



BULLETIN

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Interborough Express Advances

The Metropolitan Transportation Authority released a Request for Proposals to solicit consultant bids to begin the preliminary engineering phase of the Interborough Express (IBX), which is expected to take approximately two years. This represents a major step in the design of the transit project which will connect communities in Brooklyn and Queens to 17 subway lines, 51 current bus routes, the Long Island Rail Road at the East New York Station, as well as significantly reduce travel times within and between the two boroughs.

To date, the MTA has hosted more than 35 project meetings with elected officials, stakeholders, and the

public. This includes three virtual and five in-person open house meetings, including the most recent open house in East New York on September 16. The in-person open house meetings have been attended by over 500 individuals, and additional public meetings will be announced in the future, including public hearings associated with environmental review process.

Since the governor announced the beginning of the environmental review phase of the IBX project in 2023, early environmental analyses have begun in anticipation of Federal Transit Administration (FTA) approval to

Continued on page 3



Electric Railroaders Association

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Trip Notices

November 22-24, 2024: Annual Meeting Weekend with visits to the Coney Island Yard maintenance shop on Friday (now completely booked), the Shore Line Trolley Museum on Saturday, and early entry to the New York Transit Museum on Sunday. Visit <https://erausa.org/regional-trips/2024/11/> for all the details, including booking information.

Note: The Annual Meeting is fully booked as we have reached our maximum capacity of 50 attendees. We regret that we cannot accomodate any additional members and their guests.

Donations

The ERA Board of Directors express their deepest appreciation for these member donations in September 2024.

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Monthly Meeting

IMPORTANT NOTICE to Members!

There is no Zoom meeting for November. The presentation will be in-person at the Annual Meeting at Manducatis and not be recorded. We return to Zoom for our December 20th meeting.

Front Cover Photo

Day Five of scheduled activities on the ERA's 2024 European tour took us to Utrecht. There, we visited the Dutch National Railway Museum (Spoorwegmuseum). Among the impressive display of restored steam, diesel and electric equipment was this EMU, No. mBC6. It was built for the Zuid-Hollandsche Electriche Spoorweg-Maatschappij (South Holland Electric Railway Company) in 1908 by J. J. Beijnes of Haarlem and contained 24 second class and 49 third class seats. This was the first electric railway in the Netherlands which was energized at 10 kV 25 Hz AC. The third class section was rebuilt to second class seating in 1923. It was donated to the museum in 1957. Jeff Erlitz photo

**Worldwide Suburban Electric Railway, Metro and Tramway Openings in October 2024**

Date	Country	City	Segment	Distance (miles)	Rail/Metro/Tram
10/1	China	Wuhan	Line 7: Hengdian to Huangpi Square	9.4	M
10/7	India	Mumbai	Line 3: Aarey JVLR to Bandra-Kurla Complex	7.9	M
10/12	Italy	Milan	M4: San Babila to San Cristoforo	4.8	M
10/15	Nigeria	Lagos	Red Line: Oyingbo to Agbado	168	R
10/18	Germany	Stuttgart	U5: Leinfelden Bahnhof to Leinfelden Neuer Markt	0.4	T
10/29	Poland	Warsaw	Lines 14 & 16: Spacerowa to Miasteczko Wilanów	3.9	T

URBAN RAIL NEWS, OCTOBER 31

formally begin the National Environmental Policy Act (NEPA) environmental review process. The Preliminary Engineering phase will include advancing design and engineering work to reach a 30-percent level of design, setting the stage for the issuance and award of future construction contracts.

The project has undergone further refinement in the last year to ensure that it will provide the best service for passengers for the best value. In Middle Village, the MTA is advancing design of a tunnel solution beneath Metropolitan Avenue rather than on-street operations, making the proposed line less prone to travel delays due to mixed traffic operations. This would result in a shorter end-to-end travel time and a project that is more resilient with a dedicated right-of-way for rail operation, allowing the MTA to offer faster and more frequent service. Conceptual plans include expansion of the existing tunnel or a new tunnel adjacent to it.

At East New York, the design team is advancing design of a station location north of Atlantic Avenue within an MTA-controlled site. Locating an IBX station here will facilitate transfers to the **A** **C** **J** **Z** and **L** trains at the Broadway Junction station complex, as well as the LIRR East

New York Station on Atlantic Avenue.

The design team has reduced the total number of bridges along the project corridor that require reconstruction and identified stations where one center platform can be constructed instead of two platforms.

Preliminary engineering will be principally funded through New York State's 2025 budget, which designated funding specifically for IBX. An additional \$15,000,000 was awarded to the MTA by the United States Department of Transportation's Rebuilding American Infrastructure with Sustainability and Equity grant, which will fund a corridor assessment in support of preliminary engineering. USDOT has also provided \$1 million to fund innovative finance expert services for the project.

The Preliminary Engineering contract will be awarded under the MTA's 2020-2024 Capital Plan. An additional \$2.75 billion for further project development and the start of construction is included in the MTA Board-approved 2025-2029 Capital Plan. The total estimated cost of the IBX project is \$5.5 billion.

[MTA PRESS RELEASE](#), October 29

Rail News in Review

New York Metropolitan Area

NEW YORK CITY TRANSIT (NYCT)

Platform Barrier Installation Update

Over the weekend of October 12-13, platform edge barriers were installed at Graham Avenue Station on the BMT Canarsie **L** Line. Northbound trains bypassed the station on Saturday and southbound trains bypassed it on Sunday while the work was being performed.

The following weekend, October 19-20, crews moved four stations down the BMT Canarsie **L** Line and installed the barriers at Jefferson Street Station. As at Graham Avenue,

northbound trains bypassed the station on Saturday and southbound trains bypassed it on Sunday.

Flushing **7** Line Station Work Continues

The northbound platforms at 82 Street-Jackson Heights and 111 Street Stations have been out of service since May 6. The work involves repairing structural defects, performing various abatements, reconstructing the platforms for ADA access, refreshing the appearance of the station, upgrading the electrical and communication systems, and painting.

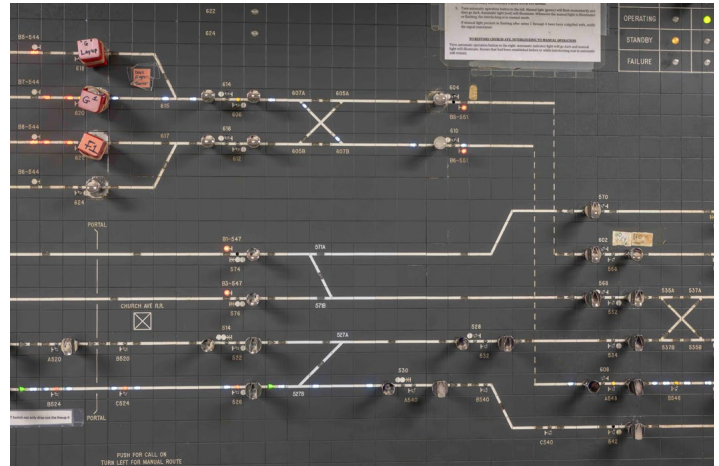
Judlau Contracting, Inc. has been performing this work under contract A-46026. The work was scheduled to be completed on Monday, October 21 but it has now been extended to the end of the year, December 31.

IND Prospect Park/Culver F Line Signal Work

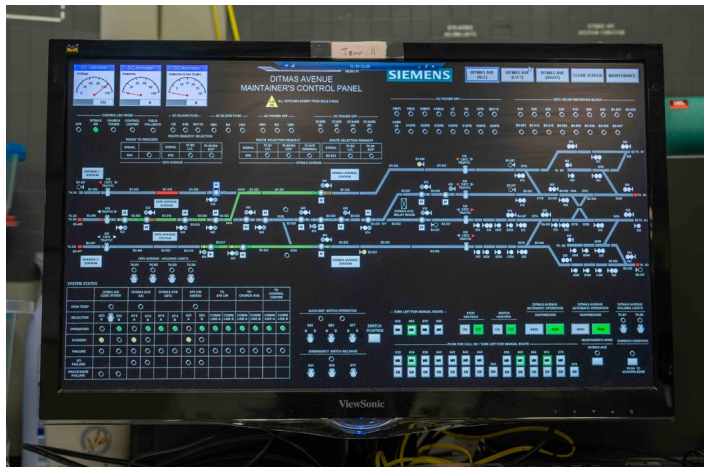
The new interlocking at Ditmas Avenue was placed in service between August 5 and 21, 2023. For reasons unknown to us, the master control panel at Church Avenue Master Tower, which controlled Ditmas, was not modified at that time for the new configuration there. Instead, two computer workstations, using Schneider Electric's Citect SCADA 2018 software, were installed at Church Avenue to control Ditmas Avenue.

During the week of October 21 to 26, Five Star Electric Corp., under contract S-47009 (Culver CBTC Overlay), made the changes to the control panel and control was transferred from the temporary computer workstations to the master control panel.

