



Volume 66, Number 12 | December 2023

Congestion Pricing Takes A Step Forward

The Metropolitan Transportation Authority (MTA) received a detailed report produced by the Traffic Mobility Review Board recommending a tolling structure for Central Business District Tolling, New York's congestion pricing program. The recommendations submitted in the report will be considered on Wednesday, December 6, by the Board of the Triborough Bridge and Tunnel Authority (TBTA), which is coterminous with the MTA Board. The Board will review the recommendations as it considers commencing the rate making process, which includes putting forward a proposed toll schedule for public review.

The rate making process for Central Business District toll amounts would include an open, months-long public review process similar to the public review process under the State Administrative Procedures Act, similar to review processes regularly undertaken for MTA fare and toll increases. In addition to a series of hybrid virtual and

in-person public hearings, members of the public will have a 60-day opportunity to offer comments electronically, or via voicemail or U.S. Mail.

Public hearings will be held in February 2024. After the conclusion of the public hearing process, the MTA Board will review input received from the public, and then schedule a vote on whether to authorize TBTA to adopt a Central Business District toll rate schedule to allow for the start of toll collection to proceed at a date that would be announced in advance.

While the public review process is underway, the vendor that is building out the toll system and infrastructure will continue installing the infrastructure that will be used for toll collection. As of today, 60 percent of the sites are complete.

The report may be read and/or downloaded at https://new.mta.info/document/127761 MTA PRESS RELEASE, November 30

Electric Railroaders Association

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The *Bulletin* is published monthly and sent free to all ERA members.

Back Issues

PDFs of previous issues can be downloaded at erausa.org/bulletin

In This Issue

in this issue	
Worldwide Electric Railway, Metro and Tramway Openings	3
Rail News in Review	3
North American Transit Openings in 2023	19
Travels with Jack May	20

Trip Notices

May 10-25, 2024: International tour to Belgium, the Netherlands and Luxembourg. Visit https://erausa.org/international-tours/2024/ for all the details.

September 6-10, 2024: ERA convention in Edmonton and Calgary, Alberta, Canada. Save the dates!

Cover Photo

It's September 7, 1946 and Third Avenue Transit System's lightweight double-truck motor 589 is eastbound on West 42nd Street east of Sixth Avenue operating on the B-Broadway route. This trip is apparently a short-turn as the destination sign reads 42nd St. & 3rd Ave, rather than 42nd St. & 1st Ave. Three months after this photo was taken the route was converted to motor bus. No. 589 was one of 75 lightweight streetcars (551-625 — the first 50 were made of aluminum) built in the 65th Street Shops of the Third Avenue Railway System between the end of 1936 and 1938.

Max H. Hubacher (1900-1989) photo via New York Public Library

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

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Monthly Zoom Meeting

Friday, December 15, 2023 at 7:30 PM.

Presenting This Month: Andrew Grahl

Andrew's holiday season spectacular will be a veritable smorgasbord of transit updates! News from our Tri-State area, Montreal, Toronto, Washington, D.C., Los Angeles and San Fransisco, Calif. and Boston will be on the menu. We will see the Brightline extension to Orlando, other transit sights in Miami and a visit to the APTA Expo. For dessert, historic slides taken in the 1950s will be served, as well as additional news from Philadelphia, Norfolk and many other places of interest!

How to Join Our Zoom Meeting

The Zoom registration link for this meeting is: https://us02web.zoom.us/meeting/register/tZ0qc-urrzwi-H9Uiq82qRGFQd-GbWkwZFw0h. You can sign in at 7:15 PM. The show begins at 7:30 PM. If you have any problems, email Bob Newhouser at bnnyc1955@aol.com, or on the night of the meeting, text or call Bob at 917-482-4235.

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

Date	Country	City	Segment	Distance (miles)	Rail/ Metro/ Tram
11/4	Canada	Edmonton	Valley Line: 102 Street to Mill Woods	8.1	T
11/5	Bangladesh	Dhaka	Line 6: Agargaon to Motijheel	5.3	М
11/6	Poland	Bydgoszcz	Most Kazimierza Wielkiego to Toruńska/Kazimierza Wielkiego	0.4	T
11/15	Romania	Bucharest	M2: Berceni to Tudor Arghezi	1.0	М
11/17	India	Navi Mumbai	Line 1: Belapur to Pendhar	6.9	М
11/21	Thailand	Bangkok	Pink Line: Nonthaburi Civic Center to Min Buri	21.4	М
11/27	Chile	Santiago	Line 2: La Cisterna to Hospital El Pino	3.2	М
11/28	China	Chengdu	Line 19: Jiujiang North to Tianfu Station	26.8	R
11/30	п	Chongqing	Line 5: Dashiba to Shiqiaopu Line 10: Houbao to Lanhualu	2.9 2.4	М
11/30	Iran	Tehran	Line 1: Imam Khomeini Int'l Airport to Shahr-e Parand	11.8	R

URBAN RAIL NEWS, NOVEMBER 30

Rail News in Review

New York Metropolitan Area

METROPOLITAN TRANSPORTATION AUTHORITY (MTA)

Proposed 2024 Budget

The MTA released its preliminary operating budget for 2024, the second of five years to have a projected balanced budget. This November Financial Plan outlines \$427 million in operating efficiencies, exceeding the target of \$400 million in savings as projected in the July Financial Plan. The MTA is ahead of schedule toward identifying \$500 million in savings annually beginning in 2025.

The MTA has identified specific savings across all its agencies, delivering on its promise in the New York State Budget agreement of achieving \$400 million savings in annual operating efficiencies. These savings include improving employee availability while reducing overtime costs by strategically managing assignments within compliance of timekeeping rules within New York City Transit. Identified efficiencies within Long Island Rail Road and Metro-North Railroad include collaborating to identify best industry practices in equipment shops and ensuring appropriate inventory availability for required maintenance. Bridges and Tunnels reviewed staffing requirements, reducing vacancies. These efficiencies together will save the MTA \$427 million in 2024, going beyond what was promised in the New York State Budget.

While paid ridership on subways and commuter railroads continues to increase in accordance with the midpoint scenario as projected by the consulting firm McKinsey, paid

bus ridership is now trending below the low case scenario. Crossings at MTA Bridges and Tunnels continues to track at or above pre-pandemic levels.

In July, the Board approved a 5.5 percent toll increase and 4 percent fare increase for 2023 which went into effect in August. This is projected to generate \$117 million in 2023. The five-year plan assumes an additional 4 percent increase in both 2025 and in 2027.

MTA PRESS RELEASE, November 29

NEW YORK CITY TRANSIT (NYCT)

Transit Museum Holiday Train Returns

Once again, the New York Transit Museum's Holiday Train, consisting of R-1/9 cars, is in operation for the holiday season.

Like in previous years, the train operates from Second Avenue on the Lower East Side to 145th Street lower level on the Concourse Line. It operates express on Sixth Avenue and Central Park West.

The train leaves Second Avenue at 10 AM, 12 Noon, 2 and 4 PM. Southbound, it leaves 145th Street at 11 AM, 1, 3 and 5 PM. A change from previous years sees the train operating on each of the five Saturdays in December instead of Sundays. This was done to avoid Christmas and New Year's Eves.

Second Avenue Phase 2 Advances

The Federal Transit Administration (FTA) has issued \$3.4 billion in funding to advance the Second Avenue Subway Project.

The FTA signed the Full Funding Grant Agreement as a part of the Capital Investment Grant program, which receives funding under the Infrastructure Investment and Jobs Act.

The funding will help support the 1.8-mile extension of the line along the east side of Manhattan to 125th Street, relieving overcrowding on the Lexington Avenue Line, which transports 200,000 riders daily.

The \$7.7 billion extension project is the second of four planned phases to extend the Second Avenue Subway to improve the region's public transportation network.

MASS TRANSIT, November 6

One More Accessible Station

On November 21, new elevators at the 7 Avenue [3] © Station were placed into service. The project included the installation of three elevators, one elevator that takes passengers from street level to the station mezzanine and two from the mezzanine to the platforms.

The installed elevators include a new fire alarm system, smoke and heat detectors and cameras inside the elevator cabs. Each elevator is also equipped with an emergency two-way communication system which gives riders the ability to communicate with dispatchers in the event of an emergency via standard voice communication or visually by answering on-screen questions, which improves communication for riders with hearing or speech disabilities.



The new elevators on the mezzanine leading to the platforms, on November 21. Marc A. Hermann/MTA photo

To support the installation of the three new elevators, a new platform ADA boarding area was installed, and tactile strips were placed along the entire length of both platforms. At the Seventh Avenue entrance, the hallway floor connecting the fare arrays and the mezzanine elevators was regraded to meet ADA standards, and the corridor has new mosaic artwork commissioned by MTA Arts & Design, which also lines the mezzanine walls at the Eighth Avenue entrance.

