operating a bus, under a joint agreement with all labor unions. Additionally, the two bus agencies worked with labor partners to establish a process whereby operators who receive speed-camera violations are disciplined and must pay the fine. The agencies continued to use the Accident Review System (ARS) as a corrective safety intervention tool for collision reduction.
- Installed Pedestrian Turn Warning (PTW) systems on a total of over 1,700 buses by the end of 2021. This safety technology alerts pedestrians when a bus is making a right-hand or left-hand turn using automated external audio announcements.
- Continued enforcement of CDC and NYS DOH Covid-19 guidelines to safeguard employees and customers. Efforts include safety messaging, social distancing rules, distribution of PPE, disinfection of bus interiors and employee workspaces, vaccination information, testing, and more.
- Maintained agencywide measures to protect bus operators from assault, including the installation of bus operator shields across the entire fleet, de-escalation training, and installation of more on-board security cameras. Both bus operations continue

the Vision Zero operator training programs for accident and assault mitigation.

- Continued thorough customer complaint reviews to identify employees for additional counseling and/or de-escalation training. Both NYCT and MTA Bus continued collision reduction campaigns that provide safe driving reminders, defensive driving techniques, and methods to correct unsafe driving habits. Both bus operations continue to review and analyze employee injury data to identify and address the root causes and trends behind lost-time accidents.
- Continued the Red-Letter Drill (RLD) program, a joint initiative by MTA Bus Security, the NYCT DOB Command Center, and the MTAPD. The program provides field personnel with simulated emergency training. Also, carried out nearly 2,255 undercover "ride checks" to evaluate operator safety and provide feedback.
- Completed a video management system upgrade to Genetec at Eastchester Bus Depot. Established Access Control and video management system IESS connectivity at Eastchester Bus Depot. LaGuardia Bus Depot video management system upgrade to Genetec is currently in design and LaGuardia Bus Depot access control and video management system IESS connectivity is currently in progress.

Long Island Rail Road—Safety/Security Initiatives

- Implemented an accelerated disinfection program in response to the pandemic, with train cars cleaned every 24 hours and station touchpoints twice daily. The agency also piloted a number of new cleaning methods and technologies for cars and stations, dispensed sanitizer onboard and in stations, and installed PPE vending machines in Penn Station.
- Modified workplace protocols for maximum safety, including teleworking during state mandates, hand sanitizer stations at offices and facilities, temperature checks, plexiglass partitions, and extensive signage. The agency also redesigned its TrainTime app to provide real-time information on seating availability, enabling LIRR customers to plan for safer traveling during the pandemic.

- Continued the railroad's Confidential Close Call Reporting System (C3RS), a collaborative effort between management, labor, and the Federal Railroad Administration (FRA) that enables employees to confidentially report "close calls" that could have caused operating and safety incidents. Peer review teams meet several times a month to review reports, discuss mitigations, and recommend corrective actions.
- Progressed the implementation of a new Enterprise Safety System (ESS) that will replace LIRR's existing mainframe-based accident reporting system with a new database system utilizing trend analysis and other "business intelligence" capabilities.
- Continued a slate of employee safety initiatives, campaigns focusing on PPE and social distancing, track safety for employees, and employees' safety-related experiences in the field. Unless suspended due to the pandemic, LIRR's continued it quarterly "Safety FOCUS Days," in which the LIRR president and the vice president of LIRR Corporate Safety meet directly with frontline supervisors and managers to discuss safety issues in the field.
- Continued implementing safety recommendations resulting from an anonymized employee "Safety Barometer" survey co-managed by the National Safety Council (NSC).
- Completed multiple security projects across the railroad. These included the installation of CCTV and video management systems, intrusion detection systems, and access-control devices at many LIRR stations, facilities, and existing rail cars. New cameras continue to be installed on station platforms, crossings, yards, ticket offices, facility buildings and newly acquired rail cars.
- Continue the installation of high-security electronic gates and fencing, along with other "hardening" upgrades to thwart trespassers on the right of way, as well as exterior yards. Also advanced the development of analytics to work in conjunction with security cameras and access devices to deter crimes and record evidence for investigations.

Metro-North—Safety/Security Initiatives

Safety/ Emergency Management

- Continued to respond to the Covid-19 pandemic with extensive customer and employee safety efforts, including safety messaging; mask distribution to customers and distribution of PPE to employees; disinfection of trains, stations, and workspaces; free onsite Covid-19 testing for employees; and enforcement of the MTA's vaccination or weekly test program for employees.
- Continued Metro-North's program to train first responders (fire, police, and EMS) in railroad safety, equipment, and emergency procedures, reaching 1,571 first responders in 2021. The program includes both classroom instruction and field training. Also conducted an emergency preparedness exercise simulating evacuation of a disabled train, providing first responders with hands-on experience with Metro-North equipment and in the Grand Central Terminal train shed.
- Continued Metro-North's contributions to statewide disaster preparedness efforts as part of the Governor's Disaster Preparedness Commission. The commission develops disaster plans, response exercises, and interagency coordination for New York State.

Safety/Operational

- Continued the railroad's systemwide participation in the FRA C3RS. This program seeks to identify and implement safety improvements based on the reports submitted. The system fielded 555 reports in 2021, bringing the total to 6,396 reports since the launch of C3RS.
- Continued the agency's obstructive sleep apnea (OSA) program, which began in 2015 with the screening of all Metro-North locomotive engineers. Currently, 114 locomotive engineers are in the program. They are screened for OSA as part of their pre-employment physical, as well as their annual physical. By the end of 2021, 857 conductors were screened and 98 placed in the OSA monitoring program.
- Continued using an enterprise safety database system as a centralized repository

for safety data. Metro-North also continued to use a safety management system (SMS), endorsed by the FTA and the FRA. The SMS supplements an engineering-centered process with increased attention to the "human element," data sharing, and measurements of safety performance.

- Continued delivering a full day of safety training to new hires. The railroad trained 177 new and existing employees in 2021. Other employee-facing efforts included bi-annual safety cleanup days at Metro-North facilities, quarterly "Safety Focus" weeks to address key topics and hold open safety discussions, production of a new in-house safety video, and annual safety awards for employees and departments.

Safety/Public Outreach

- Continued the agency's public safety outreach efforts, including TRACKS (Together Railroads and Communities Keeping Safe), a multipronged effort to promote grade-crossing and rail safety to schools and other community groups. The 2021 program continued during the pandemic through virtual outreach, along with limited in-person events. TRACKS contacts totaled 233,940 in 2021, with over 627,000 contacts since the program was established in 2016.
- Continued "Question, Persuade, Refer" (QPR) suicide prevention training, with over 760 Metro-North employees now trained in QPR. Metro-North also maintained partnerships with the Crisis Text Line, a free 24/7 text support line, and the National Suicide Prevention Lifeline hotline, a 24/7 hotline for anyone experiencing a mental health crisis. From 2019 through 2021, Metro-North's keyword has been used in 68 text conversations placed though the Crisis Text Line alone.
- Continued to partner with the GPS app WAZE to alert drivers using the app to railroad crossings along their route. The app uses real-time verbal alerts and hazard icons that will display each time a driver comes within 500 feet of a crossing.

Security

- Completed a comprehensive assessment of all rooms and spaces within Grand Central Terminal, reviewing the security, contents, usage, and access for over

1,400 individual spaces. The data was stored via a GIS collector app and will be used to maintain an active mapping database of all terminal spaces to eliminate any unauthorized usage and maintain continuity during any future changes in space usage.

- Completed the transition from delivering physical copies of video incidents to only releasing security video footage via a cloud-based system that grants "view and download" privileges. Once downloaded by the approved requestor, a digital version of the video is in their possession, while chain-of-custody is maintained via an electronic audit trail.
- Added video surveillance at 25 stations and facilities for live and archival remote viewing by the agency's Security Command Center. Also, installed high-definition security surveillance cameras at six Metro-North stations in Connecticut
- Continuing collaboration with MTA IT to review and enhance the cybersecurity readiness of the agency's electronic assets. All field-deployed cellular camera systems are now configured with real-time threat monitoring to ensure all system events are captured and documented in compliance with the agency's cybersecurity requirements.
- Conducted systemwide physical security site inspections of the Metro-North infrastructure. Site inspections, ongoing data and information analytics, expanded interagency partnerships, and continued collaboration with the Metro-North MNR team led to the completion of 62 security reports. Each report provided detailed security recommendations to increase passenger and employee safety and security, act against track intrusion, and minimize service disruptions.

Bridges and Tunnels—Safety/Security Initiatives

Employee Safety

Bridges and Tunnels experienced a reduction in lost-time injuries in 2021. As a result, the "employee lost-time" injury rate decreased to 5.6 per 200,000 work hours for the year. This improvement can be attributed in part to the agency's ongoing safety efforts, including:

- Initiated workplace measures to safeguard employees during the Covid-19 pandemic, including provision of masks and other PPE; expanded ventilation; daily sanitization of facilities and vehicles; regular safety communications; and social distancing protocols
- Coordinated interdepartmental healthcare efforts through the Bridges and Tunnels Safety & Health Department, including, employee advisories and training; onsite temperature testing, Covid-19 testing, monitoring of exposures and quarantines; and Covdi-19 vaccination efforts.
- Continued regular safety training for all field employees, including traffic management safety training for all Bridge and Tunnel Officers (BTOs) and supervisors. The agency also modified some traffic enforcement procedures to minimize social contact.
- Utilized joint labor/management safety task forces to address safety risks in the new cashless operating environment. The agency is also revising its policies and procedures as part of an updated safety-management system for all Bridges and Tunnels facilities.

Customer Safety

Traffic increased at Bridges and Tunnels crossings in 2021 compared to 2020. The agency reported 206 customer collisions with injuries in 2021, an increase from the previous year. Adjusting for annual traffic, the rate of collisions with injuries was 0.67 per million vehicles, a decrease from the previous year. Measures for improving customer safety include:

- Continued to focus on the three E's: engineering to identify and mitigate collision-prone locations; enforcement to target unsafe driving behaviors; and education to publicize and correct unsafe driving behaviors.
- Issued 10,134 summonses in 2021, with the most cited violations being registration related violations, including, but not limited to suspended registrations and concealed or obscured license plates; disobeying traffic signs and other traffic controls; and overweight vehicles or other Title 49 federal safety regulations. The agency effectuated 97 arrests in 2021, an increase from the prior year. Criminal Possession of a Forged Instrument and Driving with a Suspended License accounted for most of

the arrests.

- Conducted Collision Task Force meetings to analyze sporadic increases in collisions during the Covid-19 pandemic and strategize solutions. In addition, interdepartmental meetings were held to review traffic trends and interoperability.

Cost Cutting /Revenue Initiatives

Interagency—Cost Cutting/Revenue Initiatives

- Continued to work with state representatives and other transit agencies nationwide in efforts to seek emergency federal relief from a loss of revenue during the height of the Covid-19 pandemic. On March 11, 2021, the MTA announced $6.5 billion in federal support from President Biden's American Rescue Plan, thereby avoiding drastic service and workforce cuts. The MTA had previously received $4.0 billion from the CARES Act in March 2020 and second appropriation of $4.0 billion in December 2020.
- Completed implementation of the state-mandated MTA Transformation Plan in 2021. Despite the pandemic, the Transformation Management Office (TMO) made significant progress over the course of the year, completing an MTA-wide reorganization and consolidation of agency support functions, and achieving goal of reducing 2,700 positions, largely through workforce attrition. The new organizational structure provide a platform for ongoing interagency efficiencies and recurring annual savings.
- Consolidated and streamlined essential functions that had previously operated within each agency, thereby eliminating overlaps, improving resource allocations, and realizing greater cost efficiencies. The consolidated functions are: Communications & External Affairs; Compliance; Diversity & EEO; Finance (incl. Budget & Accounting); Legal; People (incl. Labor Relations & Human Resources); Police & Security; Procurement (incl. Supply Chain). The reorganization was completed in 2021 and the Transformation team wound down as planned.

NYC Transit (Subways)—Cost-Cutting/Revenue Initiatives

- Continued to closely monitor overtime, which is approved only when necessary to fill crewed jobs that cannot be left vacant or to ensure adequate response to critical repair work and emergencies including storm responses.
- Supported efforts to increase ridership and revenue with the #TakeTheTrain campaign to encouraging New Yorkers and visitors to use the subway to reach all of New York's many destinations.

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)—Cost-Cutting/Revenue Initiatives

- Developed a major interagency initiative that is significantly reducing bus maintenance costs. The new plan transitions the Central Maintenance Shop Overhaul Program from four-year and eight-year overhauls to a single six-year overhaul. The first fleet of buses scheduled for this new program are now in process. To mitigate any impact on bus reliability, a related EAM program is being piloted to proactively detect failures and adapt maintenance strategies as needed.
- Maintained an agency-wide hiring freeze on all nonessential personnel in 2020, then resumed selective hiring of administrative personnel in 2021.

