BULLETIN

Volume 67, Number 7 | July 2024

Congestion Pricing Delayed Indefinitely

Governor Kathy Hochul has delayed the MTA's long-awaited plan to toll drivers entering the busiest parts of Manhattan, a last-minute about-face that's infuriating public transit advocates and spurring accusations of political posturing.

In a six-minute video address on June 5, Hochul confirmed she directed the MTA to "indefinitely" pause the congestion pricing program, which would have charged a base toll of $15 for drivers who enter the borough below 60th Street. The program was years in the making and had been set to go into effect on June 30.

Hochul's decision to pull her support for congestion pricing comes after she publicly backed the plan for months.

The tolls were controversial among some drivers in New York City's suburbs, a battleground area that could help determine control of the U.S. House of Representatives. State lawmakers are also up for reelection this November.

The indefinite pause on the program also leaves the MTA's capital plan to upgrade mass transit infrastructure with a major funding hole. The tolls were required by law to generate $1 billion a year, which in turn would be used to finance $15 billion worth of bonds. The MTA planned to use the money to pay for investments such as new subway cars, upgrades to aging track equipment, and the extension of the Second Avenue subway into East Harlem.

In her address, Hochul said the state has set aside money — likely in New York's cash reserves — to help bridge the gap. But she also acknowledged her office is currently "exploring other funding sources."

Four people briefed on Hochul's plan told Gothamist that the governor is considering a potential increase in the MTA payroll tax for New York City businesses. The officials

Continued on page 3

Electric Railroaders Association

Founded August 15, 1934 by E.J. Quinby
P.O. Box 3323
New York, N.Y. 10163
https://erausa.org

In This Issue

Trip Notices

September 6-9, 2024: ERA convention in Edmonton and Calgary, Alberta, Canada. Visit https://erausa.org/conventions/2024/ for all the details.

August 17-21, 2024: Metropolitan New York Bus Association Committee of the Motor Bus Society trip to Montreal and Quebec. Visit https://erausa.org/pdf/motor-bus-society/2024-08-metropolitan-ny-bus-association-trip-to-montreal.pdf for all the details.

September 14, 2024: MNYBA Committee trip to the New Jersey Transportation Heritage Historic Bus Festival and Philadelphia Route 15 PCC service. Visit https://erausa.org/pdf/motor-bus-society/2024-09-metropolitan-ny-bus-association-trip-nj-pa.pdf for all the details.

Donations

ERA is a 501(c)(3) tax exempt corporation. Your donations are fully tax deductible and can be made either with your membership renewal or using our donation form on our website: www.erausa.org/donate. Your donation helps to maintain ERA's 90-year long tradition of traction education and entertainment!

Monthly Meeting

Friday, July 19, 2024

Presenting This Month: Jeffrey Erlitz

Last fall, your *Bulletin* Editor-in-Chief traveled to Scandinavia for the first time. With the exception of three nights spent in Gothenburg, Sweden, Jeff and his wife stayed in Copenhagen, Denmark and took day trips to other nearby locations. In Copenhagen we'll take a look the commuter rail and metro systems. The new light rail systems in Odense, Denmark and Lund, Sweden will be visited, as well as the heritage tramway operation in Malmö, Sweden. The extensive tramway system in Gothenburg, Sweden will be visited, too. We will see some marine operations in Copenhagen, as well as a few electric buses. We will also take a look at the new Copenhagen Letbane (Light Rail), which is under construction.

This Meeting Is In Person

This meeting is one of our two biennial in-person meetings (the other one being the Annual Meeting in November). The price is right for this meeting — free to all paid up ERA members. Any attending member may bring one guest. We have a maximum of 50 places for dinner so reserve your spot by emailing Treasurer Mike Glikin at trnsper@aol.com or call him at (917) 714-7087 . The deadline for reservations is Friday, July 12 or when all places are reserved, whichever comes first. So don't delay, book today!

Cover Photo

Day Two of scheduled activities on the ERA's 2024 European tour took place in Den Haag (The Hague), Netherlands. Our equipment for the day's tour was PCC No. 1210, built by BN (La Brugeoise et Nivelles) in 1963. Returning to the city center from the northernmost terminal of the system at Scheveningen Noord, we paused at the Vredespaleis (Peace Palace) stop along tram route 1 for this photo opportunity. The Peace Palace is the home of the Permanent Court of Arbitration and United Nations International Court of Justice. Jeff Erlitz photo

A Message from President Bob Newhouser

ERA 90th Anniversary Celebration later this year

2024 marks the 90th anniversary of the ERA's founding. To celebrate this important milestone in the club's history, the Board is planning three days of exciting activities starting Friday, November 22 and running through Sunday, November 24. Please note that this is the weekend before the Thanksgiving holiday.

We will kick things off on the morning of **Friday, November 22** with a tour of MTA New York City Transit's Coney Island Overhaul and Maintenance Complex. The ERA has not visited Coney Island in several years and this will be a must-see as it is one of the largest rapid transit rolling stock maintenance facilities in the world. Notably, the ERA is in discussions to exclusively view equipment not available for public access.

In October 2012, Superstorm Sandy inflicted severe damage on the Coney Island complex. Since then, it has undergone a transformation, as the yard and the shop buildings have been upgraded and fortified against future severe weather events. Observing these works, in addition to the regular rolling stock maintenance activities, should be quite interesting.

Then later that evening we will gather at Manducatis Restaurant in Long Island City, Queens for dinner, followed by a special presentation which will touch on ERA's unique and notable history.

On **Saturday, November 23** ERA will travel to the Shore Line Trolley Museum in Branford, Connecticut. The museum's collection includes unique and historically significant artifacts dating back to the beginning of electric railways and many that operated in the New York metropolitan area. Participants will be treated to rides and barn tours.

Information on transportation and dining arrangements will be forthcoming.

Finally, on **Sunday, November 24** we have arranged to visit the New York Transit Museum in downtown Brooklyn, New York City. The Transit Museum will graciously accommodate us with an earlier than usual opening time exclusively for ERA visitors. This visit should also be quite special as 2024 marks the 120th anniversary of the opening of the first Interborough Rapid Transit line, New York City's first subway. To commemorate this important date in the city's history, the Transit Museum is currently developing a new exhibit which should be opening in advance of the IRT anniversary on October 27. We will have exclusive access to this exhibit before the museum opens to the general public that day and the Museum is tentatively arranging for the exhibit's curator to be available to answer questions.

Please note that only current ERA members in good standing will be eligible to attend any of the weekend activities. Members will be allowed to bring one non-member guest. For the visit to Coney Island, we will be requiring in advance completed waiver forms and proof of identification for security purposes as per the request of New York City Transit.

Stay tuned! We will reveal all the details regarding scheduling and pricing next month. For now, save these dates and we hope you will be able to join us as we celebrate our ERA.

(Left) Third Avenue Railway 629 (Third Avenue Railway Shops, 1939) and Brooklyn & Queens Transit PCC 1001 (St. Louis Car, 1936) at Shore Line Trolley Museum in September 1972. Noah Caplin photo

(Continued from page 1) **Congestion Pricing Delayed Indefinitely**

requested anonymity because they weren't authorized to speak about private discussions, which are still underway.

A tax hike would require legislative approval in Albany, where lawmakers are scheduled to end their annual session on June 7.

Opponents of the congestion pricing plan — including New Jersey Governor Phil Murphy, the city teacher's union and a group representing truck drivers — have sued to halt or delay the tolling program. Federal judges in Manhattan and New Jersey are set to rule in those cases.

GOTHAMIST, June 5

Worldwide Suburban Electric Railway, Metro and Tramway Openings in June 2024

Date	Country	City	Segment	Distance (miles)	Rail/ Metro/ Tram
6/3	Australia	Melbourne	Pakenham to East Pakenham	1.2	R
6/13	France	Paris	Line 11: Mairie des Lilas to Rosny Bois-Perrier	3.4	M
6/16	England	Blackpool	North Pier to North Station	0.3	T
6/19	Spain	Seville	T1: San Bernardo to Eduardo Dato	0.6	T
6/22	Denmark	Copenhagen	M4: København H to København Syd	3.1	M
6/23	Singapore	Singapore	TEL: Gardens by the Bay to Bayshore	6.7	M
6/24	France	Paris	Line 14: Mairie de St-Ouen to St-Denis-Pleyel/Olympiades to Aéroport d'Orly	8.7	M
6/28	China	Changsha	Line 1: Kaifu District Government to Jinpenqiu	6.2	M
"	Poland	Szczecin	Lines 5/7: Krzekowo to Osiedle Zawadzkiego	0.5	T
"	Portugal	Porto	Line D: Santo Ovídio to Vila d'Este	1.9	T
6/30	Taiwan	Kaohsiung	Red Line: Kaohsiung Medical University Gangshan Hospital to Gangshan Railway Station	0.9	M

URBAN RAIL NEWS, JUNE 30

Rail News in Review

New York Metropolitan Area

NEW YORK CITY TRANSIT (NYCT)

Stillwell Yard Track Work Continues

Having completed the track reconstruction work (see April 2024 *Bulletin*, page 4), Tracks 1-3 were returned to service on April 28. Tracks 6-8 were then taken out of service on that date for their reconstruction. This work is scheduled to be completed on Sunday, July 28.

More Pilot Testing for Adjacent Track Flagging Speed Increase

In the February 2024 *Bulletin,* we talked about NYCT's pilot program to test an increase in the speed of trains that pass work zones on adjacent tracks, from 10 mph to 15 mph.

Since then, a few more locations were tested. Over the weekends of April 27-28 and May 4-5, Track A1 on the IND Eighth Avenue Line was out of service from north of 125 Street to north of 59 Street, with the actual limits of work from south of 96 Street to north of 86 Street.

In addition to the usual three yellow lanterns placed 700 feet in advance of the beginning of the work zone, denoting crews on an adjacent track, a second set of three yellow lanterns is placed 25 feet in advance of the first set of lanterns.

Another test area was on the IRT Seventh Avenue Line over the weekends of May 11-12 and June 1-2. Northbound local Track 4 was out of service for rail grinding from north of Chambers Street to north of 14 Street (first weekend) and north of Chambers Street to north of 34 Street (second weekend).

There was going to be a third test area in April, on the IND Queens Boulevard Line between Roosevelt Avenue and Queens Plaza, but this was canceled due to issues in implementing the speed increase in CBTC territory.

IND Eighth Avenue Switch Work

Starting Monday, June 17, and continuing to Monday, August 12 (at least as currently scheduled), the diamond crossover between express Tracks A3 and A4 north of 125 Street are out of service for switch reconstruction work.

These switches are currently constructed as Type I track with full-sized ties in ballast. This was typical for original IND construction. They will be reconstructed as Type II Modified track, with half-ties set in concrete.

Additional Platform Edge Barriers

We last mentioned the installation of platform edge barriers in the February 2024 *Bulletin*. At least two more stations have now received those new yellow-painted barriers.

Over the weekend of March 23-24, Maintenance of Way (Infrastructure) crews installed the new railings at 5 Avenue Station on the IRT Flushing Line. More recently, over the weekend of June 22-23, they were installed at 1 Avenue on the BMT Canarsie Line.

Marcy Avenue Tower Demolition

Over the weekend of June 22-23, crews began to demolish the long-abandoned interlocking tower located geographically west of the Marcy Avenue Station on the BMT Broadway-Brooklyn Line.

The tower came out service on May 7, 1995, during the big

Marcy Avenue Tower as seen on June 27 from the Queens-bound platform. Jeff Erlitz photo

signal replacement project (contract S-32304) on the BMT Broadway-Brooklyn, Jamaica, and Myrtle Avenue Lines.

The tower, and the interlocking it controlled, were placed into service sometime before September 16, 1908, when BRT elevated train service began over the Williamsburg Bridge to the new Delancey Street terminal station. The tower controlled the new junction with the original elevated line on Broadway from Broadway Ferry Station to Marcy Avenue. The Brooklyn Elevated Railroad had opened from Gates Avenue to Driggs Avenue on June 25, 1888 and was extended one more stop to Broadway Ferry on July 14, 1888.

This interlocking was somewhat unique on the former BRT and BMT Lines in that the plant was a Union Switch & Signal Company installation. Almost all of the BRT/BMT plants were equipped with General Railway Signal Company equipment. Marcy Avenue Tower had an 11-lever Model 14 interlocking machine. Since the tower closed in 1995, the interlocking has been controlled by the master tower in East New York Yard.