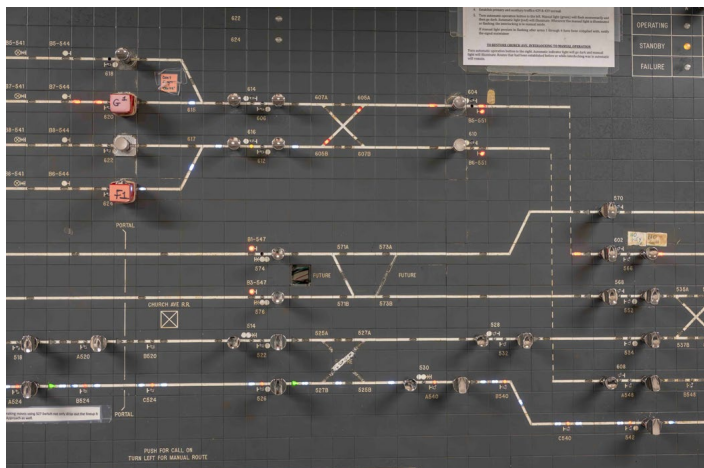
In addition, Five Star replaced the mosaic tiles south of Church Avenue Station to remove two crossovers that had never been installed.



The same section of the control panel after the new mosaic tiles were installed showing the correct permanent track layout. Jeff Erlitz photo



Closeup of one of the two computer workstations that had controlled Ditmas Avenue Interlocking. The control software was Schneider Electric's Citect SCADA 2018. Jeff Erlitz photo



Closeup of the master control panel showing the original switch layout south of Church Av Station (bottom-center). Switches 525A/B and 573A/B had never been installed. Jeff Erlitz photo

Station Re-NEW-ation Progress

The 100th Re-NEW-ation project was completed at Roosevelt Island F Station, marking a major milestone in the program which first began in 2022. This program utilizes planned service outages to perform station-wide repairs, enhancements, and deep cleanings. When regular service returns to the station, riders are met with cleaner and brighter station environments.

At Roosevelt Island station, workers scraped, primed, and painted more than 10,000 square feet of surfaces across the station including the exterior of the station's building. The station was brightened by cleaning 510 light fixtures and converting all to LED. Crews also repaired and replaced Americans with Disabilities Act tiling, installed a new tactile edge, and inspected and secured all stairway treads. One hundred square feet of wall tiling was also replaced, and workers installed hundreds of missing ceiling panels. A mobile wash team also power washed and deep cleaned the entire station including the service booth, polished the turnstiles, removed sticker residue from windows, and stripped gum from stairways and platforms. The station's artwork also received a detailed cleaning.

During the third quarter of 2024, the following stations received Re-NEW-ation upgrades:

- Botanic Garden S
- Avenue P F
- Metropolitan Avenue G
- Court Square G
- 51 Street 6
- Park Place S
- 233 Street 2 5
- Clinton-Washington Avenues G
- Classon Avenue G
- High Street A C
- Knickerbocker Avenue M
- Roosevelt Island F

MTA PRESS RELEASE, October 16

Countdown Timer Aspect Pilot Program Completed

Back on January 18, 2019, NYCT implemented a pilot program to introduce a new signal aspect to emphasize what they refer to as “optimal operation.” Basically, this means operating trains at the safest maximum speed to minimize running time over a line. After five and a half years and 27 installations at grade time signals around the system, this pilot program has been completed successfully. As a result, the countdown timer aspect has been made permanent.

The countdown timer aspect provides train operators with a countdown of the seconds remaining until the signal clears. When a countdown timer displays zero, the stop arm of the grade time signal will be in the clear position. This allows train operators to operate optimally at the posted speed and have confidence that when the countdown timer displays zero, the train will not experience an emergency brake application. The last installation of one of these aspects took place on October 26 on southbound local Track A1 in Prince Street Station on the BMT Broadway Line.

120th Anniversary of the Subway

The New York Transit Museum celebrated the 120th anniversary of the New York City subway system by hosting two vintage train rides along portions of the city’s first ever subway route. The Lo-V subway cars departed from the decommissioned South Ferry Station (Loop Track A) and traveled north along the Seventh Avenue/Broadway/Lenox Avenue Lines to East 180 Street in the Bronx before returning via the Lexington Avenue Line. After passing through the old City Hall Station the trip concluded at Brooklyn Bridge–City Hall Station.



The Lo-V train at City Hall Station on October 27. MTA photo

The Lo-V rides will be offered again on Saturday, November 16, at 10:00 AM and again at 2:00 PM, departing from the old South Ferry Station.

In celebration of the anniversary, a new exhibit at The New

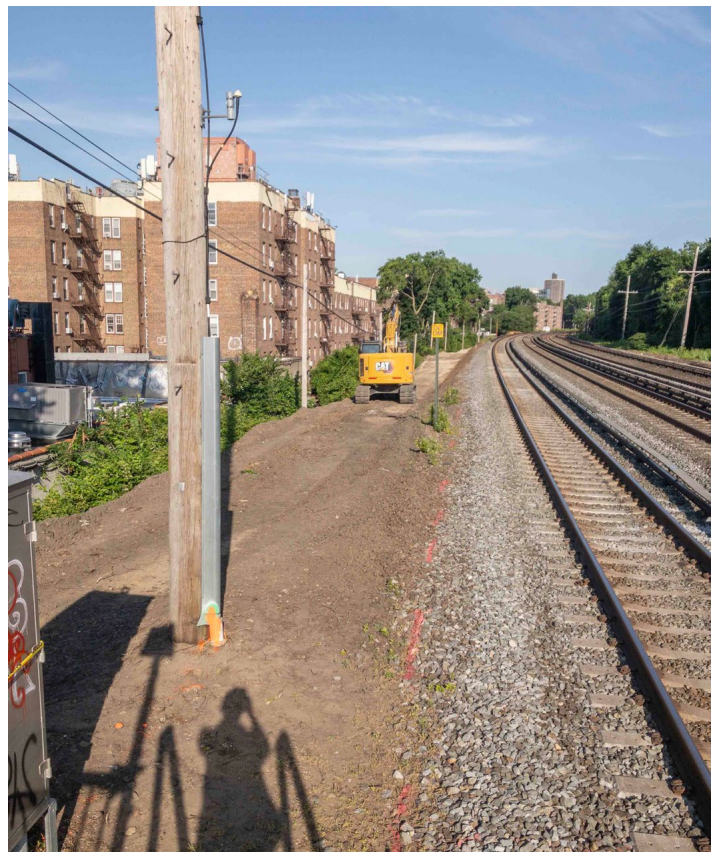
York Transit Museum titled, “The Subway Is...” takes a look at how the system shaped the city’s physical landscape, culture, economy, and identity. Featuring artifacts, photographs, and multimedia installations, the exhibit explores the evolution of the subway system, from pipe dream to powerhouse.

The New York Transit Museum also activated a city-wide “The Subway Is...” social media campaign this month, partnering with museums, parks, and influencers, inviting them to share their thoughts on what the subway means to them by completing the sentence: #TheSubwayIs... and posting it to Instagram. Users who tagged @nytransitmuseum in posts may be featured on the Museum’s Instagram account. The campaign encouraged the public to reflect on and share their personal connections to our transit system. [MTA PRESS RELEASE](#), October 27

LONG ISLAND RAIL ROAD (LIRR)

Platform Extension Work at Forest Hills

Before Congestion Pricing was suspended, work had begun to extend the platforms at Forest Hills Station from six to ten car lengths. Unfortunately, this work has now also been suspended. It is unknown at this time when the work will resume.



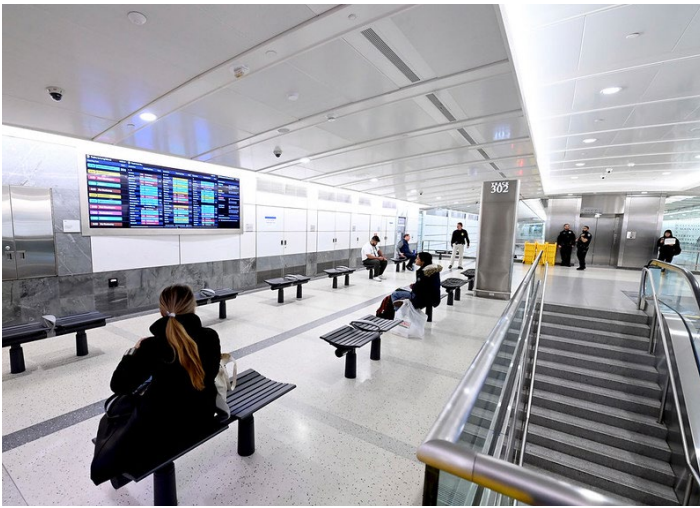
Looking east from the current east end of the westbound platform along Track 3 at Forest Hills on June 20 of this year. The area had been cleared for the extension of the platform, which would be about four car lengths long. Jeff Erlitz photo

Both Forest Hills and Kew Gardens Stations received “temporary” platform extensions a few years ago. Those extensions were only two cars long, increasing each platform’s capacity from four to six cars.

Waiting Area with Seats at Grand Central

A new passenger seating area opened on the mezzanine level of Grand Central Madison, near 47th Street, closer to trains and platforms than the terminal’s pre-existing seating options.