Long Island Rail Road—Cost Cutting/Revenue Initiatives

Revenues

- Adjusted to declining ridership due to the Covid-19 pandemic and a continuing impact on LIRR revenues in 2021. While the railroad finished 2021 with a 15.6 percent increase in ridership to 35.0 million customers, this remained well below prepandemic levels and LIRR's record 91.3 million ridership in 2019.
- Received $621 million from the Coronavirus Response and Relief Supplemental Appropriations Act 2021 (CRRSAA) to offset 2021 farebox revenue losses as a result of Covide-19.

Cost Cutting

- Generated savings throughout 2021 through a program of "additional savings actions" identified and implemented at the end of 2020. These measures reduced reliance on outside contractors, non-service-related expenses, and overtime.
- Continued to maintain tight controls on hiring and non-payroll spending in 2021, despite lifting the agencywide hiring freeze on all nonessential personnel in the second quarter of the year. The LIRR remains aggressive in reviewing all hiring decisions, including simple backfills for existing vacant positions.

Metro-North—Cost-Cutting/Revenue Initiatives

Revenues

- Generated $511,334.50 in revenue through Metro-North's Group Travel Bulk Ticket Sales Service. The Target outlet in Mount Kisco continues to be the biggest bulk ticket account, purchasing over $358,000 in monthly and 10-trip tickets.
- Generated $4.7 million in 2021 through the Outfront media contract for advertising displays in Grand Central Terminal and other agency venues.
- Continued to generate additional revenue, even during the pandemic, including roughly $9,000 from ATM machines on Metro-North properties; $21,000 from the Zipcar License agreement, and $262,000 from soda and snack vending machines.

Cost Cutting

- Reduced train service at 63 percent of pre-pandemic levels continued from January 1 through August 28. On August 29, Metro-North increased service to 82 percent of pre-pandemic levels, which continued through the end of the year. Metro-North also incurred ongoing costs as the agency continued cleaning and disinfecting protocols on rolling stock and at Grand Central Terminal and outlying stations

- Experienced overall operating expenses nearly $8 million higher than the 2021 Adopted Budget. The main drivers for these budget variances were higher fringe benefit costs and increased energy costs for train service. Train service energy costs reflect both increased consumption due to August service increase, as well as volatile energy rates in electric and fuel markets. Favorable budget variances in contracts and materials offset a portion of the worse-than-budget impacts noted above.
- Rolled back the MTA-mandated hiring freeze in place through 2020 pertaining to operations positions in 2021. Hiring challenges across all MTA agencies continued throughout 2021. The struggle to bring on new staff at all levels combined with continuing staff departures resulted in Metro-North posting a lower employee count than at the start of the year.

Bridges and Tunnels—Cost Cutting/Revenue Initiatives

- Continued cost containments and reductions in response to the pandemic and related financial crisis. The agency realized a reduction in operating expenses of 15.9 percent against the original 2021 Adopted Budget. These measures were instrumental in providing $1,377.0 million to support mass transit.
- Reduced controllable overtime by $4.4 million and a further reduction of overtime cost from an estimated $23.3 million in the mid-year budget to an actual $14.8 million at year's end, or 36.5 percent below budget. These overtime savings can be attributed to scheduling, deployment, and managerial efficiencies, as well as the deferment of non-critical maintenance work.
- Continued a comprehensive effort to address critical issues concerning toll collections, revenue recovery, and violation enforcement for vehicles registered in New York and other states. As part of this ongoing effort, the agency's Operations Division enforced New York State registration suspensions, as well as exclusion orders that prohibit persistent out-of-state violators from using Bridges and Tunnels crossings without payment.

2021 ANNUAL REPORT—SECTION 3
Capital Projects Commitments and Completions

The MTA Capital Programs

The MTA Board and the Capital Program Review Board (CPRB) approved an amendment to the 2020-2024 Capital Program in late 2021. The revised 2020-2024 Capital Program totals $55.334 billion, the largest MTA program ever. Other MTA capital programs were not amended in 2021 and their program envelopes remain unchanged at this time.

Unless otherwise indicated, the MTA agency commitments and completions listed in Section 3 of this 2021 Annual Report reflect only those established as 2021 goals by the MTA Board. For maximum transparency, all projects in the 2020-2024 Capital Program, the 2015-2019 Capital Program, the 2010-2014 Capital Program, and portions of the 2005-2009 Capital Program are identified in detail and updated regularly on the MTA's Capital Program Dashboard under "Transparency" on the MTA website at www.mta.info.

Funding Received Through Dec. 31, 2021
($ Millions—Includes receipts for MTA Bridges and Tunnels)

Includes receipts for MTA Bridges and Tunnel	2021	1982-2021
Federal grants/Superstorm Sandy Insurance	$2,430	**$43,093**
State service contracts/Bond Act	$0	**$2,931**
State appropriations/Other	$1,675	**$6,113**
City appropriations	$855	**$8,758**
MTA/TBTA bonds	$1,371	**$50,803**
New Revenue Sources & CBD Tolling	$691	**$691**
MAC	$0	**$919**
Debt restructuring	$0	**$5,362**
Other/Lessor Equity/Asset Sales/Investment Income/Operating- to-Capital/PAYGO/Insurance	$0	**$9,509**
Total	**$7,022**	**$131,179**

Capital Program Progress, 1982- 2021
($ millions)

	Commitments	Expenditures	Completions
New York City Transit	$76,145	$67,073	$63,296
Long Island Rail Road	$14,142	$12,936	$11,460
Metro-North Railroad	$10,027	$8,695	$7,723
MTA Network Expansion	$26,319	$22,978	$18,845
Bridges and Tunnels *	$8,315	$7,318	$6,528
MTA Bus Company	$1,328	$1,042	$872
Commuter Rolling Stock	$1,913	$1,913	$1,896
Superstorm Sandy (all agencies)	$5,861	$4,805	$3,515
Other **	$1,130	$1,030	$933
MTA Total	$145,180	$127,790	$115,0681

Capital Program Progress, 2021
($ millions)

	Commitments	Expenditures***	Completions
New York City Transit	$3,459	$2,088	$1,555
Long Island Rail Road	$311	$711	$332
Metro-North Railroad	$768	$484	$525
MTA Network Expansion	$2,509	$1,013	$805
Bridges and Tunnels *	$257	$569	$386
MTA Bus Company	$113	$93	$5
Superstorm Sandy (all agencies)	$262	$533	$279
Other **	$24	$59	$113
MTA Total	$7,703	$5,549	$4,000

Notes: * Includes Central Business District Tolling, managed and delivered by Bridges and Tunnels.
** Includes expenditures for Interagency and MTAPD. Numbers may not total due to rounding.
*** Expenditures include projects committed in prior years.

New York City Transit (Subways)

Major 2021 Commitments

Stations and ADA

- Awarded ten system-wide Americans with Disabilities Act (ADA) projects in 2021. ADA accessibility improvements include installation of elevators and ramps, modifications to stairs and handrails, boarding areas, station layout, and fare array, provision of accessible travel routes, modification of platforms to reduce gaps, installation of tactile warning strips on platform edges, modification of gates, and modification of customer information systems and signage. Stations in Manhattan that will receive ADA improvements are the 14th St Complex on the 6th Ave., Broadway-7th Ave. and Canarsie Lines (3 stations); 181st St on the 8th Ave. Line; and 68 St-Hunter College on the Lexington Ave. Line. Stations in Queens that will receive ADA improvements are Woodhaven Boulevard on the Jamaica Line; Queensboro Plaza on the Flushing Line; and Court Square on the Crosstown Line. In the Bronx, Westchester Square on the Pelham Line will receive ADA improvements. In Brooklyn, 8th Ave. on the Sea Beach Line will receive ADA improvements (southbound; northbound is already ADA accessible). These projects advance the MTA's ongoing commitment to systemwide accessibility ($634.2 million).
- Awarded a station circulation improvement and component repair project at Main Street on the Flushing Line in Queens in December 2021. This project will improve passenger circulation at the station by installing new street stairs and new platform access stairs to increase passenger capacity. In addition, the project will repair or replace select deficient components at the platform level and rehabilitate street stairs at the west entrance to bring components to a state of good repair ($55.0 million).
- Awarded replacement of eight traction elevators on various lines in Brooklyn and Manhattan in April 2021. The project will replace existing elevator cars, components including the operating and communication system and provide connection between

status monitors and the Elevator & Escalator (E&E) Control Center. The elevators being replaced are at: Court Street on the Broadway Line (2 elevators), Clark St on the Clark St Line (3 elevators), Lexington Ave.-63rd Street on the 63rd St Line (1 elevator) and Roosevelt Island on the 63rd St Line (2 elevators). Completion of this project will allow for continued and reliable vertical accessibility at each station ($50.0 million).

- Awarded 17 systemwide Small Business Mentoring Program (SBMP) station stair rehabilitation projects in 2021. Depending on the station, stair type can be street, interior or elevated and rehabilitation can include removal and replacement of the existing tread and risers, concrete landings, wall tiles, lighting fixtures and globe lights and structural repair. Handrails will be replaced with ADA compliant stainless-steel handrails at each project location. Stations that will receive stair rehabilitation through the 2021 SBMP are Grand Avenue, Elmhurst Avenue and 65 Street on the Queens Boulevard Line, Brighton Beach and Ocean Parkway on the Brighton Line, Ralph Ave. and Utica Ave. on the Fulton Line, Rector St on the Broadway Line, Spring St on the Lexington Avenue Line, Vernon Blvd-Jackson Ave. on the Flushing Line, 34th St-Herald Square, 23rd St, 8th St and Jay Street-Metrotech on the Broadway Line and 79 St on the Broadway-7 Ave. Line. These projects will bring all stair components to a state of good repair ($20.6 million).
- Awarded two station ventilator repair projects in July 2021. Work will include rehabilitation of the ventilator structures, repair of spalled concrete, replacement of ventilator gratings and frames, checking valves and drip pans, waterproofing of the structures and drainage modification improvements as needed. The stations that will receive ventilator repair are 42nd St-Port Authority Bus Terminal on the 8th Ave. Line, 168 St on the Broadway-7th Ave. Line, 138 St-Grand Concourse on the Jerome Line, and Rockaway Ave. and Liberty Ave. on the Fulton Line to bring ventilator components to a state of good repair ($15.4 million).

<u>Signals, Line Structures, Line Equipment and Track</u>

- Awarded systemwide mainline track, yard track, and switch replacement projects

throughout 2021. Track and switch replacement projects include replacing and installing equipment and materials to bring track and switch components to a state of good repair. For some line segments, projects also include installation of Continuous Welded Rail (CWR) to improve the condition of the track and create a safer and smoother rider for passengers. Lines that received track or switch replacement in 2021 are the Broadway-7th Ave. Line, the Jamaica Line, the 4th Ave. Line, the Lenox-White Plains Road Line, the 11th St Cut, the Lexington Line, the Pelham Line, the Concourse Line, the Jerome Line, the 6 Ave.-Culver Line, the Brighton Line, the Broadway line, the Flushing Line, the 63rd St Line, the Myrtle Ave. Line, the 8th Ave. Line, the Liberty Line, and the Eastern Parkway Line ($550.7 million).

- Awarded Communications-Based Train Control (CBTC) for Queens Blvd Line (QBL) East in December 2021. This project replaces the existing fixed block relay-based signal system with CBTC from Union Turnpike Station to the 179th St Station in Queens. The contract will install Solid State Interlockings (SSI), replace switches and provide Automatic Train Supervision (ATS) on the line. This project will complete the CBTC system on the Queens Line, providing continuous CBTC service from 179 St station to 50 St station in Manhattan. CBTC will improve service reliability by reducing signal-related delays and enabling increased train throughput on the line ($506.4 million).
- Awarded Line Structure Component Repair Program (LSCRP) projects were in 2021 on the Canarsie, Concourse, Jamaica, 63 Street, Jerome, and White Plains Road lines in Manhattan, the Bronx, Queens, and Brooklyn. Typical repairs address concrete, steel, and leak deficiencies within subway tunnels and on elevated structures. The LSCRP seeks to repair priority defects throughout the NYCT system to bring structures into a state of good repair ($166.8 million).
- Awarded Phase 1 of the Livonia Maintenance Facility rehabilitation in Brooklyn in October 2021. This project will repair or reconstruct high priority deficient components at the facility. The work will include structural repairs on the west and east side walls and several environmental upgrades such as the installation of new oil water-separators. The work will also include supporting utility, electrical, communication and signal improvements to carry out the structural and architectural repairs. Completion of

the project will bring the most critical structural components in the maintenance facility to a state of good repair while a pending Phase 2 project would make additional upgrades to the existing facility and support systems ($21.9 million).