IND Crosstown Line Closures

As some of our readers may know, the IND Crosstown Line is undergoing a project to replace its signal system. Dating from August 1933 (Queens Plaza to Nassau Avenue) and July 1937 (Nassau Avenue to Hoyt-Schermerhorn Streets), the signaling is being replaced with a Communication-Based Signal Control system.

Work has been going on for some time now but until now it has been restricted to overnights and weekends. This is about to change. Starting on Friday night, June 28 and continuing for one week, 24 hours per day, until Friday night, July 5, Phase 1 of the project will see the line shut down between Nassau Avenue and Court Square. B94 shuttle buses will operate between these stations and making stops at 21 Street and Greenpoint Avenue Stations.

Crosstown Partners, the joint venture of Thales Transport & Security, Inc. and TC Electric, LLC, will be doing track work in this section, including a switch replacement between 21 Street and Court Square.

During this week, J and Z service will be operating local in both directions between Marcy and Myrtle Avenue Stations. This will double the peak-hour/peak-direction service at Lorimer and Hewes Street Stations, which are located to the east and west of the Crosstown G Line's Broadway Station. Passengers will be able to transfer between these stations for free for the entire duration of the Crosstown Line project this summer.

Phase 2 will be from July 5 to August 12 and will result in no service from Bedford-Nostrand Avenues to Court Square. Phase 3, running from August 12 to September 3, will suspend service from Bedford-Nostrand Avenues to Church Avenue. MTA Press Release, June 12

IND Culver Line CBTC Progress

On Monday, June 3, the next section of CBTC territory was placed into service on the Culver Line. This was on northbound local Track A2/B2 from West 8 Street to Kings Highway. As was done on the first section, on Tracks B1, B3-4, B5, and B6, operation was limited to Automatic Train Protection Manual (ATPM) mode.

The next phase of CBTC implementation took effect at one minute past midnight on Monday, June 17, when full Automatic Train Operation (ATO) began operation on all tracks between West 8 Street and King Highway Stations. The Culver Yard leads, Tracks B5 and B6, were also included.

There is one temporary Automatic Train Supervision (ATS) terminal in Coney Island Yard-Tower C and one ATS workstation in the Kings Highway dispatcher's office. They are not currently being used to control Avenue X or Kings Highway Interlockings. Tower C still controls Avenue X while Church Avenue controls Kings Highway. The Control Center does not yet have the ability to control these interlockings.

New Subway Car Assignments

On June 30, new car assignments were put into effect systemwide. This was done in conjunction with the subway timetable change and crew pick.

On the IRT, car unavailability and fleet size decreased by one car from the December 17, 2023 car assignment. This was due to the derailment in January, 2024 that caused irreparable damage to one R-62A car assigned to 240th Street. This assignment reflects the transfer of one R-62A from Westchester Avenue Yard to 240th Street Yard and 10 R-142s from 239th Street Yard to East 180th Street Yard. The actual number of assigned cars in the chart below did not change from the December assignment.

Line	AM Cars Assigned	PM Cars Assigned
1	10 R-62, 300 R-62A	10 R-62, 300 R-62A
2	350 R-142	350 R-142
3	250 R-62	240 R-62
4	180 R-142, 170 R-142A	170 R-142, 160 R-142A

Line	AM Cars Assigned	PM Cars Assigned
5	340 R-142	350 R-142
6	370 R-62A	370 R-62A
7	418 R-188	385 R-188
S	12 R-62A	12 R-62A

On the BMT and IND, delivery of R-211A production cars is ongoing. This assignment reflects the conditional acceptance of 12 additional 10-car R-221A trains and two 10-car R-211T trains, maintained at Pitkin Shop and in operation on the A and C. With that, 48 R-46 cars have been removed from service. Fleet size has increased by 92 cars from the December 2023 car assignment, to 3,741 cars. Peak requirements on the B have increased from 25 to 26 trains in the AM peak, and from 23 to 26 trains in the PM peak. Peak requirements on the D have increased from 28 to 29 trains in the PM peak. Car unavailability has increased by seven cars from the previous assignment.

This assignment reflects the transfer of 100 R-179s from Pitkin Yard to 207th Street Yard, 20 R-46s from Pitkin Yard to Coney Island Yard, and eight R-68s from Coney Island Yard to Concourse Yard.

Line	AM Cars Assigned	PM Cars Assigned
A	144 R-46, 90 R-179, 110 R-211A	144 R-46, 100 R-179, 120 R-211A
B	56 R-68, 152 R-68A	56 R-68, 152 R-68A
C	40 R-46, 72 R-179, 30 R-211A, 10 R-211T	40 R-46, 72 R-179, 30 R-211A, 10 R-211T
D	232 R-68	232 R-68
E	110 R-160A, 80 R-160B1, 70 R-160B2	110 R-160A, 80 R-160B1, 70 R-160B2
F	260 R-160A, 100 R-160B1, 90 R-160B2	270 R-160A, 100 R-160B1, 90 R-160B2
G	65 R-160B1	65 R-160B2
H*	4 R-46, 5 R-179, 5 R-211A	4 R-46, 5 R-179, 5 R-211A
J Z	88 R-160A, 72 R-179	80 R-160A, 72 R-179
L	176 R-143, 16 R-160A	176 R-143, 16 R-160A
M	192 R-160A	184 R-160A
N W	184 R-46, 64 R-68, 16 R-68A	192 R-46, 56 R-68, 16 R-68A
Q	168 R-46	168 R-46, 8 R-68
R	160 R-160A, 90 R-160B1, 60 R-160B2	160 R-160A, 90 R-160B1, 60 R-160B2
S	4 R-68	4 R-68

* The Rockaway Shuttle is operated as the H train but is advertised to the public as another S train.

Subway Station Manager Office Hours

The Group Station Manager (GSM) Office Hours program was launched at the 34 Street-Hudson Yards 7 Station on June 4. This program was designed as a forum for subway riders to provide in-person recommendations, comments, and concerns on safety, cleanliness, customer service, maintenance, station signage, wayfinding, and the overall station environment.

Each GSM will hold office hours twice a month at select stations in their zones between 7:00 and 10:00 AM and 4:00 and 7:00 PM. Office hours will be held at each subway station on a rotational basis to ensure all riders have an opportunity to engage with their designated GSM. The program follows 15 months of station agents stepping out of booths and assisting riders with core customer service functions throughout their respective stations.

GSMs will have a table set up with literature promoting OMNY tap-and-go, Fair Fares, and the permanent Reduced-Fare program, among other MTA deals, discounts, and offerings. The New York Police Department, New York City Department of Homeless Services, and New York City Department of Social Services will be invited to participate in the program and distribute information to passengers.

GSM Office Hours will be promoted via digital screens and physical signage that will be posted for viewing within the designated fare array areas at a station a day prior to the event. Those looking to engage with their GSM can look for this marketing material to know when to stop by.

MTA Press Release, June 4

Christopher Street Station Renamed

On June 28, during LGBTQ+ Pride Month, the Christopher Street-Sheridan Square 1 Station in the West Village was renamed Christopher Street-Stonewall. The renaming reflects the neighborhood's long history of being the center of LGBTQ+ rights activism and specifically the Stonewall Inn. This was the site of an uprising 55 years ago, with riots breaking out in the early morning hours of June 28, 1969, and it became the birthplace of the modern LGBTQ+ rights movement.

MTA Press Release, June 28

LONG ISLAND RAIL ROAD (LIRR)

Amityville and Lindenhurst Now Accessible

The Amityville and Lindenhurst Stations are now accessible in accordance with the Americans with Disabilities Act. Crews have completed building, testing and activating elevators connecting the street to both platforms.

The LIRR received $17.9 million in federal formula funds to do the work at Lindenhurst station, part of a nine station, $169 million, design-build stations upgrade package. Copiague Station was made fully accessible on May 16.

Amityville Station was made accessible with the help of $15.4 million in federal formula funds on June 10. In addition to the new elevator and sidewalk, upgrades include new ADA

NYCT Very Long-Term Track Outages

At the beginning of each year, New York City Transit issues General Orders that take segments of mainline or yard tracks out of service for the entire year. Some of these recurring General Orders have been taking place for several years.

Listed below are those track segments that are out of service for calendar year 2024:

Line/Location	Track(s)	Out of Service Limits	Reason
IRT New Lots	M	Bumping block south of Utica Avenue to 485' north	Track condition
IRT Lenox Avenue Yard	23/24	Entire	Track condition
IND Fulton Street	A2	South end of Hoyt-Schermerhorn to south of Court Street	Storage of vintage trains
IND Rockaway	F3	Entire segment south of Liberty Avenue Jct Interlocking	For work train use only
"	F5	Entire segment north of Broad Channel	Test track use only
IND Eighth Avenue	A5	Entire segment south of 34 Street	Track shortened for new 34 Street Relay Room
BMT Nassau Street Loop	J1/J3	North of Chambers Street to bumping blocks near Manhattan Bridge	Track condition
BMT West End	C1/C2	North of 9 Avenue to bumping blocks south of 9 Avenue	Track condition
IND 207 Street Yard	15-17	Entire segments	Track replacement and construction of new yard tower building
"	58/65	Entire segments	Track condition
BMT West End	D1	From south of 36 Street to 3 Avenue grade crossing and all tracks in 3 Avenue Yard	Construction of new Railcar Acceptance and Testing Facility

parking, electrical and mechanical improvements, replacement of platform tactile strips, communication and safety security systems, wayfinding and ADA signage, LED lighting, and Help Points.
MTA Press Release, June 28

METRO-NORTH RAILROAD (MNR)

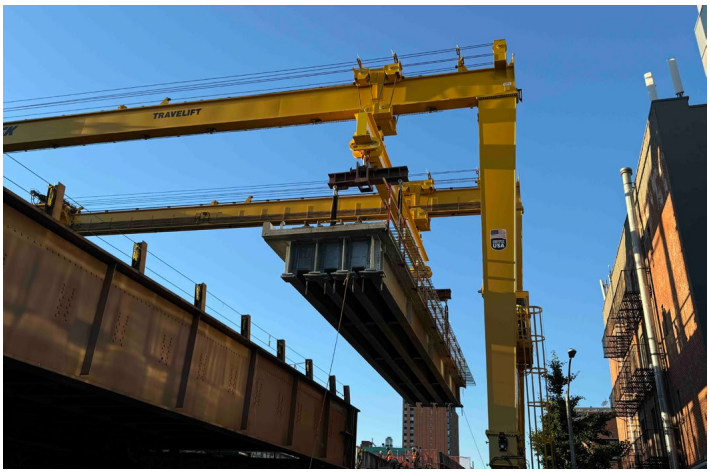
Park Avenue Viaduct Replacement Begins

The first section of the aging 130-year-old Park Avenue Viaduct was replaced over the weekend of June 8-9 without disrupting train service.

That weekend's operation utilized two gantry systems which extend over the viaduct to remove and replace the existing concrete and steel bridge deck with new prefabricated bridge units, weighing around 190,000 pounds each.

Phase 1 of the project, extending from East 115th Street to East 123rd Street along Park Avenue, includes replacement of the existing steel structure as well as new tracks, power, communications, and signal systems. Substructure construction to replace the viaduct's foundations and columns began in September 2023 and construction for Phase 1 will continue through 2026. This first round of work is part of the $590 million earmarked for the first phase of the Park Avenue Viaduct Replacement project, of which $500.9 million is federally funded.

The entirety of the Park Avenue Viaduct runs from the entrance of the Park Avenue Tunnel at East 97th Street to the Harlem River, however, the Park Avenue Viaduct Replacement project focuses on the structural elements in need of repair dating from the 1890s between East 110th Street and the Harlem River Lift Bridge, spanning 1.8 miles.
MTA Press Release, June 12



A gantry crane lifting a section of the prefabricated viaduct into place on June 8. Subutay Musluoglu photo

NEW JERSEY TRANSIT (NJT)

Brick Church Station Modernization Progress

The NJT Board of Directors has awarded a contract for improvements to the station building. This comes in advance of a recently announced separate rehabilitation project to make the

station fully accessible with high-level platforms and elevators.

The $3,122,603.89 contract with a five-percent contingency, which was awarded to John O'Hara Company Inc. of East Orange, includes the restoration of the station building's interior walls, doors, and ceilings, installation of an historic plaque, electrical work, restroom alterations for ADA compliance, heating equipment, painting, telecommunications and security upgrades.

