BULLETIN

Volume 66, Number 11 | November 2023

MTA 20-Year Needs Assessment Released

The Metropolitan Transportation Authority (MTA) outlined the Authority's long-term vision to rebuild, improve and expand the region's transit system over the next 20 years. "The Future Rides With Us," the MTA's 20-Year Needs Assessment, takes an exhaustive look into the system's infrastructure needs. It reveals both challenges and opportunities for the future of the transportation in the region and lays out an approach to rebuilding the MTA system for another century of service.

The document differs from previous assessments by providing a comprehensive, unconstrained view of the system's needs, rather than constraining it to meet an arbitrary budget target. As a result, it serves as a strong foundation in determining how to prioritize capital spending in developing the 2025-2029 Capital Plan. The assessment also debuts a comparative evaluation of potential expansion projects that could be pursued if the system's rebuilding and improvement needs are met, for the first time analyzing potential projects objectively along a host of criteria to compare their respective benefits and costs.

The level of detail, put together over the course of two years, is unprecedented at this scale, resulting in the most rigorous and transparent 20-Year Needs Assessment in MTA history. The Agency has looked at every one of the nearly six million component assets that comprise it including:

- 8,747 railcars
- 5,840 buses
- 1,907 miles of track
- 1,092 rail bridges
- 704 passenger stations
- 429 power substations
- 101 maintenance shops
- 68 rail yards
- 7 vehicular bridges
- 2 vehicular tunnels

The future of the system is contingent on three main factors that drive the need for investment: aging infrastructure, climate change and evolving rider needs. Prolonging the life of existing assets will not only improve reliability and allow for increased service systemwide but enable the opportunity to expand and modernize the transit network.

Some of the highlights of the assessment include:

New York City Transit

- Replacement of aging substations and installing Communications Based Train Control (CBTC) for 90 percent of trips by 2045 will greatly enhance reliability, shorten

Continued on page 4

Electric Railroaders Association

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In This Issue

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The ERA Board of Directors express their deepest appreciation for these member donations in September 2023.

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Monthly Meeting

November's meeting will be held in person and is combined with our Annual Meeting. See the following page for details. Correcting last month's *Bulletin*, guests **are** welcome!

Cover Photo

The M29 class of trams are now the oldest operating ones in the Swedish city of Gothenburg. Built by Hägglund & Söner AB of Örnsköldsvik, Sweden, between 1969 and 1972, these 51- to 54-year-old PCC look-alikes operate on at least five of this city's 12 tram routes. In this view west on October 5, 2023, cars 849+820 have just come off the reversing loop west of the Eketrägatan stop (route 10's northern terminal) and will shortly enter service for the return trip to downtown and beyond to Guldheden. All of the local and express bus routes in Gothenburg are contracted out to various operators (Transdev and Keolis, for example) but the tramways are still operated by Göteborgs Spårvägar (Gothenburg Tramways). Jeff Erlitz photo

Notice of Annual Membership Meeting

Friday, November 17, 2023

This combined Annual Membership/monthly Meeting of the Electric Railroaders Association, Inc. will be held Friday, November 17, 2023, at Manducatis Restaurant, 13-27 Jackson Avenue in Long Island City, Queens. There will be a cash bar starting at 6:00 PM. The meeting will start promptly at 6:30 PM and a complimentary dinner will be served following the meeting at approximately 7:00 PM. We have room for a maximum of 50 people, paid-up ERA members **and their guests**.

Please reserve your space at this dinner meeting by one of the following two methods:
1. Email your name to Michael Glikin, Treasurer at: trnsper@aol.com (preferred method)
2. Write to Michael Glikin by regular mail at: 8440 South Dixie Highway, Apt. 1402 Miami Fla. 33143

Longtime member and NYC Transit Department of Subways Supervisor Nick DiBari will be our guest speaker. Nick has been with NYC Transit for 27 years, with 22 as an Assistant Train Dispatcher. Nick will show photos and videos from a recent trip to London and Southeast England, as well as a day trip to Brussels, Belgium. He will also share a few photos of the 2022 and 2023 Subways Parades of Trains. This meeting will be recorded and posted on erausa.org. There will be no live Zoom meeting.

The following slate of candidates for the 2024 ERA Board of Directors was submitted by the Nominating Committee:

For President: **Robert J. Newhouser**
For First Vice President: **Sandy Campbell**
For Second Vice President and Corresponding Secretary: **Jeffrey Erlitz**
For Third Vice President and Recording Secretary: **Robert Colorafi**
For Membership Secretary: **Alexander "Sasha" Ivanoff**
For Treasurer: **Michael Glikin**
For Director: **Paul Grether**
For Director: **Subutay Musluoglu**

The by-laws allow any active member not included in the nominating committee's slate to be nominated by written petition of at least 25 other active members of the ERA. The petition must be submitted to the membership secretary no later than the close of the first session of the Annual Membership Meeting. If the petition is mailed to the ERA, it should be sent by certified mail and must be received by the corresponding secretary no later than November 16, 2023. The petition should be accompanied by a biographical sketch not exceeding 250 words including the name, ERA membership number and qualifications of the nominee and a statement of what the nominee proposes to do for the membership if elected to the board.

Respectfully Submitted,
Robert Colorafi
Third Vice-President & Recording Secretary
September 30, 2023, New York, N.Y.
For the board of directors of the Electric Railroaders Association, Inc.

Meeting Agenda

1. Call to order & Welcome by ERA President
2. Proof of notice of meeting
3. Recording of attendance
4. Moment of silence/recognition of passing of ERA officers and members
5. Appointment of Parliamentarian
6. Reading of minutes of last previous annual meeting (can be waived by attending members)
7. Reports of Officers
   - Treasurer: 2022 Financial Results, 2024 Outlook, 2024 International Trip
   - Eric Oszustowicz: Forthcoming Brooklyn Book II, serves as next Headlights volumes
   - Second Vice President: *Bulletin* (Editor-in-Chief)
   - President: Zoom and in-person meetings, 2024 North American convention
8. Reports of Committees
9. Election by plurality vote of the membership present and voting, of an Inspector of Elections for the 12 months commencing November 17, 2023
10. Election, by plurality vote of the membership present and voting, of the Membership Committee for the following year (2024)
11. Election by plurality vote of the membership present and voting, of the Nominating Committee for the following year (2024)
12. Unfinished business (if any)
13. New business (if any)
14. Adjournment

Worldwide Suburban Electric Railway, Metro and Tramway Openings in October 2023

Date	Country	City	Segment	Distance (miles)	Rail/ Metro/ Tram
10/5	England	Liverpool	Kirkby to Headbolt Lane	0.8	R
10/9	India	Bengaluru	Purple Line: Baiyappanahalli to Krishnarajapura and Kengeri to Challaghatta	1.7 1.2	M
10/10	Iran	Tehran	Line 6: Shahid Sattari to Shahid Arman Aliverdi (Kouhsar) Line 7: Shahid Dadman to Meydan-e Ketab	?	M
10/13	Czech Republic	Prague	Lines 4/5: Holyně to Slivenec	0.3	T
10/20	India	Delhi	RapidX: Sahibabad to Duhai	10.6	R
"	France	Lyon	Ligne B: Gare d'Oullins to Saint Genis-Laval Hôpital Lyon Sud	1.5	M
10/21	Finland	Helsinki	Line 15: "Jokeri" Itäkeskus to Keilaniemi	15.5	T
10/23	Czech Republic	Prague	Lines 20/26: Divoká Šárka to Dědina	1.2	T
10/26	China	Qingdao	Line 13: Jinggangshan Road to Jialingjiang West Road	1.7	R
10/28	Turkey	Kayseri	T4: Sehit Mustafa Simsek to Izzet Bayraktar Camii	3.1	T
10/29	U.S.A.	Milwaukee	L: Wisconsin Ave to Lakefront	0.4	T

URBAN RAIL NEWS, OCTOBER 31

waiting times and reduce delays;
- Functionally obsolete shops and yards, like the Livonia Yard, need to be reconstructed. The Livonia Maintenance Facility was built 101 years ago and is not capable of servicing new rail cars because they do not fit. This structural limitation prevents running new cars on the 3 line;
- Continued investments in ADA accessibility projects ensures that by 2045, 90 percent of all subway rides take place at fully ADA accessible stations;
- Increase sustainability by converting the largest bus fleet in the country to a zero-emissions fleet by 2040, along with updating the necessary facilities and depots to support the transition. The MTA has also committed to reducing 85 percent of greenhouse gas emissions from its day-to-day operations.

Metro-North Railroad

- Major capital investments are required to reconstruct the Grand Central Train Shed, Park Avenue Tunnel and Park Avenue Viaduct, vital to 98 percent of Metro-North service;
- To protect the Hudson Line from growing climate threats, additional resiliency measures are needed to mitigate and prevent flooding from sea-level rise and heavy rain;
- Platforms at 19 stations on the Harlem Line currently require additional structural support and maintenance due to deteriorating conditions and must be replaced.