- Rehabilitation of the deep well system on the Nostrand Avenue Line in Brooklyn was awarded in June 2021. Work includes the replacement of well pumps, deepening of select wells and replacement of control equipment. The eight deep wells that are installed along Nostrand Avenue and Newkirk, Farragut, Flatbush, Avenue D, Clarendon and Foster use pumps to lower the water table surrounding the subway tunnel to prevent water infiltration; this project will bring the deep well components to a state of good repair. ($22.3 million)
- Two overcoat painting pilots on the Culver Line in Brooklyn were awarded in September 2021. The pilots cleaned the elevated structures from Bent 204-213 and from Bent 213-223 with abrasive blasting, which is a new and highly thorough surface preparation standard for structure painting. Success of the pilot will inform the methods used for the Culver Line overcoat project from West 8 Street to the Church Avenue Portal that is forecasted to be awarded in 2022 as well as future MTA C&D / NYC Transit line structure overcoating projects ($6.0 million).

Bus Purchases and Facilities

- Awarded purchase of 298 new buses, of which 135 are standard diesel, 84 are hybrid-electric buses, 19 are express buses and 60 are standard battery-electric buses (BEB) in 2021. These procurements will replace older buses in the city-wide fleet while providing new and improved safety and customer service technologies. The buses will be equipped with USB chargers, as well as Wi-Fi and digital information screens with route, next stop, and other customer service information. All buses will come equipped with pedestrian turn warning (PTW) technology, additional on-bus cameras and exterior cameras, hi-vis windows, and traffic signal warning (TSP) hardware technology. The BEB purchase will be the MTA’s first all-electric bus purchase and is an essential step to achieve the MTA's commitment to transition to a fully zero-emissions fleet by 2040 ($251.4 million).

- Awarded an electric bus chargers purchase in March 2021. The chargers will be procured in partnership with the New York Power Authority (NYPA) and will support the operation of all-electric buses out of five depots: East New York, Charleston, Grand Avenue, Kingsbridge, and MJ Quill. The project will support will the MTA' first all-electric bus purchase as an essential step in achieving the MTA's commitment to a fully zero-emissions fleet by 2040 ($48.2 million).

Superstorm Sandy Repair and Resiliency

Awarded multiple projects in 2021 which repaired NYC Transit facilities and infrastructure damaged by Superstorm Sandy or implemented resiliency solutions to prevent potential damage from future storms. These projects included:

- A project to repair damage from Superstorm Sandy to signals, track, and switches from 200th to 207th St on the 8th Ave. Line in Manhattan was awarded in December 2021. Equipment damaged by water infiltration will be replaced and when possible, will be installed in locations where flooding is less likely or in watertight casings. Completion of the project will return this segment of the 8 Ave Line's signal, track, and switch equipment to a state of good repair and provide resiliency against future storms ($140.3 million).
- Awarded a wrap-up project on the Rockaway Line in Queens in July 2021. While emergency repairs quickly restored service to the Rockaway Line after the storm, this project will ensure that the line's critical assets are fully brought back to a state of good repair. The project includes repairs to the North Channel Bridge; communication systems repair at circuit breaker house (CBH) #539, Edgemere substation, and Wavecrest substation; fiber optic cable installation between Howard Beach Station and Hammels Wye; and various other repairs along the line ($42.6 million).
- Awarded a flooding resiliency project at the Consolidated Revenue Facility in Queens in October 2021. This project will protect this critical facility against a 100-year storm by constructing a new flood wall around the perimeter of the property and furnishing deployable flood logs (to be stored within the facility) for all access openings ($8.8 million).

- Awarded a flood resiliency project at 138th St-Grand Concourse Station in March 2021. The southern ventilators at the station will be rehabilitated and mechanical closure devices (MCDs) will be inserted to protect the station from flooding in a major storm event ($8.1 million).

Major 2021 Completions

Stations and ADA

- Completed five systemwide ADA projects in 2021. Depending on the station, ADA accessibility improvements included installation of elevators and ramps, modifications to stairs and handrails, boarding areas, station layout, and fare array, provision of accessible travel routes, modification of platforms to reduce gaps, installation of tactile warning strips on platform edges, modification of gates, and modification of customer information systems and signage. Improvements were completed In Manhattan at 57 St-7 Ave. on the Broadway Line; in the Bronx at Gun Hill Road on the Dyre Ave. Line; in Brooklyn at 59th St on the 4th Ave. Line and at Ave. H on the Brighton Line**.** Additionally**,** an ADA platform gap retrofit project was completed at these stations in March 2021: 14th St-Union Square on the Broadway Line; DeKalb Ave. and Atlantic Ave.-Barclays Center on the 4 Ave. Line; Flushing Ave. and Marcy Ave. on the Jamaica Line; Metropolitan Ave. on the Myrtle Line; 8th Ave. on the Canarsie Line; and the Stillwell Ave.-Coney Island Terminal ($228.3 million).
- Completed the replacement of six traction elevators on the 8th Ave. Line in December 2021. The project replaced existing elevator cars, the elevator operating and communication systems and provided new connections between status monitors and the Elevator & Escalator (E&E) Control Center. The elevators that were addressed were at: 181 Street (3 elevators) and 190 Street (3 elevators). Completion of this project will allow for continued and reliable vertical accessibility at each station ($44.0 million).
- Completed a station ventilator component repair project on the 8th Ave. Line in October 2021. Work included rehabilitation of the ventilator structures, repair of

spalled concrete, replacement of ventilator gratings and frames, checking valves and drip pans, waterproofing of the structures and drainage modification improvements as needed to bring the ventilators to a state of good repair. The stations that received ventilator repairs are: 145 Street, 155 Street, 175 Street and Dyckman Street ($6.7 million).

- Completed six Small Business Mentoring Program (SBMP) stair rehabilitation projects in 2021. All projects addressed street stairs; depending on the station, rehabilitation included removal and replacement of the existing tread and risers, concrete landings, wall tiles, lighting fixtures and globe lights and structural repair. Handrails were replaced with ADA compliant stainless-steel handrails at each project location. Stations that received stair rehabilitation through the 2021 SBMP are 75 Street, 85 Street, Woodhaven Boulevard, Cypress Hills, 104th St, 111th St and 121st St on the Jamaica Line, Grand Ave. on the Queens Boulevard Line and Prince St on the Broadway Line ($5.2 million).

Signals, Line Structures, Line Equipment and Track

- Completed switch and interlocking modernization projects on the Culver Line in Brooklyn in May 2021. The existing mechanical interlocking at Kings Highway was replaced with a solid-state signal system that included the construction of a new relay room, train control and ancillary rooms and all associated equipment. This initiative also replaced 12 track switches in the vicinity of the Kings Highway Interlocking. Mainline switch replacement work included the replacement of existing turnouts, track switches, switch valves, connecting rails, contact rails, ties, and ballast. These projects improved signal reliability and train service on the Culver Line allowing the line to be compatible for future Communications Based Train Control (CBTC) implementation ($198.4 million).
- Completed systemwide mainline track, yard track, and switch replacement projects throughout 2021. Track and switch replacement projects included replacement and installation of equipment and materials that brought track and switch components to a state of good repair. For some line segments, projects also included installation of

Continuous Welded Rail (CWR) that improved the condition of the track and created a safer and smoother rider for passengers. Lines that received track or switch replacement in 2021 are the Broadway-7 Ave. Line, the Jamaica Line, the Lenox-White Plains Road Line, the Pelham Line, the Brighton Line, the Rockaway Line, the Broadway line, the Myrtle Avenue Line, the 8 Ave. Line, and the Queens Boulevard Line ($129.7 million).

- Completed several line structures, line equipment, and power projects in 2021 on the Queens Boulevard Line in Queens. A tunnel lighting rehabilitation project that replaced antiquated tunnel lighting fixtures with new LED fixtures and associated components from Roosevelt Avenue to Elmhurst Avenue. Line structure repairs were conducted from 36th Street to 46th Street, which included repair or replacement of beams, columns, concrete spall, cracks and leaks on the ceiling and walls. Priority repairs were made to the 78th St Substation that provides traction power to segments of the line. Lastly, low-resistance contact rail and supplemental negative cables were installed from the Steinway Loop along the 53rd St tube to the Roosevelt Island substation. These investments have brought various line structure, line equipment, and power assets to a state of good repair along the line ($78.4 million).
- Completed construction of a new power substation near Tottenville station on the Staten Island Railroad (SIR) was completed in February 2021. The new substation is located at Utah Street and Johnson Avenue in Staten Island; work included construction of the structure and installation of rectifiers, an air-cooled transformer, circuit breakers, switchgear and supervisory control equipment. This new substation improved reliability of train service by boosting the electrical power along the SIR right-of-way ($25.0 million).
- Completed a systemwide signals key-by circuit modification project in July 2021. The installation of signal key-by timers into the existing circuits of automatic and approach signals at 240 locations system-wide help arriving trains maintain adequate emergency braking distance when approaching a train stopped in a station ($20.1 million).

Car and Bus Facilities

- Completed two projects at the East New York Bus Depot in Brooklyn in June 2021. First was the construction of new administrative support space and the modification of bus lanes and storage areas to accommodate the operation of a new articulated bus fleet. Second was a project to provide new operational capabilities for articulated buses. The articulated modification included replacement of the chassis wash with a new mounted vertical scissor lift and control panel on the maintenance floor of the bus depot, demolition of the existing modular administrative building, reconfiguration of depot storage areas and a reconfiguration of mechanical systems in the existing bus maintenance bays. These projects will allow NYC Transit to implement articulated bus service on high volume routes and reduce operating costs at the depot ($20.4 million).

- Completed rehabilitation of shop components within three railcar maintenance facilities in August 2021. The rehabilitations included HVAC repair, roof repair, new communication controls, and electrical and mechanical component replacement as required. The facilities that received component rehabilitation are the 180th Street Maintenance Facility and the Pelham Maintenance Facility in the Bronx and the Coney Island Complex in Brooklyn ($31.4 million).

Superstorm Sandy Repair and Resiliency

Completed multiple projects in 2021 which repaired NYC Transit facilities and infrastructure damaged by Superstorm Sandy or implemented resiliency solutions to prevent potential damage from future storms. These projects included:

- Completed repair and resiliency projects at the Rutgers Tube between Manhattan and Brooklyn in December 2021. Superstorm Sandy inundated the Rutgers Tube with salt water and damaged a variety of critical assets. This project repaired those assets, which include signal equipment, power and communications cable, track, pump rooms, fan plant equipment, and tunnel lighting. This project also provided various

resiliency improvements at two pump rooms to protect the tube from water damage in future storms. ($142.9 million)

- Completed repair of Superstorm Sandy damage and installation of long-term resiliency protection at 148th St Yard in Manhattan in October 2021. Repairs included replacement of power cables within the yard, which were damaged by flood water from Superstorm Sandy. Additionally, a perimeter wall and a stop log gate system at the yard's portal were implemented to prevent flooding in future storms ($84.7 million).
- Completed various systemwide flood resiliency projects were completed in 2021 at street level openings in the vicinity of NYC Transit facilities or within the facilities. Two projects addressed vulnerable street level openings such as sidewalk vent grates, stair and elevator openings, hatches and manholes and hardened internal communication and signal rooms at seven stations and one fan plant. Resiliency measures included inserting mechanical closure devices (MCDs), watertight manhole inserts, conduit sealing, and installation of watertight hatches, doors, and deployable stop log barriers. The stations that received the flood resiliency measures were Houston Street on the 7 Avenue Line, 103 and 110 Street on the Lexington Line, 155 Street on the Concourse Line, 138 Street-Grand Concourse on the Jerome Line and Roosevelt Island-21 Street (including the 21 Street Fan Plant) on the 63 Street Line. Lastly, a project provided flood resiliency at the Steinway Portal Signal Tower on the Flushing Line. Flood resiliency was achieved at the signal tower by installing watertight flood doors and walls, sealing conduit and duct penetrations, and procuring stop logs to be used as needed in a storm event ($54.0 million).

MTA Bus Operations (NYCT DOB, MTA Bus, AAR)

Major 2021 Commitments

Depots and Facilities

- Awarded the following NYC DOB capital project contracts in 2021: Jamaica Lot Demolition, Phase II. ($1.0 million); Grand Avenue Chassis Wash ($1.5 million); Kingsbridge Roof Topping & Expansion Joints ($4.4 Million); Ulmer Park & Flatbush Window Replacement ($6.6 million); Ulmer Park Chassis Wash Replacement ($1.7 Million); Zerega CMF HVAC Rehab & Replacement ($8.5 million).
- Advanced the following NYCT DOB project in 2021, awarded in 2020: East New York Brick Façade and Windows, currently 46 percent complete ($14.67 million).
- Advanced the following NYCT DOB projects during 2021, awarded in 2019: Queens Village Roof, currently 65 percent complete ($6.20 million); ENY Caisson Tower Repairs, currently 85 percent complete ($0.43 million); Jackie Gleason Bus Wash Replacement, currently 10 percent complete ($3.6 million); Fresh Pond Roof, currently 75 percent complete ($4.8 million).
- Awarded the following MTA Bus Company contracts in 2021: Spring Creek Compressed Natural Gas Upgrade, currently 90 percent complete ($6.9 Million); College Point Chassis Wash ($2.0 million); Non-Revenue Vehicles, not included on the 2021 commitment goals ($3.6 million); Central Revenue Facility Flood Mitigation ($7.2 million); Spring Creek HVAC Replacement ($3.88 million MTABC).