Brick Church Station on March 7, 2016. Jerrye & Roy Klotz, M.D. photo via Wikimedia

The contract comes in addition to the $83.1 million Federal Transit Administration grant awarded last month to replace the current low-level platforms with accessible high-level platforms and add elevators. Other improvements include restoring the historic benches and terrazzo floor as well as the historic windows and providing an art installation.
NJ TRANSIT PRESS RELEASE, June 11

Brielle Drawbridge Replacement

NJT's Board of Directors has approved a contract to initiate the conceptual and preliminary design phases of the Brielle Drawbridge Replacement Project. The project will replace the existing single-track movable bridge that is more than a century old, with a new two-track movable bridge to improve flood resiliency and maritime operations, while restoring two-track capacity to this critical rail infrastructure connecting the towns of Brielle and Point Pleasant Beach on NJT's North Jersey Coast Line.

The Board approved the contract awarded to Hardesty & Hanover, LLC of New York, N. Y., to provide conceptual and preliminary design and engineering services as part of Phase I of the project, at a cost not to exceed $7,708,478.47, plus five percent for contingencies, subject to the availability of funds.

Built in 1911, the existing Brielle Drawbridge is currently operational, but is beyond its original service life. The bridge is 1,162 feet long from abutment to abutment and it currently carries a single non-electrified track and a maintenance walkway. The single-track movable span configuration sits in between sections of the railroad that are two tracks,

Aerial view of the Brielle Drawbridge. Hardesty & Hanover photo

causing a bottleneck in addition to the 20-mph speed restriction (10-mph freight) over the bridge.

Phase I is projected to be completed by First Quarter 2027. The entire construction project is projected to be completed Third Quarter 2031.
NJ TRANSIT PRESS RELEASE, June 11

Elizabeth Station Renovation Completed

NJT officially cut the ribbon on the fully renovated Elizabeth Station on June 18, which includes additional platform capacity and access with upgraded elevators and additional staircases, new station buildings and a renovated public plaza.

The westbound station building was reopened so this marked the completion of the $74.5 million renovation. In September 2023, work on the eastbound station building was completed and reopened for passenger use. Both sides of the station feature longer platforms for additional boarding capacity, accessibility improvements including renovated elevators as well as additional staircase access, security and communications system enhancements. In addition, the plaza surrounding the westbound station building was renovated to tie the new facility into the community.
NJ TRANSIT PRESS RELEASE, June 18

PORT AUTHORITY

PATH Grove Street Station Work Completed Early

Beginning the weekend of June 22-23, regular weekend service resumed at the Grove Street Station. Since April, New York-bound trains have bypassed the station on weekends to accommodate extensive station rehabilitation work that included replacing floor tiles, repainting, refinishing platform columns, and installing LED lighting and electrical wiring throughout the station.

The rehabilitation work was performed in two phases: The first phase required weekend bypasses of Journal Square-bound and Newark-Penn Station-bound trains from January through the end of March. To accommodate the second phase of work, weekend bypasses of New York-bound train service had been scheduled from April through the end of

June. These weekend bypasses for New York-bound trains at Grove Street are no longer needed.

During both phases of this weekend work, weekday service was not affected. This work is part of the Port Authority's $440 million 2-year program known as the PATH Forward Program to renew and modernize the 116-year-old PATH system.
PORT AUTHORITY PRESS RELEASE, June 20

AirTrain JFK Reduced Fare for Summer

The AirTrain JFK single ride fare will be reduced by 50 percent starting July 1 and continuing through to Labor Day to encourage the use of public transit when accessing John F. Kennedy International Airport. A record number of travelers will take to the sky while the airport's $19 billion transformation project, including an entirely new roadway network, reaches peak construction activity this summer.

The $4.25 AirTrain JFK fare applies at both the Jamaica and Howard Beach stations, the two off-airport stations that require payment via OMNY or MetroCard. Jamaica is just 20 minutes from Grand Central Madison, Penn Station, or Atlantic Terminal via LIRR, and easily accessible from Long Island. Easy subway connections are also available at the Sutphin Blvd-Archer Avenue-JFK Airport E J Z and Howard Beach A Stations.
PORT AUTHORITY PRESS RELEASE, June 28

Other U.S. Systems

ATLANTA, GA.

Infill Station Locations Revealed

Atlanta Mayor Andre Dickens has pulled back the curtain on where three additional MARTA stops will be located that city leadership deems vital for boosting transit ridership.

Dickens issued an administrative order pinpointing the locations for these stations as: Krog Street/Hulsey Yard where Inman Park and Old Fourth Ward meet Cabbagetown; Joseph E. Boone Boulevard on the Westside; Armour Yards in southern Buckhead; and as previously revealed during Dickens' State of the City address in March, Murphy Crossing near the BeltLine's Westside Trail.

All four of those locations are identified as "ideal candidates" for delivering equitable transit projects across the city.

Dickens' order also calls for city staff, MARTA, and the Atlanta BeltLine to begin developing a plan for transit options across the entirety of the BeltLine corridor, as part of what the city calls an "innovative collaboration."

The order mentions that funding could come from both public and private sources, but no timelines are provided.

In a press statement, Dickens calls Atlanta's transportation landscape "dynamic" in a way that mirrors "the diverse growth and evolution of Atlanta's neighborhoods."

Dickens' directive also calls for a "crosstown" corridor for a Bus Rapid Transit line that would connect a planned Bowen Homes redevelopment on the Westside with Ponce City Market. Last summer, the Bowen Homes project secured a $40 million grant from the U.S. Department of Housing and Urban Development meant to kickstart equitable development at the former public housing site.
URBANIZE ATLANTA, April 11

CHICAGO, ILL.

New Green Line Station

The Chicago Transit Board proved an ordinance officially naming the City of Chicago's newest rail station, which is currently under construction along the Green Line at the intersection of Lake Street and Damen Avenue. The new station, which is expected to open in coming weeks, will officially be known as the Damen Green Line station.

The strikingly modern design of the new Damen Green Line station will be fully accessible to those who use mobility devices and will fill a gap between existing stations on the Green Line, providing convenient connections to those living and working near the developing Kinzie Industrial Corridor.

Construction of the station is being led by the Chicago Department of Transportation, and was designed by Perkins & Will, a Chicago-based architecture and design firm known for innovative transit station projects. The expected cost of the project is $80 million and is funded by the Kinzie Industrial Corridor Tax Increment Financing District.
CTA PRESS RELEASE, June 25

DETROIT, MICH.

Scarborough Vehicles Acquired

Municipal officials in Detroit have approved funding for Detroit Transportation Corp. (DTC) to replace its fleet of automated peoplemover cars with vehicles from Toronto.

ALRT cars 7 and 11 (UTDC, 1987) approaching Millender Center on Detroit's downtown peoplemover loop. 42-BRT photo via Wikimedia

Similar to the first generation of Skytrain cars for Vancouver, the UTDC-built ALRT vehicles were used on

Toronto Transit Commission's Scarborough Rapid Transit automated light metro line. That route was closed following a derailment in July 2023 and is now being replaced by an extension of TTC's Bloor-Danforth heavy metro line, which is expected to open around 2030.

Detroit's three-mile downtown peoplemover runs on a unidirectional loop through the city center, and it currently has a fleet of 12 cars that operate in pairs. These date from the line's opening in 1987. DTC told local media that while the Scarborough RT trainsets were technically similar, they have driving cabs despite being used in automated mode, whereas its existing cars do not.

DTC believes that buying the secondhand vehicles would save the city several million dollars compared to the cost of procuring a newly designed fleet.

DTC has been allocated $38 million by the city council to cover operation of the peoplemover until 2029. This includes the $6 million projected cost of buying and commissioning the ex-TTC trainsets. As a trial aimed at growing ridership, no fares are being charged on the peoplemover in 2024.

DTC hopes that the fleet replacement could be completed within the next 18 months.

METRO REPORT INTERNATIONAL, June 27

HONOLULU, HA.

Third Rail Energized on Second Segment

The Honolulu Authority for Rapid Transportation (HART) has begun the energizing process on the third rail for the second operating segment of the Skyline rail system, from the Aloha Stadium Station to the Middle Street Station.

The energization of the third rail marks a milestone in the construction of the second segment of the rail system and will allow for the commencement of certain testing along the section of the system from the Aloha Stadium Station, past the Daniel K. Inouye International Airport and Pearl Harbor to the Middle Street Station. The segment of Skyline is expected to open for service in late 2025.

MASS TRANSIT, June 18

PHILADELPHIA, PENN.

PCCs Return to Route 15

Presidents' Conference Committee (PCC) trolleys returned to Route 15 on Sunday, June 16. SEPTA officials celebrated this milestone with employees at West Philadelphia's Woodland Shop, which is the Authority's heavy-duty trolley repair facility.

Work has been completed on eight trolleys so far. Route 15 will operate with a combination of trolleys and buses along Girard Avenue and Richmond Street. This allows SEPTA to deploy the restored trolleys while maintaining frequency on the route.

SEPTA's Trolley Restoration Team has been innovative in finding solutions to restore these 75-year-old vehicles. This included extensive research and review of original blueprints

PCC III No. 2328 (St. Louis Car, 1947) at Woodland Shop on June 12.
Chris Compendio/Philly Voice photo

from the 1940s, so they could reverse engineer and fabricate parts that are no longer manufactured.

Easily recognized by their retro design, the PCCs embody a rich history in Philadelphia — a staple for 75 years along Route 15, which serves Port Richmond to West Philadelphia via Girard Avenue. The St. Louis Car Company originally built the PCCs in 1947, and they remained in service until 1992. In 2005, 18 rebuilt and ADA-accessible PCCs returned to Route 15.

After 15 years of trekking through rain, snow, and road salt, the PCCs were due for another restoration. In January 2020, with major PennDOT construction planned for I-95 and I-76, SEPTA suspended trolley service on Route 15 and substituted it with bus service.

The PCCs will eventually be replaced by the new trolley fleet as part of Trolley Modernization — SEPTA's program to transform the nation's largest trolley network into an accessible, fast, and easy-to-use system. Since it could take as long as a decade for full implementation of the project, restoring the PCCs gives SEPTA the ability to run ADA-accessible trolleys on Route 15 in the interim.

SEPTA PRESS RELEASE, June 12

Wayfinding Signage Contract Approved

SEPTA will advance its SEPTA Metro Wayfinding program under a contract approved by the SEPTA Board. The vote allows SEPTA to move forward with a construction contract for Nova Industries LLC to design, fabricate, and install new signage and wayfinding for 27 stations on the Broad Street Line [B] and in Center City.

Phase 1 of a multi-phase project, the station overhauls will begin later this year and continue into 2025. Phase 2, which includes the remainder of the Market-Frankford Line [L] and Subway-Surface Trolleys [T] will begin next year.

The SEPTA Metro improvements include:

- Easy to see and read colors, letters, and numbers for each SEPTA Metro line.
- New maps and signs that show bus connections and highlight SEPTA's most frequent bus lines, along with the

entire Trolley network.
- New station entrance signage and illuminated pylons to make stations easier to find.
- New neighborhood maps and exit signage to help riders find their destinations.
- Adjusting station names to eliminate duplicates, such as "Girard" (Broad-Girard) on the Broad Street Line and "Girard" (Front-Girard) on the Market-Frankford Line, and merging complexes, such as "15th St/City Hall" instead of having two separate station names: "15th St" and "City Hall."

A preview of new SEPTA Metro signage debuted in April as part of the opening for the new Drexel Station at 30th Street. That station will continue to feature new maps and wayfinding as the project progresses.

This project is also coordinated with modernization efforts for SEPTA's website, mobile app, and data feeds to enhance digital wayfinding tools. Planned improvements include releasing more real-time information, working to significantly reduce "ghost buses," and piloting new, easier-to-read bus detour signage to align with the larger wayfinding improvements.

SEPTA Press Release, June 27

PORTLAND, ORE.

Type 6 LRVs Testing

A milestone approaches for TriMet's newest trains before they enter regular service: testing on the MAX Red Line. It occurred in June over six consecutive nights. To provide dedicated space for testing, the Red Line experienced nightly disruptions from Sunday, June 16, through Friday, June 21, between the Gateway/NE 99th Ave Transit Center and Portland International Airport.

Shuttle buses replaced MAX Red Line trains starting at 7:30 PM and lasted until the end of service, stopping at all closed stations between the Gateway Transit Center and PDX. Red Line service resumed each morning on its regular schedule.

MAX Red Line service was fully restored after testing was completed on Saturday, June 22.