Long Island Rail Road

- Due to its aging condition, the Atlantic Avenue Tunnel must be structurally rehabilitated and improved with waterproofing, enhanced lighting, upgraded fire safety and security systems;
- To minimize disruptions to service, 60-100 bridges and 11-23 viaducts must be replaced or rehabilitated. Taking the opportunity to apply state-of-the-art protective surface coating and deck waterproofing will decrease future maintenance needs;
- Approximately 50 miles of signal systems need to be upgraded, particularly segments across five LIRR branches where 50-75 percent of the signal components are rated poor/marginal;
- Completion of the Centralized Train Control location will improve operations and communication. The centralized system also replaces train tower control systems located at different points across the LIRR's service area, reducing operating costs and future capital costs by eliminating the need to maintain towers and their related communication systems.

System Expansion

- For the first time, the document includes an evaluation of potential future projects to expand the system comparatively against one another on a level playing field. The analysis comprehensively considers all projects through a systematic analysis using conservative industry-leading cost estimation and modeling techniques that take into account current and projected changes to costs, ridership and local population shifts. Projects are compared to one another to evaluate potential ridership, cost, travel time, capacity, geographic distribution, equity, resiliency and network leverage.

Further details on the process and outcomes of each potential project are found in the Appendix, https://future.mta.info/documents/20-YearNeedsAssessment_FullAppendix.pdf.
MTA PRESS RELEASE, October 4

Rail News in Review

New York Metropolitan Area

METROPOLITAN TRANSPORTATION AUTHORITY (MTA)

Interborough Express Public Meetings To Be Held

The MTA will hold its first in-person public engagement town hall meetings on the Interborough Express. Members of the public are encouraged to attend the meetings to hear an overview of current progress on the Interborough Express, including the Planning and Environmental Linkages study. The light rail transit project will connect communities in Brooklyn and Queens to 17 subway lines and the Long Island Rail Road and significantly reduce travel times within and between the two boroughs.

The first town hall will be held on Wednesday, November 8 from 6:30 to 8:30 PM at Brooklyn College in Flatbush, Brooklyn. This meeting will be followed by two more public events held on Wednesday, November 15 from 6:30 to 8:30 PM at P.S. 7 Louis F. Simeone School in Elmhurst, Queens and Thursday, November 30 from 6:30 to 8:30 PM at Widdi Catering Hall in Sunset Park, Brooklyn. The town hall events will provide an opportunity for members of the public to learn more about the proposed project and to provide feedback on its potential benefits as the MTA prepares to formally enter the environmental review process.
MTA Press Release, October 30

First OMNY Card Vending Machines In Service

The first OMNY card vending machines have been activated. Riders can use cash at the vending machines and credit and debit cards and digital wallets are also accepted for purchases. Tappable OMNY cards provide cash riders a way to take advantage of OMNY's financial flexibility to pay-as-you-go and never spend more than $34 in seven days.

Installation of OMNY vending machines in all 472 subway stations will continue through 2024. The first vending machines are available at the following stations:

- 86 St and Lexington Ave 4 5 6;
- Atlantic Ave-Barclays Ctr 2 3 4 5 B D N Q R;
- Bowling Green 4 5;
- Fordham Rd 4;
- Fordham Rd B D;
- Junction Blvd 7.

As a temporary introductory offer, new OMNY cards are $1.00, the same price as a new MetroCard. OMNY cards last up to five years, more than three years longer than newly issued MetroCards.

Riders have tapped into the transit system more than a billion times, with the billionth tap occurring on July 26. In the latest Spring 2023 Riders Count Survey, OMNY posted a 79 percent fare payment satisfaction rate. Riders have tapped into all 472 subway stations and boarded 204 local bus routes and 31 express bus routes. Of the 195 countries that issue bank cards, OMNY has processed a card from every single one of them.

One of the new OMNY vending machines, this one at Atlantic Avenue-Barclays Center Station. Marc A. Hermann/MTA photo

OMNY market share of full fare subway rides continues to be at 70 percent since the MTA updated its fare-capping schedule on August 20.

OMNY also supports Reduced-Fare riders who are ready to use their smart device or contactless bank card to tap and go. Reduced-Fare riders are encouraged to seamlessly make the switch from MetroCards online with the OMNY digital assistant, which is available 24/7 at https://omny.info/.
MTA Press Release, October 30

NEW YORK CITY TRANSIT (NYCT)

Long-Term Track and Platform Outages

Last month we mentioned that the southbound platform at Westchester Sq-East Tremont Av 6 Station was out of service to permit MLJ Contracting, under contract A-37146, to demolish and rebuild platform stairs and install a new canopy roof and that the work was extended two weeks and was scheduled to conclude on Monday, October 2. That work finally did wrap up, two weeks later still, on October 16.

Back on May 15 the southbound platforms at 82 St-Jackson Hts and 111 St on the IRT Flushing 7 Line were taken out of service to allow Judlau Contracting, Inc., under contract A-46026, to perform station reconstruction work. This work was supposed to conclude on October 27 but has now been extended to December 31.

Track Y3 on the IRT Dyre Avenue Line, which was out of service from July 8, was returned to service on October 6 after a four-day extension of work.

Station Re-NEW-Vation Progress

During October, the following stations have been completed in this station renovation program:

Station	Weekend
Junction Blvd 7	October 7-8
Morris Park 5	October 14-15
Hunters Point Av 7	October 28-29
Avenue J B Q	"

MTA PRESS RELEASES, October 12, October 19, November 2

STATEN ISLAND RAILWAY (SIR)

First R-211S Cars Delivered

On the night of October 10, the first five-car set of R-211S cars was transferred from the subway to the SIR's Clifton Shop.

(Above and below) The overnight transfer of the R-211S cars, which took place on the night of October 10. Above, car 100 is loaded onto a flatbed trailer at the South Brooklyn Marine Terminal, 39th Street and Second Avenue. Below, heading across the Verrazzano-Narrows Bridge. Marc A. Hermann/MTA photo

There is no track connection any more between the two properties (it's been many years since the connection along Staten Island's north shore was broken) so they were trucked over the Verrazzano-Narrows Bridge.

The five-car set, 100-104, ran from Coney Island Yard to 38th Street Yard under its own power. There, a pair of NYCT diesels (with a rider car in between them) brought them over to the South Brooklyn Marine Terminal at 39th Street and Second Avenue. Each car was loaded onto a flatbed trailer and then drove off to Clifton.

They will undergo further testing on Staten Island, after which they will go into revenue service.

MTA PRESS RELEASE, October 17

LONG ISLAND RAIL ROAD (LIRR)

New Schedules

The LIRR altered their timetables starting on November 13 and these included small adjustments necessary to support upcoming maintenance and trackwork.

Port Washington Branch

The new schedules create more morning express service on the branch.

- The 6:47 AM train from Port Washington will depart five minutes earlier at 6:42 and operate express from Great Neck arriving at Penn Station at 7:22. To accommodate riders, the 6:28 AM train from Great Neck will make added stops at Little Neck (6:31) and Douglaston (6:33) arriving at Grand Central at 7:05;
- The 7:19 AM train from Port Washington will operate express from Great Neck and arrive at Penn Station at 7:54 (this train formerly operated to Grand Central Madison). To accommodate riders, the 7:02 AM train from Great Neck will make added stops at Little Neck (7:05) and Douglaston (7:07) and arrive at Penn Station at 7:40 (this train formerly departed Great Neck at 7:03);
- The 7:38 AM train from Little Neck will now originate from Great Neck at 7:35. This train will now operate to Grand Central Madison instead of Penn Station;
- The 7:54 AM train from Port Washington will depart one minute earlier and make an added stop at Bayside at 8:08;
- The 7:11 PM train from Port Washington will run to Penn Station instead of Grand Central;
- On weeknights, the train that had departed Grand Central Madison at 8:44 PM will instead originate at Penn Station.

Ronkonkoma Branch (Main Line)

- The 7:01 PM train from Grand Central Madison to Ronkonkoma and the 7:49 PM train from Grand Central Madison to Ronkonkoma will no longer operate.

Babylon Branch

- The 5:24 AM train from Wantagh will originate in Babylon at 5:04, make local stops along the branch and operate to Atlantic Terminal instead of Grand Central;
- A 2:38 PM train from Penn Station stopping at Jamaica and

making all local stops between Rockville Centre and Babylon will start operating every weekday;
- The 7:24 PM train from Atlantic Terminal to Freeport will be cut back to Jamaica where riders will transfer for a Babylon train for service further east;
- The 7:40 PM train from Grand Central Madison will no longer operate.