Rolling Stock

- Advanced the following NYCT DOB fleet purchase contracts in 2021, awarded in 2020: Purchase of 84 New Flyer standard hybrid buses ($71.2 million); purchase of 139 New Flyer standard diesel buses ($98.8 million); purchase of 60 New Flyer

standard all-electric buses ($65.8 million); and purchase of 23 Prevost over-the-road coach buses, of which 19 are funded under the Capital Program and four funded by Operations ($14.5 million).

- Awarded the following MTA Bus contracts in 2021 for fleet purchases: Purchase of 25 Nova standard diesel buses ($16.8 million); purchase of 25 Nova standard diesel buses ($18.1 million); and purchase of 85 Nova standard diesel buses, not included in the 2021 commitments goals ($61.9 million).

Major 2021 Completions

Rolling Stock

- Completed delivery of one NYCT DOB bus contract in 2021 for 15 New Flyer all-electric articulated buses ($34.2 million). The buses feature the latest safety and customer service technologies, such as digital information screens, Wi-Fi, USB charging ports, pedestrian turn warning (PTW) technology and traffic signal priority (TSP).

Depots/Facilities

- Completed the following NYCT DOB capital projects in 2021: the Queens Village Bus Wash Project ($2.30 million); the Queens Village Roof Project ($6.30 million); the Jackie Gleason Bus Wash Project ($2.56 million); and the Manhatanville HVAC Replacement NYPA Project ($15.73 million).
- Completed the following MTA Bus Company capital projects in 2021: the Eastchester Service Building Modification ($13.25 million) and the Automated Passenger Count, Phase 1 Roll-Out Project ($1.8 million).

Long Island Rail Road

Major 2021 Commitments

Stations

- *ADA Accessibility and Components Design*: Awarded a design contract to prepare conceptual design reports and preliminary engineering documents to bring various stations into code and ADA compliance. These documents will be used for the procurement of a single or several design-build contracts. Design goals consist of improved customer experience including accessibility improvements required to meet current ADA and code requirements which include ADA / code compliant curb cuts, restrooms, signage, tactile, walkways, elevators, doorways, and parking ($10 million).

Line Structures

- *Wreck Lead Bridge Rehabilitation*: Awarded a construction contract award for Wreck Lead Bridge mechanical rehabilitation. This project will rehabilitate the moveable bridge components to improve bridge reliability levels by rehabilitating the lower and upper span locks, installing a new centering device with appropriate capacity and rebalancing the bridge to ensure proper alignment and closure ($5 million).
- *Small Business Mentoring Program—Tunnels (SBDP*): Awarded a Small Business Development Project (SBDP) construction contract for the Franklin Avenue Tunnel Hatchways Improvements. Work includes demolition and replacement of the existing tunnel floor beams, sidewalk, curbs, roadways, hatchways, and staircases ($40 million).

Track

- *Jamaica Capacity Improvements Phase 1—Beaver Signal Platform (SBDP*):

Awarded an SBDP construction contract for the Beaver Signal Platform portion of the Jamaica Capacity Improvements – Phase 1 project. This project provides for the construction of structural platforms to allow the installation of new signal infrastructure. There will be a total of three platforms constructed and employee access stairs at the Central Instrument Location (CIL) platform ($302 million, total project budget).

Shops & Yards

- *Rehabilitation of Employee Facilities (SBDP*): Awarded an SBDP project for the Morris Park and Ronkonkoma Yard Paving Design. The scope of work includes the designs for parking lot improvements and drainage / safety enhancements at Morris Park and Ronkonkoma Yard ($18 million).

Major 2021 Completions

Stations

- *St. Albans Station Renewal (SBDP*): Completed the St. Albans Station Renewal project. This SBDP project included rehabilitation of the concrete platform, replacement of the concrete staircase stair treads, installation of a new platform shelter shed, new signage, upgrading of the lighting to LED lighting, and replacement of the chain link fencing with new high security fence ($5 million).
- *Penn Station Elevator / Escalator Replacement*: Completed the refurbishment of LIRR-owned elevators and escalators in Penn Station. Under this project, five elevators were upgraded to meet all applicable codes, standards, regulations including the provision of alternate recall programming. The elevators are now provided with telephone and video cameras. In addition, fourteen escalators were upgraded with the replacement of old parts with new modern controls, chains, bull gears, tracks, and handrails, while re-using structural components which are still in good condition. The escalators are now equipped with safety enhancements and

sleep mode technology ($11 million).

- *Jamaica Station—Planning and Engineering*: Completed the LIRR-to-AirTrain Wayfinding Improvements at Jamaica Project. The project has resulted in major signage and wayfinding enhancements at the Jamaica Transit Hub, making it easier for LIRR, Subway, Bus and PANYNJ JFK AirTrain customers to navigate the complex transfer environment, especially for visitors traveling through JFK who are otherwise unfamiliar with Jamaica station. Not only has this project enhanced and enlarged the static signage with a custom-designed standard for this multi-agency environment (with sign designs corresponding to each mode of transportation now unified throughout the complex) but it also added new digital signage to display real-time information at key waypoints along a passenger's journey. Additionally, the project has improved lighting within heavily trafficked corridors of Jamaica. Customer access to/from the JFK AirTrain is now far easier and more user-friendly than before, with a noticeable improvement in the passenger flow and a reduction in passenger requests for directions already being recognized ($10 million).

Track

- *Retaining Walls / Right of Way Projects*: Completed the Retaining Walls / Right of Way Projects has been completed. These improvements of the physical condition of the right of way will ensure safe and efficient operation of trains systemwide. The project constructed / renewed retaining walls, rehabilitated culverts, and addressed areas with drainage and flooding conditions in order to ensure the track structures and other railroad assets along the right of way are in a state of good repair ($10 million).
- *Brentwood Freight Siding*: Completed the construction of a new freight siding on the Main Line in Brentwood. Work included installation of two #10 switches, two electric lock cases, associated terminations, field modifications, removal of old signal cables, and the removal and reinstallation of fencing ($2 million).
- *Massapequa Pocket Track*: Completed the construction of a new 12-car stub-ended

electrified and interlocked pocket track east of Massapequa Station. This is an East Side Access Readiness Project. The new pocket track has 3 interlocked turnouts and switches providing a crossover to each main line track and approximately 1,700 feet of new track. The work also included construction of a new 75-foot bridge over Unqua Creek that shares the existing Unqua Creek Bridge Abutments ($21 million).

Line Structures

- Lynbrook and Rockville Centre Viaduct (SBDP): Completed the third of three SBDP contracts for rehabilitation of the Rockville Centre and Lynbrook viaducts in Nassau County. This final contract covered Lynbrook Viaduct Spans 1 to 39. The underdeck structural work on the viaduct included concrete rehabilitation, repairs to joints, utilities, and improvements to the existing drainage system. The project is part of the LIRR's efforts to maintain a state of good repair of the infrastructure, extend the life of viaduct structures, and improve drainage issues ($9 million).
- *Mentor Allowance—Line Structures (SBDP):* Completed bridge painting work performed under an SBDP contract. This project provided for the painting of Flushing Main Street Bridge, Francis Lewis Boulevard Bridge, and Gosman Avenue Bridge. Work included surface preparation, lead abatement, air monitoring and maintenance, and protection of traffic ($15 million).

Communications

- *LIRR Public Address System*: Completed the replacement of the selected components of the Audio-Visual Paging System (AVPS). This includes the replacement of the AVPS head-end system and redundant head-end, along with the replacement of AVPS back-end computers at 121 LIRR stations ($5 million).
- *Fiber Optic Network*: Completed integration of new carrier class network transport equipment to replace the obsolete equipment in the LIRR's fiber optic network (FON). FON is a carrier-grade backbone communications network that will support LIRR vital, non-vital, and business/mission critical communications systems including

corporate enterprise (non-vital / critical) systems. FON will improve the LIRR's ability to support modern applications and systems as well as improve performance of other pre-existing applications and systems ($34 million).

Signals

- *Signal Normal Replacement Program*: Completed the Signal Normal Replacement Program. This provided for replacement of selected signal system equipment that had reached or exceeded its useful life. The scope included the replacement of signal system components consisting of case/hut batteries, grade crossing gates, signal aerial cables, signal cases / huts, switch machines, and signal heads ($30 million).

Power

- *Third Rail—2,000 Million Cubic Meter Cable*: Completed the replacement and upgrade of 6,800 linear feet of third-rail cables and 750 linear feet of ducts in selected locations to maintain a state of good repair and to property support the electric fleet on crossings, side leads, and gaps. Replacement of deteriorated / deficient third rail cable ensures capacity to handle current and future operating plans and future service enhancements, as well as facilitate service reliability by reducing equipment failures ($2 million).
- *Third Rail—Disconnect Switches*: Completed the replacement and upgrade of third rail disconnect switches (68) in selected locations. This project maintains a state of good repair in critical areas including substations, yards, and sectionalizing locations. Replacement of deteriorated / deficient third rail disconnect switches ensures capacity to handle the increased power load of current and future operating plans, including the new M-9 fleet and future service enhancements ($2 million).
- *Third Rail—Protection Board*: Completed the replacement of third rail protection board in selected locations systemwide. The replacement of deteriorated / deficient protection board maintains a state of good repair and ensures capacity to handle the increased power load of current and future operating plans, including the new M-9 fleet and future service enhancements ($6 million).

- *Third Rail—Composite Rail*: Completed the replacement and upgrade of approximately 76,990 linear feet of third rail with new aluminum third rail at various locations. Replacing deficient / deteriorated composite rail maintains a state of good repair and helps mitigate lack of contact from train shoes ($12 million).
- *Third Rail—Feeder Cable*: Completed the replacement and upgrade of 12,800 linear feet of third rail feeder cable has been completed. Replacing deteriorated / deficient third rail feeder cable maintains a state of good repair and ensures capacity to handle the increased power load of current and future operating plans, including the new M-9 fleet and the future service enhancements ($3 million).
- *Negative Reactor Upgrade*: Completed the replacement of aged, deteriorated, and inadequate negative reactors and associated negative return cables systemwide. Replacing negative reactors which are beyond their useful life brings them to a state of good repair and ensures capacity to handle the increased power load in the future, including the new M-9 fleet and traction power needs associated with present and future operating plans. Replacement protects service reliability by reducing traction power system failures, thus supporting on-time performance goals ($3 million).
- *Atlantic Avenue Tunnel Lighting*: Completed the design and construction of new lighting in the tunnel segments between East New York station and Atlantic Terminal. Replacement of lighting equipment included replacement of light fixtures, wire, cable, conduit, distribution equipment, primary power, transformers, and switches ($5 million).
- *Signal Power Motor Generator Replacement*: Completed the replacement of existing Signal Power Motor Generators (MG) and MG switch gears including transformers, circuit breakers, electrically operated switches (EOs), MG Controls, and state-of-the-art Programmable Logic Controller (PLC) systems. Work also included structural repairs and rehabilitation of MG buildings. Locations included Smithtown, Greenlawn, Port Jefferson and Babylon ($6 million).

<u>Miscellaneous</u>

- *Substations Environmental Remediation*: Completed soil remediation activities at Bayside and Cedar Manor Substations. The LIRR has now remediated 19 of the 20

electric substations that were originally included in this project. Project activities included investigation, remedial design, and remediation of elemental mercury contamination in drains, rectifier pits, leaching pools, and surface soils. Supplemental investigation and remediation of the last remaining substation, located in Far Rockaway, will be conducted under a separate capital project ($10 million).

- *Station Platform CCTV Cameras*: Completed the installation of CCTV cameras at 18 stations. There were a total of 126 cameras installed at 18 locations. Each location received 4 cameras with the exception of East New York and Oakdale, which received 46 and 16, respectively ($1 million).

Superstorm Sandy

- *Long Beach Branch—System Restoration*: Completed the replacement of various systems along the Long Beach Branch that were damaged by Superstorm Sandy. The Long Beach Branch System Restoration project included Communications, Power, and Signal work. New overhead Communication and Signal lines with equipment drops have been constructed. Power replacement of cables, third rail brackets, and protection boards, as well as new impedance bonds and insulated joints (IJs) was also performed. New elevated signal huts with microprocessor signal equipment with reverse signaling on both tracks and new Supervisory Control and Data Acquisition (SCADA) software and hardware at Lead and Valley Towers as well as at the Jamaica Central Control (JCC), was also part of this project ($69 million).