The disruption was necessary to give our newest light rail vehicles — our Type 6 MAX trains — dedicated track space to conduct electromagnetic compatibility tests. During testing, crews needed to clear an area to set up equipment to measure the train's electromagnetic characteristics to ensure the trains do not create excessive emissions and that emissions don't interfere with safe train operation. These tests are required before any new light rail vehicle enters regular service, ensuring that it's compatible with industry standards as well as the existing rail system.

TriMet is introducing 30 new vehicles, and have been putting them through a series of tests these past several months to prepare them for service. Two trains have already entered the final operational testing phase, what is called the "burn-in," where they run out of service for 5,000 miles. The rest of the trains will go through a 1,500-mile burn-in.

A new Type 6 at City Center. TriMet photo

TriMet expects to start introducing the new vehicles beginning this summer. Similar to all but the oldest trains, which were introduced in 1986, these are manufactured by Siemens Mobility. They feature operator cabs on both ends and space on board for 168 riders.

Once the trains are in service, riders will be greeted by a vehicle that's comfortable and efficient, with improved technology, better lighting, updated digital displays and improved temperature controls. They will also feature upgraded diagnostics, making it easier to predict when maintenance is needed.

TriMet Press Release, June 5

SAN JOSE, CALIF.

Eastridge Extension Work Begins

San Jose light rail operator VTA has started work on a southern extension of its Orange Line from Alum Rock to Eastridge.

Celebrations were held at the Eastridge Transit Center on June 8 to mark the start of construction on the 2.4-mile extension, which is expected to take around four years to build. The line has been dubbed the Eastridge to BART Regional Connector, as passengers from Eastridge will be able to interchange to BART's Green and Orange Lines at Milpitas Transit Center, north of Alum Rock. *(Editor's Note: BART began using colors for line names with their timetable change in February 2022.)*

The extension will mostly run on an elevated alignment in the median of the East Capitol Expressway. There will be an intermediate station at Story Road, accessed via a footbridge over the road, and a street level terminus at the Eastridge Transit Center. Revenue services are scheduled to begin in 2028.

The light rail extension forms the final phase of the city's decade-long Capitol Expressway Transit Improvement Project, which is intended to transform the highway into a multi-modal corridor supporting bus rapid transit and improved pedestrian access as well as rail. Earlier phases included the reconstruction of the Eastridge Transit Center, completed in 2015.

Metro Report International, June 12

SEATTLE, WASH.

Lynnwood Link Extension

Testing on the 8.5-mile long Lynnwood Link Extension has entered the pre-revenue phase, marking an important milestone toward the opening on August 30. This phase includes training for operators and maintenance staff, and continued testing to ensure stations, tracks, utilities, and vehicles work together as expected in preparation for the start of service.

During this period, light rail vehicles are running frequently between the Northgate and Lynnwood City Center stations.

The next phase of testing will be simulated service, which will begin next month. During simulated service, all trains will discharge passengers at Northgate and continue to Lynnwood. When the Lynnwood extension opens, trains will run every eight minutes during peak hours.

Stacy & Witbeck/Kiewit/Hoffman JV and Skanska Constructors L300 JV are executing the civil construction on the Lynnwood Link Extension. The $3.26 billion project budget includes up to $1.17 billion from a Full Funding Grant Agreement executed by the Federal Transit Administration. In addition, the U.S. Department of Transportation's Build America Bureau executed a $658 million low-interest loan supporting the project, including new light rail vehicles and support facilities.

The Lynnwood extension will serve the following stations, all of them with connections to multiple transit modes:

- Shoreline South/148th
- Shoreline North/185th
- Mountlake Terrace
- Lynnwood City Center

In 2016, voters approved the addition of a light rail station to the Lynnwood Link Extension at NE 130th Street. That station is scheduled to open in 2026.

SOUND TRANSIT PRESS RELEASE, June 7

WASHINGTON, D.C.

Takoma Station Reopens Early

The Takoma Metrorail Station reopened to riders at the start of rail service on Friday morning, June 28, two days ahead of schedule. Crews also successfully rebuilt the Takoma Interlocking, located between Fort Totten and Takoma Stations. The area in the interlocking had long-standing drainage issues, so the team removed the existing track, fixed the problem, rebuilt the track bed, and replaced the ballast and ties.

The Takoma Station has also been upgraded with brighter, more efficient platform edge lighting, new communication cabling, new track ties, and the removal of overgrown vegetation along the track area. The station was also refreshed with new signage, paint, and sidewalk repairs.

New easier-to-read digital Passenger Information Displays that show real-time train arrival and other service information are also in progress.

The Red Line from Glenmont to Takoma will still be under construction through August 31 due to the Maryland Transit Administration building the Purple Line light rail connection to the Red Line at Silver Spring and other Metro track work. Shuttle buses replace train service on this segment.

WMATA PRESS RELEASE, June 26

International

BELO HORIZONTE, BRAZIL

Metro Trains Ordered

Belo Horizonte metro operating concessionaire Metrô BH announced the purchase of 24 four-car metro trainsets from CRRC on June 10. The vehicles are to feature Automatic Train Operation equipment, passenger information screens and large windows. The final fit-out of the trains is still being undertaken by CRRC and is yet to get final approval from Metrô BH.

According to the concessionaire, CRRC has already started production of the trainsets. The first is expected to arrive in Brazil in early 2026 and the trains are to enter service starting from the first half of that year.

Rendering of CRRC's new metro trainset for Belo Horizonte. Metro BH

The new vehicles are to replace some of the 25 Series 900 trainsets on Line 1, which were manufactured in the 1980s and lack air-conditioning. They are also to operate on the future Line 2, which would run 10.5 kilometers from Nova Suíça on Line 1 to Barreiro in the southwest of the city, serving seven stations. Revenue services are expected to start in 2028.

The concession to operate, manage, and extend the Belo Horizonte metro was awarded to Comporte Participações in December 2022.

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 enable automatic train operation as well as onboard equipment for the existing fleet plus the 24 newly purchased trains.

METRO REPORT INTERNATIONAL, June 28

BLACKPOOL, ENGLAND

Trams Return to North Station

The opening of a 600-meter track extension connecting the current Promenade tramway with a new tram stop by Blackpool North train station was celebrated at a special event on Wednesday, June 12.

The first passengers to take the historic trip up Talbot Road won a local prize draw to become the first people to enjoy the journey to the train station since 1963.

Blackpool Transport ran a range of special tours over the following days, with the route opened up to fare-paying passengers from Sunday, June 16.

Flexity 2 No. 017 (Bombardier Transportation, 2017) waits to depart the new North Station terminal on the T3 route to Fleetwood Ferry on June 25. Simon Smiler photo

Trams leave and arrive at the new North Station tram stop roughly every fifteen minutes between 5:45 AM and 11:45 PM. As a general guide, trams going south to Starr Gate (Route T2) will leave on the quarter hours (15 minutes' past and 45 minutes' past), with trams going north to Fleetwood Ferry (Route T3) leaving on the hour and half hour, however the timetable will be adjusted based on need. These routes will work alongside with the mainline tram operation — now known as Route T1 — which continues to run between Starr Gate and Fleetwood between 5:00 AM and 11:00 PM.

To support the additional journeys created by the extension, two new Flexity-2 trams have been added to the fleet.

The new Blackpool North tram stop sits alongside the Holiday Inn hotel and Marco Pierre White restaurant, which opened in May, while passengers can walk through to Blackpool North train station via a new underpass. A range of retail units surround the new tram stop and underpass.

Over two million passengers per year use Blackpool North train station, while Blackpool itself welcomed 20 million visitors in 2022. The extension and new tram stop form part of the Talbot Gateway area with the tram offering an extended commuting route for workers as well as a tourism route.

The £23 million tramway extension was funded by Blackpool Council and received £16.4 million from the Lancashire Enterprise Partnership's Growth Deal funding. BLACKPOOL COUNCIL NEWS, June 12

BOLOGNA, ITALY

Cross-City Suburban Service Begins

Regional operator Trenitalia Tper has introduced cross-city suburban services in the Bologna area starting June 9.

Route SFM1 linking Porretta in the southwest with Pianoro to the southeast has been established by the extension of the existing Porretta to Bologna Centrale service to Pianoroa. This has eliminated a 30-minute connection time for passengers traveling across the city. There are now 27 through trains per day from Pianoroa to Porretta or Marzabotto and 30 in the opposite direction, offering an end to end journey time of 1:40, plus five additional short workings between Pianoro and Bologna.

The project is being backed by the Region of Emilia-Romagna, the Bologna municipality and the metropolitan authority, national infrastructure manager RFI and regional railway Ferrovie Emilia Romagna.

The region has invested €19.5 million in the procurement of three more Pop and Rock electric multiple-units from Alstom and Hitachi Rail to support the enhancement of Bologna suburban services, and will provide €5.6 million per year to support the operation of SFM1. Tper regional passes are accepted on the new service.

Further service enhancements are anticipated from September 9, following the completion of summer engineering works. This will include a regular half-hourly frequency as far as Marzabotto with peak hour extensions to Porretta. Meanwhile, work began on June 10 to upgrade RFI's Pianoro–Prato line and FER's Bologna–Vignola branch, which are to be integrated into the enhanced suburban network. RAILWAY GAZETTE INTERNATIONAL, June 20

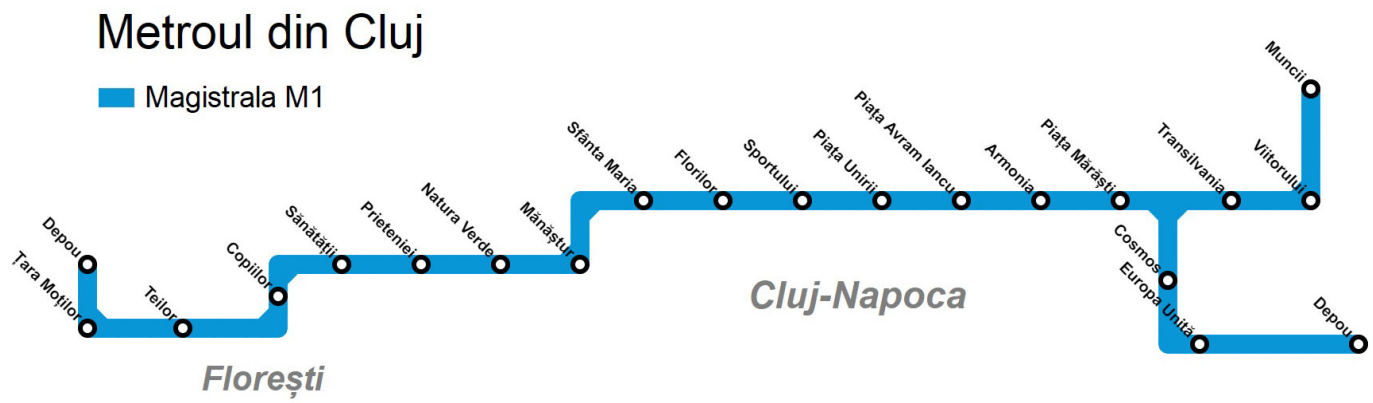
CLUJ-NAPOCA, ROMANIA

Construction Started for First Metro

Construction of Cluj-Napoca metro Line 1 was launched with a groundbreaking ceremony on June 5.

The country's first driverless metro will run over a 21-kilometer route with 19 stations. Starting from Țara Moților in Florești, the Y-shaped line will run via Mănăștur and the future regional hospital to Piața Mărăști, where it will divide. One branch will serve the Muncii industrial area via an interchange with the national railway, while the other will run to Europa Unită via Gheorgheni and Sopor.

Expected to cost 13.7 billion lei, the project is being financed from Romania's National Recovery & Resilience



Map of the proposed Cluj-Napoca metro. Alex Nico map via Wikipedia

Plan, with 10 billion lei coming from the national government and 1.48 billion from the European Union. There will also be a local contribution.

A nine-billion lei contract for design and construction was awarded in May 2023 to a consortium of Turkish contractor Gulermak, Alstom, and Arcada.

The line is scheduled to open in 2031, although it is anticipated that the first seven stations may be completed as soon as 2026. A condition of the EU funding is that the first phase should be operational within four years. The line will be operated by a fleet of 26 three-car trainsets with capacity for up to 540 passengers, and is expected to carry 164,000 passengers per day.