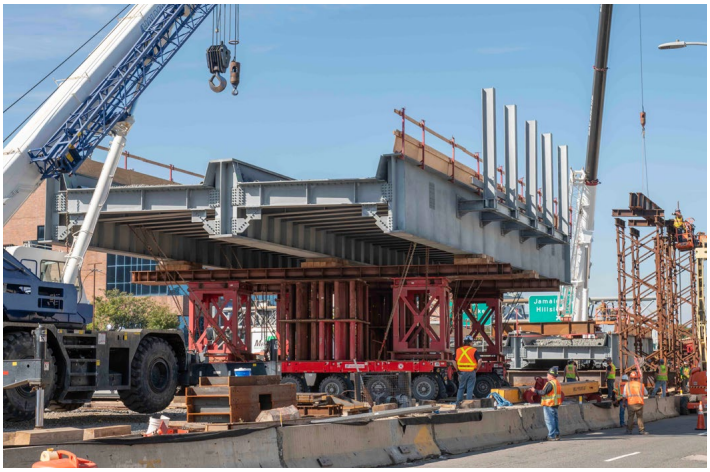
Brooklyn Service

Two additional through trains will operate to Atlantic Terminal in the AM peak hours:
- The 5:30 AM train from Ronkonkoma will operate to Atlantic Terminal instead of Grand Central Madison;
- The 5:24 AM train from Wantagh will operate to Atlantic Terminal instead of Grand Central Madison.

MTA Press Release, October 22

Another Bridge Roll-In

Over the weekend of October 28 and 29, the railroad replaced the bridge carrying Main Line Tracks 1 and 3 over the northbound lanes of the Van Wyck Expressway. This was very much like the work performed on the west half of the bridge back on April 15-16 (see the May 2023 *Bulletin*, pages 5 and 6).



As was done last spring, the new bridge was assembled in the median between the expressway's northbound main and service roads. Jeff Erlitz photo

There was "piggybacking" track maintenance work also being performed on Track 3 between Jamaica and Woodside so all westbound trains operated on Track 2, normally the eastbound express track. Because of this, all westbound trains skipped Kew Gardens, Forest Hills and Woodside. Railroad tickets were cross-honored on the subway for the duration.

METRO-NORTH RAILROAD (MNR)

Laser Car Re-Introduced

MNR's Laser Train has been wrapped in a bold display that makes it prominently visible to the public. Previously, the train looked like normal maintenance trains.

The newly wrapped LaserTrain is commemorated with a photo op in Stamford Yard before its inaugural run of the season from Stamford to Croton-on-Hudson on October 11. Emily Moser/Metro-North photo

The laser train helps prevent autumn passenger trains from operating short of their normal length. When trains encounter the slimy leaf sludge, caused by a chemical in leaves known as pectin, they can slip along the rails as trains brake, which causes the wheels to develop flat spots. For trains to operate safely and quietly, wheels need to be perfectly circular, or "true". Train cars with wheels that have flat spots are taken out of service, resulting in shortened consists, so MNR machinists using lathes can re-true the wheels.

Inspired by NASA's "worm" logo of the 1970s, the design of the Laser Train wrap was a collaborative effort between MNR's operations, safety and asset management teams. It features illustrations of leaves commonly found throughout MNR's service area in temperate deciduous forests commonly found in the northeast United States.

The wrap comes as the railroad is debuting a 40th anniversary Heritage Series of locomotives paying homage to the railroad's predecessors.

The LIRR first deployed laser trains in 2017 before exporting the concept to MNR. MNR expanded their laser train fleet in 2023 following a successful 2022 pilot run. During the pilot test in fall 2022, Metro-North safely cleaned over 12,000 miles of track with the laser train, which resulted in a 40% reduction in slip/slide events and the lowest wheel-true cost season on record.

MTA Press Release, October 17

New Schedules

MNR's fall timetable change took effect on October 29. The new schedules restore six trains on Saturday and four trains on Sunday on the Hudson Line between Grand Central Terminal and Poughkeepsie following the completion of seasonal track work. The schedules also adjust Connecticut service on the New Haven Line, New Canaan Branch and Danbury Branch as proposed by the CT DOT on September 19. Those changes result in two fewer New Haven Line main

line trains Monday through Thursday, eight fewer trains on Fridays and two off-peak trains on each of the Danbury and New Canaan Branches.

Hudson Line

With the completion of a significant switch-replacement project in a capacity-constrained area of the Bronx, MNR is restoring six weekend trains between Grand Central and Poughkeepsie to supplement the railroad's hourly service. Those are:

- The 9:24 AM train from Poughkeepsie, which makes all stops between New Hamburg and Peekskill, operates express to Harlem-125 St and then Grand Central. This train operates on Saturday only;
- The 10:24 AM train from Poughkeepsie, makes all stops between New Hamburg and Peekskill, operates express to Harlem-125 St and then Grand Central;
- The 3:24 PM train from Poughkeepsie, makes all stops between New Hamburg and Peekskill, operates express to Harlem-125 St and then Grand Central;
- The 4:16 PM train from Grand Central, which stops at Harlem-125th St, Tarrytown, Ossining, Croton-Harmon and all stations to Poughkeepsie. This train operates on Saturday only;
- The 5:16 PM train from Grand Central, which stops at Harlem-125th St, Tarrytown, Ossining, Croton-Harmon and all stations to Poughkeepsie;
- The 6:16 PM train from Grand Central, which stops at Harlem-125th St, Tarrytown, Ossining, Croton-Harmon and all stations to Poughkeepsie.

Harlem Line

With the completion of track renewal between Pleasantville and Chappaqua, train departure times of several Harlem Line trains have been adjusted by one to five minutes.

New Haven Line

On the New Haven Line, Monday through Thursday, two fewer daily trains will operate. Morning and evening peak service has been preserved with the exception of the 5:55 PM train from Grand Central to South Norwalk and the 6:20 PM train from New Haven State Street to Grand Central. On Fridays, when fewer people are riding, service on the New Haven Line has been adjusted from 241 trains per day to 233.

On the New Canaan Branch, two weekday off-peak trains will no longer operate:

- The 12:29 PM train from New Canaan to Stamford;
- The 12:01 PM train from Stamford to New Canaan.

On the Danbury Branch, two weekday off-peak trains will no longer operate:

- The 9:17 PM train from Danbury to South Norwalk;
- The 11:17 PM train from South Norwalk to Danbury.

Lastly, fares within Connecticut increased on November 1.

MTA Press Release, October 20

Landslide Halts Hudson Line Service

At approximately 9:45 AM on Saturday, October 21, a mudslide obstructed all four MNR tracks near Scarborough station in the village of Briarcliff Manor. As a result, there was no service between Tarrytown and Croton-Harmon stations.

Initially, there was limited hourly service between Grand Central Terminal and Tarrytown and between Croton-Harmon and Poughkeepsie. In addition, very limited bus service replaced trains between Tarrytown and Croton-Harmon. That substitute plan lasted through the weekend. There was no train or bus service at the Philipse Manor, Scarborough and Ossining Stations and riders at those stations were encouraged to go to the Tarrytown Station for rail service to Grand Central Terminal or the Croton-Harmon Station for rail service to Poughkeepsie.

Aerial view of the Hudson Line landslide on October 22.
MTA Police Department photo

Crews worked around the clock to clear 350 cubic yards of soil and debris and 250 cubic yards of rock and cement walls from two of the Hudson Line's four tracks. Crews broke apart the rock walls to reincorporate segments to help stabilize the slope where the mudslide occurred and they repositioned other segments to the shore side of the tracks, transforming it into "rip-rap" that stabilized the coastline alongside the right-of-way.

Service resumed in time for the Monday morning rush hour on October 23 but only on the two normally-southbound Tracks 2 and 4. In addition, to reduce the potential for congestion-related delays, the railroad cancelled four peak-period trains. Those four trains are:

- The 6:42 AM from Poughkeepsie to Grand Central;
- The 7:08 AM from Tarrytown to Grand Central;
- The 5:30 and 6:11 PM Poughkeepsie express trains from Grand Central.

To reduce congestion in the two-track area, reverse-peak trains are bypassing Philipse Manor or Scarborough during the morning and evening rush hours.

As of publication time for this issue of the *Bulletin*, Track 3

is out of service for the forseeable future. Track 1 is back in service but only to support the work on Track 3.
MTA PRESS RELEASES, October 21, October 22, October 23

Park Avenue Viaduct Reconstruction Begins

Reconstruction work on the 130-year-old Park Avenue Viaduct in East Harlem has begun as areas underneath have been cleared for the viaduct's new foundations and columns that will support the new structure.

The Park Avenue Viaduct is an elevated steel structure that carries four tracks along Park Avenue between East 110th Street and the Harlem River Lift Bridge. 98 percent of MNR's trains utilize it on their way to and from Grand Central Terminal.

View looking south from the east side of Park Avenue at 122nd Street at the existing structure. Trent Reeves photo

Rendition of the rehabilitated viaduct looking north from 116th Street. MTA

The $590 million for the first phase of the Park Avenue Viaduct Replacement project will replace major segments of the elevated steel structure, nearly half of which was first built in 1893, to ensure it remains in a state of good repair; $500.9 million is federally funded.

Phase 1 work will include replacing existing structures, tracks, power, communications and signal system from East 115th Street to East 123rd Street. Phase 1 construction will continue through 2026. Work currently is underway for substructure construction, focusing on the viaduct's foundations and columns.