This project was funded by a grant provided by the Federal Transit Administration (FTA) and completed as part of a design-build package of eight stations throughout the subway system, the first such bundle undertaken by MTA Construction & Development (C&D) as part of an effort to deliver accessibility upgrades better, faster, and cheaper. The

remaining stations from that bundle will open later this year. MTA PRESS RELEASE, November 21

Flushing-Main Street Station Improvement

On November 22, the completion of the Flushing-Main Street
 Station improvement project was announced, totaling an additional 1,200 square feet of space for passenger circulation. The work consisted of replacing eight staircases, installing eight new staircases, creating four new points of entry to the station and installing two new fare control areas, for a total of four. These upgrades should improve passenger flow as additional state of good repair work such as steel rehabilitation and waterproofing will ensure the integrity of the station's infrastructure for its 44,000 average weekday riders, Queens' busiest station without subway transfers.



Looking west at the expanded mezzanine at Main Street on November 22. Marc A. Hermann/MTA photo

As part of the renovation project, the security camera system was replaced with new upgraded equipment, and 15 digital screens, along with five new countdown clocks, were installed across platforms and mezzanines, delivering more real-time and location-specific information.

The scope of work involved in the project included:

- · Installation of four new street-to-mezzanine stairs;
- · Installation of four new mezzanine-to-platform stairs;
- Installation of two new fare control areas;
- Rehabilitation of four existing street-to-mezzanine stairs to be ADA compliant;
- Rehabilitation of four existing mezzanine-to-platform stairs to be ADA compliant;
- State of good repair work including steel rehabilitation, concrete spall, and leak mitigation.

The Notice to Proceed was issued in December 2021 with actual construction beginning in July 2022, following utility relocation work. The design-build project was completed on-time and approximately \$9 million under budget, at \$48 million, despite challenges including ensuring the structural stability of nearby buildings and managing logistics at the busy Roosevelt Avenue and Main St intersection.

MTA PRESS RELEASE, November 22

Long-Term Track and Platform Outages

On the BMT Jamaica Line, Gramercy Group has been working on the station renovation job (contract A-35305) at 75th Street-Elderts Lane since February 26. Due to wrap up on December 2, this work has been extended again, to December 18.

Meanwhile, up the line at Woodhaven Boulevard Station, MLJ Contracting, under contract A-37135, completed their work on the Jamaica-bound platform on December 2. On Monday, December 4, work shifted to the Manhattan-bound platform. As a result, southbound 1 trains will be bypassing Woodhaven Boulevard for several months.

On the IND Culver Line, the middle track (B3-4) from the south end of Avenue X Station to the first crossover switch north of the station is out of service from November 13 to December 18. This is enable Tutor Perini Corporation and Five Star Electric Corporation, under the CBTC signal contract (S-47009), the install track panels. This work will also replace the existing General Railway Signal Model 5 switch machines with Union Switch & Signal Style M-3 switch machines.

Station Re-NEW-Vation Progress

During November, the following stations were completed in this station renovation program:

Station	Weekend		
Whitehall St (N) (W)	November 11-12		
Aqueduct Racetrack A	n		
Baychester Av 5	November 18-19		

MTA PRESS RELEASES, November 17, November 21

LONG ISLAND RAIL ROAD (LIRR)

Wireless Service Expanded

On November 21, upgraded mobile connectivity service was started. Enhanced cellular service is now available for AT&T, T-Mobile and Verizon subscribers at Grand Central Madison (GCM) and its tunnels, and at Atlantic Terminal, Jamaica Station and tunnels between Atlantic Terminal and Jamaica Station. The cellular service was designed, installed and managed by Boingo Wireless. The expanded cellular service features 5G and LTE coverage and is complemented by free public Wi-Fi at Atlantic Terminal, Jamaica Station and GCM.

Boingo networks for the LIRR are built and managed at no cost to the MTA and are designed to generate long-term revenue for the MTA.

MTA PRESS RELEASE, November 21

Stations Signs Arrive at Grand Central

Towards the end of November, station signs were beginning to be installed at Grand Central Madison.

From the time the station opened back in February until now, there were no station signs anywhere on the four platforms. Apparently due to ADA requirements, these signs are now being installed.



One of the new Grand Central station signs, this one being along Track 301 on the lower level, as seen on December 1. Jeff Erlitz photo

By December 1, the signs had been installed along six of the eight tracks in the terminal, with only Tracks 204 and 303 having yet to be done.

Initially, these signs were only being installed along the track walls. Of course, if there are two trains sitting at any one platform, none of the signs are visible. It is understood that there will eventually be additional signs posted along the platforms, just like at every other station on the railroad.

METRO-NORTH RAILROAD (MNR)

Third Heritage Locomotive Unveiled

On November 13, MNR introduced its third "wrapped" locomotive celebrating a previous operator of its lines.



P32AC-DM 211 (General Electric, 3/1998) at North White Plains on November 13. Emily Moser/MNR photo

The New York Central Railroad's "lightning stripe" scheme was chosen, which was carried on most of the Central's electric and diesel passenger locomotives in the 1940s and 1950s.

The locomotive made its debut run on the Hudson Line on Tuesday, November 14, departing Croton-Harmon Station at 7:31 AM, and arriving at Grand Central Terminal at 8:26.

MTA PRESS RELEASE, November 13

NJ TRANSIT (NJT)

Hudson River Tunnel Project

Construction has started on the Hudson Tunnel Project. The project is one of the largest infrastructure projects in U.S. history and a key component of the Gateway Program, an effort to revitalize the Northeast Corridor (NEC) by improving the rail infrastructure along a 10-mile segment. The scope of the Hudson Tunnel Project includes two components:

- The construction of a two-track Hudson River rail tunnel between Bergen Palisades in New Jersey and New York Penn Station in Manhattan;
- Rehabilitation of the existing North River Tunnel, which sustained significant damage during Superstorm Sandy.
 The existing North River Tunnel was constructed in 1910 and is the sole passenger rail connection between Manhattan and New Jersey and the NEC.

The Gateway Program has seen significant additional progress in recent months. Construction of the new Portal North Bridge, led by NJT and Amtrak, recently passed the 35 percent completion mark, and key elements of the Hudson Tunnel Project have advanced, including:

- The Hudson Tunnel Project entered the Engineering Phase of the Federal Transit Administration's Capital Investment Grants Program, making the project eligible for \$6.88 billion in federal grants;
- GDC was selected for a \$25 million Rebuilding American Infrastructure with Sustainability and Equity Grant from USDOT for construction of the Tonnelle Avenue Bridge and Utility Relocation Project;
- USDOT's Build America Bureau is advancing applications for Railroad Rehabilitation and Improvement Financing loans to support the Hudson Tunnel Project;
- Five out of nine contemplated Hudson Tunnel Project contracts are in procurement or construction.

MASS TRANSIT, November 6

New Schedules Effective November 12

There were minor time changes to numerous trains on most lines. The more substantial changes included the following:

Morris & Essex Lines - Weekends

 Train 6908, which currently departs Dover at 5:05 AM and Denville at 5:12 AM, will now depart Dover at 5:04 AM and Denville at 5:11 AM. It will also add a Mount Tabor stop at 5:13 AM. The remainder of this train's schedule is unchanged.

Montclair-Boonton Line - Weekdays

 Train 204, the 6:30 AM departure from Montclair State Univ., will no longer stop at Mountain Avenue and will make stops from Upper Montclair to Hoboken 1-2 minutes earlier.

• Train 1070, the 5:05 AM departure from Hackettstown, will now depart Montclair State University at 6:21 AM and add the Mountain Avenue stop at 6:25 AM (11 minutes earlier than the current Mountain Avenue stop on Train 204).

Northeast Corridor/North Jersey Coast Line - Weekdays

- Train 3702 will be renumbered as Train 3102 and will no longer serve Jersey Avenue. It will depart New Brunswick at 5:27 AM (same as at present) and will maintain its current schedule to New York.
- Train 3704, which currently departs Jersey Avenue at 5:50 AM, will now depart Jersey Avenue at 5:41 AM and make stops nine minutes earlier.
- Train 3812, which currently departs Trenton at 5:21 AM, will now depart Trenton at 5:27 AM, make all station stops through North Elizabeth 3-6 minutes earlier, and no longer stop at Newark Airport. Times at Newark Penn Station and New York are unchanged.
- Train 3503, which currently departs New York at 5:47 AM, will now depart New York at 5:37 AM, drop its Newark Airport stop and make remaining stops 10-15 minutes earlier.
- Train 3265, the 5:20 PM departure from New York, will no longer stop at Avenel.
- Train 3267, the 5:36 PM departure from New York, will add an Avenel stop.
- Train 3727, the 5:39 PM departure from New York, will now depart New York at 5:43 PM, make all stops 3-4 minutes later, and be renumbered 3169.
- Train 3733, the 7:20 PM departure from New York, will be renumbered as Train 3879 and will add stops at Princeton Junction, Hamilton and Trenton.
- Train 3881, the 7:43 PM departure from New York, will be renumbered as Train 3735 and will no longer stop at Princeton Junction, Hamilton and Trenton. Jersey Avenue will now be this train's final stop.
- Train 3965, the 7:49 PM departure from New York, will now depart New York two minutes earlier, at 7:47 PM, and add a Secaucus stop. Times at the remaining stops will not change.
- Stops at Newark Airport have been adjusted.