The area will have 14 two-seat pairs for a total of 28 seats, and are available to ticketed LIRR passengers with a 90-minute limit. It is located near the escalators that take passengers to down to Tracks 301 and 302 and up to Tracks 201 and 202. There is a larger seating area located upstairs on the LIRR Concourse near the main ticketing office.



Looking north in the new seating area on the mezzanine in the “east cavern,” at Tracks 201/202/301/302. Marc Hermann/MTA photo

The die-cast aluminum seats in the new seating area are built by Forms + Surfaces from its Tecno RS collection made specifically for high use areas such as public transit stations. [MTA PRESS RELEASE](#), October 18

New Schedules

Schedule changes are going into effect on Monday, November 11. These timetables are expected to enable the LIRR to continue to operate full scheduled service when Amtrak takes one of its four East River tubes (Line 1) out of service as it embarks on a long-discussed plan to remediate damage caused by storm surge flooding from Superstorm Sandy in 2012. The impact on LIRR service is expected to be minimal. There is no change in overall service levels or travel times into or out of Manhattan.

During the height of the morning rush hour, two trains will be diverted from Penn Station to Grand Central and some Penn Station arrival and departure times have been adjusted a few minutes earlier or later. Other minor infrastructure projects throughout the system will also result in some minor midday and late-evening time changes on various branches. There are no changes to weekend schedules.

Long Beach Branch

- The 7:48 AM train from Island Park to Atlantic Terminal will depart at 7:21 AM and arrive at 8:12
- The 7:54 AM train from Long Beach will depart at 7:41 AM, no longer stop at Kew Gardens, and run to Grand Central, arriving at 8:31 AM
- The 8:02 AM train from Long Beach to Penn Station will no longer stop at Rosedale, Laurelton, or Locust Manor, and will add a stop at Kew Gardens
- The 5:54 PM train from Grand Central will no longer stop at Forest Hills

Port Jefferson and Ronkonkoma Branches

- The 4:26 PM train from Port Jefferson to Jamaica will now leave at 4:49, improving reliability and providing a later westbound option for Stony Brook students
- The 4:57 PM train from Ronkonkoma to Penn Station will now leave at 4:47
- The 5:01 PM train from Penn Station to Ronkonkoma is adding a stop at Hicksville
- The 5:22 PM train from Huntington to Penn Station will now leave at 5:10

Greenport (Main Line) Service

- Midday train service between Ronkonkoma and Riverhead will resume on November 11. Buses will replace all trains between Riverhead and Greenport from November 11–24 as rail and switch replacement work moves eastward
- Full train service between Ronkonkoma and Greenport will resume on Monday, November 25

West Hempstead Branch

- The 7:53 AM train will now depart from West Hempstead at 7:55 and will arrive at Grand Central at 8:46

Hunterspoint Avenue Service

- The 8:19 AM train from Jamaica to Hunterspoint Avenue will no longer run; other trains run at 8:04 and 8:31

[MTA PRESS RELEASE](#), October 28

METRO-NORTH RAILROAD (MNR)

Waterbury Branch Service Resumes

Train service on the Waterbury Branch of the New Haven Line resumed on Monday, October 28 with the 4:45 AM train from Waterbury and the 7 AM train from Bridgeport.

Over the last several weeks, the Connecticut Department of Transportation and MNR crews and O&G Industries worked to repair the damage that occurred during the historic August 18 storm. The significant amount of rain created two washouts near Beacon Falls and Seymour which severed the line. In Seymour near the Kinneytown Dam, crews had to build temporary access roads so equipment and materials could reach the washed out areas. Nearly 7,000 tons of



The washout, near Seymour, as seen back on August 22.
Marc A. Hermann/MTA photo

material was needed to repair the washout, which was approximately 85 feet long, 60 feet wide, and 22 feet deep.
[MTA PRESS RELEASE](#), October 18

STATEN ISLAND RAILWAY (SIR)

First R-211S in Revenue Service

The R-211S subway cars were placed into service on October 8. The cars are part of a 535-car order which includes 440 R-211A standard cars with state-of-the-art amenities, 75 SIR cars and 20 cars with an open gangway feature. Following the announcement, attendees rode the first train in service on its inaugural ride from St. George Terminal.



Looking south from the Hannah Street overpass, just south of the Tompkinsville Station, at the R-211S on its way to St. George for the inaugural revenue trip on October 8. Marc A. Hermann/MTA photo

The R-211S cars feature 58-inch-wide door openings that are eight inches wider than standard door openings on

existing cars. The new cars are also six times more reliable than cars in the current fleet — able to travel an average of 240,000 miles between replacements and major repairs.

These models include security cameras, additional accessible seating, digital route displays that will provide more detailed station-specific information, and brighter lighting and signage, among other features that improve the rider experience.

The current class of cars on the Staten Island Railway are R-44s, which joined the SIR in 1973 after debuting on the subway the previous year.

In October 2022, the MTA announced the MTA Board had approved to order an additional 640 standard R-211 subway cars, bringing the total number of new subway cars to 1,080 within the next two years.

[MTA PRESS RELEASE](#), October 8

NEW JERSEY TRANSIT (NJT)

New Schedules

On Sunday, November 10, new NJT Rail schedules will take effect on all lines. Service changes include:

Morris & Essex Lines

- Train 6200, the 4:45 AM departure from Montclair State University, will depart five minutes earlier at 4:40 and make additional stops at Montclair Heights and Watsessing Avenue
- Train 6602, the 4:16 AM departure from Dover, will depart all stations six to eight minutes earlier and no longer stop at Mt. Tabor
- Train 402, the 5:10 AM departure from Gladstone, will depart all stations from Gladstone to South Orange six minutes earlier and stop at Mountain Station, Highland Avenue, Orange, and East Orange
- Train 6606, the 5:31 AM departure from Dover, will now stop at Short Hills, Millburn, and Orange and will no longer stop at Secaucus
- Train 6610, the 5:54 AM departure from Dover, will now stop at Maplewood, South Orange, and Brick Church and will no longer stop at Short Hills or Millburn
- Train 6406, the 5:56 AM departure from Peapack, will now stop at Short Hills, Millburn, and Maplewood and will no longer stop at South Orange, Orange, Brick Church, or Newark Broad Street
- Train 6612, the 6:09 AM departure from Dover, will now stop at South Orange, Orange, Brick Church, and Newark Broad Street and will no longer stop at Short Hills, Millburn, and Maplewood
- Train 6305, the 6:05 AM departure from New York-Penn Station, will depart seven minutes earlier and make an additional stop at Orange

Northeast Corridor

- Train 3808, the 4:22 AM departure from Trenton, will depart Trenton through New Brunswick five minutes earlier and will now stop at Metuchen and Edison

- Train 3704, the 5:50 AM departure from Jersey Avenue, will depart Jersey Avenue through Metropark five minutes earlier, and will now stop at Rahway, Linden, Elizabeth, and North Elizabeth
 - Train 3812, the 5:22 AM departure from Trenton, will depart Trenton Station 12 minutes later and will no longer stop at Rahway, Linden, Elizabeth or North Elizabeth
 - Train 3892, which departs Trenton at 11:53 PM, will depart 9 minutes later
 - Train 3800 on weekdays and train 7800 on weekends, which departs Trenton Station at 12:23 AM, will depart Trenton Station 16 minutes later
 - Train 3737, the 9:56 PM departure from New York-Penn Station will depart 11 minutes later
 - Train 3891, the 10:11 AM departure from New York-Penn Station, is replaced by Train 3979, which will stop at Secaucus, Newark, Princeton Junction, Hamilton, and Trenton only
 - On weekends, new Train 7842 will operate between Trenton and New York-Penn Station, departing at 2:20 PM, and making all stops to Metropark Station, then express to Newark Airport, Newark, and New York
- Most other lines have minor time changes and changes to connecting service at Newark and Secaucus stations.
- [NJ TRANSIT SERVICE ADVISORY](#), October 30



The first example of the new car order, No. 8501, being shown to the press at the Meadowlands Maintenance Center.
NJ Governor's Office photo

roughly \$270 million.

The new train cars will feature USB charging ports, bike racks, and 11 percent more seating than existing multi-level cars. Some will be self-propelled (EMUs), eliminating the need for a separate locomotive.

[NEW JERSEY MONITOR](#), October 30

First of the New Rail Cars Unveiled

The first in a set of new multi-level rail cars due to go into service over the coming years was unveiled at the Meadowlands Maintenance Center. The first four of the 174 new rail cars NJT has ordered from Bombardier (now Alstom) will be sent to Pueblo, Colorado for testing and are expected to go into service midway through 2025.

Mechanical issues are a growing source of NJT disruptions. Between June and August, mechanical problems caused 462 train cancellations. Only weather and issues with Amtrak infrastructure caused more delays during that three-month stretch.

The new rail cars will replace cars in NJT's aging and increasingly unreliable fleet of trains. Many rail cars presently in use by the agency are more than 40 years old and require frequent maintenance checks and repairs.

Officials said the new rail cars would drastically cut down on maintenance costs, requiring inspections every 400,000 miles compared to the 20,000-mile checks needed for much of the agency's existing equipment. Delivery of the new cars was delayed by pandemic and supply chain issues.