The project seeks to minimize impacts on the surrounding community by phasing the work, which also results in limited impacts to MNR train schedules. In line with community feedback and in conjunction with the State Historic Preservation Office, project design elements will include: a more welcoming lighter color structure, improved lighting and increased pedestrian safety under the viaduct. By utilizing modern design standards and materials, the new structure is expected to reduce noise and vibration levels as compared to existing levels. MTA Arts & Design is also coordinating a permanent art installation for 116th Street as part of the project.

Details about this project can be found at https://new.mta.info/project/park-avenue-viaduct.
MTA PRESS RELEASE, October 26

NJ TRANSIT (NJT)

Tap & Ride Arrives

NJT has introduced a "Tap & Ride" payment option for bus and light rail riders. The feature allows those passengers to use their contactless credit and debit cards with the existing validators on board buses and at light rail stations. "Tap & Ride" is now available on all NJT bus routes (except for A&C and O.N.E. emergency stabilization service at this time) and all light rail lines.

Initially, the "Tap & Ride" program will only be for adult one-way tickets. It will be expanded to accept payment for more ticket types soon. Light rail riders simply tap their contactless credit or debit card at the station validator to pay for their fare. Fare enforcement officers have mobile scanners that they will ask a customer to tap the same card used to purchase their ticket to validate proof of payment.
NJ TRANSIT PRESS RELEASE, October 11

PORT AUTHORITY AIRTRAIN JFK

OMNY Arrives

AirTrain JFK began accepting fare payments using the MTA's OMNY "Tap and Go" contactless payment readers on Tuesday, October 10. OMNY is available at select gates in both the Jamaica and Howard Beach stations, where an $8.25 one-way fare is required to enter or exit the system and the AirTrain remains free for travel between airport terminals.

The new fare payment system will accept contactless debit/credit cards, digital wallets and OMNY cards. Fare gates that accept MetroCards will remain available and an option for riders. The initial installation of OMNY at the Jamaica and Howard Beach stations represents the first phase of the integration process. The number of OMNY-equipped gates will steadily increase over the next 15 months. By the end of 2024, the OMNY "Tap and Go" contactless readers will be fully integrated into all fare gates.
PORT AUTHORY PRESS RELEASE, October 4

Other U.S. Systems

ATLANTA

New Automated Fare Collection System

Metropolitan Atlanta Rapid Transit Authority's (MARTA) Board of Directors on October 12 awarded a contract for the installation of a new automated fare collection system (AFC 2.0) to Innovation in Transportation, Inc. (INIT).

MARTA says its riders will quickly see how user-friendly the new fare system is, allowing multiple methods of payment, including debit and credit cards and mobile wallets directly at the fare gate without having to use a vending machine.

Eventually, AFC 2.0 will fully replace MARTA's existing Breeze card and Breeze Mobile systems and will involve the replacement and upgrading of rail station fare gates and bus fareboxes throughout the system. The new automated fare system will be deployed over the next five years.

The new AFC 2.0 system will provide many benefits to MARTA and its riders, including:

- A more convenient open payments system: Riders will be able to use their debit card, credit card or mobile wallet, as well as a Breeze card, to pay the fare. This will make the system more intuitive, shorten the fare payment process and reduce wait times at ticket vending machines;
- Upgraded faregates: The new faregates at each of MARTA's 38 rail stations will be faster and more reliable;
- More user-friendly ticket machines: Rail stations will also have new ticket vending machines that will be more dependable and will do things like provide exact change in bills rather than just coins;
- Modernized bus fare boxes: MARTA's buses will be outfitted with fare boxes with large digital screens and improved software that will speed up the boarding process;
- An expandable system: The new system will bring in all transit modes, including bus, rail, MARTA Rapid and the Atlanta Streetcar, which is currently on its own payment system. And regional transit partners can also be integrated quickly into the system;
- A more adaptable system: The AFC 2.0 system is "open-architecture," allowing a variety of software and apps, such as trip-planning apps, to connect to the MARTA system;
- Improved ability to customize pricing: The system will allow MARTA to be nimble and flexible with pricing, whether it's for employer programs, senior or student rider discounts, or for special events and promotions;
- An expansive retail network: Cash Riders will be able to load their Breeze cards at the checkout lines of as many as 240 retail locations. Currently, MARTA's cash riders must first travel to a rail station or justice center to reload their Breeze cards.

RAILWAY AGE TRANSIT BRIEFS, October 13

Rendering of Boston's new Type 10 car to be produced by CAF. The Type 10 also introduces a new paint scheme to be used on all of Boston's light rail vehicles. CAF

BOSTON

Public Feedback to Be Used in Green Line LRV Specs

Public feedback is being incorporated into the specifications for the Type 10 Supercar light rail vehicles which CAF is to supply for Boston's Green Line.

The 102 LRVs which Massachusetts Bay Transportation Authority (MBTA) ordered in 2022 at a cost of $811 million are intended to offer increased safety, improved accessibility, more capacity and better maintainability.

MBTA's Vehicle Engineering team is currently engaging with stakeholder groups on the technical specifications, which include redundant components, audio-visual information and accessibility enhancements when compared to legacy rolling stock.

The seven-section LRVs will be a little over 39 feet longer than the current Green Line vehicles.

Accessibility features will include a 100 percent low-floor design to offer level boarding once the stops are modified, as well as wider doors, gap fillers and more priority seats.

Safety systems will include onboard and lineside equipment for signal and speed limit enforcement.

The future livery was announced on October 16, following an online survey which received more than 16,300 responses. Three options were put forward and there were 9,566 votes for the winning design, which includes a green and dark grey body, green doors and a white and turquoise lower stripe.

MBTA plans to display a mock-up of the LRV for public feedback next year. Four pilot vehicles are then scheduled for delivery in spring 2026, with production vehicles following in 2027-31.

METRO REPORT INTERNATIONAL, October 18

Ashmont Branch and Mattapan Line Track Work Completed

The MBTA announced the successful completion of critical

track work on the Red Line's Ashmont Branch between JFK/UMass and Ashmont Stations and the Mattapan Line. Shuttle buses replaced service on those lines for 16 days from October 14-29, with regular service resuming at the start of service on October 30.

Crews replaced nearly 5,000 feet of rail and 1,174 ties on the Ashmont Branch and nearly 4,700 feet of rail and 1,380 ties on the Mattapan Line, improving reliability and reducing maintenance needs. Following this work, all speed restrictions that were in place prior to the shutdown have been alleviated in this area, improving travel times by over 10 minutes for riders on both branches. The MBTA expedited this work by working around the clock with unencumbered access, which would have otherwise taken six months to complete if crews only worked during nights and weekends.

The MBTA also maximized these closures by performing a variety of in-station work along both lines to improve the rider experience, including new floor tiling, ceiling and platform canopy repairs, new paint, new tactile edging on platforms, stairway repairs, new lighting, vegetation removal and power washing.

MBTA Press Release, October 30

BUFFALO, N.Y.

Fare Gates on Metro Rail

Niagara Frontier Transportation Authority (NFTA) recently announced that, beginning on November 1, it will activate fare gates on Metro Rail, making way for MetGo, its contactless payment solution.

Key changes include:

- Fare Gates: Valid payment is required to enter and exit below ground stations. All below-ground transit gates will activate November 1;
- Child Fares: Children nine and under ride free with a paying adult up to three children;
- Day Passes: Day passes will no longer be sold on the bus. Using stored value on your MetGo account will ensure users get the best value, never paying more than $5 per day.
- Reduced Fare Cards: Reduced fare passengers must have an official NFTA-Metro issued reduced fare card to get a discount. Cards can be picked up at the customer service center at 181 Ellicott Street in Buffalo.

To prepare for this transition, NFTA says riders can expect to see educational materials, station staff available to answer questions and signs to help them navigate.

Railway Age Transit Briefs, October 31

CHICAGO

Forest Park Branch Reopens

The Chicago Transit Authority (CTA) announced the completion of major track work as part of Phase 1 of the Forest Park Branch Rebuild. Blue Line trains are now running between the O'Hare and Forest Park stations, making all stops for the first since late-July.

As part of this $268 million project, crews have completely rebuilt almost three miles of track, between the LaSalle and Illinois Medical District (IMD) stations in 11 weeks. Additional work planned as part of Phase 1 project work continues, including the complete reconstruction of the Racine main station entrance and auxiliary entrance, as well as construction of the new Morgan substation.

Phase 1 project work was planned on an aggressive timeline to minimize impacts to riders.

CTA sequenced the project to complete the trackwork with bus shuttle support and then complete the signal work with trains running. As such, trains will run temporarily at a reduced speed between LaSalle and IMD and then gradually increase up to the posted speed. The full speed restoration is anticipated by the end of this year.

Anticipated impacts to Blue Line service are expected in 2024-2025 as the remaining portions of Phase 1 project work is completed, this includes upgrading the Morgan Street substation and the reconstruction of the Racine station. During this time, service impacts can include weekend line-cuts, single track operations and/or back rides.