Metro-North Railroad

Major 2021 Commitments

Rolling Stock

- Continued the acquisition and replacement of components for rebuilding an additional sixty-six (66) M8 Electric Multiple Units (EMUs). A total of 26 EMUs out of the 66 EMUs have been delivered. Based on the latest Detailed Contract Scheduled received from the Car Builder, delivery of the remaining EMUs is expected in the

second quarter of 2022. (Out of the total rebuild project budget of $1.4 billion, $472 million comes from the MTA and $936 million from the Connecticut DOT.)

Stations

- Awarded the construction of priority repairs to the North White Plains Station platforms and foundations. The work includes replacement of 90 percent of the trackside platform edges with new concrete sections, new edge boards, new tactile warning strips, and new platform expansion joints. Also, repair of concrete cracks and spalls at the remaining platforms, platforms supports, and the repairs to existing underpass stairs ($7.4 million).
- Awarded the construction of ADA improvements at Hartsdale, Scarsdale, Purdy's stations. The work includes: two new elevators and elevator machine rooms at the Hartsdale Station; one new elevator and elevator machine room at the Scarsdale Station, with modification to the existing overpass stairs and utilities; demolition of an existing staircase and construction of a new elevator at Purdy's Station ($16 million).
- Awarded a Small Business Mentoring Program (SBMP) contract to perform priority repairs of the Rye Station platforms This project includes priority repairs at Rye Station on the New Haven Line to address structural deficiencies in platform surfaces and platform edges, expansion joints, tactile warning strips, and stairs ($1.5 million).

Infrastructure

- Awarded two SBMP contracts to perform drainage improvements and pave three commuter parking lots at New Hamburg, Cold Spring, and Beacon stations ($4.1 million).
- Awarded a construction contract to build a new parking lot near the Croton Falls Station ($7.0 million), along with an SBMP contract to build an adjacent sidewalk ($800,000).

- Awarded a contract for Preliminary Engineering and Program Management for the Phase 1 replacement of the Park Avenue Viaduct from 115th to 123rd streets. This contract will develop bid documents for a design-build replacement of Phase 1, as well as construction inspection and oversight. The Park Avenue Viaduct is the main artery of the Metro-North system and carries all trains into and out of Grand Central Terminal ($55.8 million).
- Awarded the construction of the Grand Central Terminal Train Shed Sector 1 roof replacement, encompassing replacement of the roof over the train shed on E. 47th St. between Madison Ave. and the centerline of Park Ave., E. 48th St. between Madison Ave. and the centerline of Park Avenue and Southbound Park Ave. between E. 48th and E. 47th streets.

Major 2021 Completions

Stations

- Completed the construction of the White Plains Station. Improvements included an extension of the island platform, new side platforms, and lobby and plaza enhancements. This project was part of a multiyear design-build contract for the Enhanced Station Initiative Project, including design-build enhancements at five stations on the Hudson, Harlem, and New Haven Lines. The stations are White Plains, Riverdale, Port Chester, Crestwood, and Harlem-125th St. ($100 million)
- Completed the Customer Service Initiative at 20 outlying stations and the GCT PA Head End/VIS system. The project includes a systemwide upgrade of the public address, visual information, and video surveillance/access control systems at 20 Metro-North stations and facilities. It also includes upgrades to elevator monitoring, providing network connectivity for new and existing equipment and real-time data improvements (customer service Initiative, $85.2 million; GCT PA/VIS System, $62 million).
- Completed the construction of new platform and amenities at Port Jervis Station. This

included a high-level side platform to replace the old low-level platform, with one car length of wood ceiling canopy, other ESI and CSI Elements, and one heated shelter with artwork on glass shelter panels ($6.8 million).

Infrastructure

- Completed the construction of Rock Slope Remediation measures along Metro-North right-of-way. That includes tree clearing, rock scaling and removal, rock bolting, concrete buttresses, cable mesh supports, rock fence, shotcrete at eight sites East of Hudson and six sites West of Hudson ($18.6 million).
- Completed the replacement of three vehicular bridges located in the city of Mount Vernon at 3rd Ave, 6th Ave, and 10th Ave.
- Completed the construction of the new substation at Brewster. ($23.4 million)
- Completed the West of Hudson Signal Improvements ($21.1 million).

Bridges and Tunnels Capital Projects

Major 2021 Commitments

MTA capital are now managed by dedicated business units at MTA Construction & Development (C&D). The C&D Bridges and Tunnels Business Unit committed a total of $260 million to Capital Program projects in 2021, a continuation of the agency's commitment to maintain its facilities in a state of good repair. This does not include funds committed by Bridges and Tunnels to the Central Business District Tolling Program (CBDTP), which amounted to $42.3 million in 2021 alone. The following are details on C&D's Bridges and Tunnels Business Unit's major commitments in 2021:

Bronx Whitestone Bridge

- Awarded the construction contract for the miscellaneous structural rehabilitation and painting of the Bronx-Whitestone Bridge ($26.7 million contract award, $37.7 million total project budget).

Henry Hudson Bridge

- Awarded the design-build contract for the Dyckman Street Substations upgrade ($35.0 million contract award, $50.3 million total project budget, incl. Phase 2 construction already completed).

Robert F. Kennedy Bridge

- Awarded the design-build contract for the construction of a new multi-use path connection between the Harlem River Lift Span and the future Manhattan Waterfront Greenway and Harlem River Lift Span Fender Upgrades ($42.1 million contract award, $61.4 million total project budget).

Verrazzano-Narrows Bridge

- Awarded the design-build contract for the installation of a safety fence on the VNB suspended span ($34.5 million contract award, $43.6 million total project budget).

Major 2021 Completions

In 2021, the C&D Bridges and Tunnels Business Unit completed a total of $386 million in Capital Program projects. The following are highlights of the major completed projects:

Cross Bay Bridge

- Completed the replacement of the fender protection systems at the Marine Parkway Bridge and the Cross Bay Bridge and scour protection at the Cross Bay Bridge ($65.9 million, total project budget).

Hugh L. Carey Tunnel

- Completed the rehabilitation of ventilation systems at the Hugh L. Carey Tunnel ($88.0 million, total project budget).

Verrazzano-Narrows Bridge

- Completed the anchorage & piers rehabilitation and sealing at the Verrazzano-Narrows Bridge. This was completed one month ahead of schedule ($48.7 million, total project budget).
- Completed the painting of the suspended span at the Verrazzano-Narrows Bridge ($73.6 million, total project budget).

MTA Construction & Development

MTA Construction & Development (MTA C&D) was officially established in December 2019 to assume and expand upon the responsibilities of the former MTA Capital Construction. In addition to the capital megaprojects listed below, MTA C&D manages the construction and development projects of the MTA operating agencies listed in the agency sections above, in particular the nonoperational initiatives of the 2020-2024 Capital Program. The MTA C&D team consolidates the expertise of MTA engineers, architects, planners, project managers, and other professionals to deliver construction projects in the most timely, cost-efficient manner possible, utilizing design-build contracts, new technologies, and state-of-the-art construction methodologies. That portfolio includes many of the capital projects currently listed as agency Capital Projects Commitments/Completions, which will be reflected in future reporting.

MTA Mega Projects

Second Avenue Subway, Phase 2

- Committed $221 million to the Second Avenue Subway, Phase2, as of December 2021. Initial funding for this project is $1.735 billion to address environmental work, design, real estate, project support, and preliminary construction work. Additional funding of $4.555 billion is included 2020-2024 capital program, bringing the total Phase 2 budget to $6.29 billion. On January 6, 2022, FTA

approved the SAS Phase 2 Project to enter into the Engineering phase of the FTA New Starts Program. Over the next several months, MTACD will be working with FTA to provide all required documentation and management plans in support of advancement to a Full Funding Grant Agreement.

East Side Access

- Committed $10.2 billion to East Side Access (ESA), as of December 2021. This commitment comes out of a current project budget of $11.133 billion, plus a rolling stock reserve of $463 million, based on the approved 2020-2024 Capital Plan. Federal funding for the project totals $2.699 billion. Total third-party construction executed to date is over $6.7 billion. In 2021, ESA executed approximately $203.7 million worth of construction, including Force Account work and $326.5 million in overall expenditures, including engineering, management, and insurance costs. The public revenue service date is forecast for December 2022.
- Reached "substantial completion" of the Harold Structures B/C Approach contract (CH058A) in September 2021. This contract included construction of the B/C Tunnel Approach structure and track work in Harold Interlocking for the High-Speed Rail project. Work advanced towards the substantial completion in 2022 of the remaining ESA construction contracts. The GCT Station Caverns and Track contract (CM007) completed major construction activities in 2021. The contract involves constructing a permanent structural concrete lining for the caverns previously excavated beneath Grand Central Terminal, interior structures, and fit-out of the LIRR Grand Central Terminal, as well as installation of track, special trackwork, and third rail.
- Expect to reach "substantial completion" to the GCT Concourse and Facilities Fit-Out contract (CM014B) in Q3 2022. This contract constructs the new LIRR Grand Central Terminal (GCT) Concourse, including foundations, underground utilities, CMU walls, structural steel framing, mechanical, electrical, plumbing, fire protection, and architectural finishes, as well as fit-out of the 44th St and 50th St ventilation facilities. Systems related contracts, covering installation of traction power, signals, and facility systems (CS084, CS086, and CS179, respectively),

will be substantially complete by Q3 2022. The Mid-Day Storage Yard Facility contract (CQ033), which is expected to be substantially complete by Q1 2022, provides 30-acre yard that will allow the LIRR to store upwards of 300 train cars during the day. The contract will include construction of 24 layup tracks, 11 miles of new railroad tracks, and more than 82 switches. In 2021 the Passenger Experience & Retail Enhancements contract (CM030) was awarded, which will provide retail pre-tenant fit out; customer service and retail spaces; structures for digital advertising and MTA customer information screens; and wayfinding signage. Work under this contract will be substantially complete in Q4 2022.During 2021, the Harold Catenary Construction contract (CH063) work advanced, including the design and construction of catenary systems; traction power systems; medium voltage power systems; civil structures; track; and special trackwork for use by Amtrak and LIRR in Harold Interlocking and Sunnyside yards. This contract benefits both the ESA and the Harold Interlocking High Speed Rail projects. C&D also awarded the Eastbound Reroute contract (CH058B) in August 2021, with design and construction work initiated during the year. This project provides a grade-separated trackage through the Harold Interlocking as part of the Harold Interlocking High Speed Rail project.

Penn Station Access

- As of December 2021, $198.1 million has been committed to the Penn Station Access project, out of $430.5 million in the 2015-2019 Capital Program and $2,051 million included in the 2020-2024 Capital Program, bringing the total project budget to $12.867 billion. Design Build and Project Management Consultant (PMC) contracts were both awarded on December 29, 2021.

LIRR Expansion Project

- The design-build contract is to construct approximately 10 miles of third track on the Main Line; eliminate eight street- level grade crossings and provide grade-separated vehicular and pedestrian crossings at six locations. As of December 2021, the total budget for the base value of the design-build contract, project management contract,

and the completion option, is $2.589 billion ($2.050 billion in the 2015-2019 Capital Program and $538 million in the 2020-2024 Capital Program). Project completion is forecast for mid-2023.

2021 ANNUAL REPORT—SECTION 4

Description of the Metropolitan Transportation Authority and the MTA Board Structure

Submitted as part of the MTA 2020 Annual Report
Pursuant to New York State Public Authorities Law Section 2800(1)(a)(11)

The Metropolitan Transportation Authority ("MTA"), a public benefit corporation of the State of New York (the "State"), has the responsibility for developing and implementing a unified mass transportation policy for New York City ("NYC") and Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester counties (collectively with NYC, the "MTA Commuter Transportation District").

MTA carries out these responsibilities directly and through its subsidiaries and affiliates, which are also public benefit corporations. MTA and its subsidiaries, are listed by their legal names and estimated number of employees (full-time and full-time equivalents) as indicated in the MTA 2020 Adopted Budget February Financial Plan 2020 – 2023 (February 2020):

Legal Name	Number of Employees
MTA Headquarters	3,073 employees
The Long Island Rail Road Company	7,690 employees
Metro-North Commuter Railroad Company	7,134 employees
Staten Island Rapid Transit Operating Authority	356 employees
MTA Bus Company	3,981 employees
MTA Construction and Development	181 employees

The following entities, listed by their legal names, are affiliates of MTA:

Legal Name	Number of Employees
Triborough Bridge and Tunnel Authority	1,497 employees
New York City Transit Authority, and its subsidiary, the Manhattan and Bronx Surface Transit Operating Authority	50,783 employees

MTA and the foregoing subsidiaries and affiliates are collectively referred to herein, from time to time, as the "Related Entities." Throughout this document, the Related Entities are referred to by their popular names, as indicated below.

Certain insurance coverage for the Related Entities is provided by a New York State-licensed captive insurance public benefit corporation subsidiary of MTA, First Mutual Transportation Assurance Company ("FMTAC").