113 of the cars are expected to come into service in 2026. Another 25 are expected to be deployed by the end of 2027, with the remaining cars expected to come online by the end of 2028.

The agency has the option to purchase an additional 100. The new fleet represents a significant investment for NJ Transit. Between state and federal sources, the agency has put more than \$950 million behind the purchase of modern rail cars.

Nearly \$567 million from the Federal Transportation Administration represents a majority of those costs while New Jersey's investment in the modern fleet comes to

PORT AUTHORITY TRANS-HUDSON (PATH)

Hoboken Station to Close

The Port Authority of New York and New Jersey announced that Hoboken Station will be closed from 11:59 PM January 30, 2025, to 5:00 AM February 25, as part of the agency's two-year, \$430 million PATH Forward program.

During the closure, the PATH will carry out safety repairs and improvements across several elements of the system. The full station closure enables the agency to complete track and station work on an expedited basis that would otherwise necessitate severe schedule reductions and service suspensions repetitively over a prolonged period. Track work will include replacing in-station track, replacing the interlocking outside the station, and repairing 4,500 linear feet of track leading to the station. Station work will include refurbishing the concrete platform surface and replacing four stairways between the station's mezzanine and platform levels.

During the closure, several travel alternatives will be offered, including:

Cross-honored ferry service

- Additional peak period service departing every 10 minutes from both Hoboken ferry terminals, the PATH/NJT station terminal and the 14th Street terminal, with service to Manhattan's Brookfield Place/Battery Park City terminal and Midtown/West 39th Street terminal
- Expanded NY Waterway crosstown bus service from Midtown/West 39th Street terminal

- Extended operating hours until 10 PM weekdays and 12 AM weekends at both Hoboken terminals
- Additional weekend route, offering service to Midtown/West 39th Street from both Hoboken terminals

Free PATH shuttle bus service

- Frequent shuttle buses connecting Hoboken riders to continuing PATH service at Newport and Exchange Place

Supplemental Bus Service to Enhance NJT's No. 126 Line

- NJT to increase frequency of the No. 126 bus, connecting Hoboken station with the Midtown Bus Terminal

Supplemental PATH service

- Additional PATH trains to serve expected additional passengers at Newport and Exchange Place stations to/from World Trade Center and 33 Street. The additional service will result in trains arriving at Newport every two to four minutes and trains arriving at Exchange Place every five minutes or less during rush hours

Supplemental Hudson-Bergen Light Rail service

- Additional service weekdays between 6-10 AM and 3-7 PM, connecting riders to/from continuing PATH service at Newport and Exchange Place

The station closure is the next major phase of the Port Authority's two-year PATH Forward program. The program encompasses a series of projects including comprehensive track repair and replacement, modernization of bridges, railcars and other critical infrastructure, and rehabilitation of four major stations: Hoboken, Grove Street, Newport, and Exchange Place

Through the end of this year, work will continue between Journal Square and Harrison stations, necessitating adjusted service levels on most weekends between those stations. Trains will run every 40 minutes on weekends. PATH is replacing 6,000 feet of track and installing an additional interlocking, which will improve operational flexibility and reduce the impact of delays. This new interlocking will enable PATH trains to bypass disabled trains west of Journal Square, allowing for a quicker resumption of service on the Newark-World Trade Center line. Additionally, PATH is completing a sea wall along the Passaic River that will protect the system from future flooding.

[PORT AUTHORITY PRESS RELEASE](#), October 31

Other U.S. Systems

BOSTON, MASS.

Type 10 Mockup On Display

The Massachusetts Bay Transportation Authority (MBTA) celebrated the arrival of a future Green Line Type 10 vehicle

mockup at Boston City Hall Plaza, giving the public a chance to be inside and offer feedback to MBTA representatives.

Feedback from the public will help the MBTA in its final design phase with contractor CAF USA Inc. The MBTA has a \$810-million contract with CAF for the design, construction, and delivery of the new Green Line vehicles. The contract includes 102 cars with new safety technology and accessibility improvements.

Upgrades to the new Type 10 vehicle include but are not limited to the following:

- A 100-percent low floor design
- Additional bridgeplate request buttons and passenger intercoms to make it easier for riders to request assistance
- A hearing loop available throughout the entire train
- Four priority areas for wheeled mobility devices
- The latest generation of crash-safety technology
- Wider doors for streamlined boarding and alighting
- Passenger information screens onboard that will show digital real time information and line maps



The Type 10 mockup at City Hall Plaza on October 30.

Andrew Grahl photo

The MBTA and CAF will finalize the design and continue the procurement process. Pilot cars are expected to be delivered in 2026. The full Type 10 fleet delivery is expected to be completed in 2031.

[MBTA PRESS RELEASE](#), October 30

Track Work Continues...Slow Speeds Dwindle

The "T" has continued to plug away at track conditions that resulted in slow speed orders across the system.

Service on the Red Line's Braintree Branch had been suspended between JFK/UMass and Braintree for 24 days from September 6 to September 29. The Ashmont Branch was also suspended, but only for one day on September 28. As a result, 37 speed restrictions across 18 miles of track was lifted.

Over on the Orange Line, service was suspended between Forest Hills and Back Bay from October 8 to October 20 with the service suspension extended from Back Bay to North Station during the holiday weekend of October 12 through



View of the track work taking place north of Massachusetts Avenue Station on the Orange Line on October 11. MBTA photo

October 14. This work resulted in the lifting of an additional 20 speed restrictions.

Service was suspended again on the Orange Line between Oak Grove and Ruggles October 26–27 and between Oak Grove and North Station October 28–November 1. This work lifted nine more speed restrictions and, as a result, the Orange Line is now completely free of all speed restrictions for the first time since 2010.

[MBTA PRESS RELEASE](#), September 30

[MBTA PRESS RELEASE](#), October 22

[MBTA PRESS RELEASE](#), November 5

LOS ANGELES, CALIF.

Southeast Gateway Line

The Los Angeles County Metropolitan Transportation Authority (Metro) has been awarded \$231 million by the California State Transportation Agency from the Transit and Intercity Rail Capital Program, following a statewide competitive grant application process for Cycle 7, for its Southeast Gateway Line. The Southeast Gateway Line is a light rail line stretching 14.5 miles from the Slauson/A (Blue) Line Station to the City of Artesia providing a dependable alternative to driving for 2 million people in southeast Los Angeles County.

The Southeast Gateway Line will include nine stations extending from the Slauson A Line station located in the City of Los Angeles/Florence–Firestone unincorporated area of Los Angeles County to its southern terminus at the Pioneer Station located in the City of Artesia, passing through the cities of Bell, Bellflower, Cerritos, Cudahy, Downey, Florence–Firestone, Huntington Park, Los Angeles, Paramount, South Gate and Vernon. The line will also include a new C Line station at the I-105 freeway.

The area is currently home to over 600,000 jobs, which is projected to increase to over 700,000 jobs by 2042. The area also has a high projected population and employment densities that are five times higher than LA County, with

44 percent of the population below the poverty line and 18 percent of households that do not own a car.

The project will provide direct connection to the Metro C Line (Green), Metro A Line (Blue) and LA County’s broader regional transit network.

[LA METRO PRESS RELEASE](#), October 23

SACRAMENTO, CALIF.

Station Upgrade Completed

Construction at the Swanston Station to modify the platform height to accommodate the new S700 low-floor light rail vehicles was completed ahead of schedule on Friday, October 18. Platform construction will then begin at the Roseville Road Station on Monday, October 21, as part of its ongoing efforts to improve accessibility on the Blue Line.

Roseville Road Station will be closed through Friday, November 8, as crews work to adjust the platform height. Riders are encouraged to use nearby stations, such as Marconi/Arcade or Watt/I-80, during the closure.

[SACRT PRESS RELEASE](#), October 11

SALT LAKE CITY, UTAH

New Light Rail Vehicles

Stadler and Utah Transit Authority (UTA) signed a contract on October 23 for up to 80 new light rail vehicles tailored for the UTA TRAX service in and around Salt Lake City. Stadler is set to build the vehicles at its Salt Lake City manufacturing site. This is Stadler’s first large light rail contract in North America and the first serial contract in its U.S. home state of Utah.

The initial \$129 million contract is for 20 new Stadler Citylink light rail cars and funded, in part, by a Federal Transit Administration grant. Pending additional funding, it includes options for 60 additional vehicles, all built in accordance with federal Buy America requirements.



Rendering of Stadler’s CityLink car for Salt Lake City. Stadler

The first TRAX line, the Blue Line, was opened in 1999 with 23 Siemens light rail vehicles. This was followed by several extensions and two further lines. The Red Line was opened in 2001 and the Green Line in 2011. Today, the route network has a length of 45 miles.

The vehicle fleet currently comprises a total of 117 vehicles:

- 23 Siemens SD-100 LRVs (1001–1023), built in 1998
- 17 Siemens SD-160 LRVs (1024–1040), built in 2001–2003
- 77 Siemens S70 LRVs (1101–1177), built in 2010–2012

The new Stadler vehicles will replace the aging Siemens SD-100 and SD-160 series and will also supplement the fleet for future route expansions.