Though track-replacement work is now complete, work continues on the reconstruction of a train-turnaround area just west of UIC-Halsted station called Morgan Middle. As a result, riders on the Blue Line will continue to see a slight and temporary reduction in trips.

CTA typically uses that turnaround to "short-turn" trains — turning Forest Park-bound trains back north at UIC-Halsted to head back toward O'Hare — which allows for more trains to be added into service on the busiest parts of the Blue Line between downtown and the O'Hare Branch.

While the reconstruction of Morgan Middle continues, CTA will continue to short-turn a few trains during the AM and PM rush hours near LaSalle, as has been done during the construction project. During this phase of construction, most Blue Line trains will need to travel all the way to Forest Park. Those longer trips require more workers to account for the additional distance and time meaning fewer available to operate more Blue Line trains.

In Mid-November, when work on Morgan Middle is complete, CTA will add back rail service to previous levels.

Crews are continuing work to upgrade the traction power system that provides electricity to the system and will result in improved service reliability. This work entails the construction of a new substation over the right-of-way at Morgan Street, as well as other upgrades being made to power system components in the area (e.g., switchgear, transformers and rectifiers at the Hermitage Substation).

Crews have already demolished and begun to rebuild the Racine main station entrance to make it fully accessible. Currently, only four of the 11 stations on the Forest Park Branch of the Blue Line are accessible.

The Loomis St. auxiliary entrance of the Racine station re-opened following the completion of track work.

As part of Phase 1 of the Forest Park Rebuild, the station house at the main Racine entrance will include a new elevator. In addition to the elevator, a longer platform and new stairs will replace the ramp that once connected the platform to street level at Racine Avenue.

The main entrance of the Racine station will remain closed and is expected to re-open in late-2024, at which time the Loomis St. auxiliary entrance will close for reconstruction through 2025.
CTA PRESS RELEASE, October 8

SACRAMENTO, CALIF.

Additional LRVs Ordered

Sacramento Regional Transit District has ordered eight more S700 low floor light rail vehicles from Siemens Mobility.

The latest order announced on October 9 follows from an initial 20 which were ordered in 2020 and another eight ordered in 2021, taking the total order to 36.

One of Sacramento's new S700 vehicles. SacRT photo

Production is being undertaken at Siemens' plant in Sacramento. So far, 17 of the LRVs have been delivered and are undergoing testing ahead of entry into service on the Gold Line by summer 2024.
METRO REPORT INTERNATIONAL, October 11

SAN JOSE, CALIF.

Silicon Valley BART Extension

Metropolitan Transportation Commission (MTC) on October 25 voted to allocate the $375 million for Phase II of Valley Transportation Authority's (VTA) BART Silicon Valley Extension (BSVII), bringing regional BART service one step closer to downtown San Jose and Santa Clara. For VTA's BART Silicon Valley Program, financial support comes in the form of local tax measures, which Santa Clara County residents have passed repeatedly over the past two decades.

Map of the San Jose/Santa Clara extension. VTA

In total, Santa Clara County local sales tax measures are funding an estimated $4.3 billion for construction of VTA's BSVII Project.

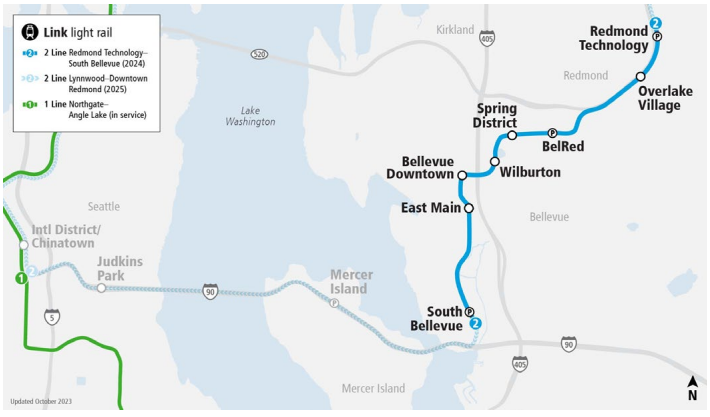
In 2018, Bay Area residents approved Regional Measure 3, which is anticipated to raise $4.45 billion to finance highway and transit improvements. This funding includes the purchase of new BART cars, extending Caltrain to downtown San Francisco and $375 million towards the construction of VTA's BSVII Project.

VTA says it anticipates receiving a full funding grant agreement (a commitment to fund the project known as the FFGA) for approximately $6 billion, or approximately half of the total cost of VTA's BSVII Project, in late 2024. With that, VTA will have secured the last remaining piece of the funding pie.
RAILWAY AGE TRANSIT BRIEFS, October 27

SEATTLE

Pre-Revenue Testing Begins on East Link

Testing on the 2 Line is entering the pre-revenue phase starting Wednesday, November 1. 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 next spring.



Map of the East Link extension. Sound Transit

Light rail vehicles will run frequently between the South Bellevue and Redmond Technology stations, including at street crossings in the Bel-Red area. Pedestrians and motorists should be alert for trains and expect they could be running at any time of the day or night.

In addition to trains on the tracks, people can expect to see maintenance vehicles, testing equipment and personnel involved in the testing process and hear sounds typical in an operating light rail system including station announcements, wheels on the tracks and warning signals.

The next phase of testing will be simulated service, expected to begin early next year.

SOUND TRANSIT PRESS RELEASE, October 31

WASHINGTON

"Auto Doors" Return

On Wednesday, October 18, Metro began certifying operators who have been trained to use Metro's Auto Doors function. The feature enables doors to open automatically when the train stops at the platform. Not only is it safer and more reliable, but it also eliminates the delay of operators manually opening the doors.

Currently, operators are required to open and close train doors manually. They're instructed to stick their head out the window, take a few seconds to verify they are opening the doors on the correct side of the train and then press a button to open the doors. The process can take up to 15 seconds and happens more than 20,000 times a day across the system.

With Auto Doors, signals at the platform tell the train which side to open automatically when it arrives at each station platform. Operators will still put their head out of the window to make sure everyone has exited or boarded safely before manually closing the doors.

Metro has been testing Auto Doors during off-hours for months and the system performed without any safety issues more than 2,500 times. Metro worked closely with the Washington Metrorail Safety Commission to move forward with this step in its automation program.

WMATA PRESS RELEASE, October 18

International

BERN, SWITZERLAND

Trams Offered to Lviv

Bern operator Bernmobil has announced that the first of 27 Tramlink trams being supplied by Stadler is expected to enter regular service on November 1, with seven expected to be in use on Route 7 by the end of the year.

The first public services will be on October 28, when a new tram and a heritage vehicle will operate a shuttle service for an open day at the expanded Bolligenstrasse depot.

Tramlink 912 (Stadler, 2023). Bernmobil photo

A framework agreement for the supply of up to 50 trams was signed in September 2019, with a SFr125 million firm order for an initial 27. The first was delivered on February 1 and formally unveiled on October 16.

The order includes 20 bidirectional vehicles with 52 seats and six doors per side and seven unidirectional trams with 71 seats and seven doors per side, both able to carry 250 passengers in total. The 100 percent low-floor meter-gauge trams will be 42.5 meters long, with wooden seats, retractable steps and a collision avoidance system.

The Stadler trams will replace 12 Vevey and nine RBS vehicles on Route 6 that are approaching the end of their life. They will also be used expand the fleet to support additional services on Route 9 and its extension from Wabern to Kleinwabern.

Bernmobil has offered to donate 11 Vevey (Be 4/8) trams to the city of Lviv. They were manufactured by ACMV/Düwag/ABB in 1989-90 and eight would be for revenue service with three to be used for spare parts.

Swiss specialists visited the Ukrainian city on October 9-11 to inspect the track and depot facilities, which they concluded would be compatible with the Bern trams.

METRO REPORT INTERNATIONAL, October 19

DAUGAVPILS, LATVIA

Locally-Assembled Tram Unveiled

The first two of four trams being assembled at the Daugavpils Locomotive Repair Plant using components supplied by Czech company Pragoimex was unveiled in the city on October 17.

The trams are based on Pragoimex's EVO1 model. The remaining two vehicles are due to be competed by the end of this year.

Operator Daugavpils Satiksme awarded DLRR the €7.4 million contract in October 2022, with EU co-funding.

The 15-meter-long low-floor trams are equipped with air-conditioning, CCTV, USB sockets and passenger information screens.