Northeast Corridor/North Jersey Coast Line - Weekends

- Train 7245, the 1:07 PM departure from New York, will add a stop at North Elizabeth.
- Train 7845, the 1:14 PM departure from New York, will no longer stop at North Elizabeth.

Raritan Valley Line - Weekdays

- Train 5714, which currently departs High Bridge at 6:12 AM, will now depart High Bridge at 6:11 AM and add a stop at Bridgewater. Its times from Plainfield through Newark Penn Station will not change.
- Train 5416, the 6:50 AM departure from Raritan, will no longer stop at Bridgewater and will make all stops from Bound Brook to Newark Penn Station two minutes earlier.

NJ TRANSIT SERVICE ADVISORY, November 12

Sawtooth Bridges Replacement Project

Amtrak, in coordination with NJT, has begun the procurement process for the Sawtooth Bridges Replacement Project. Replacement of the Sawtooth Bridges is a key component of the Gateway Program to preserve and expand the busiest section of the Northeast Corridor (NEC).

The Federal Railroad Administration (FRA) recently awarded the project up to \$133.32 million in grant funding to support early construction activities, along with 24 other projects totaling more than \$16.4 billion of federal investment across the NEC. The work will modernize and expand 1.9 miles of the NEC in Kearny, N.J., built in 1907.



Looking west at the Sawtooth Bridges in Kearny. Amtrak photo

Owned by Amtrak, the Sawtooth Bridges carry more than 400 Amtrak and NJT trains per day over tracks used by NJT, PATH and Conrail freight trains. When complete, the new four-track NEC structure will double track capacity in one of the most congested and complex locations on the NEC, where these different services all come together. The age and current condition of the Sawtooth Bridges also restrict trains to speeds of 60 mph.

The procurement process has officially begun with the publication of Advance Notices on Amtrak's Procurement Portal. Amtrak intends to use the innovative CMAR approach to deliver the project and expects to issue two Requests for Qualifications in the near future — one for the CMAR contract and another for the project, program and construction management contract. A formal Request for Proposals will follow in 2024.

This work will be performed under a Project Labor Agreement as part of a 2021 Memorandum of Understanding between Amtrak and North America's Building Trades Unions covering Amtrak's major civil engineering projects. MASS TRANSIT, November 21

Other U.S. Systems

BOSTON

Progress On Track Work

The Massachusetts Bay Transportation Authority has

completed more critical track work that was planned on the Red Line between JFK/UMass and Park Street Stations. Shuttle buses replaced service between these stations during the evenings from November 14 to 16 and all day during the weekend of November 18 to 19. The work follows critical track work MBTA completed on the Red Line's Ashmont Branch between JFK/UMass and Ashmont Stations and the Mattapan Line for 16 days in October.

Today, less than 10 miles of Red Line track is currently speed restricted — a first since March 8 when the MBTA first initiated slow zones systemwide. The early access and weekend diversion allowed crews to replace more than 2,000 feet of rail and 115 crossties on the Red Line. The MBTA alleviated six speed restrictions in the area between South Station and JFK/UMass and alleviated three restrictions near Downtown Crossing Station.

The MBTA also maximized these closures by performing a variety of in-station work, including new and cleaned signage within tunnel areas, restoration and sanding of the platform benches at Broadway, Andrew and South Station, new rubber flooring on the stairway at Broadway, painting at Broadway and Andrew and platform tripping hazards fixed at South Station.

MASS TRANSIT, November 22

CHICAGO

Service Improvements

Rail service is being added back to rail lines that saw recent, temporary reductions. Effective Monday, November 13, more frequent rail service will be scheduled on weekday Red, Orange and Pink Lines. Effective, November 18, Saturday service on both the Brown and Orange lines will be increasing.

Scheduled service improvements are as follows:

- Red Line: Weekday midday and evening headways drop from 10 to 7.5 minutes;
- · Orange Line:
 - •Weekday AM and PM peak headways drop from 10 to 8.5 minutes;
- ·Saturday early AM and evening peak headways drop from 15 to 12 minutes;
- ·Saturday midday headways drop from 12 to 10 minutes.
- Pink Line: Weekday early AM and early evening headways drop from 12 to 10 minutes;
- · Brown Line:
 - •Saturday AM and evening and late evening headways drop from 15 to 12 minutes;
- ·Saturday early peak headways drop from 20 to 15 minutes; With the recent completion of work at Morgan Middle on the Blue Line, a turn-back track along the Forest Park Branch near the UIC-Halsted station, Forest Park-bound Blue Line trains are now able to "short turn" at UIC-Halsted to head back north toward O'Hare. This puts more trains on the busiest parts of the Blue Line between downtown and O'Hare, helping to address issues of crowded trains and platforms due to increasing ridership.

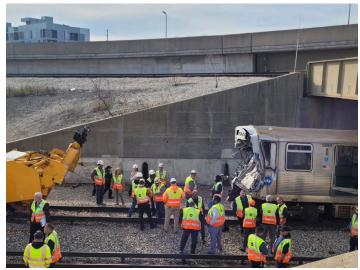
With Morgan Middle now available, O'Hare-bound train headways at UIC-Halsted will be scheduled every 6-12 minutes instead of 10-12 minutes weekdays between 6:30 and 9 AM and 6-7.5 minutes instead 10 minutes between 3:30 and 6 PM. CTA PRESS RELEASE, November 9

Yellow Line Collision

A Yellow Line train crashed into a slow-moving snowplow on the tracks near the Howard Station on the North Side, injuring at least 38 people, three of them critically. Four children, the youngest being two, were injured, suffering "bumps and bruises." None of the injuries was life-threatening.

But the chaotic scene near the Far North Side station just hours after the morning rush hour jarred commuters and passersby alike.

As passengers were led off the train, some were brought into a triage center lined with stretchers to be assessed. One passenger was bleeding heavily from the head. A family with a young child in a stroller who were let off the train talked to police on a nearby street corner, planning to follow an injured family member to the hospital.



Aftermath of the collision involving a Yellow Line train and a snow plow. Chicago Fire Department photo

Twenty-three people were taken to hospitals, and 15 refused care, officials said. The CTA operator, who was near the point of collision, was among the most critically injured.

The cause of the crash remains under investigation, CTA officials said. The National Transportation Safety Board announced on X, formerly known as Twitter, that it would conduct an investigation.

As of publication time for this issue of the *Bulletin*, Yellow Line service remains suspended with shuttle buses operating between Howard and Dempster–Skokie Stations. Red Line service, which had been suspended between Howard and Thorndale, was delayed through mid-afternoon that day. Purple Line service returned to normal later that day. CHICAGO SUN-TIMES, November 16

HARRISBURG, PA.

Restored PRR Power Director's Office Opens

After a long lease negotiation and a year of restoration and cleanup, the Harrisburg Chapter of the National Railway Historical Society has opened the former Pennsylvania Railroad 1937 Power Director's Office (PDO) for public visits by arrangement.



The former Pennsylvania Railroad Power Director's Office, now leased and operated by the Harrisburg Chapter of the National Railway Historical Society as an interpretive museum. Dan Cupper photo

Situated on the second floor of the 1887 PRR passenger station, the 60-by-60-foot room governed the flow of 11,000-volt A.C. current across the western end of the railroad's Northeastern electrification network. That electricity powered the railroad's iconic GG1, P5A, and E44 locomotives, as well as multiple-unit commuter cars.

A schematic panel, resembling an Olympic-sized interlocking-tower model board, stretches across three walls, showing 19 substations, high-voltage distribution lines, and the location and energized status of all wired tracks.

This was the last-built of four PDOs, joining centers in New York, Philadelphia and Baltimore. Together, they supervised power distribution to overhead catenary along 674 routemiles and 2,191 track-miles.

To arrange a visit or ask about open-house dates, contact https://www.harrisburgnrhs.org/pdo.
TRAINS NEWS WIRE, November 29

LOS ANGELES

Improved Metro Service

Effective Sunday, December 10, frequency of service on Metro's light rail A, C, E, and K lines is being improved and later trains are being added on its A and E Lines.