MTA and its subsidiaries are generally governed by the Metropolitan Transportation Authority Act, being Title 11 of Article 5 of the New York Public Authorities Law, as from time to time amended (the "MTA Act").

Triborough Bridge and Tunnel Authority is generally governed by the Triborough Bridge and Tunnel Authority Act, being Title 3 of Article 3 of the New York Public Authorities Law, as from time to time amended (the "MTA Bridges and Tunnels Act").

The New York City Transit Authority and its subsidiary are generally governed by the New York City Transit Authority Act, being Title 9 of Article 5 of the New York Public Authorities Law, as from time to time amended (the "MTA New York City Transit Act").

Due to the continuing business interrelationship of the Related Entities and their common governance and funding, there are provisions of each of these three acts (the "MTA Act," the "MTA Bridges and Tunnels Act," and the "MTA New York City Transit Act") that affect some or all of the other Related Entities in various ways.

Basic Organizational Structure of MTA Operations

MTA Headquarters (Including the Business Service Center)

MTA Headquarters includes the executive staff of MTA, as well as a number of departments that perform largely all-agency functions, including information technology, security, audit, budget and financial management, capital programs management, finance, governmental relations, insurance and risk management, legal, planning, procurement, real estate, corporate compliance and ethics, and treasury. In addition, MTA maintains

its own Police Department with non-exclusive jurisdiction over all facilities of the Related Entities.

Transit System

MTA New York City Transit and its subsidiary MaBSTOA operate all subway transportation and most of the public bus transportation provided within New York City (the "Transit System").

Commuter System

MTA Long Island Rail Road and MTA Metro-North Railroad operate commuter rail services in the MTA Commuter Transportation District (the "Commuter System").

MTA Long Island Rail Road operates commuter rail service between NYC and Long Island and within Long Island.

MTA Metro-North Railroad operates commuter rail service between NYC and the northern suburban counties of Westchester, Putnam, and Dutchess; from NYC through the southern portion of the State of Connecticut; through an arrangement with New Jersey Transit, the Port Jervis and Pascack Valley commuter rail services to Orange and Rockland Counties; and within such counties and the State of Connecticut.

MTA Bus

MTA Bus operates certain bus routes in NYC formerly served by seven private bus operators pursuant to franchises granted by NYC (the "MTA Bus System").

MTA Long Island Bus

Pursuant to a lease and operating agreement with the County of Nassau ("the County"), MTA Long Island Bus formerly operated bus service in the County. MTA Long Island Bus operations ceased as of December 31, 2011, the date the lease and operating agreement terminated.

MTA Staten Island Railway

MTA Staten Island Railway operates a single rapid transit line extending from the Staten Island ferry terminal at St. George to the southern tip of Staten Island.

MTA Bridges and Tunnels

MTA Bridges and Tunnels operates all nine of the intra-State toll bridges and tunnels in NYC.

MTA Construction and Development

MTA Construction and Development is responsible for the planning, design, and construction of current and future major MTA system expansion projects for the other Related Entities, including East Side Access (bringing MTA Long Island Rail Road into Grand Central Terminal), system-wide capital security projects, and the Second Avenue Subway.

The legal and popular names of the Related Entities are as follows:

Legal Name	Popular Name
Metropolitan Transportation Authority	MTA
New York City Transit Authority	MTA New York City Transit
Manhattan and Bronx Surface Transit Operating Authority	MaBSTOA
Staten Island Rapid Transit Operating Authority	MTA Staten Island Railway
MTA Bus Company	MTA Bus
Metropolitan Suburban Bus Authority	MTA Long Island Bus
The Long Island Rail Road Company	MTA Long Island Rail Road
Metro-North Commuter Railroad Company	MTA Metro-North Railroad
MTA Construction and Development[1]	MTA Construction & Development
Triborough Bridge and Tunnel Authority	MTA Bridges and Tunnels

[1] MTA Construction & Development (MTA C&D) replaced MTA Capital Construction in 2019.

Governance of the MTA

Pursuant to statute, MTA's Board consists of a Chair and 16 other voting Members, two non-voting Members and four alternate non-voting Members, all of whom are appointed by the Governor with the advice and consent of the State Senate. The four voting Members required to be residents of the counties of Dutchess, Orange, Putnam, and Rockland, respectively, cast only one collective vote. The other voting Members, including the Chairman, cast one vote each (except that in the event of a tie vote, the Chairman shall cast one additional vote). Members of MTA are, *ex officio*, the Members or Directors of the other Related Entities and FMTAC.

In accordance with legislative amendments enacted in 2009, the MTA Board Chair ("Chair") is also the Chief Executive Officer ("CEO") of the MTA and is responsible for the discharge of the executive and administrative functions and powers of the Related Entities. The CEO of MTA is, ex officio, the Chair and CEO of the other Related Entities. At the start of 2020, the MTA Office of the Chairman was composed of a Chief Operations Officer, Chief Transformation Officer, and an MTA Chief Development Officer, who were charged with the day-to-day administrative, as well as managerial and executive functions allocated to the CEO. Operating Officer Mario Peloquin resigned on February 26, 2021, and the position remains vacant. MTA Chairman and CEO Patrick J. Foye resigned on July 29, 2021. Effective July 31, 2021, Janno Lieber was named Acting Board Chair and CEO of MTA. At the same time, legislation was presented to the State Senate seeking to split the role of MTA Board Chair and CEO. Fredericka Cuenca held the role of Acting Chief Development Officer from July to December. On December 2, 2021, Jamie Torres-Springer joined the MTA as Chief Development Officer and President of MTA Construction & Development. Chief Transformation Officer Anthony McCord resigned on October 15, 2021, signaling the completion of transformation program. In October 2021, organizational changes were announced including the creation of the new role of Chief Administrative Officer, consolidating People, Procurement, Information Technology, and Real Estate. Lisette Camillo joined the MTA on December 2, 2021, as the MTA's Chief Administrative Officer.

The following Committees of the Board assist the Chair and the Board in discharging their responsibilities: (1) the Audit Committee; (2) the Finance Committee; (3) the Committee on Operations of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, and the MTA Bus Company; (4) the Committee on Operations of the Metro-North Commuter Railroad; (5) the Committee on Operations of the Long Island Rail Road and the Metropolitan Suburban Bus Authority; (6) the Committee on Operations of the Triborough Bridge and Tunnel Authority; (7) the Capital Program[2] Committee; (8) the Diversity Committee; (9) the Corporate Governance Committee; and (10) the Safety Committee. As of April 2019, the Committee on Operations of the Metro-North Commuter Railroad and the Committee on Operations of the Long Island Rail Road and the Metropolitan Suburban Bus Authority meet jointly.

Board Members are assigned by the Chair to serve as chairperson or as a member of several committees. The following chart sets forth the Chair and Committee Assignments for each MTA Board Member as of December 31, 2021.

[2] On November 17, 2021, upon recommendation from the Corporate Governance Committee, the Board approved revision to the CPOC Charter to align with the consolidation.

BOARD MEMBERS	Audit Committee	Corporate Governance Committee	Diversity Committee	Finance Committee	Capital Program Committee	B & T Committee	LIRR Committee*	MNR Committee*[3]	NYC Transit\MTA Bus Committee	Safety Committee
Patrick J. Foye (Chair)[4]		▮ C			▮ C					▮ C
John "Janno" Lieber Chair & CEO[5]		▮ C			▮ C					▮ C
Andrew Albert *				▮	▮	▮			▮	▮
Jamey Barbas	▮ C			▮	▮	▮			▮	
Frank Borelli Jr.	▮	▮					▮	▮		
Gerard Bringmann[6]										
Norman E. Brown *				▮	▮	▮	▮	▮	▮	▮
Victor Calise				▮					▮	
Lorraine Cortes-Vazquez			▮						▮	▮
Michael Fleischer					▮		▮	▮		▮
Randy Glucksman *				▮	▮	▮	▮	▮	▮	
Rhonda Herman		▮	▮ C	▮	▮		▮	▮ C		▮
David R. Jones	▮			▮	▮				▮	
Linda Lacewell[7]		▮	▮	▮		▮ C			▮	
Kevin Law				▮	▮	▮	▮ C	▮		▮
Robert W. Linn	▮	▮		▮	▮		▮	▮	▮	▮
David S. Mack[8]		▮			▮	▮ C	▮	▮	▮ C	
Haeda Mihaltses			▮	▮		▮				▮
Robert J. Mujica, Jr.	▮			▮					▮	
Harold Porr, III[9]				▮	▮					
John Samuelsen *				▮		▮			▮	▮
Lawrence Schwartz[10]		▮		▮ C		▮			▮	
Vincent Tessitore, Jr. *				▮	▮		▮			▮
Neal Zuckerman			▮	▮	▮	▮	▮	▮		▮

▮ Indicates committee membership. **C** Indicates committee Chair. * Indicates nonvoting member.

[3] The LIRR Committee and MNR Committee meet jointly.
[4] Chairman and CEO Patrick J. Foye resigned on July 29, 2021
[5] Janno Lieber was named Acting Chair of Board and CEO of the MTA on July 31, 2021
[6] Gerard Bringmann was appointed on June 7, 2021
[7] Linda Lacewell resigned on August 24, 2021
[8] David S. Mack serves as Acting Chair of the B&T Committee, as of Sept. 2021
[9] Harold Porr, III was appointed on June 7, 2021
[10] Lawrence Schwartz resigned effective December 31, 2021.

The MTA Board held eleven (11) meetings in 2021. Six meetings, January through June 2021, were Joint MTA Committee and Board Meetings. The following chart sets forth the meetings of the MTA Board and the attendance of each Board Member at those meetings.

Board Meeting Date	Number or Board Members in Attendance[11]
January 21, 2021	21
February 18, 2021	21
March 17, 2021	21
April 21, 2021	21
May 26, 2021	20
June 23, 2021	23
July 21, 2021	23
September 15, 2021	20
October 20, 2021	20
November 17, 2021	22
December 15, 2021	22

[11] Due to the Covid-19 pandemic 2021 Board meetings were held both in person and remotely. Attendance indicates in-person and remote participation.

2021 ANNUAL REPORT—SECTION 5

Material Pending Litigation Report

Litigation

General

The MTA and its affiliates and subsidiaries maintain extensive property, liability, station liability, force account, construction, and other insurance, which is described in the Annual Disclosure Statement for the MTA's Combined Continuing Disclosure Filings. Monetary claims described below may be covered in whole or in part by insurance, subject to the individual retentions associated with such insurance.

The Related Entities also provide accruals in their financial statements for their estimated liability for claims by third parties for personal injury arising from, among other things, bodily injury (including death), false arrest, malicious prosecution, and libel and slander, for property damage for which they may be liable as a result of their operations, and advertising offense, including defamation, invasion of right of privacy, piracy, unfair competition, and idea misappropriation. The estimated liabilities are based upon independent actuarial advice obtained by the Related Entities. However, except in special circumstances and except for the annual judgments and claims budgeted amounts, additional cash reserves are not generally established in an amount equal to the full amount of the accrual.

MTA

Lockheed Martin Transportation Security Solutions v. MTA Capital Construction and MTA. MTA is a defendant, along with MTA C&D, in an action brought in April 2009 by Lockheed Martin Transportation Security Solutions ("Lockheed") in federal district court in Manhattan. (*Lockheed Martin Transportation Security Solutions. v. MTA Capital Construction Company and Metropolitan Transportation Authority.*) Lockheed initially sought a judgment declaring that MTA and MTA C&D were in breach of its contract for furnishing and installing an integrated electronic security ("IESS") program, and an order terminating Lockheed's obligations. Following MTA's termination of its contract, Lockheed amended its complaint to seek damages for delay and disputed work items ($80 million, later revised to $93 million) or, alternatively, for the alleged "reasonable value of work performed" by Lockheed ($137

million, later raised to $149 million), exclusive of pre-judgment interest, based on its claim that MTA wrongfully terminated the contract. MTA and MTA C&D are vigorously contesting Lockheed's claims for money damages and counterclaimed, alleging that Lockheed materially breached the contract and seeking damages which were estimated to be $205,909,468, exclusive of pre-judgment interest. Following the completion of discovery, in July 2013, both MTA and Lockheed moved for partial summary judgment in connection with various claims.

By decision dated September 16, 2014, the court granted in part and otherwise denied each party's respective motion. With respect to the MTA's motion, the Court dismissed Lockheed's claim under a *quantum meruit* theory, thereby reducing the MTA's exposure by roughly $50 million, to approximately $94 million (exclusive of pre-judgment interest). Trial commenced on October 6, 2014, and concluded on November 14, 2014. Based on the trial record, MTA reduced its damages claim to $189 million, exclusive of pre-judgment interest. Lockheed's claim for damages remained the same. Post-trial papers were submitted on November 24, 2014, and the final reply papers were submitted on December 5, 2014. The parties now await the decision of the Court. The final outcome of this action cannot be determined at this time.