METRO REPORT INTERNATIONAL, June 18

COPENHAGEN, DENMARK

Metro Line M4 Extension Opens

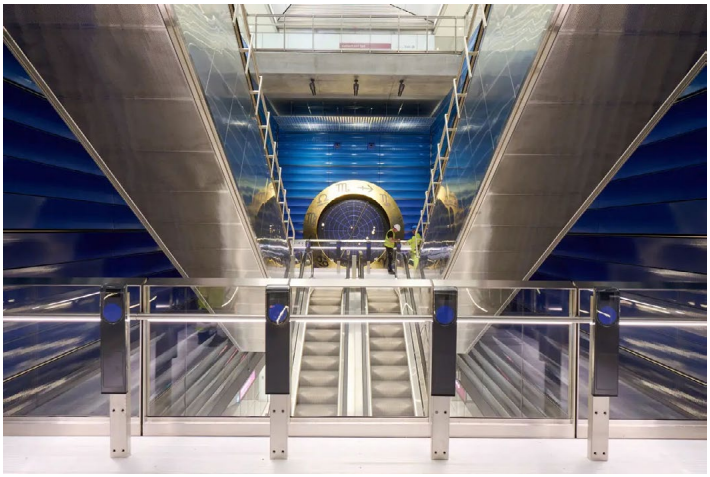
The southern extension of Copenhagen's automated metro Line M4 serving the Sydhavn and Ny Ellebjerg districts was formally inaugurated by King Frederik X on June 22.

The 5.7-kilometer extension with five stations brings the capital's four-line network to 43 route-km and 44 stations. It terminates at København Syd (Copenhagen South), where connections are provided with regional and S-bane services — the interchange was renamed from Ny Ellebjerg with the December 2023 timetable change. Intermediate stations are provided at Havneholmen, Enghave Brygge, Sluseholmen, and Mozarts Plads.

The ribbon-cutting ceremony at Mozarts Plads was attended by 6,000 people, including ambassadors from France, Austria, Italy, Portugal and Japan.

Under construction for six years at a total cost of DKr10 billion, the extension is expected to be carrying eight million passengers per year by 2030, according to metro authority Metrokselskabet. As with the rest of the metro, the line has been equipped with CBTC and train supervision systems from Hitachi Rail, supporting driverless operation to Grade of Automation 4.

The journey time between København Syd and Rådhuspladsen is 10 min, while a ride from Mozarts Plads to the M1/M2 interchange at Kongens Nytorv takes 11 minutes.



View from the lower mezzanine at København Syd. Metrokselskabet photo

The new Metro map showing the M4 extension on the bottom-left. Copenhagen Metro

METRO REPORT INTERNATIONAL, June 25

DNIPRO, UKRAINE

Metro Construction to Resume?

Dnipro Metro is aiming to restart an extension project which was suspended when the contractor pulled out following Russia's full-scale invasion of Ukraine.

The metro is to work with the European Bank for Reconstruction & Development (EBRD) to test the risk appetite of the market in the context of the current situation in Ukraine and to give potential contractors an opportunity to provide feedback on optimal procurement and implementation strategies and any concerns they might have.

In 2012 the national government received €152 million of EBRD loans for the project to extend the 7.1-kilometer metro by four kilometers from Vokzalna into the city center with stations at Teatralna, Tsentralna, and Muzeina.

Vokzalna Station, the current terminal, on May 16, 2018. Michael Moll photo via Wikimedia

In 2016 Turkish company Limak was awarded a €224 million construction contract, but it ceased work when Russia invaded in February 2022 and the contract was terminated. Dnipro Metro is now planning a new tender, and EBRD is considering extending financing.

ILF Consulting Engineers Polska will support the metro during the tendering process.

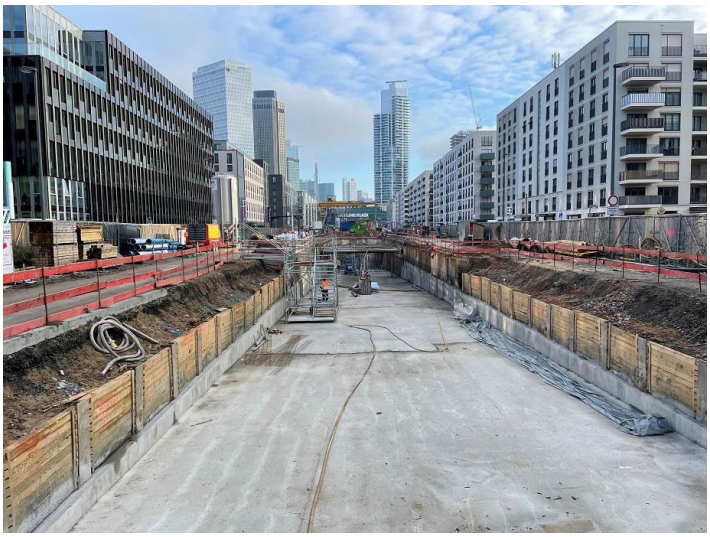
METRO REPORT INTERNATIONAL, June 3

FRANKFURT-AM-MAIN, GERMANY

Tramway Extension Plans

The development of plans for a further extension of Frankfurt Stadtbahn Line U5 beyond Europaviertel to the Römerhof area was approved by the city's transport committee on June 3.

The 1.5-kilometer two-stop extension would use a fully segregated surface alignment with grassed track. The cost is estimated at €84 million.



Frankfurt's U5 extension under construction. SBEV photo

Opening is envisaged for the end of 2027, when a 2.7-kilometer partly underground extension of U5 currently under construction between Frankfurt Hauptbahnhof and Europaviertel is now expected to open.

METRO REPORT INTERNATIONAL, June 13

GENOA, ITALY

Next-Generation Metro Trainset Delivered

Hitachi Rail has delivered the first of 14 of the latest generation of metro trainsets to Genoa.

Hitachi Rail's newest metro cars for Genoa. AMT Genoa Metropolitana photo

The vehicles are to be used to expand the capacity of the city's automated light metro line, which is currently being extended at both ends.

Ordered at a cost of €70 million, the articulated four-car

trains are similar to seven sets ordered from AnsaldoBreda (now Hitachi Rail) in 2012. Each 39-meter-long trainset will be carried on three powered and two unpowered trucks, and provide capacity for up to 290 passengers, including two wheelchair spaces. The air-conditioned units are intended to operate in coupled pairs, and will also be able to run in multiple with the earlier sets.

The trainsets are equipped with onboard ATP and ATO equipment. They also feature audiovisual passenger information systems, and CCTV.

The entry to service of the new vehicles will also allow the withdrawal of the six first-generation trainsets, manufactured by Breda, which entered service in 1990, lowering the average age of the fleet from 18.5 years to 9.8 years.
METRO REPORT INTERNATIONAL, June 6

GOTHENBURG, SWEDEN

Tram Refurbishment

Work is now in progress at Škoda Group's Ostrava production site in the Czech Republic to refurbish 79 type M31 trams for the Swedish city of Gothenburg.

Public transport operator Västtrafik awarded Škoda a €80 million contract to refurbish the M31 fleet in May 2022. The M31 trams were built between 1984 and 1986 and have already undergone several upgrades, including major repairs at Ostrava in 2011-17.

Unrefurbished M31 No. 380 (ASEA/MGB, 1991) has just arrived on the departure side of the turnback loop at Nymånegatan before departing on a Route 6 trip to Länsmansgården. View north on October 4, 2023.
Jeff Erlitz photo

The refurbishment program includes installing new door systems, a modern electro-hydraulic braking system, improved heating for passengers and air-conditioning (for drivers only) , all designed to withstand Gothenburg's harsh winter climate.

Four trams are currently on the production line at Ostrava, with the prototype at the painting stage. The new livery more closely matches more modern designs in the Gothenburg fleet, Škoda says.

The first refurbished trams are due to be delivered to Västtrafik by the end of this year.
INTERNATIONAL RAILWAY JOURNAL, June 18

LONDON, ENGLAND

Additional Trains for Elizabeth Line

Alstom has signed a contract to supply and maintain a further 10 nine-car Class 345 Aventra electric multiple-units for London's Elizabeth Line.

The £220.5 million order is being funded by the Department for Transport, with Transport for London contracting for maintenance until 2046 which takes the total value of the deal announced on June 14 to £370 million.

Aventra 345 003 arrives at Harold Wood on March 28.
Smiley.toerist photo via Wikimedia

Alstom said the Elizabeth Line continues to experience passenger demand ahead of predictions, which meant that the current fleet of 70 EMUs would be insufficient to meet demand later this decade and through the 2030s.

The additional sets are to be assembled at the former Bombardier Transportation plant in Derby where the original fleet was manufactured. Last year, Alstom had warned that the future of the plant was in doubt because of a lack of future work once current projects are completed.
RAIL BUSINESS UK, June 14

MADRID, SPAIN

Metro Orders New Cars

Metro de Madrid has signed a contract for sole bidder CAF to supply 40 six-car trainsets to operate on large-profile Lines 6 and 8. The €400 million deal announced by CAF on June 17 includes a program to optimize the fleet's life cycle, and there is an option to order additional trainsets. The 1,445-mm gauge trainsets will have four motor and two trailer cars, with wide

A Series 8000 (CAF, 2002) trainset at the Pinar del Rey Station of Line 8 on December 22, 2021. SerrgioFdezz photo via Wikimedia

gangways running the full length of the unit.

Metro de Madrid is aiming to improve service quality and increase capacity in line with the city's environmental policies and predicted increases in demand.

CAF said the contract has extremely exacting requirements for energy consumption, life-cycle cost, and technical performance, including the possibility of GoA2 semi-automatic or GoA4 unattended fully automatic operation.

The order is being financed with European Investment Bank loans.

METRO REPORT INTERNATIONAL, June 17

NUREMBERG, GERMANY

Inter-Urban Plan Accepted

The latest plans for the Stadt-Umland-Bahn 26-kilometer inter-urban extension of the Nuremberg tram network from the Am Wegfeld stop to Erlangen and Herzogenaurach have been backed by voters in Erlangen. The project is being developed by a joint venture of Nuremberg, Erlangen and Herzogenaurach councils.

An initial referendum in 2016 gave the go-ahead for the development of detailed proposals. The plans were approved by 52.4 percent of participants in a second vote held alongside the European Parliament elections on June 9.

The cost of construction is estimated at €635 million at 2022 prices, including a 20 percent risk buffer. The promoters envisage that the majority of the cost would be funded by the federal government and the Land of Bayern, with Erlangen contributing €82 million, Nuremberg €27 million and Herzogenaurach €22 million.

Construction could begin in 2028, for opening in stages in 2031-34. Services would operate every 10 minutes, running through to central Nuremberg on existing tracks.

It is not envisaged that people would travel the full length of the line, as using regional trains for longer sections would be faster. Instead, the line with 31 stops would form part of the wider transport network and improve access to destinations including Friedrich-Alexander University and major employers including Siemens, Adidas, Puma, and Schaeffler.

An eastern branch starting in Erlangen and running via Spardorf, Buckenhof, Uttenreuth, Dormitz, Neunkirchen am Brand, and Kleinsendelbach to Eckental is also being planned.

METRO REPORT INTERNATIONAL, June 14

PARIS, FRANCE

Operating Contracts Awarded

Paris transport authority Ile-de-France-Mobilités has awarded Keolis and RATP Cap Ile-de-France contracts to operate the future Grand Paris Express Métro Line 18 and existing tram-train services T12 and T13.

The 35-kilometer fully automated Line 18 is to open in three phases, from Massy to CEA-St.-Aubin in October 2026; from Massy to Orly Airport in October 2027; and from CEA-St.-Aubin to Versailles-Chantiers in 2030. Ridership is predicted at 110,000 passengers per day.

Citadis Dualis TT506 (Alstom, 2021) operating on line T13 at Les Portes de Saint-Cyr Station in Versailles on June 8. Chabe01 photo via Wikimedia

Keolis beat RATP Dev and ATM France-Egis to win the seven-year operating contract, which can be extended in six-month periods to a maximum of 10 years. When Line 18 reaches Orly, Keolis will become the operator of the airport station served by lines 18 and 14.

Tram-train service T12 runs 20 kilometers from Massy-Palaiseau to Evry-Courcouronnes and T13 runs 19 kilometers from St-Cyr-l'Ecole to St-Germain-en-Laye. Both lines are currently operated by the Transkeo T12-T13, a 51:49 joint venture between Keolis and SNCF Voyageurs.

The next contract has been awarded to RATP Cap Ile-de-France, which currently operates T10. It is set to run for eight years, including a 16-month mobilization period, with staff to

transfer from Keolis to RATP Cap IDF. The contract includes traffic and station management delegated by national rail infrastructure manager SNCF Réseau, and operation of an extension of T13 to Achères which is scheduled to open in 2028.
METRO REPORT INTERNATIONAL, June 20

PUNE, INDIA

Metro Line 3 Train Delivered

Alstom has delivered the first of 22 Metropolis trainsets for the Pune Metro Line 3 project. The three-car trains will have a capacity of 1,000 passengers, with a design speed of 95 km/h and an operating speed of 85 km/h.