For the first time, weekday peak hour trains (5 to 9 AM and 3 to 7 PM) on the A Line (Long Beach to Azusa) and E Line (Santa Monica to East Los Angeles) will operate every

eight minutes instead of the current 10 minutes. Trains will operate every 10 minutes instead of 12 minutes during weekdays at midday and Saturday/Sunday from 9 AM to 7 PM. Two additional trains will be added to the nightly schedule in each direction, extending service by an extra 40 minutes each night on both weekdays and weekends. Last A Line trains will depart APU Citrus (Azusa) and Downtown Long Beach at 11.45 PM nightly, with last E Line trains departing Downtown Santa Monica 11:54 PM and East LA (Atlantic) at 12:18 AM nightly.

Improvements in frequency will also be made to the C and K Lines, as weekday midday trains will operate every 10 minutes instead of 12 or 15 minutes. Saturday/Sunday C Line service will also improve to every 10 minutes instead of every 15 minutes. However, K Line trains will operate every 20 minutes on Saturday and Sunday due to construction and testing work through May 2024 to connect the C and K Lines and the forthcoming LAX/Metro Transit Center Station, set to open in late 2024. K Line weekend frequency is planned to improve to 10 minutes as soon as these works are completed. LA METRO PRESS RELEASE, November 29

NEW ORLEANS

100th Anniversary of Perley A. Thomas Streetcars

The New Orleans Regional Transit Authority (RTA) hosted a block party on October 28 to celebrate the 100th anniversary of the use of the Perley A. Thomas streetcar.

The celebration took place at the Carrollton Streetcar Barn, welcoming the community, streetcar enthusiasts and public officials for a family-friendly event with music, refreshments, activities and guided tours of the equally historic facility. New Orleans RTA's CEO Lona Edwards Hankins hosted facility tours, featuring the craftsmen who build and maintain the streetcar system.

Debuting in 1835, the St. Charles Streetcar line is the oldest continuously operating streetcar line in the world and is registered as a National Historic Landmark. The first streetcars were pulled by steam locomotives and were later replaced by horse-drawn carriages. In 1893, the streetcar line was electrified. The iconic, green Perley A. Thomas cars were introduced in the New Orleans Streetcar system between 1923 and 1924.

New Orleans RTA notes the streetcars are revered for their artistry and meticulous construction. Of the 173 Perley A. Thomas streetcars originally ordered, 38 remain, with 10 to 13 in service on the St. Charles Streetcar line daily. The entire streetcar fleet is maintained by skilled RTA electricians, welders, carpenters, machinists and painters, often using antique tools and machines dating back to the 1900s. Originally purchased for \$15,000 each, the Perley A. Thomas replicas would cost nearly \$4 million per car to build today.

The RTA is working to attract the next generation of its workforce to preserve the rich, nearly 200-year legacy of the New Orleans streetcar system. Most of the principal craftsmen who maintain the legacy streetcar system are at or beyond



One of the Perley A. Thomas streetcars, No. 965, built in 1924 and seen here on June 6, 2014. Vegasjon photo via Wikimedia Commons

retirement eligibility, creating a potential skilled labor crisis. Simultaneously, RTA is re-training and developing a workforce to expand the use of low- and no-emission vehicles beyond the current streetcar system to RTA's fixed route bus service, ferry vessels and eventually modern rail. The RTA has partnered with Delgado Community College and nonprofit partners like the 1881 Institute to identify and train a workforce that can carry the baton to the next phase of the authority's history.

MASS TRANSIT, November 2

PHILADELPHIA

Tokens To Be Discontinued

SEPTA announced that the Authority will no longer accept tokens for fare payment effective January 1, 2024. The sale of tokens ended in 2018; however, SEPTA has continued to accept tokens on buses and trolleys, and via fare kiosks located at stations and bus loops.

Riders must use any remaining tokens before they expire at the end of the year. Tokens are valued at \$2 each and are not redeemable for cash. SEPTA encourages riders to add the value of their tokens to a SEPTA Key card at a fare kiosk. Tokens can be used to load a pass to a Key card, or to add funds to the Travel Wallet feature.

Travel Wallet can be used to pay for trips on all modes, including buses, trolleys, the Market-Frankford Line, the Broad Street Line, the Norristown High Speed Line, and Regional Rail. Riders who use Travel Wallet on SEPTA Key are also eligible for two free transfers.

SEPTA Key cards cost \$4.95 and can be purchased at SEPTA Sales Offices and participating retailers. Registering a Key card protects the fares in the event it is ever lost or stolen. Riders who register their Key card within 30 days are refunded the \$4.95 purchase price in the Travel Wallet. SEPTA PRESS RELEASE, November 1

New Conshohocken Station Opens

SEPTA cut the ribbon at the new Conshohocken Station along the Manayunk/Norristown Regional Rail Line on Monday, November 6.

The new station, located at 36 W. Washington Street, was built directly to the west of the former station, which allowed SEPTA to continue operations during construction and minimize the disruption to riders. With an average of approximately 500 weekday riders, Conshohocken Station is one of SEPTA's busiest Regional Rail stations.

Construction on the approximately \$15 million project began in November 2019, and it will continue into early 2024 to decommission the former Conshohocken Station. SEPTA used a hybrid approach to construction to leverage outside expertise with the strengths of internal resources to increase overall productivity and cost effectiveness.

The fully ADA accessible station features a new building and passenger shelters; high-level platforms; an accessible parking area; a new grade crossing for vehicular and pedestrian traffic; and new signage and lighting. The Schuylkill River Trail was realigned to accommodate the new station and grade crossing.

This project would not have been possible without Pennsylvania Act 89, the state's comprehensive transportation funding law passed in November 2013. Act 89 has enabled SEPTA to invest millions of dollars in the transit network throughout the region.

SEPTA PRESS RELEASE, November 9

PORTLAND, ORE.

Streetcar, Light Rail Train Collide

A TriMet MAX light rail train and Portland streetcar collided in an intersection east of downtown Portland on November 16, briefly pinning the streetcar operator and sending that operator and one passenger to the hospital with minor injuries.



Portland Streetcar 100T 024 (United Streetcar, 9/2013) and MAX SD660 216 (Siemens, 1997) after the collision.

Dave Killen/Oregonian photo

The collision occurred about 10:20 AM at the intersection

of Northeast 7th Avenue and Holladay Street. Portland Fire & Rescue described the streetcar operator as being "lightly pinned" but said he was freed by firemen. Both vehicles were derailed and suffered damage; the intersection was closed for several hours while the damaged equipment was removed.

KATU-TV reports the Multnomah County Sheriff's Office will review video footage from on board both vehicles to help determine a cause.

The light rail and streetcar systems connect and intersect at several locations but are separate entities: The five-line, 59.7-mile MAX light rail system is part of the regional transit agency TriMet, while the three-line, 16-mile streetcar network, which uses smaller trainsets, is owned by the city of Portland. TRAINS NEWS WIRE, November 16

ST. LOUIS

MetroLink Extension Progress

Construction on the MidAmerica St. Louis Airport MetroLink extension project in St. Clair County, Ill., continues to progress, with the route of the alignment becoming more visible. The project will extend the MetroLink light-rail system 5.2 miles from the existing Shiloh-Scott Transit Center in Shiloh, Mo., to MidAmerica St. Louis Airport in Mascoutah, Ill. As part of the project, a new MetroLink Station will be constructed directly across from the passenger terminal and parking lot on Airport Boulevard. Plans also include a new 2.4-mile access roadway that extends from Rieder Road to Airport Boulevard, a 0.3-mile extension of Rieder Road from Wherry Road to Scott Air Force Base's Cardinal Creek Gate and a five-mile expansion of the MetroBikeLink System, which is a network of paved trails and bike paths that runs adjacent to the MetroLink in St. Clair County.

The MidAmerica St. Louis Airport MetroLink extension project is being funded, in large part, by a \$98 million Rebuild Illinois Grant. Project partners include St. Clair County, St. Clair County Transit District, St. Louis Metro Transit, Illinois Department of Transportation, Southwestern Illinois Building Trades Council, WSP, Gonzalez Companies, Plocher Construction, Kilian Construction, Keeley Construction and L.K. Comstock. The project is on track to be completed in the spring of 2026. MASS TRANSIT, November 28

International

BERLIN

Christmas Train Returns

After a 15-year break, a Christmas train will finally run again in December 2023. A mixed short train with cars built in 1928 and 1938 is being used.



ET/EB 167 006 with seasonal adornment. Historische S-Bahn photo

The Christmas train ended in December 2008. A tradition that has its roots in the 1950s had to be temporarily ended because the fleet of historic vehicles on the Berlin S-Bahn had maintenance deficiencies that the company no longer had the capacity to correct.