[URBAN TRANSPORT MAGAZINE](#), October 24

SEATTLE, WASH.

West Seattle Link Extension

The Sound Transit Board selected the route and station locations for the West Seattle Link Extension. This action authorizes the project to move forward into the final design phase. Construction is expected to begin in 2027.

This action also establishes the project definition for the NEPA Record of Decision (ROD). When the ROD is issued, the federal environmental review process will be complete, and the project can proceed. This milestone is expected in late 2024.

In conjunction with publication of the Final EIS in September, Sound Transit updated the cost estimate for the West Seattle Link Extension to between \$6.7 and \$7.1 billion. In response to this significant increase, the Sound Transit Board passed Motion M2024-59 directing the agency to develop a workplan to improve the agency's financial situation and move West Seattle Link Extension through design to inform a financially sound project to be baselined. This workplan will include programmatic, financial, and project-level measures.

The West Seattle Link Extension was approved by voters in 2016 as part of the ST3 plan. The project will extend light rail 4.1 miles and serve four new stations (at SODO, Delridge, Avalon, and the Alaska Junction).

Trips between Alaska Junction and Westlake stations ultimately will take only 16 minutes during peak hours — a 50-percent reduction from current travel times. The extension will improve overall transit service frequency, reliability, and capacity; facilitate redevelopment, including affordable housing near stations; and provide a travel alternative when the West Seattle Bridge is congested or unavailable.

The final alignment selected by the Board is the Final EIS Preferred Alternative:

- West Seattle Junction segment: Medium Tunnel 41st Avenue Station West Entrance Station Option
- Delridge segment: Andover Street Station Lower Height South Alignment Option
- Duwamish Segment: South Crossing Alternative
- SODO segment: At-Grade Lander Access Station Option

The alignment selected incorporates refinements requested by the Sound Transit Board when it identified the preferred alternative in 2022. Working with community members, the City of Seattle and King County, staff studied these project features to enhance station access, prioritize an integrated and well-designed transfer experience from buses to light

rail, and address concerns over potential displacements of organizations serving low-income and communities of color.

The Board's approved resolution included an amendment to move forward with the development and implementation of the workplan to improve the agency's financial situation and move the West Seattle Link Extension through design. This amendment also directed the agency to continue working to reduce identified project impacts during the design phase and advancement of the workplan to achieve cost savings and to minimize community impacts in SODO and West Seattle, while continuing to provide enhanced transit integration and station access and engaging with impacted residents and businesses.

The agency will return to the Board in the future as design progresses and to authorize construction dollars.

[SOUND TRANSIT PRESS RELEASE](#), October 24

International

BELO HORIZONTE, BRAZIL

Metro Line 2 Construction Starts

Construction started on Belo Horizonte's second metro line on September 16. The 10.5-kilometer metro Line 2 will link Nova Suíça on Line 1 with Barreiro in the southwest of the city, serving seven stations.



A Series 1000 trainset (CAF/Alstom, 2012-15) on Line M1 at Waldomiro Lobo Station on March 12, 2024.

Ladislau Fernandes photo via Wikimedia Commons

Operations are expected to begin in 2029, but Metrô BH says that, together with the state of Minas Gerais, it is committed to accelerating the schedule. Metrô BH announced the purchase of 24 four-car metro trainsets from CRRC on June 10. The trainsets are already in production and are due to serve both lines 1 and 2.

In October last year, Metrô BH awarded Alstom a contract to automate the existing Line 1 and the future Line 2. Alstom is to

supply new signaling to support ATO as well as onboard equipment for the existing fleet plus the 24 newly purchased trains.

[METRO REPORT INTERNATIONAL](#), October 14

BOLOGNA/ROME, ITALY

Tram Orders Placed

CAF has been awarded a framework contract to supply and maintain a fleet of trams for the network under construction in Bologna, while Rome transport operator ATAC has exercised an option to increase a previous order.

The orders announced on October 8 have a total value of around €200 million.



An example of the Stanga cars that will be replaced in Rome, No. 7057 is operating a Route 5 trip on the Via di Porta Maggiore on October 4, 2019. Built in 1950, this particular car was withdrawn from service this past August. pageforpictures photo via Urban Electric Transit

CAF was the sole bidder for the framework contract awarded by the city of Bologna, which is being partly funded from the European Union's Recovery & Resilience Fund.

There is a €130 million firm order for an initial 33 trams, and options to order up to 27 more within six years; procurement laws would allow up to 20 percent more to be ordered, which could take the order to 72 vehicles. The order includes tools, spare parts and the provision of four years of maintenance.

The five-section bidirectional trams from CAF's Urbos family will be 35 meters long and 2.4 meters wide with a capacity of up to 225 passengers, including 68 seats and two spaces for disabled people.

They will have CAF's On Board Energy Storage System for catenary-free battery operation to reduce the tramway's visual impact in the historic areas and increase energy efficiency.

The four-line tram network is being developed as the centerpiece of the Bologna's sustainable urban transport plan which aims to reduce pollution through the creation of a single integrated network. This will be operated by Trasporto Passeggeri Emilia-Romagna, which last year awarded the CAF subsidiary Solaris a contract to supply 127 hydrogen buses.

Meanwhile, Rome operator ATAC has exercised a first option for an additional 20 trams under a 2023 framework agreement which included a €130 million firm order for an initial 40 Urbos trams. There are options for 81 more which would take the value to more than €400 million. The trams will also be fitted with OESS, and the deal includes five years of maintenance. The CAF trams will replace the aging Stanga cars as well as operating on planned new lines.

[METRO REPORT INTERNATIONAL](#), October 8

CASABLANCA, MOROCCO

Tramway Adds Two Lines

Public services on tram routes T3 and T4 in Casablanca began on September 23 after an extended period of trial running over the summer. The city now has a network of 72.5 kilometers with 110 stops.

The fleet of Alstom Citadis trams has been expanded to 204 vehicles, which network operator RATP Dev Casablanca runs in pairs. Headways on the new lines are 11 minutes on average, but are planned to be reduced as demand grows — traffic is expected to reach over 20 million journeys in 2025.

Both new lines start in the city center and provide a link to the southeastern suburbs. Line T3 is 14 kilometers long with 20 stops. It starts at the main line station at Casa Port and heads south following Boulevard Mohammed VI to the Sbata district before turning east to Hay El Wahda, beyond which is a maintenance depot.



Citadis 134 is seen at the Habous stop of Line T3. RATP Dev photo

Line T4 is 12.5 kilometers long with 19 stops. It starts on the west side of the city center at Parc de la Ligue Arabe and heads east to pick up Route des Ouled Ziane, following this out to Sidi Othmane district before heading east to terminate at Mohammed Erradi in the Moulay Rachid industrial area.

The new lines interchange with each other twice; each also connects in the center with Line T1, opened in 2012, and with Line T2 to the southeast, opened in 2019.

[METRO REPORT INTERNATIONAL](#), October 2

COPENHAGEN, DENMARK

Metro M5 Design Study

Copenhagen Metro operating authority Metroselskabet has awarded a design studies contract for the future Line M5 to a consortium of Systra Denmark and Rambøll, with Gottlieb Paludan Architects.



Before it opened (this past June) to Copenhagen South, the newest part of Copenhagen's light metro was Line M4 to Orientkaj. In this view northeast from an adjacent parking garage on September 27, 2023, we see No. 36 (Hitachi Rail, 2018) leaving that station on its trip south and west to Copenhagen Central Station. Jeff Ertlitz photo

Systra Denmark will oversee the development of preliminary designs for the transport system, operations control center, and maintenance depot. The consortium will define the technical specifications for trains, infrastructure and related subsystems as well as providing strategic advice for future operations and maintenance.

Line M5 is planned to serve the new city district at ØstHAVNEN, promoting modal shift to public transport, and supporting environmental goals for the development.

The first phase would run southeast from Copenhagen Central Station onto Amager (southeast of the city center) before turning north into the harbor area and then west to Østerport — connecting at both ends with circular Line M3. Eight intermediate stations would include interchanges with Lines M1 and M2, and a depot is planned on a branch across to the island of Prøvestenen.

[METRO REPORT INTERNATIONAL](#), October 22

KRAKOW, POLAND

Metro Plans To Be Developed

The city of Krakow has established a committee to advance the detailed development of long-standing proposals for what would be Poland's second metro.

The first phase would run six kilometers from the intersection of Reymonta and Piastowska Streets in the west to

the Młyńskie traffic circle in the east. There would be three stations in the city center near the main railway station, Bagatela Theater and Mogilskie Road intersection.

A heavy metro is envisaged, rather than putting trams underground as has previously been studied.

The cost is estimated at three billion złoty, with city, national and EU contributions envisaged and a public-private partnership model to be used. It is hoped that a contract could be awarded for construction of the initial section by the end of 2025. Civil works could begin in 2028.

Later phases could extend the line east to Nowa Huta and west to Bronowice, taking it to a total of 20 kilometers.