METRO REPORT INTERNATIONAL, October 20

Daugavpils' new trams. Daugavpils Municipality photo

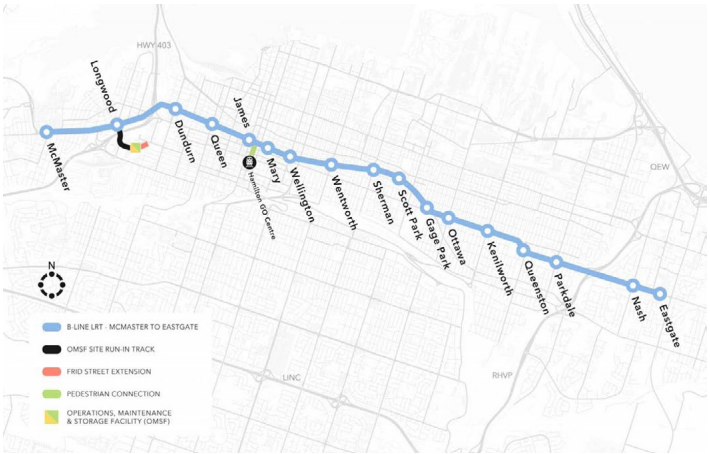
HAMILTON, ONTARIO, CANADA

Light Rail Technical Adviser Appointed

Greater Toronto & Hamilton Area transport agency Metrolinx has appointed AECOM as technical adviser for the Hamilton Light Rail Transit project.

AECOM has subcontracted WSP to provide technical advisory services including strategic guidance on delivery.

The planned 14-kilometer line with 17 stops would start at McMaster University in the west and run along King Street to Gage Park, then along Main Street East and Queenston Road to an eastern terminus at the Eastgate retail district.



Map of Hamilton's LRT route. Metrolinx

It is being designed to accommodate expected future growth in Hamilton, improve connectivity and attract economic development.

The project will include a complete revitalization of private and public utility infrastructure along the route, including water, gas and telecoms.

METRO REPORT INTERNATIONAL, October 27

HELSINKI

Tramway Extensions

Helsinki Regional Transport opened its 25-kilometer orbital light rail line serving the Helsinki-Espoo conurbation for revenue service on October 21, almost a year ahead of schedule.

Running from Itäkeskus in eastern Helsinki to Keilaniemi in neighbouring Espoo to the west, the line is branded Jokeri, which is an abbreviation of JOukkolikkenteen KEhämäinen Raide Investointi (mass transport ring rail investment).

It runs in an arc around the capital, which is located on a pear-shaped peninsular connected by three radial highways. Around 16 kilometers of the route is located in Helsinki and nine kilometers in Espoo.

It's opening day, Saturday, October 21 and ForCity Smart Artic X54 601 (Škoda, 2021) is seen at the Aalto-yliopisto stop in Espoo (west of Helsinki) on the new route 15 light rail line.
Nikita photo via Urban Electric Transit

Being promoted as an "express tram," the Jokeri LRT is intended to replace bus Route 550, which since being launched in August 2003 has become HSL's busiest with 40,000 passengers per day on weekdays. The end-to-end journey time of 65 minutes, an average speed of 25 kph, is similar to the bus timetable, but the trams will not be subject to delay by traffic jams. The bus service is expected to cease running at the end of the year.

The light rail line was first proposed around 1990, but it was not until June 2008 that the city of Helsinki commissioned a detailed plan, which was presented in May 2009.

The scheme was finally approved in 2016 and construction began in June 2019.

Tracklaying was completed in August 2022 and test running finished in September. The route was originally expected to open in summer 2024, but the target date was brought forward to January and then to October 2023.

The line has been developed by the Jokeri Rail Alliance, set up by the two cities to bring the promoters, designers and contractors into a single umbrella organization. The double-track line has been built to meter gauge for compatibility

with HKL's legacy tram network. It serves 34 stops at an average spacing of approximately 800 meters. Three of these provide interchange to the metro stations at Itäkeskus, Aalto University and Keilaniemi and three to suburban railway stations at Oulunkylä, Huopalahti and Leppävaara. Construction of the line required four new bridges over the radial highways and one of the city's ring roads, plus a 300-meter tunnel at Patterinmäki.

Civil works were budgeted at €382 million with another €108 million for the rolling stock plus €70 million for the dedicated depot at Roihupelto, bringing the total to €562 million.

The cost of the project has been split three ways. The national government contributed €84 million and the remainder has been divided between the municipal administrations in Helsinki (65 percent) and Espoo (35 percent). According to HSL, the line has been completed around €13 million below budget.

The line will be operated by a fleet of 29 ForCity Smart Artic X54 supplied by Škoda Transtech. These are a longer version of the Smart Artic cars previously supplied to HKL and similar to those in operation in Tampere.

The five-section low-floor cars are 34 meters long, with provision to incorporate an extra 10-meter section if demand increases in the future. Each car can carry up to 214 passengers, including 78 seats and four spaces for wheelchairs or baby carriages and can run at speeds up to 70 kph. The trams are finished in a white and petrol blue livery which, like the interior, was developed by Finland's Idis Design.

Tram services operate from 4:30 AM to 1:15 AM each weekday, starting an hour later at weekends. As only 15 trams have so far been delivered, the initial headway is 10 to 12 minutes, but the frequency will increase to a tram every 6 minutes when all 29 are available, allowing the bus route to be withdrawn. Zonal fares are charged, with a flat fare of €2.80 for travel in either Helsinki or Espoo and €3.10 for both zones, all valid for 80 minutes.

Plans are being developed for extension of the line to serve Viikki, Pasila, Otaniemi and Tapiola. This would follow the completion of HKL's 5.5-kilometer Crown Bridges light rail line linking Helsinki with its fast-growing eastern suburb of Laajasalo, which is scheduled to open in 2027.
METRO REPORT INTERNATIONAL, October 23

JERUSALEM

Blue Line Tramway Contract Awarded

The city of Jerusalem and the national transport and finance ministries have selected the J-Train consortium for a Public-Private-Partnership contract to finance, build, operate and maintain the light rail Blue Line. J-Train comprises bus operator Dan Bus, construction company Denya Cebus and Spain's Comsa.

The estimated cost of the project is around nine billion shekels. The consortium will operate the line for seven years with an option to extend for an additional 18 years, while the maintenance contract runs for 25 years.

The Blue Line will have branches from Gilo and Talpiot in southern Jerusalem to the Hebrew University Mount Scopus campus and Ramot in the north, with a shared central section of line. It will total 31 kilometers, including a 2.5-kilometer underground section running from Jaffa Road, beneath Ge'ula and Mea She'arim to the Sanhedria area.

There will be a total of 53 stops, including three underground and a depot in Malkha.

Pesa is to supply a fleet of 132 single-ended 33-meter-long three-section trams from its Twist family, which will operate as 66 pairs. It is the Polish manufacturer's first order from Israel. There is an option for a further 30 LRVs.

Opening is planned in stages between 2028 and 2030, although local industry sources have suggested this could be an ambitious target.
METRO REPORT INTERNATIONAL, October 2

OTTAWA, ONTARIO, CANADA

Trillium Line Delay

Ottawa's light-rail transit will not open its expanded north-south (Trillium) line until at least April 2024, a 20-month delay to the expected delivery date in the original contract, according to a report by The Canadian Press.

The last update from the city's transit services in August had estimated the line could be opened as soon as November.

Rendering of the Trillium Line's airport station design.
City of Ottawa image

But OC Transpo head Renée Amilcar, according to The Canadian Press report, says that "in the name of caution, the transit agency is delaying a public opening, though it is seeking a handover from contractors as soon as possible."

The decision means there will be more time to test the system and ensure proper training.

The extended Trillium Line will run south from Bayview Station, which is part of the city's east-west transit line, past the Ottawa International Airport to Limebank Station near the Riverside South neighborhood.

Last month, the city estimated that an eastward extension of the existing line is on track for 2025 and a westward

expansion is expected to open in late 2026.
RAILWAY AGE TRANSIT BRIEFS, October 10

PARIS

Operating Contract Awarded

Paris regional transport authority Ile-de-France Mobilités has formally awarded the Stretto consortium of Keolis-SNCF Voyageurs the first tendered contract for the operation of Transilien passenger services.

The contract awarded on October 12 covers three routes operated using a fleet of 41 Alstom Citadis Dualis tram-trains.

The Y-shaped tram route T4 from Bondy to Aulnay-sous-Bois and Hôpital de Montfermeil and the branch of Transilien Line P between Esbly to Crécy-la-Chapelle are currently operated by SNCF Voyageurs under the Transilien brand.

Tram route T11 from Le Bourget to Epinay-sur-Seine is currently operated by the Transkeo T11 joint venture of Keolis and SNCF Voyageurs.

Laying over at the d'Epinay-sur-Seine terminal station of line T11 is Citadis Dualis TT310 (Alstom, 6/2017).
Remontees photo via Wikimedia Commons

RATP Cap Ile-de-France and Transdev had also bid for the contract, which will see Stretto run the services for seven years from March 2025.

IDF Mobilités has signed an agreement with infrastructure manager SNCF Réseau which means Stretto will be responsible for maintenance on T4 and T11 and operate the 32 stops.

There are around 900 services per day carrying 70,000 passengers per day on the three routes, around two percent of the Transilien network's total ridership. The services total 2.9 million train-kilometers per year, around 4.6 percent of the Transilien network.

The 400 staff on the three lines will be transferred to Stretto, which aims to bring together its two parent companies' experience of tram-trains to offer improved punctuality and reliability and better passenger information.