They are being manufactured at Alstom's Sricity plant in accordance with Made-in-India requirements.

Alstom's Metropolis trainset for Pune's Line 3. Alstom photo

The standard-gauge elevated Line 3 will run for 23.3 kilometers from Hinjewadi Rajiv Gandhi Infotech Park to Balewadi and Shivajinagar, with 23 stations.

It is being built by the Pune IT City Metro Rail Ltd joint venture of Tata's TRIL Urban Transport and Siemens Project Ventures under a design, build, finance, operate, and transfer (DBFOT) Public-Private-Partnership contract awarded by Pune Metropolitan Region Development Authority in September 2019.

In 2021 a joint venture of Alstom India, TRIL Urban Transport and Siemens Project Ventures was awarded a DBFOT contract to provide rolling stock and electrical and mechanical systems.
METRO REPORT INTERNATIONAL, June 5

REGENSBURG, GERMANY

Tramways Rejected

The further development of plans for a 15-kilometer two-line light rail network in Regensburg was rejected by 53.6 percent of voters in a referendum held alongside the European Parliament election on June 9. The city council now plans to wind up the Stadtbahn Regensburg committee.
METRO REPORT INTERNATIONAL, June 14

SALVADOR, BRAZIL

Tram Construction to Start

Construction of a three-line tram network in the coastal city of Salvador, capital of Bahia state, is due to start next month. This follows the state government's approval for the 36.4-kilometer project on June 14 and the opening of contractors' tenders on June 4 after bids had been called in December 2023. Contracts for the three lines were signed on June 5-6.

The first line will run for 16.6 kilometers between Calçada, site of the former main line station, and Ilha de São João to the north. It will follow the alignment of a former suburban railway used for a monorail project that had been in progress since February 2021, but which was later abandoned.

Winning contractor for Line 1 is Consórcio Expresso Mobilidade Salvador, formed of Álya Construtora, Metro Engenharia and MPE Engenharia; the contract value is R$1.42 billion.

The second line, 9.2 kilometers long, will run from the coastal area of Paripe inland to Águas Claras. This will be built by the Cetenco Engenharia Consortium that includes Consbem Construções e Comércio and Agis Construçao at a cost of R$1·08 billion.

The third route will connect Águas Claras to Piatã on the Atlantic coast, a distance of 10.5 kilometers. This will be in the hands of a consortium formed of Mota Engil Engenharia e Construçao, Obrascon Huarte Lain and Meir Serviçios e Construçoes, whose bid was valued at R$791·4 million.

Construction of the first line is expected to be complete by October 2027 with the other two routes due to be finished by August 2028. Also included in the program of works are 7.5 kilometers of additional highways on the BA-528 main road which links Paripe with Águas Claras and a 7.1-kilometer feeder road in the Parque São Bartolomeu area.

It was announced in mid-June that rolling stock for the three routes will consist of 40 seven-section light rail vehicles which the city is to acquire from the city of Cuiabá, capital of Mato Grosso. Cuiabá had ordered the fleet of low-floor Urbos 3 cars from CAF of Spain in 2012, but they were never used in passenger service and the Cuiabá light rail project was abandoned in 2020. Public transport operator Companhia de Transportes do Estado da Bahia has approved acquisition of the mothballed fleet for around R$750 million, a decision that was supported by Brazil's Federal Audit Court.
METRO REPORT INTERNATIONAL, June 24

SINGAPORE

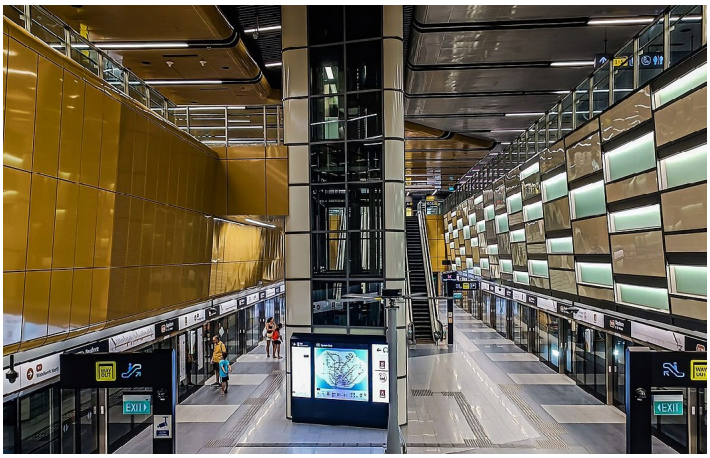
Thomson-East Coast Line Extension Opens

The fourth stage of the Thomson-East Coast Line (TEL) was opened for revenue service on June 23, serving seven new stations in the southeast of the island.

Created by merging two projects, TEL has been opening in stages from west to east. Services began operating along the Thomson Road corridor from Woodlands North towards the

city center, reaching Gardens by the Bay in November 2022.

The 10.8-kilometer fourth phase comprises the bulk of the East Coast segment, adding stations at Tanjong Rhu, Katong Park, Tanjong Katong, Marine Parade, Marine Terrace, Siglap, and Bayshore. It was inaugurated on June 21 with a ceremony at Marine Parade. A free preview service was operated for the rest of the day, giving around 380,000 passengers the opportunity to sample the line.



Bayshore Station, the new eastern terminal, on June 28. Fans018 photo via Wikipedia

According to Land Transport Authority, TEL4 will provide alternative travel options for the East Coast area, relieving the original East-West Line which runs further inland. With the opening of this section, an estimated 235,000 households are within a 10-minute walk of a TEL station.

TEL stations have more entrances than those on earlier lines to improve accessibility, as well as longer pedestrian underpasses to offer sheltered walking routes. Three stations at Marine Parade, Marine Terrace, and Bayshore feature Singapore's first underground bicycle parking facilities, which will also be provided at Sungei Bedok.

The fifth stage of the line will see services extended from Bayshore to Sungei Bedok, where interchange will be provided with an extension of the Downtown Line from Expo via Xilin. Both routes are expected to open in 2026, along with the multi-level East Coast Integrated Depot serving the Downtown and East-West Lines as well as TEL.

An additional station at Founders' Memorial, between Gardens by the Bay and Tanjong Rhu, is expected to open in 2028. Longer-term plans will see TEL continuing to Changi Airport by the mid-2030s, in conjunction with the opening of Terminal 5. It would then absorb the Airport-Expo-Tanah Merah branch on the East-West Line.

METRO REPORT INTERNATIONAL, June 24

STUTTGART, GERMANY

Tramway Extension Gets Underway

The Stuttgart regional council has launched the approval process for a planned light rail extension to an industrial estate and a new depot.

The 4.8-kilometer branch would start at the existing Rastatter Straße stop on U13 and run through Weilimdorf and Hausen to the Ditzingen-Süd industrial estate with six stops.

The project includes the construction of a depot in Weilimdorf to maintain the growing fleet used across the wider Stuttgarter Straßenbahnen network.

METRO REPORT INTERNATIONAL, June 7

SWITZERLAND

Double-deck EMUs To Be Ordered

SwissS Federal Railways (SBB) has issued a public tender for the procurement of 116 new double-deck EMUs for use on the Zürich S-Bahn and in French-speaking Switzerland. The contract is expected to be worth billions of Swiss francs.

SBB says 95 of the new trains will replace the first-generation double-deck fleet on the Zürich S-Bahn, including the 115-strong DPZ fleet and HVZ-D trains, which are used at peak times. The remaining 21 trains will be deployed on the Vaud RER centered on Lausanne and the RE33 Marigny-Annemasse line.

SBB RABe 511 044 operating on the S30 route to Winterthur in Weinfelden on July 23, 2019. Joachim Kohler photo via Wikimedia

The contract will include an option for the supply of 84 additional vehicles. Procurement of these is considered essential to operate the additional services foreseen under the federal government's Expansion Step 2035 for the national network.

The new 160 km/h trains will be 150 meters long, which compares with 100 meters for the DPZ fleet. They will offer 500 seats each, with more than 1,000 seats available on the S-Bahn during peak times when two trains will run in multiple. The trains will be low-floor, feature multi-functional zones for passengers taking short-distance journeys, and will have two toilets, one of which will be wheelchair accessible, as well as dedicated areas for bicycles, luggage and baby carriages.

Potential suppliers have until early 2025 to submit bids for

the contract. The preferred bidder will be announced by the end of next year and the trains are expected to enter service in the 2030s.
INTERNATIONAL RAILWAY JOURNAL, June 12

TORONTO, CANADA

Spadina Streetcars Temporarily Replaced

Beginning Sunday, June 23, until the end of the year, buses will replace streetcars on Spadina Avenue to accommodate track renewal and modernization of the overhead power network.

Work will include upgrading the overhead electrical system along the Spadina streetcar right-of-way between King Street and Queens Quay, and from College Street to Spadina Station. Track renewal work will take place at Spadina Station, along with enabling works for a future platform extension.

The service changes include:

- 510 Spadina streetcar service will be replaced with buses, operating both ways on Spadina Avenue between Spadina Station and Queens Quay West, and serving curbside stops.
- There will be no 510 Spadina streetcar service operating to or from Union Station. Riders traveling to or from Union Station will be able to transfer between the replacement buses and 509 Harbourfront streetcars at Queens Quay West.
- 509 Harbourfront streetcar service will be increased to provide frequent travel to and from Union Station.

TTC PRESS RELEASE, June 12

Eglinton Crosstown West Extension Update

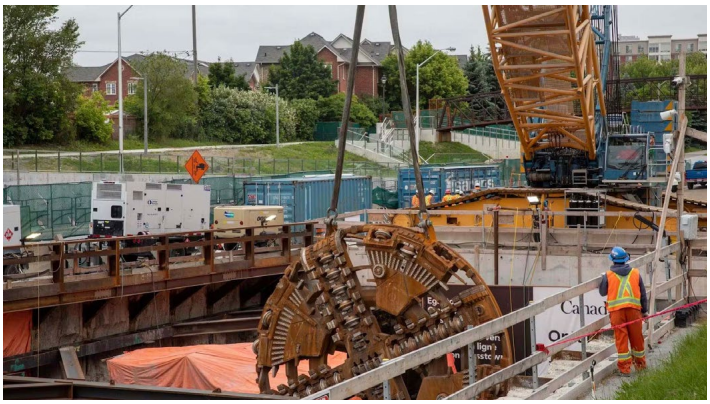
Metrolinx's two tunnel boring machines (TBMs), Rexy and Renny, have finished excavating the tunnels for the western underground segment of the Eglinton Crosstown West Extension after two years of work. The project will bring future Eglinton Crosstown light-rail transit (LRT) service 9.2 kilometers (5.7 miles farther west, with seven new stations along the way.

The 750-metric ton, 131-meter-long (429.8-foot-long) machines excavated to construct two parallel tunnels stretching 6.3 kilometers (3.9 miles) from Renforth Drive in Mississauga, to west of Scarlett Road in Etobicoke, where the future line will come to the surface and transition to a 1.5-kilometer (0.93 miles) elevated section. Renny broke through the final wall and emerged from the tunnel at the extraction shaft in May, approximately three weeks after Rexy reached the finish line.

Along the way, Metrolinx notes Rexy and Renny excavated approximately 1.2 million metric tons of soil and rock and installed a total of more than 52,000 pre-cast concrete segments to build 7,433 rings to support the tunnel walls.

Work will now continue at the extraction shaft to lay the foundations and form the structure of the future tunnel portal. During the months to come, Metrolinx says crews will finish up work on the passageways that connect the tunnels.

Along the route between Scarlett Road and Jane Street, work is ongoing to prepare sites for construction of the elevated segment, which will run along the north side of Eglinton Avenue West. Crews are also preparing work sites from east of Jane Street and Mount Dennis Station to excavate the eastern underground section of the line, which will connect the extension to future Eglinton Crosstown LRT service.
MASS TRANSIT, June 25



After being disassembled, parts of the TBM are carefully lifted out of the extraction shaft with a crane. Metrolinx photo

UZBEKISTAN

High-Speed Trains Ordered

Uzbekistan Railways has awarded Hyundai Rotem a Won 270 billion ($US 187.9 million) contract to supply six trains with a maximum speed of 250 km/h, in what is the first export order for Korean high-speed technology.

The contract also includes maintenance which Hyundai Rotem will undertake in collaboration with the Korean national operator Korail.