In July 2009, Lockheed's performance bond sureties on the contract commenced a related action in federal district court in Manhattan against Lockheed and the MTA defendants, alleging that they are unable to conclude that the conditions to their obligations under the bond have been satisfied. They seek a declaration of the rights and obligations of the parties under the bond. (*Travelers Casualty and Surety Company et. al v. Metropolitan Transportation Authority, et al.*). MTA and MTA C&D answered and counterclaimed against the sureties, seeking damages in connection with the sureties' violation of their bond obligations in an amount to be determined at trial. The matter was consolidated with the *Lockheed* action above. In October 2013, the sureties moved for partial summary judgment on their exposure, seeking a reduction of their potential obligation by $5.4 million to account for a progress payment issued by MTA to Lockheed post-default. By decision dated September 15, 2014, the Court denied that motion. The final outcome of this action must await the outcome of the underlying action (*Lockheed v. MTA*, discussed above), and cannot be determined at this time.

Actions for Personal Injuries/Property Damage/Workers' Compensation. As of December 31, 2021, there were approximately 28 actions and claims pending against the MTA. These include claims for damages for personal injuries sustained while on duty, including actions under the Federal Employers' Liability Act ("FELA"), no-fault cases, and other torts. Also, as of that date, there were approximately 116 pending Workers' Compensation cases.

Transit System

Actions for Personal Injuries/Property Damage. As of December 31, 2021, MTA New York City Transit and MaBSTOA had an active inventory of 9,374 personal injury claims and lawsuits and 1,558 property damage matters arising out of the operation and administration of the Transit System. In addition, with respect to the Access-A-Ride (Paratransit) program, as of December 31, 2021, there was an active inventory of approximately 799 personal injury cases and approximately 151 property damage cases arising out of the operation of vehicles leased to outside vendors that provide Access-A-Ride service. Such Access-A-Ride claims are covered by a commercial automobile policy which in 2021 had policy limits of $3 million per occurrence, subject to a $2 million deductible.

As of December 31, 2021, MTA Staten Island Railway had a pending inventory of 12 claims and lawsuits relating to personal injury and property damage arising from the operations of MTA Staten Island Railway.

Workers' Compensation and No-Fault. As of December 31, 2021, MTA New York City Transit and MaBSTOA had an active inventory of approximately 13,663 Workers' Compensation cases and approximately 1,599 no-fault cases. As of December 31, 2021, there were 25 Workers' Compensation cases for MTA Staten Island Railway, 16 of which, involve employees who have been classified as permanently disabled, entitling the claimants to continuing monthly benefits and payment of future related medical expenses, as well as two death cases.

Actions Relating to the Transit Capital Program. MTA New York City Transit has received claims from various contractors engaged in work on various Transit Capital Program projects. The aggregate amount demanded by all such claimants, if recovered in full, could

result in an increase in the cost of the capital projects that are the subject of such disputes. The capital program contemplates the payment of such claims from project-specific and general program contingency funds, as well as other available monies pledged for capital purposes.

In addition, as previously reported, a lawsuit was commenced in 2016 relating to a specific capital project, captioned Bronx Independent Living Services, et al. v. MTA, et al., challenging the lack of elevator accessibility at Middletown Road Station. MTA and NYCT were sued by two disabled rights advocacy organizations and two individuals who allege violations of the Americans with Disabilities Act and other legislation, for proceeding with certain construction work at the station without including, in the scope of such work, the installation of elevators or ramps. The complaint seeks declaratory and injunctive relief; no claim for monetary relief is asserted. MTA and NYCT answered the complaint in September 2016 and denied any asserted violation of applicable law. In March of 2018, the federal government was granted leave to join the action, and filed an intervenor-complaint, which defendants answered in April of 2018. Fact discovery was conducted and Plaintiffs' motion for partial summary judgment was granted by the court in March of 2019. The court held that the alterations made at the Middletown Road station affected the "usability" of the station, thereby triggering the application of the federal DOT regulation set forth in 49 C.F.R. Section 37.43(a)(1). Expert discovery relating to the defendants' principal defense in the action, that installation of an elevator or ramp at the Middletown Road Station as part of a larger renewal project was "technically infeasible" within the meaning of the federal DOT regulations and hence not required, was completed. The parties' cross-motions for summary judgment were each denied on March 29. 2021. The outcome of the litigation cannot be determined at this time. It should be noted that were plaintiffs to prevail in obtaining an injunction requiring installation of an elevator or ramp at the Middletown Road station, the costs associated with such an injunction would have to be covered by the NYCT capital program.

In late April 2017, two purported class actions relating to subway system accessibility were filed against NYCT and the MTA by several individuals and advocacy organizations on behalf of persons with disabilities that prevent them from using the stairs in the subway system. The plaintiffs in both cases seek declaratory and injunctive relief, not money damages. The City of New York was also named as a defendant in both cases but was

voluntarily dismissed, with a tolling agreement, from the federal class action. In Center for Independence of the Disabled, New York ("CIDNY"), et al. v. MTA, et al. (Southern District of New York), plaintiffs allege, among other things, that defendants inadequately maintain the existing elevators in the subway system, provide insufficient notice to elevator users about outages, and provide insufficient alternative transportation during elevator outages. These alleged deficiencies are claimed to constitute discrimination in violation of Title II of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the City Human Rights Law. Defendants' motion for summary judgment was granted in March 2020. In that decision, the District Court noted that the NYCT reported a median system-wide elevator availability of 98% and that the plaintiffs had failed to identify, and measures required by law that NYCT had not taken to maintain its elevators. However, in August 2021 the Second Circuit vacated the judgment and remanded the case back to the District Court for further consideration of whether NYCT provides meaningful access to the subway system to those subway riders impacted by elevator outages by way of notification and alternative modes of transportation such as paratransit and buses. At a conference on November 3, 2021, the District Court Judge issued an order scheduling additional discovery and a renewed summary judgment motion deadline of March 28, 2022, on the issue of the reasonable accommodation during elevator outages only. In CIDNY v. MTA (Supreme Court, New York County), the same plaintiffs have asserted that defendants, by not having installed elevators in all subway stations in the system, have discriminated against plaintiffs on the basis of their disabilities in violation of the New York City Human Rights Law. Plaintiffs seek injunctive relief that would require implementation of a program to make all subway stations accessible to people who cannot use the stairs due to a disability. Defendants' motion to dismiss the state court case on the grounds that plaintiffs' claims are preempted by New York Public Authorities Law §1266(8) and Transportation Law § 15-B, non-justiciable and time-barred was denied on June 5, 2019. The First Department affirmed the lower court's decision. on June 4, 2020. Defendants' motion for leave to appeal to the Court of Appeals was denied on August 27, 2020. On February 17, 2021, the court so ordered the parties' stipulation to certify a class. Fact discovery is scheduled to close on June 10, 2022. The outcome of these two matters cannot be determined at this time.

In May of 2019, Forsee, et al. v. MTA, et al., another purported class action lawsuit was commenced in federal court (Southern District of New York) against MTA, NYCT and the City of New York challenging the lack of elevator accessibility at all NYC subway stations.

This action was brought by three individuals and various advocacy organizations on behalf of people whose disabilities make the use of stairs "difficult, dangerous or impossible." The complaint alleges that defendants violated the Americans with Disabilities Act and other state and local laws by proceeding with renovation work at subway stations over the years without installing elevators or ramps. Plaintiffs seek declaratory and injunctive relief. The City of New York moved to dismiss the complaint for lack of jurisdiction, in response to which, plaintiffs filed an amended complaint MTA and NYCT answered the amended complaint, and a discovery scheduling order was entered in December 2019 which set a March 2021 deadline to complete discovery. MTA and NYCT's motion for judgment on the pleadings with respect to plaintiffs' ADA claims relating to work performed at stations prior to the applicable three-year limitations period was granted on March 31, 2020. On January 8, 2021, a revised discovery scheduling order was entered that set a discovery deadline of May 16, 2022. The outcome of this matter cannot be determined at this time. We note that, as in the Middletown Road litigation above, were plaintiffs to prevail and obtain an injunction requiring installation of elevators or ramps at any previously renovated subway station, the costs associated with such an injunction would have to be covered by the NYCT capital program.

Other Litigation. As of December 31, 2021, the General Law and Contracts Division had an inventory of approximately 581 cases, consisting of federal and state court plenary litigation actions and special proceedings as well as administrative matters pending before various state, federal and local administrative agencies.

Commuter System

Actions for Personal Injuries/Property Damage. As of December 31, 2021, Metro-North Railroad had an active inventory of approximately 436 personal injury claims and lawsuits arising out of the operation and administration of Metro-North Railroad, of which 232 were the result of claims filed by employees pursuant to FELA, and approximately 204 were claims filed by third parties. Also, as of that date, there was no pending property damage cases. With respect to claims for personal injury arising from the December 1, 2013, derailment of a southbound Metro-North Railroad train north of the Spuyten Duyvil station in the Bronx, Metro-North Railroad has exhausted its self-insured retention of $10 million and FMTAC has reimbursed Metro-North Railroad $50 million. Amounts incurred in excess of the $10 million self-insured retention with respect to such Spuyten Duyvil claims are covered under an all-agency excess liability policy insured by FMTAC for $50 million per occurrence.

Additionally, MTA maintains $350 million in liability coverage through the commercial insurance markets that is in excess of the $50 million coverage layer provided by FMTAC.

An incident occurring on February 3, 2015, when a Metro-North Harlem Line train struck an automobile in a highway-rail grade crossing between the Valhalla and Hawthorne stations, is also resulting in assertion of personal injury claims against the railroad. The driver of the automobile and five passengers on the train were killed. A number of passengers, and the train engineer, were injured. The National Transportation Safety Board (NTSB) adopted its report on the causes of the accident on July 25, 2017, finding that the probable cause of the accident was the driver of the automobile who, for undetermined reasons, moved the vehicle on to the tracks while the Commerce Street highway-railroad grade crossing warning system was activated, into the path of the Metro-North Railroad train. Contributing to the severity of the accident was the third rail penetrating the passenger compartment of the lead passenger railcar and the post-accident fire. While there is no indication from the NTSB's findings that MTA Metro-North Railroad was at fault in connection with this incident, 37 lawsuits have been filed to date against Metro-North, many of which name other defendants as well. Notwithstanding MTA Metro-North's position that it has no responsibility for this incident, if plaintiffs are successful in their claims against the Railroad, damages could exceed the self-insured retention and impact the FMTAC and excess layers of insurance.

As of December 31, 2021, LIRR had an active inventory of approximately 1,188 personal injury claims and lawsuits arising out of the operation and administration of the LIRR, of which 700 were the result of claims filed by employees pursuant to FELA, and approximately 488 were claims filed by third parties. Also, there were approximately 39 pending property damage matters and 227 affirmative claims.

1. <u>New Hyde Park Collision</u>

On October 8, 2016, while LIRR was conducting track work east of the New Hyde Park Station on track placed out of service, a piece of track equipment derailed fouling live track and was struck by a train carrying passengers, causing the passenger train to derail. Numerous passengers and several employees were injured due to this accident. The Federal Railroad Administration ("FRA") along with MTA/LIRR conducted investigations into this matter. There has been a total of 72 claims related to this accident; 57 passenger injuries, 8 employee injuries and the remaining are the property damage

claims. The derailment caused damage to three passenger cars, the track area and the track equipment involved. At this time, 33 lawsuits have been filed against MTA/LIRR. LIRR has paid out the entire $11 million FMTAC Force Account retention limit in expenses and settlements and $10.3 million has impacted the excess layer of insurance. The current outstanding reserves are $2.5M million and there are 13 open lawsuits.

1. Atlantic Terminal Bumper Block Strike

An incident occurred on January 4, 2017, when an LIRR Far Rockaway Line train struck a bumper block in the Atlantic Terminal-Brooklyn Station. This incident resulted in 173 injury claims, which includes 11 employee FELA claims. To date, 122 claims have been put into suit. LIRR has paid out the entire $11 million FMTAC Station Maintenance retention limit in expenses and settlements and $5.1 million has impacted the excess layer of insurance. The current outstanding reserves are $14.2 million and there are 32 open lawsuits of which 7 are settled, awaiting closing documents.

Actions Relating to the Commuter Capital Program. From time to time, LIRR and MTA Metro-North Railroad receive claims relating to various Commuter Capital Program projects. In general, the aggregate amount demanded by all such claimants, if recovered in full, could result in a material increase in the cost of the capital projects that are the subject of such disputes. The capital program contemplates the payment of such claims from project-specific and general program contingency funds, as well as other available moneys pledged for capital purposes.