Now the tradition is being revived with voluntary work — in a small format. From December 2-23, a four-car train consisting of cars ET/EB 167 006 and 475/875 605 will be operated.

The Christmas train will only run on routes that still have the old train control system. That's why it is traveling on the S-Bahn ring — the start and end station will be Grünau Station. The train will not stop at any of the stations along the way. The exception is the trips on Saturdays, where there is a short break in Charlottenburg. It is therefore not possible to get on or off along the way.

On Saturdays, trips leave Grünau at 1:10 and 3:50 PM. These trips operate via Neukölln and Südkreuz and terminate at Charlottenburg. After a 25-minute layover, the trips leave Charlottenburg at 2:25 and 5:05 PM.

On Sundays, the two departure times from Grünau are the same but upon reaching the Ring, the first trip operates as an S-41 (clockwise) and the second trip operates as an S-42 (counter-clockwise).

HISTORIC S-BAHN, November 7

BRĂILA, ROMANIA

New Trams Ordered

Brăila municipality has awarded sole bidder Astra Vagoane Călători a contract to supply six trams with an option for two more. The city's 22.7 kilometer network is currently operated with second-hand vehicles from Rotterdam, Vienna and Graz, although Astra is scheduled to deliver two new trams this December under a contract awarded in May 2021.

The latest contract was signed on October 19, with deliveries scheduled by June 2026. The 48 million lei order is being funded by the European Union's Recovery & Resilience Fund (98 percent) and Brăila municipality.



The two trams from the first order in the Astra factory. Astra photo

The new trams are intended to improve urban transport and help lower transport emissions on the route to the Lacu Sărat tourist resort.

The two-section low-floor trams will be 20 meters long with a capacity of at least 132 passengers, including 32 seated. They will have three double-leaf doors, a maximum speed of 50 km/h and a service life of at least 17 years, with a warranty of at least five years or 350,000 kilometers. The blue livery is inspired by the River Danube that passes the city.

METRO REPORT INTERNATIONAL, November 3

BRNO, CZECH REPUBLIC

More Trams Ordered

Brno operator DPMB has awarded Škoda Group a firm order to supply a further 15 ForCity Smart 45T trams. This will enable the replacement of obsolete KT8 trams dating from the late 1980s and early 1990s.

The latest order announced on November 11 has been placed as an option under a February 2021 framework agreement which included a firm order for an initial five trams with options for up to 40 more. Earlier this year DPMB secured KC630 million of EU funding to cover part of the cost of ordering 15 more.

Each tram in the latest order will cost KC75 million. The first five are scheduled for delivery in 2024, and the rest in 2025. They will be used on Route 8 from Lišně to the university campus where the five trams delivered under the initial order are already in service. DPMB has remaining options to order another 20 trams by 2026.

The ForCity Smart 45T three-section bidrectional low-floor trams are 31 meters long with a capacity of 233 passengers including 64 seated. There are two large multifunctional spaces for wheelchairs, prams or bicycles. All eight axles are powered, with maximum operating speed of 70 km/h and they are equipped for regenerative braking.

Features include air-conditioning, a modern, clear



The last of the first five ForCity Smart 45T cars (Škoda, 5/2023) is seen leaving the route 8 terminal at Nemocnice Bohunice on June 18, 2023. Karel Šimána photo via Urban Electric Transit

information system with wide LCD monitors, internal and external CCTV, stainless steel handrails, USB chargers and partially tinted side windows.

The cab is designed for simplicity and good visibility. The windscreens are heated, and the front windscreen has daytime running lights.

METRO REPORT INTERNATIONAL, November 2

COPENHAGEN, DENMARK

Original Metro Cars Getting Refurbished

Specialist logistics company Van der Vlist is organizing the multi-modal transport of 34 metro trains by sea to Zeebrugge and then to Rotterdam, where Alstom is to undertake a €30 million mid-life refurbishment program over three years.

The 39-meter-long, 59-ton three-car trainsets are being moved in one piece, with a total transport length of 49.5 meters and weight of 151 tons.



Looking south from the Amager Strand station of line M2 on September 29, 2023, two of the original AnsaldoBreda cars from 2002 are passing each other. The train on the left is heading towards Vanløse while the one on the right is headed to the airport. Jeff Erlitz photo

The driverless trainsets were supplied by AnsaldoBreda for the opening of the metro in 2002 and are used on lines M1 and M2. The refurbishment program is designed to provide another 10 years of operational life, and includes interior and exterior renovation and component replacement.

METRO REPORT INTERNATIONAL, November 10

EDMONTON, CANADA

Valley Line Southeast Opens

The city of Edmonton's Valley Line Southeast light-rail transit (LRT) began service on November 4. The project was delivered by TransEd, a consortium comprised of Alstom along with Bechtel, EllisDon and Fengate. The city of Edmonton is expecting the Southeast LRT to serve about 30,000 riders daily.

The Valley Line Southeast LRT is an integral part of achieving the City Plan and will provide more accessible, convenient and sustainable travel options for Edmontonians over the coming decades. The City Plan aims for a future where 50 percent of trips are made by transit and active transportation.

The 13-kilometer (8.1-mile) system connects Mill Woods to downtown Edmonton via rail for the first time, stopping at 11 new neighborhood stops, with direct connections to multiple bus lines. Three new bridges were built, including the new multipath eight-meter (26.2-foot) wide Tawatinâ Bridge over the North Saskatchewan River.

A tunnel was also built as part of the project. The elevated Davies Station offers direct access to the 1,300-space Park & Ride and multi-modal transit center. Transit riders may also easily transfer to the Capital Line and Metro Line light-rail lines at the Churchill Station.



View east of the new Mill Woods terminal at the south end of the line with Bombardier Flexity 2025. City of Edmonton photo

Alstom played a pivotal role in the design, supply, installation and testing and commissioning of the light-rail vehicles (LRVs), signaling, communications, power supply and distribution, overhead catenary system and related depot equipment for the Southeast LRT. The 26 Flexity LRVs, each capable of carrying up to 275 passengers along the system, offers a 100 percent low-floor design, ensuring easy access and a comfortable ride for all passengers. Step-free boarding is an important part of



Map of Edmonton's new Valley Line. City of Edmonton

the enhanced passenger experience for people with reduced mobility, wheelchairs, mobility aids and strollers.

During the height of construction, more than 1,000 workers were on site. The project awarded 83 percent of the subcontracts and 75 percent of the purchase orders to Canadian-based firms and vendors.

MASS TRANSIT, November 7

LIVERPOOL

Class 777 Performance Issues

Liverpool City Region Mayor Steve Rotheram is seeking compensation from train manufacturer Stadler following continued poor performance of Merseyrail's new fleet of Class 777 electric multiple-units. (See February 2023 *Bulletin*, page 13).

The announcement on November 8 came after a meeting with the Chief Executive of Stadler the previous day. A statement by the Combined Authority noted "the Mayor made clear, in no uncertain terms, that current performance of



Merseyrail Class 177 142 departs Headbolt Lane station on May 10, 2023. Rail Business UK photo

the fleet roll-out had been frustratingly poor and demanded immediate improvements for passengers."

Reliability figures have been low on both the Miles Per Technical Incident and the Rail Delivery Group's new Mp701D measures. The launch of the new service to Headbolt Lane in late October has been particularly disappointing, with the battery-electric trains being described as very unreliable. The Mayor and Combined Authority have repeatedly raised concerns about the level of performance with Stadler and also urged Merseyrail as the train operator to do everything possible to minimize disruption.

The situation is becoming more critical as the withdrawal of the Class 508 units dating from 1979–80 continues; the last three sets to be taken out of service are due to be 508104 and 131 during the week commencing December 18 and 508120 during week commencing December 31.

A spokesperson for Stadler told Rail Business UK the company fully understands the current frustrations of passengers. The cutting edge technology used in these trains has meant that Stadler had to overcome a series of challenges, including new infrastructure and new software. They are deploying considerable resource to overcome these challenges and are determined to quickly make them more reliable.

The seven battery trains that Stadler is manufacturing for the Liverpool City Region Combined Authority are the first in the world with traction battery technology designed for an underground network. They feature ground-breaking technology and are blazing a trail for sustainable travel in the UK.

RAIL BUSINESS UK, November 15

LONDON

Next Elizabeth Line Operator

Transport for London (TfL) has begun the process of appointing a contractor to operate Elizabeth Line services after the current concession held by MTR Corp. expires on May 25, 2025.

The next contract is expected to be for an initial period of seven years, with an option for TfL to extend this by up to two years and a separate option for up to seven months.