Rendering of Uzbekistan Railways' new high-speed train. Hyundai Rotem

The new trains will be similar to the KTX-Eum trains which first began operating at Korail in 2021. Key differences include operation on 1,520mm-gauge track with a platform height of 200mm, as well as taking traction current at 25kV 50Hz AC.

The new trains for Uzbekistan will each have seven cars compared with the six-car KTX-Eum. They will each seat a total of 389 passengers in three classes of accommodation — VIP,

business, and economy — and there will also be a dining car.

Like the KTX-Eum, the trains will be equipped with distributed traction, now in use on over 70 percent of the Korean high-speed fleet, and will be the first trains of this configuration in Uzbekistan.

The new trains will also be designed for local conditions, able to withstand high desert temperatures and equipped with filters to prevent the ingress of dust and sand.

Uzbekistan Railways plans to operate the Hyundai Rotem fleet on 1,216 kilometers of lines, including Tashkent to Bukhara (590 km), and the new lines currently under construction from Miskin to Nukus (196 km) and from Bukhara to Khiva (430 km).

INTERNATIONAL RAILWAY JOURNAL, June 18

WARSAW, POLAND

New EMUs for Regional Service Ordered

Polish regional operator Koleje Mazowieckie has signed a €750 million framework agreement with Stadler for the supply of up to 50 five-car Flirt EMUs, exercising the first two contract options for a total of 25 trains to be delivered within two years.

Including maintenance over 18 years, the framework contains four options for the purchase of 14, 11, 14 and 11 trains, the first two of which have now been exercised.

The new fleet is being co-financed with European Union funding within the framework of the National Recovery and Resilience Plan for Poland.

The five-car Flirt EMUs will each accommodate up 600 passengers, with seats for 279. The maximum speed is 160 km/h and the new trains will be fitted with ETCS Level 2 onboard equipment. A high proportion of the passenger accommodation is low-floor, facilitating access for passengers with reduced mobility or those traveling with bicycles or baby carriages. A wheelchair lift is also provided.

The EMUs will be equipped with air-conditioning, passenger Wi-Fi, and defibrillators.

Koleje Mazowieckie will deploy the new fleet on the following routes serving the Mazowieckie province:

- Warsaw-Dęblin-Skierniewice-Żyrardów-Pilawa
- Warsaw-Radom-Działdowo-Ciechanów
- Warsaw-Mińsk Mazowiecki-Łowicz-Sochaczew, and
- Warsaw-Ostrołęka-Małkinia-Łochów-Tłuszcz.

The new trains will be built at the Stadler Poland plant in Siedlce, which was established to deliver a contract won by Stadler in 2006 to supply 10 Flirts to Koleje Mazowieckie and four for Silesia.

Under a framework agreement signed in 2018, the Siedlce plant delivered 61 Flirt EMUs to Koleje Mazowieckie between 2020 and 2023. The Koleje Mazowieckie Flirt fleet now comprises 10 four-car and 61 five-car trains.

INTERNATIONAL RAILWAY JOURNAL, June 27

(Below) A recent example of one of Koleje Mazowieckie's Stadler Flirt EMUs, ER160-10 at Łowicz Główny on April 30, 2022.
Macpach1234 photo via Wikimedia

Paris Métro Continues to Grow

By Subutay Musluoglu (ERA # 6474)

June was a landmark month in the history of the Paris Métro as two major expansions were opened just 11 days apart.

First up was on June 13 when Line 11 was extended to the east by 6 kilometers with six new stations at Serge Gainsbourg, Romainville-Carnot, Montreuil-Hôpital, La Dhuys, Coteaux-Beauclair and Rosny-Bois Perrier.

Effectively doubling the length of the line, this is a significant extension beyond the Parisian city boundaries, and travel times from the eastern suburbs are projected to drop substantially. For example, journey times by bus from the new terminal at Rosny-Bois Perrier to Line's 11 central Paris terminal at Châtelet are expected to drop from 55 minutes to 25 minutes. Ridership on the extension is anticipated to be over 85,000 passengers a day.

Over half of the extension was excavated with a Tunnel Boring Machine, with additional sections built with deep box excavation and traditional cut and cover methods. Notably, the extension also features a 650-meter-long viaduct, the first such structure built on the Métro since 1980, with Coteaux-Beauclair as the system's first elevated station to open since the first decade of the 20th Century.

The extension project presented an opportunity to transform the original line, as 10 of the 13 legacy stations received capacity increasing improvements, including new street entrances, new internal stairs, elevators, escalators, and passageways for improving circulation within stations. Other systems such as power, lighting, communications, and fire-life safety were also upgraded.

A detailed description of the project to extend Line 11 was featured in the August 2021 *Bulletin*.

With the opening of the Line 11 extension came the retirement of the last of the MP59 class of rolling stock. The MP59 was only the second generation of rubber-tired metro trains, and had been the longest serving class operating on the Métro. Line 11 is now operated exclusively by 32 five-car MP14CC trainsets. The MP14CC is a manually operated variant of the MP14CA fully automated trains operating on Lines 1, 4, and 14.

With a capacity of 562 passengers, and longer than the four-car MP59 sets, the MP14 trains have increased Line 11's capacity by 25 percent. An additional seven trains will arrive in early 2025, enabling a reduction in headways from two minutes, 10 seconds to one minute, 45 seconds.

As the MP59 class is phased out, the MF67 class of steel-wheeled trains are now the oldest trains operating on the Métro, a distinction they will hold until at least the end of this decade when the last of the MF19 cars are delivered. Those cars are now being built by Alstom, and the first of them are scheduled to begin pre-series testing before the end of this year.

Rosny-Bois Perrier is anticipated to eventually evolve into a major hub. Transfer to RER Line E is now possible, and by 2031 it will also include Line 15. In 2027, transfer to Tram Line T1 Romainville-Carnot will be provided.

One of the last trains of MP59 equipment is seen at Rosny — Bois-Perrier, the new eastern terminal of Line 11, on May 23, prior to opening. This was the day they were celebrated for their six decades of service. In the distance, an MP14CC is seen entering the station. Julian Pepinster photo

The Line 11 extension cost €1.08 billion, with an additional €214 million spent on upgrading the legacy Line 11. The 39 MP14 trainsets cost €310 million.

Less than two weeks after the opening of the Line 11 extension, two extensions to Line 14 were inaugurated on June 24. In the north, the line was extended by 1.6 kilometers with one new station at Saint-Denis Pleyel.

An MP14CC train arrives at Coteaux-Beauclair on Line 11 on opening day, June 13. Capitaine AdBlock photo via Wikimedia

In the south, the line was extended by 12.3 kilometers and seven new stations at Maison Blanche, Hôpital Bicêtre, L'Haÿ-les-Roses, Chevilly-Larue, Thiais-Orly, and Aéroport d'Orly (Orly Airport). A seventh station at Villejuif-Gustave Roussy (between Hôpital Bicêtre and L'Haÿ-les-Roses) is scheduled to open by December. The extensions were built at

Line 11 at Romainville-Carnot.
Jérémie Anne photo via Metro Report International

a cost of €3 billion.

Orly is the second busiest airport in France after Charles de Gaulle, and the new Line 14 terminal at Orly is anticipated to serve 95,000 passengers a day. It offers the first direct rail access between the airport and central Paris, a significant improvement over the current two-mode method of using the Orlyval people mover together with RER Line B to gain access to central Paris.

Line 14 is a fully automated, driverless line, one of three in Paris (Lines 1 and 4 being the others) and is operated by 50 eight-car rubber-tired MP14CA trainsets from Alstom. The 120-meter-long trains, the longest operating on the Paris Métro, have a maximum capacity of 932 passengers. The Line 14 fleet will eventually grow to 72 trainsets, costed at €1.13 billion. The new Morangis maintenance shop and depot south of Orly Airport will now become the primary maintenance facility for the line's rolling stock, supplemented by the smaller facility at Saint Ouen which opened in December 2020 when the line was last extended to the north.

Concurrent with the extensions, Paris transport authority Ile-de-France-Mobilités and metro operator RATP took the opportunity to upgrade the line's Communications Based Train Control (CBTC) signaling system. Considered to be a pioneering technology when it debuted in 1998, after 26 years of service it was not seen to be up the task of supporting the extensions and planned headways of 85 seconds. To meet this requirement Siemens Mobility was awarded a contract to supply its Trainguard MT CBTC system.

At 28 kilometers with 21 stations, Line 14 is now the Paris Métro's longest line, and is anticipated to become its busiest, projected to carry one milion passengers a day by the end of this decade.

As such, the north-south line is considered to be the backbone of the entire Métro network, and its importance will only increase over time. The line now offers transfer to 10 of the other 13 metro lines, and to each of the five RER lines. In the future, the terminal at Saint Denis Pleyel will eventually be the northern hub of the Grand Paris Express, offering transfers between Lines 14, 15, 16, and 17. In the future, Villejuif-Gustave Roussy will feature a transfer to Line 15, while at Aéroport d'Orly, transfer to Line 18 will be provided.

This next phase of Paris Métro expansion should begin sometime before the end of 2025, when the initial segment of Line 15 is inaugurated, the first of several openings over the rest of this decade as the Grand Paris Express network of orbital lines are brought into service.

Saint-Denis Pleyel on Line 14, the one-stop extension on the north end of the line on June 26, two days after opening.
Chabe01 photo via Wikimedia

With these latest openings, the Paris Métro now has 245.5 route-kilometers (which is slightly over two-thirds the size of the New York City Subway) with 405 stations.

The station building at Thiais-Orly of Line 14 on opening day, June 24.
Julian Pepinster photo

INTERNATIONAL RAILWAY JOURNAL, June 14
URBAN TRANSPORT MAGAZINE, June 14
METRO REPORT INTERNATIONAL, June 17
METRO REPORT INTERNATIONAL, June 25

Los Angeles Foothill Gold Line Update

Photographs by Alan Weeks on June 15, 2024, except as noted

The 9.1-mile, four-station Glendora to Pomona project segment is now 88 percent complete. The project continues to be on schedule to reach substantial completion and turn-over to LA Metro in just six months. This past month, the project reached a major milestone when crews completed installation of the light rail power system — the final element to be completed of the new light rail system that includes the tracks, train control system and power system. Crews are now busy readying the project for train testing that's set to commence later this month.

View southeast of Glendora Station from S. Vermont Avenue.

San Dimas Station from San Dimas Avenue on June 14.

Additionally, earlier this month the procurement process to hire the design-build team for the 3.2-mile, two-station Pomona to Montclair project reached its next step when responses were received to the Request for Qualifications.

The four new light rail stations are now 77 percent complete overall. All station canopies have now been installed, and work continues on the station platforms and associated parking facilities. Working out of their studios and fabrication facilities, each station's artist/artist team continues to bring their art pieces to reality, as they prepare them for installation.

La Vern Station looking east from E Street.

All four stations will be center platform stations, with a track on each side and each station's parking facility will feature amenities for riders arriving by bike, walking, bus and drop-off.

Looking west at the Pomona Station, currently the end of the line.

With the light rail tracks, train control system and power system fully installed, the new light rail system is now nearly ready for the train testing that's set to commence later this month. Throughout the corridor, crews are currently making final adjustments and testing all elements of the new light rail system, and completing grinding the rails of the tracks to their final shape.

FOOTHILL GOLD LINE CONSTRUCTION AUTHORITY

Book Review

By Paul Grether (ERA #6933)

Operation CUT — the First 30 Years: The Story of the Rail Operations out of Cleveland Union Terminal in "Railroading's Golden Age"
by Jack Grasso, published by RAE Publishing (Railroad Avenue Enterprises), Flanders, New Jersey in 2003, softcover, 72 pages, illustrated with black & white photos. No ISBN. LCCN 2004298208.