1. Amtrak v. LIRR – Amtrak claims that the railroads operating in Penn Station (PSNY) are responsible for the cleanup of PCBs and other hazardous substances that were deposited on the tracks, which may have migrated to other areas of the station including but not limited to, lighting, drains, and other equipment. LIRR operated commuter rail lines in PSNY during a 50-year period when PCBs were used in train transformers. Amtrak alleges that these transformers leaked and contaminated the tracks in PSNY. Amtrak presented to LIRR a model which claims, based on the number of trains and usage, that LIRR is responsible for 20% of cleanup costs which are approximately $30,000,000.00 to date. LIRR has entered into a tolling agreement with Amtrak while further investigation is being conducted.

2. Newtown Creek – Newtown Creek is a federally-listed Superfund site. A group of private parties known as the Newtown Creek Group (NCG) are working together on the investigation and eventual remediation of Newtown Creek. In 2017, NCG sent a Notice of Potential Liability Pursuant to CERCLA to LIRR concerning the Creek. In addition, the NCG has asserted that LIRR may be a potential responsible party due to its historical operations along Newtown Creek. Additional parties were sent similar notices, who are acting cooperatively along with LIRR as the "small parties group". The NCG has approached the small parties group, requesting that the group agree to contribute to the cost of an "early action" remedy of the first two miles of the 3.5-mile creek. The members of the small parties group made an initial settlement offer for remediation costs relative to the first 0-2 miles of contamination at the Superfund site and investigation costs to date relative to the entire Superfund site which was rejected.

MTA Bridges and Tunnels

Actions for Personal Injuries/Property Damage. As of December 31, 2021, MTA Bridges and Tunnels had an active inventory of approximately 126 personal injury claims and lawsuits (including intentional torts such as false arrest) and approximately 42 property damage matters arising out of the operation and administration of the MTA Bridges and Tunnels facilities (including construction).

Workers' Compensation and No-Fault. As of December 31, 2021, MTA Bridges and Tunnels had an active inventory of approximately 458 Workers' Compensation cases and 0 no-fault cases.

Actions Relating to MTA Bridges and Tunnels' Capital Program. From time to time, MTA Bridges and Tunnels receives claims relating to various MTA Bridges and Tunnels' Capital Program projects. In general, the aggregate amount demanded by all such claimants, if recovered in full, could result in a material increase in the cost of the capital projects that are the subject of such disputes. The Capital Program contemplates the payment of such claims from project-specific and general program contingency funds, as well as other available moneys pledged for capital purposes. Therefore, such claims are not listed here.

Other Litigation.

Farina, et al. v. MTA, TBTA, et al. – A putative class action lawsuit (*Farina v. MTA, TBTA,*

Transworld Systems, Inc., and Conduent, Inc.) was filed in the U.S. District Court for the Southern District of New York on February 16, 2018, and assigned to U.S. District Judge Naomi Reice Buchwald. TBTA and MTA were served on February 21, 2018. The representative plaintiff in the *Farina* case alleged that the $100 violation fee allegedly imposed for each toll violation at TBTA bridges and tunnels is excessive and that the fee policies, practices, and collection methods are illegal and unconstitutional. Putative class action lawsuits were also filed by the same plaintiffs' counsel in the same federal court on February 20, 2018 (*Gardner v. MTA, TBTA, The Port Authority of New York and New Jersey, AllianceOne Receivables Management, Inc. and Conduent, Inc.*) and on March 5, 2018 (*Troiano v. MTA, TBTA, The Port Authority of New York and New Jersey, New York State Thruway Authority, Transworld Systems, Inc., AllianceOne Receivables Management, Inc. and Conduent, Inc.*). TBTA and MTA were served in *Gardner* on March 6, 2018, and in *Troiano* on April 6, 2018. The allegations regarding TBTA and MTA were substantially the same in all three actions, except that *Gardner* and *Troiano* also alleged that $50 violation fees are excessive and improper. On April 16, 2018, the Court consolidated the three cases into one case and on April 30, 2018, plaintiffs filed one consolidated complaint (*Farina, Gardner, Troiano, Ritchie, and Rojas v. MTA, TBTA, The Port Authority of New York and New Jersey, New York State Thruway Authority, Transworld Systems, Inc., AllianceOne Receivables Management, Inc., Linebarger Goggan Blair & Sampson, LLP and Conduent, Inc.*). The consolidated complaint included plaintiffs Farina, Gardner, and Troiano as well as two additional plaintiffs, Ritchie and Rojas, whose alleged claims also arose from the assessment of $50 and $100 violation fees.

On July 26, 2018, Judge Buchwald granted the defendants' request seeking leave to move to dismiss plaintiffs' consolidated amended class action complaint. On September 13, 2018, the Court granted a Stipulation between plaintiffs and Conduent, Inc. substituting Conduent, Inc., for the correct party, Conduent State & Local Solutions, Inc. On August 30, 2018, plaintiffs dismissed their claims against Transworld Systems, Inc., AllianceOne Receivables Management, Inc., and Linebarger Goggan Blair & Sampson, LLP, as well as certain causes of action against the remaining defendants. On September 14, 2018, TBTA and MTA filed their Motion to Dismiss; in their October 22, 2018, Opposition, plaintiffs voluntarily dismissed all claims against MTA. The remaining defendants also filed Motions to Dismiss.

On January 7, 2019, we received notice that the case was being reassigned from Judge

Buchwald to Judge P. Kevin Castel. Judge Castel issued his Opinion and Order on August 21, 2019. In the Order, Judge Castel dismissed all claims against each defendant with the exception of plaintiff Troiano's Eighth Amendment excessive fines claim and her unjust enrichment claim against TBTA, noting that Troiano's allegations sufficed at the pleading stage to survive a motion to dismiss.

The Court held an initial pretrial conference in mid-September 2019, during which the Court bifurcated discovery (initially limited to merits issues relating to Troiano); the initial discovery period was to run through February 3, 2020, and a case management conference was scheduled for February 21, 2020. Following the initial pretrial conference, Plaintiff's counsel filed a motion for leave to file an amended complaint, which reintroduced Mirian Rojas and added two new plaintiffs, Brian Owens and Koriszan Reese. Each plaintiff alleges Eighth Amendment and unjust enrichment claims against TBTA. Rojas and Reese also allege Eighth Amendment claims against the Port Authority of New York and New Jersey. Counsel for the parties completed briefing on the motion for leave to file the amended complaint and proceeded to await a decision.

Meanwhile, the parties continued with discovery on Troiano's claims, exchanging discovery requests and objections and responses. On February 3, 2020, the Court entered a Stipulated Protective Order and Confidentiality Agreement, and on February 12, the Court entered a Revised Case Management Plan and Scheduling Order, extending the initial fact discovery period to March 20, 2020; the period for expert discovery was set to run through May 8, 2020; and the Case Management Conference was postponed to April 13, 2020.

On March 9, 2020, Troiano, filed a stipulation to dismiss her claims with prejudice. The motion to amend the complaint remained pending. On April 17, 2020, the Court granted the motion reintroducing Rojas and adding Owens and Reese, and it brought the Port Authority back into the case as a defendant. On April 21, 2020, plaintiffs' counsel filed the Amended Complaint, which both defendants answered on July 6, 2020.

On September 10, 2020, the parties jointly submitted a proposed schedule, which the Court adopted. The fact discovery period with respect to the named Plaintiffs ran through February 26, 2021, and the expert discovery period ran through April 12, 2021. The parties exchanged and responded to written discovery and sought additional discovery extensions. On March

19, 2021, the Court extended the fact discovery cutoff to May 3, 2021. TBTA and the Port Authority deposed each of the three named plaintiffs (Rojas, Reese, and Owens) as well as Rojas' husband. Plaintiffs deposed witnesses of the TBTA and the Port Authority.

In accordance with Judge Castel's procedures, on May 17, 2021, TBTA and the Port Authority filed letters asking the Court to allow each defendant to file Motions for Summary Judgment and Plaintiffs opposed. The Court held a Case Management Conference on May 26, 2021, during which Judge Castel allowed TBTA and the Port Authority to proceed with the proposed motions. On June 30, 2021, TBTA and the Port Authority each filed their own Motion for Summary Judgment to dismiss each Plaintiff's claims. Plaintiffs filed their Oppositions on July 30, 2021, and TBTA and the Port Authority filed their reply briefs on August 20, 2021. The Motions for Summary Judgment are now fully briefed and we are waiting for the Court's decision.

Conte, et al. v. MTA and TBTA **–** This putative collective action lawsuit was filed in the U.S. District Court for the Southern District of New York on March 23, 2021, and assigned to U.S. District Judge Valerie E. Caproni. Plaintiffs, Bridge and Tunnel Maintainers and Custodians, allege that they regularly perform pre-shift work without compensation; there is a time-shaving policy that automatically rounds officers' check-in times up to their scheduled tour; supplemental pay, including differentials and bonuses, are not included in the regular rate of pay when calculating overtime; that the payment of overtime is delayed; and that, for Maintainers, overtime is only paid for time in excess of 80 hours in a workweek, rather than 40. On May 28, 2021, MTA and TBTA filed answers with appropriate affirmative defenses. The matter was mediated on October 21, 2021, before Carol Wittenberg and the parties were unable to reach a settlement. The parties are engaging in discovery. On December 8, 2021, Plaintiffs filed a motion for conditional certification of a collective action under the Fair Labor Standards Act (FLSA) and the motion was granted on January 4, 2022. MTA and TBTA did not oppose the motion, but reserved the right to move to decertify the collective after the close of fact discovery. Notice will be issued to all putative members of the FLSA collective who have not yet joined, and they will be given an opportunity to join the collective action by filing an opt-in notice. Outside counsel is vigorously defending this matter.

Mercado, et al. v. MTA and TBTA **–** This putative collective action lawsuit was filed in the U.S. District Court for the Southern District of New York on August 17, 2020, and assigned

to U.S. District Judge Analisa Torres. Thereafter, the parties engaged in motion practice related to conditional certification of a putative Fair Labor Standards Act (FLSA) collective and consolidation with a similar matter commenced by other Bridge and Tunnel officers, which extended the time for TBTA and MTA to interpose answers to the complaint. Plaintiffs, Bridge and Tunnel Officers, allege that they regularly perform pre-shift and post-shift work without compensation; there is a time-shaving policy that automatically rounds officers' check-in times up to their scheduled tour; supplemental pay, including differentials and bonuses, are not included in the regular rate of pay when calculating overtime; and that the payment of overtime and other wages is delayed. On July 15, 2021, MTA and TBTA filed answers with appropriate affirmative defenses. The matter was mediated on January 19, 2022 before Carol Wittenberg and the parties were unable to reach a settlement. A discovery schedule has been set. Outside counsel is vigorously defending this matter.

MTA Bus

As of December 31, 2021, MTA Bus had an active inventory of approximately 1232 personal injury claims and lawsuits, approximately 1385 property damage matters, approximately 543 no-fault cases arising out of the operation and administration of the MTA Bus System, and approximately 1651 Workers' Compensation cases.

Metropolitan Suburban Bus Company[(12)]

Matter of Adams v. MTA et al. This pending Article 75 petition by almost 200 former LI Bus employees who were members of TWU Local 252 seeks to compel arbitration pursuant to various "Section 13(c) agreements" attached to grants that were used for LI Bus. (*See* 49 U.S.C. §5333(b) ("Employee protective arrangements"), which provides that such agreements shall be entered into as a condition of certain federal financial assistance and shall provide, *inter alia*, "the protection of individual employees against a worsening of their positions related to employment.") The petition, which was filed in June 2013, names MTA, LI Bus, Nassau County and Veolia Transportation, which is now running bus service for Nassau County, as respondents and claims that the petitioners were either dismissed on the termination of the Lease and Operating Agreement between LI Bus and Nassau County or hired by Veolia at lower pay and therefore are entitled to arbitrate their claims and to Section 13(c) displacement benefits, which extend for six years from the time of

(12) The MTA subsidiary Metropolitan Suburban Bus Authority discontinued its provision of transportation services at the end of 2011. Its activities are limited to the winding up of its affairs.

displacement. MTA and LI Bus answered the petition, asserting various defenses. By decision filed October 27, 2014, the court granted petitioners' motion to compel final and binding arbitration before the American Arbitration Association. Respondents MTA and LI Bus appealed. By decision and order dated August 1, 2017, the Appellate Division, First Department upheld the lower court's decision. The case proceeded to arbitration and discovery closed on September 2020. MTA and LI Bus filed post-discovery dispositive motions and by a decision dated August 17, 2021, the arbitrator found in MTA and LI Bus's favor holding that liability should not extend to MTA and LI Bus under the "successor" or "acquisition" theories because MTA and LI Bus were not involved in the Veolia License Agreement and it ceased operations before that agreement. This case will no longer be reported.

Actions for Personal Injuries/Property Damage. As of December 31, 2021, MTA LI Bus had an active inventory of 15 personal injury claims and lawsuits, and 0 property damage matter arising out of the operation and administration of MTA LI Bus.

Workers' Compensation and No-Fault. As of December 31, 2021, MTA LI Bus had approximately 34 Workers' Compensation cases and 1 open no-fault claims.