Two other calls for tenders have been issued by IDF Mobilités. The first covers tram routes T12 and T13 and the second suburban Line L. IDF Mobilités plans to open the entire Transilien network to competition by 2033.
METRO REPORT INTERNATIONAL, October 13

PORTO, PORTUGAL

Tramway Extensions

Metro do Porto has awarded a consortium of Alberto Couto Alves, FCC Construcción and Contratas y Ventas a €379.5 million contract for the construction of light rail line H (Ruby).

The 6.4 kilometer Line H would connect Casa da Música on lines A, B, C, E, F and G in the center to Santo Ovídio in the south, where interchange would be provided with Line D. The station is also planned to be served by the future Lisboa-Porto high speed corridor.

Line H would have a total of eight stops, including Devesas main line station and it would also serve the Campo Alegre University and the Arrábida hospital.

The project would include the construction of a bridge over the Douro River.

Works are expected to be completed by the end of 2026. The total project cost is estimated at €435 million; Metro do Porto says this is the largest investment to date to be funded from Portugal's share of the EU's Recovery & Resilience Fund.

Meanwhile, Metro do Porto presented its Metro 3.0 expansion plan on October 17. This covers an estimated €1 billion of investment for the construction of four new lines totalling 37 kilometers, serving 38 stops. However, some of these routes may be built as bus rapid transit rather than light rail lines.

Metro do Porto says it has already called tenders for what it terms "preliminary projects" and environmental impact studies for the program. The key elements of the expansion are:

- A 6.9-kilometer Gondomar Line to link Estádio do Dragão on lines A, B, E and F to Souto in the southeast, serving eight new stops;
- A northwest to north São Mamede Line which would run 6.6 kilometers from Senhora da Hora on lines A, B, C, E and F to IPO on Line D, serving eight stops;
- A light rail extension would be built from the Ismai terminus of Line C to Muro, serving one intermediate stop. From Muro, a bus rapid transit route would be constructed further north to Trofa. The route, totaling a combined 10.2 kilometers, would run along a former railway alignment towards Guimarães, which closed in 2002;
- A 13-kilometer Maia II line to connect the Verdes on lines B and E with Roberto Frias, near the northern terminus of Line D, serving 16 stops. This could be built either as a light rail line or as BRT.

Metro do Porto says that the main objectives of the expansion plan are to reduce road traffic in the Porto metropolitan area, as well as to more than double the annual light rail ridership. The operator aims to carry 150 million passengers a year by 2030, from the 65.1 million it recorded in 2022.
METRO REPORT INTERNATIONAL, October 31

POZNAŃ, POLAND

New Tram Enters Service

The first single-section Moderus Gamma LF 05 AC tram built by local supplier Modertrans entered service on Route 99 in Poznań on September 18.

The tram is less than 15 meters long. Operator MPK Poznań and Modertrans believe it is the first single-section, fully low-floor tram to enter revenue service in Poland.

Modertrans first presented the tram in May 2021; the design was developed under a project co-financed by the European Regional Development Fund.

Poznań's first Moderus Gamma LF 05 AC tram, #600, at the Piątkowska terminal loop of lines 9 and 11.
Eelco van Weerdenburg photo via Urban Electric Transit

The tram is equipped with USB sockets and heated handrails for winter. It is also fitted with an anti-collision tool and uses regenerative braking. Braking energy is stored in supercapacitors and used either for acceleration or to enable the tram to run for up to two kilometers without catenary.

The traction system features silicon carbide drives supplied by Medcom, which are designed to provide energy savings when accelerating and quieter operation.

Modertrans says that the tram's trucks are approximately 15 percent lighter than the average for the Polish tram market and the compact traction motors also enable weight and energy savings.

METRO REPORT INTERNATIONAL, October 3

PRAGUE

Two Tramway Extensions Open

A two-kilometer tramway extension opened in the northwest of the city on October 23, running from Divoká Šárka to Dědina. The four-stop extension is served by tram routes 20 and 26 and is intended to link the newly built Na Dědině housing estate to the tram network.

The extension was built by Subterra in 13 months. The KC839.5 million construction cost was partly funded by the European Union's Transport 2 Operational Program.

T2R 6003+6004 (Tatra, 1958 & 1962) are seen at the Vlastina stop on the new extension to Dědina on October 22, the day before regular service started. Karel Šimána photo via Urban Electric Transit

A further extension of the tramway from Dědina to the future Dlouhá Míle railway station was approved on July 24. Dlouhá Míle station is being developed as part of the Prague airport rail link project; construction of the one-kilometer tram route is expected to start in 2027 at the earliest.

Revenue services started on October 13 on a 415-meter-long, one-stop extension from Holyně to Slivenec in the southwest of the city. This is the second phase of the Barrandov tram extension scheme. The tram line is used by tram routes 4, 5 and night route 94; the extension serves a real-estate development area in Slivenec and a shopping complex now being built. A park-and-ride facility is also planned at the Slivenec terminus.

T3R.Ps 8525+8564 (ČKD-Tatra, 1973 & 1983), operating on route 4 in regular service, are approaching the new Slivenec terminal on October 13, the first day of revenue service on this extension.
Matouš Černý photo via Urban Electric Transit

The terminus has a three-track, 946-meter-long loop that can accommodate 10 trams up to 30 meters long. Part of the alignment is built on steep gradients of more than 5 percent. Civil works were carried out by Strabag Rail in nine months

at a cost of KC233 million.

The first section of the extension from Sídliště Barrandov to Holyně opened in April 2022, covering a distance of one kilometer.

METRO REPORT INTERNATIONAL, October 30

ROME

Tram Fleet Renewal

Rome city transport operator ATAC has selected CAF for a €457 million framework contract to supply up to 121 bidirectional trams for use on new and existing lines.

This is, apparently, one of the largest ever tram tenders in Europe and marked a historic moment as the Stanga trams which are to be replaced are a flagship of Roman public transport but are now 70 years old.

Some of the Stanga trams will be renovated for use on an Archeotram route serving the city's historic sights.

The trams to be supplied by CAF will be 33.5 meters long and have a capacity of 215 passengers, with 68 seats and two wheelchair spaces.

The trams will feature the most innovative technology, with higher capacity than existing vehicles, better performance and lower noise on sharp curves. Features will include air-conditioning, CCTV, public address, passenger counting and collision warning systems and batteries for catenary-free operation on some routes.

One of the Treno Articolato Stanga cars to be replaced under this new order, 7039 was built in 1949. Operating on the 19 route, the car is on the Via Ottaviano at Via Germanico and is only one block from the end of the line at the Piazza del Risorgimento. Pexels photo

Hitachi Rail, Stadler and Skoda Group had also bid for the framework contract. CAF was named as the winner on September 29 and the contract is now being finalized for government sign-off.

An initial firm order for 40 trams is planned, with delivery scheduled within 18 months of the contract signing.

The framework forms part of a wider project to renew Rome's public transport fleet, with tenders also called for the purchase of low-emission buses.

METRO REPORT INTERNATIONAL, October 12

ST. PETERSBURG, RUSSIA

Retro Styling on New Trams

Uraltransmash has begun delivering trams to St. Petersburg which have a retro styling inspired by vehicles which ran in what was then Leningrad from the 1950s and 1960s.

The 42 three-section low-floor Type 71-431R Dostoevsky trams ordered in 2022 have a capacity of up to 246 passengers. They are designed to negotiate curves down to 14 meters radius in the city center.

One of the new and very "retro-looking" Type 71-431R trams. Uraltransmash photo

The order also includes 12 Type 71-421R Dovlatov trams.

All will be equipped with the Cognitive Tram Pilot active driver assistance system.

METRO REPORT INTERNATIONAL, October 16

TORONTO, ONTARIO, CANADA

Queen Streetcar Service Restored to Humber Loop

Toronto Transit Commission (TTC) on October 29 restored 501 Queen streetcar service west of Roncesvalles Ave. to Humber Loop, following completion of major infrastructure upgrades by the city of Toronto and TTC in the King St. W., Queen St. W., Queensway and Roncesvalles Ave. (KQQR) intersection area. It is the first time since January 2021 that streetcars are operating along The Queensway.

501L Queen replacement buses continue to operate both ways between Long Branch Loop and Humber Loop, via Lake Shore Blvd., Park Lawn Rd. and The Queensway. Riders can transfer between buses and streetcars at Humber Loop. According to TTC, additional streetcar service through to Long Branch Loop is scheduled to return November 19. 301 Queen

buses will continue to operate between Long Branch Loop and Neville Park Loop in overnight periods, seven days per week.

New 501M Queen replacement buses are now also operating both ways from Humber Loop to north Park Lawn Rd. via Lake Shore Blvd., Marine Parade Dr., Park Lawn Rd. and The Queensway, to provide additional service through the Humber Bay Shores neighborhood.