TfL has set out seven key objectives:

- Excellence in safety and sustainability;
- · Optimizing performance and cost without sacrificing quality;
- High and annually improving customer satisfaction, accounting for increasing expectations and emerging technology trends;
- Positively influencing passenger and stakeholder perception of TfL's Rail for London arm and the Elizabeth Line by maintaining, developing and enhancing the Elizabeth Line brand across London;
- Managing and accommodating passenger and network growth, collaborating with RfL to deliver investment projects;
- Maintaining a flexible and dynamic approach to changes in the rail industry that directly and indirectly influence the Elizabeth Line;
- Ensuring that the Elizabeth Line is a great place to work and its workforce is representative of the communities served. The operator would be paid a fee based on a package of incentives with performance-based bonuses and deductions. Parent company guarantees may be requested, and performance bonds and/or capitalization of the concession operator may also be required. A negotiated procedure with a prior call for competition is to be used. Requests to participate are to be submitted by December 15, 2023.

RAIL BUSINESS UK, November 10

New Stock for Piccadilly Line Delivered

The first of 94 trainsets that Siemens Mobility is to supply for London's Piccadilly Line is now undergoing intensive dynamic testing at the Wegberg-Wildenrath Test & Validation Center in Germany.

Scheduled to take six or seven months, the program includes testing of acceleration and braking, noise and vibration, looking at all onboard equipment including both hardware and software. Siemens Mobility will also undertake functional tests of interfaces with infrastructure and other equipment.

The first trainset is expected to arrive in London in summer 2024, ahead of further testing on the Piccadilly Line before the new trains start entering service in 2025.

Meanwhile, three cars have been tested in a climate chamber which can provide ambient temperatures from -15°C to 40°C, a solar load of 600 N/m2, ice and wind speeds of up to 100 km/h. Sensors were used to understand what passengers would experience, measuring humidity and temperature.

The Piccadilly Line fleet replacement contract which Transport for London (TfL) awarded to Siemens Mobility in November 2018 is valued at around £1.48 billion plus VAT.

TfL has options to order further trains for use on the Bakerloo, Central and Waterloo & City Lines, subject to funding being secured.

Around half of the 94 trainsets for the Piccadilly Line will be delivered from Siemens Mobility's factory at Vienna. The rest are to be produced at its new UK factory in Goole, where



London Underground Piccadilly Line Siemens Mobility train on test at Wildenrath. Tony Miles photo

manufacturing is set to start in 2024. This represents an investment of almost £200 million to develop a "rail village" which is expected to create up to 700 skilled jobs and up to 1,700 jobs in the supply chain; some components will also come from local suppliers, including LED interior lights from LPA Lighting Systems.

The custom-designed trains form part of Siemens Mobility's Inspiro family and are expected to be in service for at least 25 years. They will be the first trains on London Underground's small-profile deep-level "tube" lines to offer walk-though interiors and air-conditioning, features which are already found on the Bombardier Transportation trainsets used on the larger-profile Sub-Surface Lines which offer more space.

Siemens Mobility has made full use of the Piccadilly Line's very restricted loading gauge to provide a nominal capacity of 1,042 passengers — about 10 percent more than the 1973 stock that the trains will replace.

All equipment is mounted beneath the vehicles, rather than in the roof, to maximize available headroom. The increased width of the vehicles will require tightly-curved platforms to be "shaved;" at some stations this will increase the stepping distance to the current 1973 stock trains and passengers may need to be reminded to "mind the gap" until the old trains are withdrawn.

Door systems are being supplied by Knorr-Bremse subsidiary IFE. The 1973 trains have 1,370 mm wide double doors and 680 mm single doors at the car ends, while the new trains feature wider doors at 1,690 mm to speed passenger flow. It is envisaged that the shorter dwell times could enable an additional three trains an hour to run at peak times.

The new trains are lighter than the existing ones, making them more energy efficient as well as providing a smoother ride. The nine-car articulated trainsets ride on 10 trucks, which are offset from the articulations to facilitate the walk-through design; alternate cars are slightly shorter and have no trucks, being suspended from the adjacent vehicles.

The trains will also feature a specially designed seat moquette named after architect Charles Holden with the

pattern referencing his London Underground station designs from the 1920s and 1930s.

The availability of government funding to replace the life-expired signaling on the Piccadilly Line remains uncertain but would increase capacity from 27 to 36 trains per hour. Should funding become available, TfL has an option for Siemens Mobility to supply a further 18 Piccadilly Line trains to operate the enhanced service.

METRO REPORT INTERNATIONAL, November 21

NAPOLI, ITALY

New Metro Cars Delivered

CAF has delivered the first of 10 six-car Inneo metro trainsets ordered by Napoli regional transport EAV for use on the 10.5 kilometer Arcobaleno line between Piscinola Scampia and Aversa Centro in the north of the city.

An order for four trainsets was placed in June 2020, and followed in July 2023 by the exercising of an option for six more. The total value of the order is €100 million, including three years of maintenance, of which €60 million has been allocated from the National Recovery & Resilience Plan.

The six-car 1.5 kV DC sets are similar to 19 units ordered by municipal operator ANM for Napoli metro Line 1, which is managed separately. They are 107.7 meters long, with unobstructed gangways to facilitate passenger distribution and a capacity of 918 passengers.

The trainsets will initially be stabled at ANM's depot, because EAV's Giugliano depot has insufficient space.

On November 2, EAV called tenders for the modernization of Giugliano depot, and design and construction of an additional servicing facility at Piscinola. The €280 million cost is also to be funded by the National Recovery & Resilience Plan.

METRO REPORT INTERNATIONAL, November 21

NAVI MUMBAI, INDIA

First Metro Line Opens

Passenger services on the 11.1-km, fully elevated metro Line 1 in began on November 17.

The line links Belapur on the Harbour Line of the Mumbai Suburban Railway with Pendhar in Navi Mumbai, a planned city to the east with 1.6 million residents. There are 11 stations.

Construction began in 2011, when completion was envisaged for late 2015. The line is operated by Maharashtra Metro Rail Corp., a 50–50 joint venture of the national government and the state of Maharashtra under a 10-year contract awarded by project promoter City & Industrial Development Corp.

CRRC Zhuzhou has supplied eight three-car trainsets. Services run every 15 minutes. Planned extensions totaling 12 km would extend the line to Khandeshwar.

METRO REPORT INTERNATIONAL, November 22

NOVOTROITSK, RUSSIA

New Trams for Small City

Novotroitsk municipality has awarded PK Transportnye Systemy a one billion rouble contract to supply 13 trams.

The first of the trams was delivered on November 13, and all are due to be delivered by March 2024. The oblast is covering 50 percent of the cost of the order.

The single-section low-floor 71-911EM "Lion Cub" vehicles have a capacity of 155 passengers, including 40 seated. There are two single-leaf doors at the ends and two double-leaf doors in the middle, with a safety system to prevent the tram moving if the door is obstructed. Features include USB sockets, CCTV and a ramp for passengers with reduced mobility.



Seen in Depot No. 1 on its delivery day of November 13, the first of the new 71-911EM trams. NOKS TV photo

The 13-kilometer-long tram network in the city of 90,000 people carries 3.5 million passenger-journeys per year. Once the new trams enter service the current fleet of high-floor trams of various types will be transferred to the neighboring city of Orsk. There are only seven cities in Russia with a population of less than 100,000 inhabitants that operate a tram service, of which this is one.

METRO REPORT INTERNATIONAL, November 20

PARIS

RER NG Enters Service

Transport authority Ile-de-France-Mobilités and operator Transilien SNCF Voyageurs put the first Alstom RER NG electric multiple-units (EMUs) into passenger service on Paris Line E on November 13.

On January 11, 2017 a €1.15 billion contract for 56 EMUs for use on Line E and 15 for Line D was signed by IDFM and what was then a consortium of Alstom and Bombardier Transportation. On April 26 this year SNCF Voyageurs

exercised an option for a further 23 units for Line D and 37 for Line E. Production is being undertaken at Valenciennes Petite-Forêt and Crespin.

Deployment on Line E will be gradual, starting on the Haussmann-St-Lazare to Chelles Gournay branch and taking until the end of 2026. The EMUs are needed for the extension of Line E services west from Haussmann-St-Lazare to Nanterre-La-Folie which is planned in stages from April 1, 2024.

Entry into service on Line D is planned to begin at the end of 2024 and run through to 2028.

The six-car Class Z58000 units for Line E are 112 meters long with a capacity of 1,560 passengers, while the seven-car Class Z58500 units for Line D are 130 meters long with a capacity of 1,800 passengers. The end cars are single-deck, while the intermediate cars are double-deck.



RER NG. Transilien SNCF Voyageurs photo

Alstom says the EMUs will reduce energy consumption by 25 percent compared to the existing fleet, thanks to the use of regenerative braking. The use of eight powered trucks on a seven-car set will also provide faster acceleration at 1.1 m/s².