[METRO REPORT INTERNATIONAL](#), October 15

LISBON, PORTUGAL

More Trains Ordered for the Metro

Metropolitano de Lisboa has awarded Stadler a €134 million contract to supply 24 three-car metro trainsets, with an option for up to 12 more.

The contract, signed on October 30, is the second the operator has awarded to Stadler, after a 2021 order for 14 trainsets, the first of which is now on test. CRRC also submitted a proposal in response to the latest tender called in November 2023.



Rendering of Stadler's metro trainset for Lisbon. Stadler

The stainless steel trains will be 49.6 meters long and 2.78 meters wide, with large windows, nine double doors on each side, and interiors designed to maximize the available space, including large vestibules for rapid passenger flows. They will have CCTV and a passenger information system with large screens.

[METRO REPORT INTERNATIONAL](#), October 31

LONDON, ENGLAND

Docklands Operating Contract Issued

Transport for London has awarded incumbent KeolisAmey the next contract to operate the Docklands Light Railway automated light metro.

The contract was awarded following a competitive tender

and runs for eight years from April 1, 2025, with an option for a two-year extension. The operator is to be paid a specified fee along with performance-based incentives and deductions.

The KeolisAmey Docklands joint venture is formed of Keolis (70 percent) and Amey (30 percent).



DLR 145+121+123, all Type B07 cars built by Bombardier Transportation in 2008 and 2009, are seen arriving at Greenwich on April 25, 2019. Jeff Erlitz photo

ComfortDelGro and the Connecting Docklands joint venture of Go-Ahead Group and Atkins had also been short-listed for the contract to operate the 38-kilometer network, which carried 98.9 million passenger-journeys in 2023-24. [METRO REPORT INTERNATIONAL](#), October 3.

Bakerloo Line Extension Study Commissioned

Transport for London has appointed AECOM and WW+P Architects to undertake a feasibility study for the four stations on the proposed extension of London Underground's Bakerloo Line southeast from Elephant & Castle to Lewisham.



Looking south in Elephant and Castle Station, the current south terminal, on September 5, 2008. Sunil060902 photo via Wikimedia

The studies for the stations at Burgess Park, Old Kent Road, New Cross Gate and Lewisham will be undertaken over the next eight months.

WW+P is lead architect and will focus on the design aspects of the study, while AECOM will be responsible for civil, structural, mechanical, and geotechnical engineering matters, stakeholder engagement, and consents. WW+P has appointed London Bridge Associates to provide specialist constructability and fire safety input.

AECOM and WW+P have worked together on a number of station design schemes including the Paddington Elizabeth Line station, Crossrail 2 proposals, and the Melbourne Metro Rail project in Australia. Legal powers and funding for the Bakerloo Line Extension project are not yet in place, and completion is now envisaged by 2040.

[METRO REPORT INTERNATIONAL](#), October 10

MANNHEIM, GERMANY

Long Tram Unveiled

In Mannheim, the Rhein-Neckar-Verkehr unveiled the operator's first Škoda ForCity Smart 38T vehicle.

The car is the longest meter-gauge tram in the world, and will provide needed additional capacity on the network.

In 2018 RNV awarded Škoda a €250 million contract to supply 80 trams for the meter-gauge network serving the three cities of Mannheim, Ludwigshafen, and Heidelberg, with options for 34 more.



No. 1501, the first of the new trams. Škoda photo

Škoda is supplying 31 three-section 36T trams 30.5 meters long, 37 four-section 37T trams 40.7 meters long, and 12 six-section 38T trams 58.2 meters long.

Unveiling the first of the long trams in September, RNV had decided to exercise the option for 34 additional 36T trams. Delivery of all 114 vehicles is expected to be completed by the end of 2026.

[METRO REPORT INTERNATIONAL](#), October 11

MILAN, ITALY

Metro M4 Extension Opens

Milan's metro Line M4 was extended 7.8 kilometers west from San Babila around the south of the city center and on to San Cristoforo on October 12.

There are 13 new stations, linked by pairs of single-track running tunnels. A fleet of 47 driverless 80 km/h Metropolitan Series 4400 trainsets from Hitachi Rail Italy operate at a peak headway of 90 seconds, although the signaling can reduce this to 75 seconds if required. Line M4 is now 15.2 kilometers long with an end-to-end trip time of under 30 minutes. It will carry an estimated 86 million passengers per year with a maximum capacity of 24,000 passengers per hour.



San Babila Station, the previous western terminal of Line M4 on July 4, 2023. Saggiattarius A photo via Wikimedia Commons

Construction was managed by SPV Linea M4, owned by the Municipality of Milan (66.7 percent), ATM (31.5 percent), Webuild Italia, Partecipazioni Italia, Hitachi Rail STS, MerMec STE and Sirti.

An eastern extension from Linate Airport to Segrate is due to be opened in 2028, and a further western extension to Corsico/Buccinasco is in planning.

[METRO REPORT INTERNATIONAL](#), October 14

MOSCOW, RUSSIA

Tram Link Line Opens

A 650-meter section of tramway on the east side of the city center opened on September 22 along ul Sergiya Radonezhskogo between pl Ilyicha and pl Andronievskaya.

The short connection has a single stop and links existing routes. The new Route 2 now provides a direct link between the city center at Kursk station and ul 3 Vladimirskaya in

the Perovo district, with seven Vityaz-M trams operating at headways of around 10 minutes.

At the same time, services 12, 38 and 46 were restored over three kilometers of lines from Ilyicha square along ul Rogozhsky Val and shosse Entuziastov. These were suspended in May 2022 for reconstruction of a main line railway bridge for Moskva Diameter line D4.

[METRO REPORT INTERNATIONAL](#), October 3

MUMBAI, INDIA

New Aqua Line Opens

On October 5, the first 12.7-kilometer section of Mumbai Metro's Aqua Line, or Line 3, was inaugurated. Public services started on October 7.

Unlike Mumbai's three other operational metro lines, Line 3 is almost entirely underground. Only the depot and station at Aarey Colony at the northern end are at grade. Boring of the twin 5.85-meter-diameter tunnels began in late 2017, with 17 TBMs deployed along the 33.5-kilometer, 27-station route. The last tunnel breakthrough took place in November 2022.

The initial route runs south from Aarey Colony JVL to BKC, with the only metro interchange being with Line 1 at Marol Naka. Stations serve each of the international and domestic terminals of Chhatrapati Shivaji Maharaj International Airport, although air passengers are not permitted to carry large luggage on the metro.



Two Line M7 trains pass just north of Gundavali Station on May 17, 2023. Line M1 passes overhead in the background. Mumbai Metro photo

A station at Santacruz provides interchange with Indian Railways' Western and Harbour suburban lines via a 500-meter elevated walkway along Pandit Jawaharlal Nehru Road.

The line has 25 kV 50 Hz overhead electrification and Alstom Urbalis 400 CBTC signaling for Grade of Automation Level 4 driverless operation, although initially the line is being operated with on-board drivers. Test running with the first of 31 eight-car Metropolis units being built by Alstom at its Sri City works in Andhra Pradesh began in March.

The next phase of the Aqua Line running south from BKC to Acharya Atr Chowk is expected to open in early 2025, with the remainder to Central, Chhatrapati, Churchgate and Cuffe Parade business district in Colaba due by the end of 2025.

The project's estimated Rs372.6 billion construction cost has been part-funded through a Rs212.8 billion loan from Japan International Cooperation Agency.

Last year Delhi Metro Rail Corp won a 10-year operating contract for the line.

Mumbai Metro now has four lines in service totaling 59 route-kilometers, with 51 stations. As well as the remainder of Line 3, extensions to Lines 2 and 7 and new lines 4, 5, 6 and 9 and will together add 133 route-kilometers.

[METRO REPORT INTERNATIONAL](#), October 10



On October 4, the first four TW20 (Citadis 305) trams for Line T1 are lined up at Dépôt Villetaneuse, which is the depot that serves Line T8. From here, they are transferred over the tracks of Line T8 and the non-revenue connection in Saint Denis to their final destination, the depot of Line T1, Ateliers de Bobigny. Jeremie Anne photo

PARIS, FRANCE

Next Generation of Trams for T1 Unveiled

Transport authority Ile-de-France-Mobilités, operator RATP and Alstom have unveiled the first of the TW20 trams being supplied as part of a major program to modernize and increase capacity on the busy T1 route across northern Paris.



One of the trams that are soon to be retired, TFS2 No. 118 (Alstom, 1995) is seen laying over on the stub track at Bobigny-Pablo Picasso on August 2, 2007. The first section of the new Paris tramway system opened from this location to La Courneuve-8 May 1945 on July 6, 1992. Tim Swart photo via Urban Electric Transit

The 17-kilometer route through the capital's suburbs from Noisy-le-Sec to Asnières-Quatre-Routes is currently operated using 35 Tramway Français Standard vehicles which were supplied for the opening of the city's first modern light rail line in 1992.

These vehicles are intensively used, with the high-frequency service carrying 180,000 passengers per day and requiring 32 vehicles to be in traffic during the peak hours.

In October 2021 Alstom was awarded a €130 million contract

to supply 37 trams for T1. They are from the manufacturer's Citadis X05 family, and branded TW20 by RATP.