Additionally, starting October 30, 508 Lake Shore streetcars returned to weekday peak-hour service, operating between Long Branch Loop and Parliament St. via King St. These streetcars will provide riders with direct downtown service without having to transfer vehicles at Humber Loop.
RAILWAY AGE TRANSIT BRIEFS, October 30

TURKU, FINLAND

Light Rail Proposal Backed

Turku city council has approved the further development of plans for a light rail line. The proposal was approved by the city council on October 2 after two years of development and consultation.

The double-track-line would run 12 kilometers from Satama in the west through the city center to Varissuo in the east.

The cost of the infrastructure is put at €344 million, with a 30 percent national government contribution envisaged. Rolling stock would add a further €42 million.

Turku tramway impression. City of Turku image

The city's tramway planning and implementation company, Turun Raitiotie, will now select the most appropriate project structure and prepare an urban development plan for the tramway corridor and its surroundings. The hope is that the tramway will pay for itself through economic growth and an increase in property values.

An implementation plan is to be submitted to the city council to enable an investment decision to be taken in late 2025, with a view to work starting in 2026 for opening in 2031.

METRO REPORT INTERNATIONAL, October 19

WARSAW, POLAND

Tram Link Contract Let

A consortium of Balzola Polska and Lantania has been awarded a contract to design and build a 1.6-kilometer tram extension in Warsaw.

This will connect Warsaw Zachodnia railway station with the tram stop at Bitwy Warszawskiej, served by routes 1, 7, 9, 15, 25 and 35. Warsaw Zachodnia station is currently being rebuilt and would be served by the planned Warsaw–Łódź high speed line.

The northwest to southeast tram route will include a 500-meter-long tunnel under Al Jerozolimskie and Park Pięciu Sióstr with an underground stop. A traction substation will be built and locals roads remodeled.

Rendering of the new tram station at Warsaw Zachodnia.
ZTM Warszawa image

The contract awarded by Tramwaje Warszawskie on October 6 is worth 365.5 million złoty. The selection criteria were weighted 95 percent on price and five percent on relevant experience; the winning bid was far above Tramwaje Warszawskie's estimate of 276.3 million złoty.

Construction is scheduled to start next year and be completed within two years.

In other news, construction of an 800-meter one-stop tram branch to Stegny in the south of the city started on October 6. The route branches off at Świętego Bonifacego from an eight-kilometer extension that has been under construction from Rakowiecka southeast to Branickiego in the Wilanów district.
METRO REPORT INTERNATIONAL, October 12

Travels with Jack May

Britain and the Baltics — Part XXI

By Jack May (Photographs by the author)

Wednesday, August 23 (continued)

We continue the report on our day trip to the city of Daugavpils, in the southeastern corner of Latvia. We would use the system's KTM-8 and a KTM-5 for our first charter and then switch to an RVZ-6 and Tatra T3 train later in the day. The trams we rode were excellent portrayals of the evolution of Russian carbuilding from 50 years ago, starting with the production of the KTM-5s. Eventually over 15,000 of these workhorses were built from 1969 to 1992, followed by about 1,500 KTM-8s, an updated version, from then (and after the breakup of the Soviet Union) until 2007. I suspect the desire for low-floor units finally resulted in the retirement of the blueprint of what probably was the largest production run in streetcar history. I rode on many of these cars during my visits to an assortment of cities in Russia and its former satellites starting in the 1990s, when our son went to live there after graduating Rutgers in 1989 with a major in the Russian language. I found out that there were/are few cities that did/do not have some on their rosters. One almost exception was St. Petersburg (Leningrad), the largest tramway in Russia (in fact, the world), which tended to have its cars built locally, although they did operate a small number of KTMs. Another car type used extensively in the Soviet Union during that period and now into the 21st century, are Czech-built Tatra T3 and T6 units, which still constitute substantial portions of the car rosters in a number of their large cities. As mentioned earlier, we would ride in a train of T3s, plus an RVZ-6 car built in Riga, whose manufacturer competed with Ust-Katav until about 1990, but was not nearly as successful. What was necessary in all these cities was a car that would not derail on bad track nor throw its riders around when traveling at decent speeds.

Our first trip covered all of route 1, from the carhouse to the railway station (Stacija) and back. The dark overcast sky eventually evolved into a steady drizzle, but that was insufficient to prevent us from having a few photo stops, mostly away from the motor traffic along 18 Novembra, an important artery (see https://en.wikipedia.org/wiki/File:Daugavpils_tram_map.png for a map).

After we returned from our first round trip, many of us had the opportunity to take more photos at the carhouse, while others took advantage of this rest stop's facilities. Our second trip was aboard a two-car train made up of Tatra T3s 080 and 078 and RVZ-6 car 061. The T3s came from Schwerin, Germany in 2002, after they had served in that city during the 1970s and 1980s and were later modernized for continued use in 1992. To operate in Daugavpils, their gauge was widened from standard to five feet and their pantographs were replaced by trolley poles. Their smart-looking blue and white color scheme was retained and in fact, Daugavpils'

(Above and below) Two photos of the start of the Stacija (railway station) loop of the 1 line. Only a short walk from the city center and the station, the scene looks like it could be out in a lush residential area. In the upper view a KTM-5 in scheduled service on the route slows for its terminal stop. Below, our chartered KTM-8 car is shown right behind the regular. The main difference in the appearance of these two models is the presence (or absence) of the ribbed metal.

RVZ-6s were repainted into that livery. I've always liked the RVZ-6 cars, which were built for this city between 1978 and 1988, and for many other tram systems as well, eventually numbering about 6,000 units. It is said that the bodies of these cars are based on American PCCs.

On this trip we followed all of route 2 to its terminal loop at Maizes Kombinats in the Forstadte neighborhood. This is my favorite line, as after it turns off the "mainline" used by the 1 and 3 lines, it immediately becomes single track and passes many quaint and doll-house sized residential dwellings. The 2 looks like a small-town tram line, but certainly not an American one, because of its setting among tiny wooden

A view of our two chartered cars leaving the Stacija loop and approaching Maizes iela, where they will join the line's double track.

As the result of our photo stops, the regular route 2 car, a KTM-5, caught up to us, which presented an opportunity for another picture. I believe this scene, more than any other, is evocative of the tiny houses that dot the surroundings of the bi-directional single-track line.

Our second charter consisted of RVZ-6 tram 061 and a train made up of T3 cars 080 and 079 in the same color scheme. The location is at the extremity of the Maizes Kombinats terminal loop of the mostly single track route 2.

houses. When I rode it in 1995, most of the parallel streets were dirt roads, but since then many have been covered with asphalt paving. There is a single passing siding on the line and service operated on a 28-minute (!) frequency.

I should mention that we were unable to go out on the long northern portion of route 3, as it was temporarily out of service due to an overhead wire problem. Since we could not turn toward the center of the city after traversing route 2, as the track layout forces all route 2 cars to head northward, we had to run all the way to the carbarn before reversing and heading to the city center. Thus there is no through service from the 2 to downtown. Perhaps there is a method to this madness, since fare collection in Daugavpils remains traditional, with single tickets for occasional riding sold on the cars and transferring to other lines entailing the payment of another fare (thereby creating additional revenue). After looping through the carhouse we finally headed downtown, where the trip would end. *(Author's note: since this visit the track layout has been changed and now an additional line, route 4, runs from Maizes Kombinats through the city center to the railway station.)* We followed route 3 to its Cietoksnis terminal, operating on single track past the last three stops from the junction with route 1 to the loop. At our photo stop, which was held in steady rain, Karl-Heinz and I decided to abandon the trip and ride route 3 aboard a regular service car, as we still had ample time to make our train. Thus, we made a round trip to Stropu ezers, covering the remaining portion of the system through a very wooded area along the single track (with one passing siding) from the point where the lines leaves the 1 and 2. The operator was very nice to us, waiting at the northern terminal for us to take our photos and then not charging us the €0.43 fare for our return ride (nor did she make any remarks about our soaked footwear).

Upon our return to downtown, we grabbed a fast bite (the hot watery soup was just what I needed to warm up) and walked to the railway station, where we met Julien and also John Wilkins, who needed little persuasion to abandon the

An equipment view of RVZ-6 tram 061. The 1987 Riga-built unit is stopped next to an unpaved road along route 2. Some have said these cars resemble Brilliners more than PCCs.

A close-up view of ex-Schwerin Tatra T3 cars 080 and 079 along the Maizes Kombinats terminal loop of route 2. These PCCs, from 1981 and 1975 respectively, still ride beautifully.

bus and take the train back to Riga. We left in our three-car motor-trailer-trailer DMU set on time at 5:35 PM. After a very comfortable ride, we arrived back in Riga at 9:13, 10 minutes early. Except for the weather, it was a great day of riding streetcars.

On to Liepaja in Part XXII.

(Above and below) Photos of KTM-5 car 106 in the rain at the terminals at both ends of route 3. While most of the group was being picked up by the charter bus at Cietoksnis (upper photo), we two rode this 1991-built tram to Stropu ezers loop (bottom). As inviting as this park-like area would be on a sunny day, we did not want to wait 25 minutes for the next car. The 106 certainly does not look newer than the fantrip cars, but it is.