The dual-voltage 1.5 kV DC and 25 kV AC EMUs have a maximum speed of 140 km/h. They are fitted with both ETCS and the French legacy KVB train control system, and there is provision for the installation of NExTEO equipment, which could support GoA2 driver-supervised automated operation on the central section of Line E from Pantin to Nanterre-La-Folie.

Each EMU offers a mix of three types of passenger space, reflecting the nature of RER operations. The lower deck has standing space for people making very short journeys and seats for journeys of less than 20 minutes, while the upper deck has a wider seat spacing to provide more comfort for passengers making longer regional journeys. The trains have CCTV, air-conditioning and USB charging sockets.

RAILWAY GAZETTE INTERNATIONAL, November 15

RER to Get CBTC

Alstom is to equip Lines B and D of the Paris RER network with the NExTEO train control system. The company says it is one of the largest signaling framework contracts ever placed in France.

The approximately €300 million contract was awarded by Île-de-France Mobilités, SNCF Réseau, SNCF Voyageurs and RATP, and announced on November 22. It forms a key element in a wider program of resignaling and infrastructure enhancements on lines B and D valued at €967 million.

NEXTEO is a CBTC signaling technology intended to increase throughput and improve reliability in the core of the RER network between Paris-Nord and Châtelet-les-Halles stations, where lines B and D share a common tunnel. The project partners intend to reduce headways in this section to 116 seconds once CBTC has been deployed.

Designed to support attended automatic train operation to GoA2, NExTEO is similar to other CBTC systems, incorporating ATP with moving block functionality and automatic traffic supervision as well as ATO.

The concept was initially conceived within SNCF Réseau, in consultation with Paris metro operator RATP and various signaling suppliers. In 2016 a contract was awarded to a consortium of Siemens Mobility and Atos for the technical development and industrialization, along with deployment on the central section of RER Line E from Pantin to Nanterre-La-Folie as part of the EOLE program to extend Line E westwards.

Alstom says the technology will help to ensure a high level of performance in the heavily used central Parisian section, while also optimizing train control and traffic management on the suburban branches of Lines B and D in the Île-de-France region north and south of the city center. It will enable simultaneous management of the differing operating and interoperability rules that apply on the two lines, sections of which form part of SNCF Réseau's main line network and parts of which are managed by RATP.

NExTEO is to be fitted to the sections between Sevran-Livry/Sevran-Beaudottes and Robinson/ St-Rémy-les-Chevreuse on Line B, and from Stade-de-France-St-Denis to Vigneux-sur-Seine/Montgeron-Crosne on Line D. It will be rolled out alongside a central traffic control center which will oversee operations on both lines.

The first section to go live is scheduled to be the core between Gare du Nord and Châtelet-les-Halles in 2031, with the remainder being activated by the end of 2033. Onboard equipment will be fitted to the RER NG EMUs destined for Line D and to the future MI20 trainsets for Line B under a separate contract worth €239 million, funded by Ile-de-France-Mobilités.

RAILWAY GAZETTE INTERNATIONAL, November 27

PRAGUE

Trams to Return to Wenceslas Square

Prague transport authority DPP has selected Eurovia CS for a KC1.24 billion contract to bring trams back to Wenceslas Square (Václavského Náměstí).

The new tram tracks will run down the elongated square to connect existing lines at the Muzeum metro station and Wenceslas Square stops.

Construction is scheduled to start in spring 2024 and take three years. Bids were received from six consortia comprising 15 companies from four countries, and the tenders were evaluated on the basis of cost (80 percent) and

completion date (20 percent).

The project includes a wider redevelopment of the square including traffic calming and pedestrianization, drainage works and landscaping. The roof of the Muzeum metro station will be reinforced to support the tram tracks.

The tracks were removed from the square in 1980 and the city now believes it was wrongly thought that the metro would fully replace trams.

METRO REPORT INTERNATIONAL, November 9

Additional Trams Ordered

Praha transport operator DPP has selected Škoda as preferred bidder for a KC16.6 billion framework contract to supply up to 200 trams, with a firm order for an initial 40.

Škoda's bid based on its ForCity Plus design was announced as the most economically advantageous on November 9, with signing of the contract subject to a 15-day standstill period.

Stadler had also submitted a KC17.8 billion bid based on its Tango family.



15T7 ForCity 9450 (Škoda, 1/2019), the last car of the previous order, has just departed the Anděl stop on Plzeňská while operating on route 9 towards Sídliště Řepy on March 5, 2020.

21-72 photo via Urban Electric Transport

The tenders were evaluated on price (50 percent weighting), prices for specified spare parts (10 percent), the length of the warranty period (7 percent) and various technical specifications.

The unidirectional 100 percent low-floor trams will be up to 32 meters long. Delivery of the first 20 vehicles is planned for 2025, with 20 more the following year. The contract would also include fault diagnosis software, documentation, staff training and spare parts, including trucks for moving broken down trams.

METRO REPORT INTERNATIONAL, November 16

QUEBEC CITY, CANADA

Tramway Uncertain?

The government of Québec has asked infrastructure

investment specialist CPDQ Infra to investigate options to develop transport links for the city of Québec after procurement of a planned tram line collapsed in early November.

The city had been developing plans for a 19.3 kilometer line with 29 stops to connect Pôle Le Gendre in the southwest with Pôle D'Estimauville to the north, including a 1.8 kilometer underground section through the city center. However, the city council announced on November 1 that procurement of the civil works was not now expected to proceed following the withdrawal of the last remaining consortium from the tendering process.

The scheme has been hit by rising costs, with the outlay estimated to have more than doubled to reach between C\$10 and C\$13 billion.

On November 1 the city council submitted a proposal to the provincial government for a descoped option costing around C\$8 billion. This was rejected for now, and instead, the province has opted to commission CPDQ Infra to assess current and projected transport needs for the metropolitan region, looking at all modes of transport.

The city council has already selected Alstom Transport Canada to supply and maintain 34 Citadis Spirit trams for the now-moribund light rail project. Construction had been expected to begin in 2024 for completion by 2029.

METRO REPORT INTERNATIONAL, November 23

ROSTOCK, GERMANY

Tramway Extension

The city of Rostock has selected a western alignment as its preferred option for a proposed tramway extension from Zoo to Reutershagen. An eastern variant was also under consideration before the decision on November 15.

Reutershagen has around 18,000 residents, making it the largest district of the city not to be served by the tram network. The extension would be used by tram routes 3 and 6, each running every 20 minutes to provide a tram every 10 minutes.

The planning process is expected to take several years. It will start with the tendering of a contract for preliminary planning works, including determining the optimal alignment based on factors including environmental issues, technical feasibility, economic viability and transport benefits. The results are expected to be available in autumn 2024. Further refinement would then take place as a basis for seeking planning approval.

METRO REPORT INTERNATIONAL, November 24

STOCKHOLM

Narrow Gauge EMUs Enter Service

Custom-designed Stadler X15p electric multiple-units have begun entering passenger service on Stockholm's Roslagsbanan, the first new trains on the 891 mm gauge suburban line for around 30 years.

The SFr232 million order signed in April 2017 covers 22 EMUs with options for 45 more. The first public service was the 10:35 AM from Stockholms Östra on October 31, and the X15p fleet will gradually enter service as more drivers and maintenance staff are trained.

The three–car 1.5 kV DC EMUs are 60 meters long and 2,750 mm wide, with lightweight aluminum bodies. They have a maximum speed of 120 km/h and operating speed of 100 km/h, with faster acceleration and shorter braking distances than the current X10p EMUs supplied by Hägglunds in 1988–95.

Winterization for Swedish conditions includes enclosed traction equipment, double-wall inter-car gangways, high levels of insulation, floor heating and warm air curtains around the doors.



Roslagsbanan Stadler X15p EMU. LeStudio photo

The EMUs have a capacity of 300 passengers, including 162 seated, with wide gangways and spaces for prams and wheelchairs. Features include air-conditioning, passenger information screens and 43 power sockets. Accessibility features include floors level with the platforms, moving steps to bridge the gap to the platform and white doors to provide a visible contract with the blue livery.

It was originally planned that these EMUs would enter service in 2022. The narrow gauge meant that testing which would normally be undertaken as part of the manufacturing process had to be undertaken on site in Stockholm, creating delays when any issues needed to be addressed.