On October 4 the first six were presented on Villetaneuse depot on T8, where they are being delivered from Alstom's La Rochelle plant because the T1 depot at Bobigny is being modernized. Testing is being carried out on both T1 and T8, although they will only operate on T1.

The trams are 32 meters long, 2.4 meters wide and 3.421 meters high. They have a maximum speed of 70 km/h, although the limit on T1 is 60 km/h. The capacity of 200 passengers is 15 percent higher than the TFS trams, and they are low-floor throughout and have six large doors to improve accessibility.

The specification includes lighting which adapts to the daylight and customized seats and handrails. Other features include CCTV, air-conditioning, USB sockets and 20 information screens arranged so that every passenger can see one.

Authorization for use is scheduled for November 26, with entry into service planned for December 10.

IdFM plans to acquire a further 28 TW20 trams to support an extension of T1 from Noisy-le-Sec to Val-de-Fontenay which is to open in two stages in 2027 and 2029.

The extended line will be operated in two sections, T1a from Val-de-Fontenay to Bobigny and T1b from Bobigny to Asnières-Gennevilliers-Les-Courtilles. In the longer term a T1c route is envisaged to run from Asnières to Rueil.

There will be 110-meter-long loops in Bobigny and Asnières able to hold three trams to enable the regulation of through-running services and allow a change of drivers.

[METRO REPORT INTERNATIONAL](#), October 17

TEMIRTAU, KAZAKHSTAN

First Tram Delivered for Tramway Revival

The first tram has been delivered for the reopening of the tramway which links the Temirtau steelworks to the city.



Temirtau tram unveiled on October 2. Metro Report International photo

The 11-kilometer line was included in the deal when steelmaker company Qarmet acquired the steelworks from ArcelorMittal Steel in December 2023. Trams had been replaced by buses in February 2023 when the then owner said the line was unprofitable and required expensive works which were beyond the means of the local council. Qarmet agreed to rehabilitate the line at a cost of 10 billion tenge.

Eight partially low-floor four-axle trams are being supplied by the QazTehna plant in Saran, which primarily produces CNG and battery powered buses using kits supplied by Chinese company Yutong.

Each car will have its own livery based on different facilities of the steel plant and the city of Temirtau.

Qarmet is working with the Temirtau Higher Polytechnic College to recruit tram drivers, with the first cohort of 12 to begin training during October.

[METRO REPORT INTERNATIONAL](#), October 10

TURKU, FINLAND

Tram Procurement Planned

The city of Turku's tramway project promoter Turun Raitiotie has begun market consultation ahead of the procurement of a fleet of trams.



Rendition of tramway streetscape in Turku. City of Turku

It plans to order standard-gauge trams 37 meters long and 2.65 meters wide with a capacity of 220-260 passengers and the option to extend to 47 meters. The first phase of the tramway is planned to run 12 kilometers from Satama in the west through the city center to the Varissuo district in the east, with 19 stops.

The cost of the infrastructure is estimated at €344 million, plus €42 m million for the rolling stock. Construction is planned for 2026-31 with opening in the early 2030s.

[METRO REPORT INTERNATIONAL](#), October 14

ZAGREB, CROATIA

Tramway Extension Project Launched

Zagreb's first tramway extension for 24 years was ceremonially launched on October 25, when a construction contract was awarded to Strabag.



TMK 2300 No. 2301 (Končar, 12/2009) at the terminal for Route 8 at Zaprude on August 30. The new extension is to be built from this location. GarfieldHR photo via Urban Electric Transit

The Sarajevska extension will run from Zaprude to Ranzirni Kolodvor. The ceremony marked the start of work on 1.8 kilometers of road which is being built as part of the project, with the construction of 2.3 kilometers of tramway with four stops to begin in December.

Completion will bring 35,000 inhabitants of Travno, Utrine, Dugave, Hrelić, and Jakuševac within the tram network.

The €25 million project is being co-financed by the EU and the Ministry of Sea, Transport & Infrastructure.

[METRO REPORT INTERNATIONAL](#), October 29



From the Camera of Henry Wilhelm (ERA #1968)

Two more early images from Henry's travels around the Long Island Rail Road. The negatives for these images are in the collection of the Western Connecticut Chapter-NRHS, whom we thank for their use.



In the view above, we see Class B3 boxcab electric No. 334 (PRR-Juniata, 11/1926, s/n 4049-2) at New Lots Yard on the Bay Ridge Branch in Brooklyn sometime in 1928. Below, we are looking west towards MT (later, Nassau) Tower and the Main Street grade crossing in Mineola on the Main Line sometime in 1929. In the distance is the Mineola Boulevard overpass.

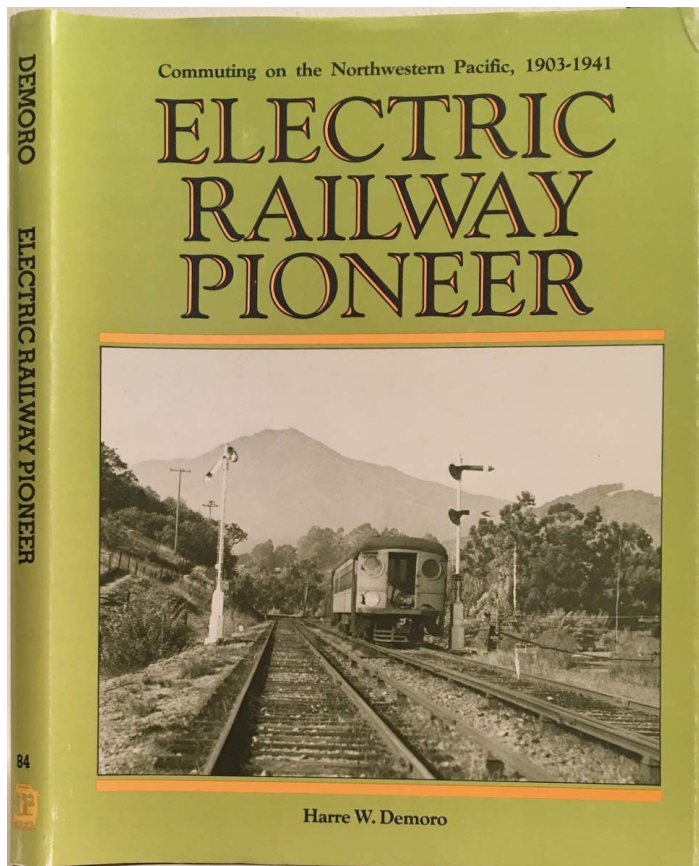


Book Review

Paul Grether (ERA #6933)

Electric Railway Pioneer: Commuting on the Northwestern Pacific, 1903-1941 by Harre W. Demoro, published by Interurban Press [Pentrex], Glendale, California in 1983, hardcover, 136 pages, with extensive black-and-white pictures, detailed equipment rosters, bibliography and index. ISBN 978-0916374556.

The Northwestern Pacific Railroad (NWP) started as a narrow-gauge steam railroad serving the coastal areas north of San Francisco. It was a joint venture of the Southern Pacific and the Santa Fe railroads and primarily hauled timber. A small commuter passenger market developed in Marin County, across the bay from San Francisco. The NWP operated ferries across the bay to connect to its trains at Sausalito.



The territory served and the scale of the electrification are not that remarkable in the context of overall North American railway electrification schemes. What makes the NWP electrification interesting are the many “firsts” associated with it. Demoro describes how the NWP made the decision to invest in electrification in the early 1900s. He correctly states that the decision carried significant risk at such an early stage in the development of railway electrification technology. Multiple-unit control had only just been invented, for example. Demoro points out that the NWP was the first railroad to electrify for operating efficiency

and improvement rather than steam locomotive smoke mitigation in tunnels or other obstacles to the use of steam. Ultimately, four lines were electrified and operated with multiple-unit car equipment.

The NWP electrification started operations in 1903 and was operated as a true railroad, versus an interurban trolley type system. As part of the design of the system the NWP chose a third rail electrification. The NWP was also the first to employ alternating current for signal track circuits. This innovation eliminated interference from the use of the running rail as the negative return for traction power.

The commuter operation was never really profitable, and increasing use of private automobiles and the opening of the Golden Gate bridge in 1937 caused the limited ridership to collapse. The electrification was turned off for good in 1941. Commuter service resumed in 2017 under the Sonoma-Marín Area Rail Transit using diesel powered multiple-unit equipment on a part of the former right-of-way.

This book will appeal to those interested in early railroad electrifications, electric railroad operations in the San Francisco Bay area, and the economics and sociology of a railroad that tried to make a marginal passenger service successful. Demoro includes detail photo captions, equipment rosters with dispositions and an appendix dedicated to the line’s sole electric locomotive.

Link to book information: www.libib.com/u/grether?solo=89939080



Northwestern Pacific steel passenger motor No. 381 en route to Manor at San Anselmo, Calif. on February 28, 1941.

Philip C. Johnson photo via Montana State Library

Travels with Jack May

Britain and the Baltics — Part 32

By Jack May (ERA #2275)

Friday, September 1 (2017)

All good things must come to an end, and this trip was no exception. This last part covers Stockholm's No. 7 line and the activities of our final day in the Baltic region.