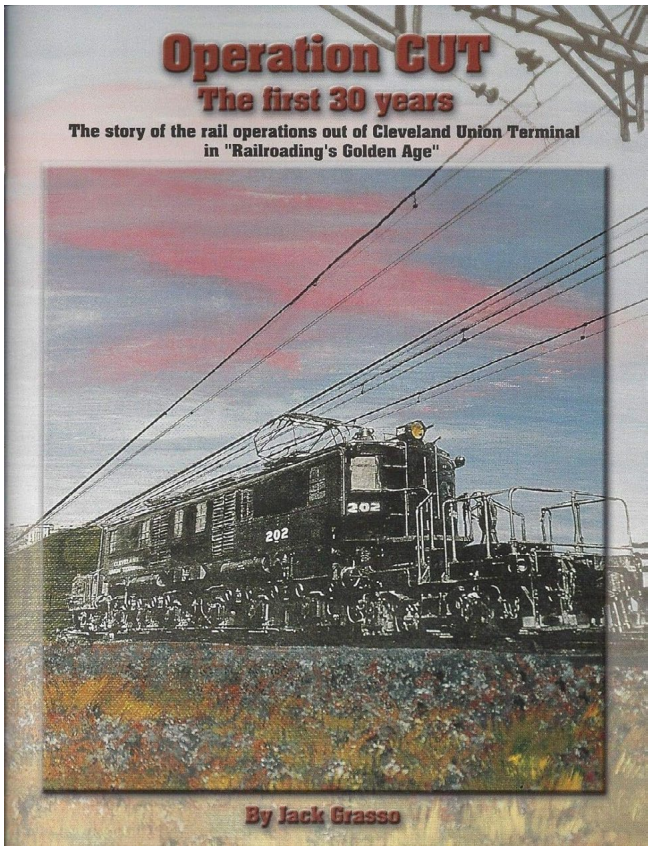
The 2024 American Public Transportation Association (APTA) Rail Conference was held in Cleveland, Ohio during the first week of June. Significant changes are on the horizon for the Cleveland RTA rail system. The Waterfront Line will soon re-open following structural repairs and an order has been placed with Siemens Mobility to replace all of the RTA rolling stock. The new S200 model cars will "unify" the fleet, replacing the legacy Breda light rail fleet on the Green and Yellow "Shaker Heights" lines and the Tokyu cars on the Red "Rapid" line. Since the conference spotlights Cleveland passenger rail it is a good time to reflect on a part of its interesting electric railroading history.

Any story about the railroad history of Cleveland tells the major impact of the Van Sweringen brothers. The Van Sweringens ended up controlling the Nickel Plate Railroad with the backing of the New York Central. Their primary purpose for obtaining control was to further their Cleveland real estate and traction business interests culminating in the 1930 opening of Cleveland Union Terminal.

This booklet provides a summary level history of the railroad operations of Cleveland Union Terminal (CUT) and Terminal Tower. Included are technical descriptions of the operations, the background to the development of the complex and the Van Sweringen involvement, the electrification effort with the New York Central, and the parallel development of the Shaker Heights (and later Cleveland Rapid) electric transit lines. The transfer of the big P-motor electrics to New York City/Grand Central service after diesel takeover and the eventual end of passenger service are also covered.

Illustrations are nicely curated and provide sharp pictures of the infrastructure of the CUT complex and along the 17-miles of electric territory, the variation of equipment and railroads and related rapid transit operations. Rosters of the CUT equipment (electric and diesel) including renumbering following transfer to New York City and rosters of the various Shaker Heights and early Cleveland Rapid equipment are included. A detailed bibliography along with some transcripts of former employees describing their experiences working in CUT are included.

From this booklet the reader gets a quick but thorough impression of the history, scale and complexity of the CUT system and parallel rapid transit lines. While the electrified territory was smaller than many other electric railroads, it operated in a complex urban railroad environment and the reader can draw interesting parallels with the primary New York Central electric operations centered on Grand Central.



Link to book information: www.libib.com/u/grether?solo=62155514

The view from the back of a Cleveland RTA Breda car operating parallel to the former shared right-of-way of the Cleveland Union Terminal railroad territory on June 3, 2024. A CUT catenary tower, unused for over 70 years, remains near the former interchange between CUT and the Nickel Plate Railroad at 9th Street, which can be seen in the background (now owned by Norfolk Southern). Paul Grether photo

Travels with Jack May

Britain and the Baltics — Part XXIX

By Jack May (ERA #2275, photographs by the author)

Tuesday, August 29, continued

(Author's note: The late Martin Heyneck had corrected my comment about the Variotram being specifically built for the meter gauge market, stating that the prototype delivered in 1993 for Chemnitz was standard gauge. He further indicated that the prototype was a 100-percent low-floor car, but the meter gauge version, which came out three years later, was only 75-percent low floor. The ill-fated Helsinki cars were the first 100-percent low-floor version of the meter-gauge design.)

After splitting away from the group's activities, we noticed that clouds were rolling in (as predicted), so we decided we would have to move quickly to outrace the weather if we wanted well-lit photos of the metro.

The first section of Helsinki's five-foot gauge Metro was opened in 1982, and it has grown steadily since, segment by segment. At the time of our visit it had attained a length of about 13 miles, but just 2½ months later, on November 18, 2017 to be exact, it was extended a further nine miles (on its western end), and now totals 26 miles of route with a further extension. The system splits into two branches on its eastern end, with alternate trains operating to each terminal (see http://www.urbanrail.net/eu/fi/helsinki/helsinki.htm for a map). The rapid transit line links Helsinki's eastern and western suburbs via a trunk line through the city center, with a number of well-placed stations (this is in contrast with the suburban railway system, which has just a single downtown terminal).*

Three different types of rolling stock provide the service: the original 84 100-series cars built for the system by Valmet/Stromberg, the 200s (24 cars) built by Bombardier in 2000, and the 300-series (20 trains: 80 cars) constructed by CAF starting in 2015.

**I can't help thinking that the geography of the rail system in Helsinki has much in common with that of Manhattan, as both cities are bounded by bodies of water on their east and west sides, and have virtually unimpeded northward access. And land's end is on the south side of both cities. Helsinki's east-west Metro navigates the waterways via bridge and tunnel, while suburban trains, which are operated by Finnish Railways, run northward and have no such constraints. Thus I think of Helsinki Central Station as the equivalent of New York's Grand Central Terminal, and its Metro alignment as being like the ex-PRR/LIRR route across Manhattan through Penn Station (but with better distribution).*

The eastern part of the system with 11 stops operates mostly on the surface, while the 14 remaining stations are underground. Thus we headed east for six stops to Itakeskus, looking out for the best location for our pictures. The stations are covered except for Siilitie, where the western end of the platform is unsheltered, so we rode one station back to take photos at that point. Our survey took us only as far as Itakeskus, as that is where the Metro splits into two branches, and thus each station beyond would see only half the service — in other words there would be a train every 7½ minutes, only 50 percent of the number on the joint section.

We stayed for only about 20 minutes, until the clouds finally caught up to us. During that period we saw about five eastbound trains, but none were made up of 200-series cars. Herewith photos at Siilitie.

The 300s (right) are four-car sets, but the platforms can fit six-car trains. Since I didn't ride in the rush hour I don't know whether six-car trains were being operated with other equipment later in the day.

(Above and top-left on facing page) Contrasting views of inbound trains of Valmet cars (upper) and CAF units (facing page) at the Siilitie stop, which is in a rock cut.

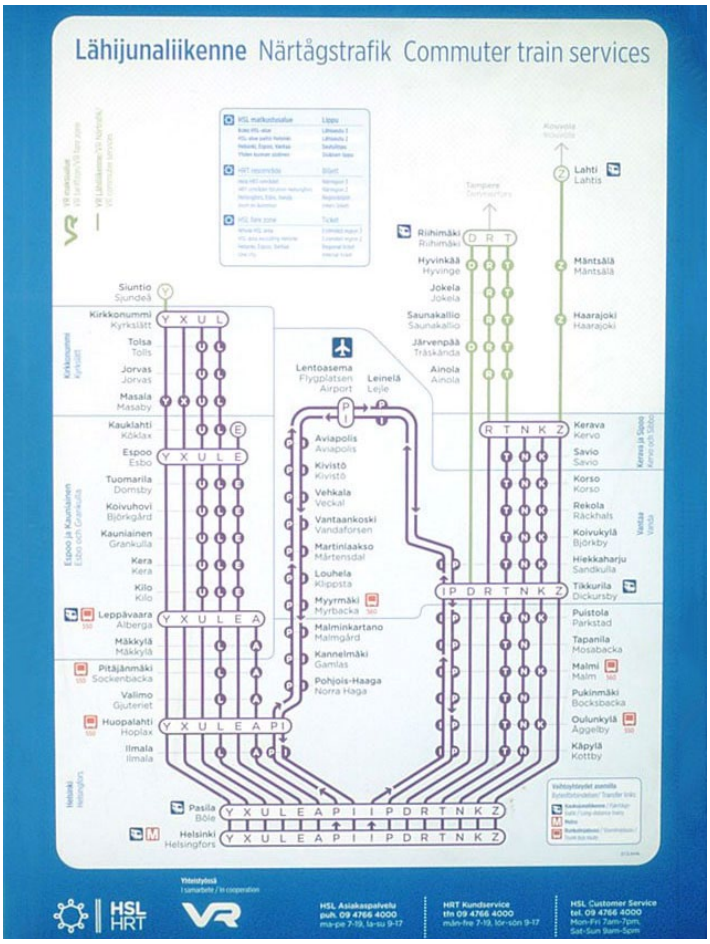
In order to complete the coverage of the different types of Metro cars, here is a photo I took in the rain a year earlier.

A train of Bombardier 200-series units is heading eastward into the Kalasatama station.

We then rode back to Central Station in order to take a look at the suburban rail system. In addition to a network of 15 electrified (25,000 V AC) commuter lines, the Saarinen 1919-built station serves Finnish Railways (VR) intercity and long-distance trains, so there is plenty of activity. Since the railway system is built to Russian gauge, through trains are operated to that country, with four high-speed Pendolino tiliting trains making round-trips to St. Petersburg each day (3½ hours for 250 miles), supplemented by locomotive-hauled overnight trains to and from Moscow (roughly on a 16-hour schedule like the old New York-Chicago Broadway and Twentieth Century Limiteds for the 650 miles).

Suburban eMU service is intense, with 15 services (identified by letters) running over four lines. Some 195,000 passengers ride the trains each weekday, compared with 350,000 on the Long Island Rail Road. But then Helsinki's metropolitan area is one-tenth the size of New York City's.

We took photos at the terminal and then rode route K as far as to Olounkyia, where we then backtracked to Pasila,



Diagrammatic map of Helsinki's suburban rail services, operated by Finnish Railways (VR) and underwritten by Helsinki City Transport (HSL/HKT). HSL and the bold lettering are names in the Finnish language, while HKT and lighter type are Swedish. According to Wikipedia, Swedish is an official language and is spoken by about nine percent of Finland's population. Note that the airport is served by lines I and P. Both run on a 10-minute headway, resulting in an airport bound train from Central Station every five minutes.

Helsinki's version of New York City's 125th Street station. We did not leave the inner fare zone so our day tickets were acceptable (although we were not checked).

Since this 125th Street also has tram service, we rode back to the hotel via routes 7, 2, 10, and 9, taking some photos along the way (see http://www.urbanrail.net/eu/fi/helsinki/hel-tram/helsinki-tram.htm for a map). After claiming our luggage we rode to our overnight ferry via routes 6 and 5, arriving at the Katajanokan terminal at 4:40 PM, almost an hour before our 5:30 departure to Stockholm aboard Viking Line's Mariella.

There is little I want to report about the ferry; we had a comfortable twin stateroom and consumed decent dinners and breakfasts. This was the third time I sailed between Helsinki and Stockholm, once on Silja Line and now twice on Viking. I found the more-expensive Silja product to be a bit more opulent than the other, but not to the extent that I wanted to pay the higher fare.

Part XXX starts our adventures in Stockholm.

Three trains are shown under the shed of Helsinki's busy Central Station. At left is an intercity consist that has just arrived. In the center a train of CAF-built eMUs is receiving passengers for a longer distance suburban run, and the right-most train is made up of Stadler-built Flirt units, the newest equipment on VR's roster. The shed encompasses eight of the station's 19 tracks, with three more on the east side and eight to the west.

A longer-distance MU train approaches Pasila station. Some 30 air-conditioned 70-percent low-floor Sm4 units were built by CAF from 1998 to 2005. For reasons probably known only to the local railfans, these cars, which also have 3-and-2 seating, are called Pupus (bunnies). I exposed this view in 2016 from the Asemapaallikonkadun silta/ Pasilan silta bridge, which is traversed by route 7 trams.

Helsinki's Flirt eMU cars are the subject of these photos. Three Stadler air-conditioned 100-percent low-floor trains are shown on Tracks 1, 2, and 3 of Central Station in the left view. Some 75 such cars of this internationally successful product were ordered from Stadler in 2006 and began operating here in 2009. The right photo is a close up. Apparently those trains that run only short distances are being painted purple, leaving the longer-distance MUs in green. These cars are officially classed Sm5 and have 3-and-2 seating.