The 65-kilometer Roslagsbanan network comprises three electrified routes from Stockholms Östra to Kårsta (L27), Österskär (L28) and Näsbypark (L29), which together carry around 15 million passengers a year. Since April 2022 it has been operated by Transdev under a 12-year contract awarded by regional transport authority Storstockholms Lokaltrafik. RAILWAY GAZETTE INTERNATIONAL, November 6

streetcars officially entered service on November 17, with an inaugural run on the 504-King route. The new streetcars are jointly funded by C\$568 million (US\$414 million) in contributions from the TTC's 2023-2032 Capital Budget and Plan, government of Ontario and the city of Toronto. In May 2021, the federal and Ontario governments each announced up to C\$180 million (US\$131 million) toward the TTC Streetcar Program. The remaining C\$208 million (US\$151 million) is coming from the city of Toronto.

The TTC's 2023-2032 Capital Budget and Plan includes the 60 low-floor streetcars and the reconfiguring of Hillcrest Complex to accommodate the storage of at least 25 streetcars. The new vehicles are being produced by Alstom at its Thunder Bay facility. The remaining streetcars will be delivered by 2025.



An example of one of the newest Flexity Outlooks from the previous order, 4603 (Bombardier, 2020), is operating on the 501-Queen route at Logan Avenue on September 16, 2020.

Rob Hutchinson photo via Urban Electric Transit

In addition to streetcars, Alstom has also supplied 480 Toronto Rocket subway cars to the TTC and is currently providing a communications-based train control railway signaling solution on Line 1 Yonge—University, as well as the Toronto-York Spadina Subway Extension.

Since 2020, the TTC has operated only low-floor, high-capacity, fully accessible streetcars on its network. Buses also operate on the streetcar network in the short term to support ongoing construction projects in the city. The capacity of one streetcar is equal to two and a half buses.

In 2022, the TTC operated nine streetcar routes, spanning approximately 355 kilometers (220 miles), carrying more than 26 million people.

MASS TRANSIT, November 20

TORONTO, CANADA

New Flexities In Service

The first of 60 new Toronto Transit Commission (TTC)

North American Transit Project Openings Scheduled for 2023

By Randy Glucksman

Ten projects were proposed for completion this year including seven holdovers from previous years. Two Toronto projects were moved to 2024 and the first phase of Montreal RER was added to this list.

Date	Agency	City	Туре	Line	Details	Notes
January 23	Rhode Island DOT	Pawtucket, Rhode Island	CR	Northeast Corridor	Pawtucket/Central Falls Station opens	From 2022
January 25	MTA Long Island Rail Road	New York, New York	CR	Grand Central Madison (East Side Access)	Harold Interlocking to Grand Central Terminal ^{1,2} 3.75 miles, 1 station	From 2022
May 19	WMATA	Washington, DC	HR	Blue and Yellow	Potomac Yard infill station (between Washington National Airport and Braddock Road) opens	From 2022
June 16	Los Angeles County Metropolitan Transportation Authority	Los Angeles, California	LR	Downtown Regional Connector	Little Tokyo/Arts District Station to 7th Street/Metro Center Station 1.86 miles, 3 stations	From 2022
June 30	Honolulu Authority for Rapid Transportation	Honolulu, Hawaii	LR	Honolulu Rail Transit Phase I (Skyline)	East Kapolei to Aloha Stadium 10.8 miles, 9 stations	From 2021 (Originally 2012)
July 31	Reseau Electrique Metropolitan	Montreal. Quebec	LR	RER - South Branch	Central Station to Brossard 9.9 miles, 6 stations	Added
September 16	Sound Transit	Tacoma, Washington	LR	T - Tacoma Hilltop Extension	Theater District to St. Joseph 2.4 miles 6 new and 1 relocated station	From 2022
October 29	City of Milwaukee	Milwaukee, Wisconsin	SC	L - Loop	Extension to Lakefront ³ 0.4 miles, 3 stations	
November 4	Edmonton Transit	Edmonton, Alberta	LR	Valley Line Southeast Phase I	102 St. to Mill Woods Town Center 8.07 miles, 11 stations	From 2020

Notes:

³ Limited service (Saturdays & Sundays) until Spring 2024, then full service.

Legend			
CR	Commuter Rail		
HR	Heavy Rail		
LR	Light Rail		
SC	Streetcar		

 $^{^{\}rm 1}$ Limited service between Jamaica and Grand Central Madison.

² Full service to Grand Central Madison began February 27.

Travels with Jack May

Britain and the Baltics — Part XXII

By Jack May (Photographs by the author)

Thursday, August 24

If the previous day's rain signified the worst weather of the tour, then today we had the best. Although it was partly cloudy when we finished breakfast a little before the 8:00 AM departure of our bus, by the time we reached Liepaja to ride its small tramway the sky was totally clear. However, we did not go there directly, but rather took a slight detour to visit Cinevilla, a site used by Latvia's fledgling movie industry for large-scale sets, both indoor and outdoor. We arrived at Latvia's version of a Hollywood back lot at about 9:30. From my observations, the site looked rather distressed and dilapidated, but apparently quite a few movies have been produced there, as the ramshackle backdrops can be painted and decorated as needed. Among the outdoor "props" were a church and some quaint structures placed in a setting of a market square and cobblestone streets.

The purpose of the visit however, was to see a replica tram used for movie scenes, as well as a steam locomotive. There were few other visitors, but some souvenir stores and a restaurant were open and, interestingly, there seemed to be a fundamentalist or evangelical Christian rock group performing on an indoor stage. Anyway, we stayed for much too long a time, about 90 minutes.



Arbitrarily numbered 12, this decrepit four-wheeler could be cleaned up if needed for a movie. The pole and lighting fixture evoke an era over a century ago.

Back on the bus at about 11:00 we continued to the carhouse in Liepaja, arriving at about 1:20 PM. All in all, the detour to the studio added only about 20 miles to the normal 140-mile trip, but the 90 minutes at Cinvevilla was deadly. Liepaja, pronounced Leap aye yah, or Libau by our German group, is Latvia's third largest city, and has a population of about 70,000. Located on the Baltic Sea and due west of Riga, it



Cinevilla's 2-10-0 steam locomotive is typical of those that operated throughout the Soviet Union before dieselization and electrification. Moviegoers would find it familiar.

is surprising that there is no direct rail service between the two cities. Only one round-trip per week is operated by Latvian Railways, from Riga on Friday evenings and back on Sundays. This was the reason I didn't get to this city on my 1997 trip; it didn't occur to me to make a day trip by bus, a mental lapse that was now being corrected. So I was happy to finally get to Latvia's third tramway, in a locale that looked rather pleasant and prosperous.

Unlike the two other systems we visited, the tramway here is meter gauge and uses pantographs for current collection. The system dates back to 1899 and is now 4.3 miles long, after a one-mile extension at its southern end was opened in 2013 (see http://www.urbanrail.net/eu/lv/liepa/liepaja.htm for a map). Its entire roster consists of 16 single-ended ČKD-Tatra KT4 two-section articulated trams that date from 1979-1987 (some received second-hand from Cottbus, Germany). The only concession to its origins is a beautiful single-truck sweeper, built by Herbrand in 1899. The company was unable to operate it onto the street, but did maneuver it into the sun for photographs under its own power on trackage behind the ancient carhouse.

There was no point of operating a fantrip, as the company hadn't retained any heritage cars, so each participant was given a day ticket to ride the city's single line. With the carbarn located near the railroad station at the northern end of the system, I first walked to the beautiful facility, which is now mainly used as a bus terminal, and then began riding, first three stops to the northern terminal at Brivibas iela, and then southbound, stopping at interesting locations for photos.

To be continued in Part XXIII.



(Above and below) Brivibas iela, one of Liepaja's major arteries, is the operative name for the location of these two photos, which feature ČKD-Tatra KT4 car 234 advertising Škoda. Earlier this year the company issued a tender for six or seven new trams. The upper view shows the Brivibas iela terminal station, while below 234 is shown operating inbound on the street carrying that name.





Author's note: Since my visit Liepaja has ordered — and received — new trams, but not from Škoda. Instead KONČAR, a carbuilder in Zagreb, Croatia, won the contract in 2018 for six three-section, 100 percent low-floor streetcars, which arrived starting in late 2020. Liepajas Tramvajs was so happy with their performance, that eight more were ordered and have since been delivered. Some ČKD-Tatra KT4s remain on the roster. KONČAR photo





Liepajas Tramwajs is proud of its sweeper and keeps it in excellent condition. The Herbrand-built work car dates from 1899, the same year that electric rail service began in the city. Herbrand is a long gone Polish carbuilder.



Liepaja's railway station has a beautiful facade, but the structure now serves mainly as a bus terminal. I guess it could be technically described as multi-modal, as the frequent tram service in the forecourt is supplemented by regional bus operations and a single once-per-week train departure and arrival. I was unable to find out when this substantial building was built, but it is clearly a landmark.

Author's note: Rail passenger service between Riga and Liepaja has since been beefed up to two round trips per week.