Friday dawned overcast, but the forecast indicated it would clear up. After breakfast Karl-Heinz and I checked out of our hotel and left our luggage with the desk clerk. We walked to Rådmansgatan and took the Green Line to Alvik, where we saw some blue sky to the northeast, and so rode the Tvärbanan to Solna Business Park. Here we photographed the 22 at the bridge over the railway (displayed in part 31) and the railway from above (shown in part 30). Then we headed downtown via the Blue Line to its terminal at Kungsträdgården to ride and finally get some good photos of the Spårväg City line, route 7, now that the clouds were disintegrating.

Tram route 7 is a story of persistence, first for the creation of a museum line, and then for its development into a meaningful transit route with modern equipment (while still retaining scheduled heritage operations). The initiative for the project started even before the abandonment of the bulk of Stockholm's streetcar system in 1967, with a campaign for retention of tram operation on the island of Djurgården, a park-like venue of recreation and leisure-time activities, and home to a number of tourist attractions and museums, located a mere mile from the city center. The battle was eventually led by the Stockholm chapter of the Swedish Tramway Society, operator of a tramway museum in Malmköping, some 70 miles west of Stockholm. It was controversial, opposed by the usual alliance of automobile supporters (it will interfere with traffic) and fiscal conservatives (it will cost too much money), but the good guys eventually won. With help from the municipal government, a carhouse-museum was built and tracks were laid for the operation of a working tram line — partly in an urban setting and partly on a park-like island — a historic showcase of over a century of tramways in Sweden. Summer and weekend service over a two-mile line between the mainland and the center of Djurgården began in 1991 with preserved trams from a number of cities that once operated streetcars.

But that's just the start of the story, as rail advocates immediately began pushing for the line to operate as a regular part of Stockholm's transit network from Central Station, hub of the rapid transit and commuter railway network. This too was controversial, but the advocates for good public transit won again, and in 2007 it was decided that the line would be extended about a half mile to a point near the railway station and be operated with modern streetcars. The new service was inaugurated in 2010, with the start of operation of both modern and heritage trams on the reborn route 7 contracted to AB Stockholms Spårvägar, a

corporation owned by the Stockholm Chapter of the Swedish Tramway Society. The organization has since assumed operation of the Lidingöbanan as well, and has received governmental support to build a link to connect the two lines at Ropsten. (*Author's Note: AB Stockholm Spårvägar (SS) was the name of the municipal corporation that assumed operation of the city's transit system starting in 1917, but eventually (1967) morphed into the current Storstockholms Lokaltrafik AB (SL), which controls all of the city and county transit services. The symbolism invoked by the use of this historical name would be similar to having the operator of the Washington, D. C. streetcar be named Capital Transit.*)

I mention all of this as a prelude to relating my experience on the line during my visit to Stockholm in 2002, when I decided to stop there prior to meeting Clare in St. Petersburg to pick up our six-year-old granddaughter and bring her to the U. S. to enjoy the summer (and practice her English). I sent an email message to the Malmköping Museum indicating I would be in town on a Sunday and asking if there was a way to get out to their site without renting a car. The response indicated that it would not be productive for me to go there on that date as there would be a "tram festival" at their Djurgården facility (I had planned to visit the island on the Saturday) and that every piece of equipment that could be operated would be taken out for a spin. Naturally I made sure I'd be there and had a terrific time (my slides have not been scanned), riding all sorts of heritage streetcars and meeting many Swedish traction enthusiasts. But unfortunately I still haven't gotten to Malmköping.

The heritage operation, which is staffed by museum volunteers, is limited in terms of operating dates. It runs on a fixed schedule as route 7N (see <https://www.sparvagssallskapet.se/doxs/fil.php?doxs=1196>), supplementing the frequent service of route 7. In the downtown area, it loops as it did from its 1991 inauguration at Norrmalmstorg, while the 7 continues further westward along Hamngatan. Because of construction in the Central Station area, the 7 was running only as far as Kungsträdgården, where the trams used a crossover to turn back. Nevertheless it ran every six minutes (summer schedule, seven and one half in the winter), providing ample opportunity for photos.

The line's rolling stock is made up of six Bombardier Flexity Classic 70-percent low-floor cars from 2011. Numbered 1–6, the units are classified by the SL as type A34. Actually, before those cars could be delivered, the line used virtually identical cars borrowed from Norrköping and Frankfurt am Main for the first year of service. We saw a seventh car on the line, A35 class No. 461, which is part of the Nockebybanan/Tvärbanan fleet (but were unable to get a



(Above and below) The temporary Kungsträdgården terminal of route 7, with the upper view showing an inbound car after it has dropped its passengers, and the lower an outbound unit about to depart the city center location.

Bombardier Flexity Classic No. 2 has just turned off Stranvägen and is traversing the Djurgårdsbron bridge over the Djurgårdsbrunnsviken (bay) to reach the island.



A view of Stockholm Djurgården Lusthusportens park, located along the tram line with Djurgårdsbrunnsviken in the background. The island's attractions include the Vasa Museum (17th century ship), the Nordic Museum, the Gröna Lund amusement park, the Waldemarsudde art museum, the Rosendal botanical garden, and many attractions specifically devoted to children. The Skansen zoo/open-air museum is especially notable, as it is reached by a 650-foot long Von Roll funicular.



As it leaves the congestion of the city center, the Spårväg City line runs along Stranvägen, a road fitted with a lush park-like “neutral ground” containing an abundance of mature trees. Outbound A34 Flexity Classic No. 6 has just left its Styrmansgatan stop and is heading for the island.

photo). My impression is that 461 is the first of seven from that series that will reequip the Spårväg City line later this year, as the current A34 cars will be sent to Norrköping.

Once our coverage of the 7 was completed, and now that the sun was blazing, we realized we had just enough time for some final photos as long as we headed in the general direction of our hotel. We rode the Green Line (again) to Alvik and photographed the Tvärbanan from the northern portal of its tunnel (pictured in part 31), and then returned to Odenplan. Looking at the time, and realizing we were not going to be fed on our flights, we stopped at a restaurant we had passed on several occasions. Thus en route to the Tegnérslunden, where we claimed our luggage, we had good imitations of American-style hamburgers and fries at Flippin’ Burgers.

After reaching Odenplan, our Pendeltåg took us to Arlanda



An outbound car approaching the Liljevalchs/Gröna Lund stop, near the Liljevalchs art museum and the Gröna Lund amusement park. The Nordic Museum and its onion dome are in the background. The switches in the foreground lead to and from the carhouse (Alkärrshallen), which is located on an in-street loop around two corners away from the line. The ABBA museum (!) and aquarium are also located in this area.



The line splits into a single-track counter clockwise in-street loop at its outer end. Bombardier-built car 5 is approaching Waldemarsudde terminal, one of two stops along the loop.

in a short 38 minutes. We had to pay the airport supplement of SEK 120 (about \$13) to leave the station and enter the terminal. We then said our good byes and remarked on how much we enjoyed our visit to the Baltic. Check-in and security was fast and easy, although some passengers were selected (randomly, I think) for more serious examination, which took place behind curtains. Boarding for Norwegian's Boeing 787 jumbo jet began at 5:00 PM, and could be best described as an organized free-for-all, as after passengers with children were called, the flight was opened to all rows. The bright and shiny aircraft looked like it had just come out of the factory; it even had that new car smell. My seat, assigned by the airline since I didn't want to pay extra, was

32D, on an aisle in the center section of a 3-3-3 row. The middle seat next to mine was unoccupied on the 90-percent full flight so I was very comfortable.

We backed away from the gate at 5:52 PM (seven late) and climbed up from the tarmac at 6:04. After a busy period of activity in the aisles while those who ordered meals were served, things quieted down and it became a smooth relaxing trip. The plane's windows darkened and I watched some episodes of the Big Bang Theory and the movie, Manchester by the Sea. Before I knew it the lights came on and we began descending. We touched down at JFK at 7:46 and reached our gate at 8:15 (ten late). Customs and Immigration using self-service machines was rapid (although a long walk). An automated train headed for Jamaica came in just as I reached the Air Train platform and whisked me to the Long Island Rail Road station, where I bought a Senior ticket to Penn Station. After a stop at Woodside I arrived at the terminal at 9:15 (12 late), in plenty of time to catch the 9:32 NJ Transit train to Watchung Avenue (but not enough to purchase and consume a slice of Rose's Pizza). I was home at 10:30.

It was a great trip. I hope you enjoyed reading about it.



A view from our 2016 visit showing the heritage motor-trailer set that Clare and I rode. Running as route 7N, No. 76 and 846 are shown laying over at the line's downtown terminal at Norrmalmstorg just after a heavy shower. Four-wheeler 76 has an interesting history. It was constructed in 1905, but totally rebuilt in 1926. In 1959 it was converted to a snow-blowing trailer for the subway and then six years later sold to Oslo for the same purpose. When Oslo was finished with it in 1993 it was acquired by the Swedish Tramway Society. Matching trailer 846 was built in 1929. Both were products of ASEA, which was merged into ABB, Adtranz, Bombardier, and now Alstom.

