BULLETIN

Volume 68, Number 4 | April 2025

Museum Trains Operate to Baseball Openers

As has been the custom for the past few years, the New York Transit Museum (NYTM) operated some of their historic trains to the season opening games for the Yankees and Mets.

The Yankees' opening day game took place on Thursday, March 27. NYTM operated two trains to the stadium, the Lo-Vs and the "Train of Many Colors (TOMC)." At about 8:30 AM, the Lo-V train left 239th Street Yard and proceeded to South Ferry Loop Track A (outer loop) and held there in the station.

At about 9:00 AM, the "Train of Many Colors" left 207th Street Yard and proceeded to Times Square Spur (Track M between 34 Street-Penn Station and Times Square) and held there. At about 10:50 AM, this train left Times Square Spur and headed to South Ferry Loop Track A.

In the meantime, the Lo-V pulled out of South Ferry, crossed over to inner Loop Track B, and pulled up to south of Bowling Green. The Train of Many Colors pulled in to South Ferry outer Loop Track A behind it.

At about 11:45 AM, the two trains operated light to Grand Central, went into service, and then operated non-stop to 161 Street-Yankee Stadium. After discharging passengers, the Lo-Vs relayed north of Burnside Avenue while the TOMC relayed north of 167 Street. Both trains then proceeded south to 161 Street and were staged on Track M, with the Lo-Vs north and the TOMC south of the station, until the game began. They then laid up to their respective yards.

The Mets' opening day at Citifield was on Friday, April 4. For the occasion, a train of R-33 and R-36 Redbirds, composed of N-9207-9206+9069-9068+9542-9543+9587-9586-S was used to bring the fans to the game. This train left Coney Island Yard about 8:30 AM and made its way to 34 Street-Hudson Yards, where it arrived at about 11:55.

The special left 34 Street at 12:07 PM as the 1207 Extra 7 from 34 Street to Willets Point. It made all stops to Queensboro Plaza, after which it made regular express stops to Mets-Willets Point. After discharging its passengers, the train operated back to Coney Island Yard.

Continued on page 3

Electric Railroaders Association

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In This Issue

Trip Notices/Save the Dates

April 24-26: Motor Bus Society Spring Convention, Jacksonville, Fla. Visit https://erausa.org/regional-trips/2025/04/24/ for all the details.
May 3: The Shore Line Trolley Museum's New York Transportation History Day. Visit https://shorelinetrolley.org/event/new-york-transportation-history-day/ for details.
August 9-13: Motor Bus Society trip to Toronto area
August 26-30: ERA convention in Kansas City and St. Louis. Visit https://erausa.org/conventions/2025/ for all the details, or to make your reservation.
October 8-11: Motor Bus Society Fall Convention, Indianapolis and Louisville.
April 29-May 13, 2026: ERA International trip to Northern England, Scotland, and Isle of Man.

Donations

The ERA Board of Directors express their deepest appreciation for these member donations in March 2025.

$50 to $99

Keith Kirby

Up to $49

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ERA is a 501(c)(3) tax exempt corporation. Your donations are fully tax deductible and can be made either with your membership renewal or using our donation form on our website: www.erausa.org/donate. Your donation helps to maintain ERA's 91-year long tradition of traction education and entertainment!

Monthly Zoom Meeting

Friday, April 18, 2025 at 7:30 PM.

Presenting This Month: Anthony Schill

The Pittsburgh Railways Company was not the largest North American streetcar system, but arguably it was the most interesting — by a long shot. Nowhere else was there a trolley system so encumbered by hills and rivers, or with such an incredibly varied character of street and interurban operation. Our April program starts at the very beginning of the street railway in Pittsburgh in 1859, and winds its way through good times and bad to the very last days of rail operation by Pittsburgh Railways, February 28, 1964. Tony Schill is a native of Pittsburgh and a trolley fan since his very first ride on Pittsburgh Railways in the late 1940s. He is retired from a career in rail and bus transit operations in Chicago and Buffalo (unfortunately not in Pittsburgh, but he does now serve as a volunteer operator at the Pennsylvania Trolley Museum!).

How to Join Our Zoom Meeting

The Zoom registration link for this meeting is: https://us02web.zoom.us/meeting/register/jmdgi2wX-ScS-x05TwsnT8w. 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.

Front Cover Photo

The tenth day of scheduled activities on the ERA's 2024 European tour took place on Thursday, May 23, at the Vicinal Tramway Museum in Thuin, Belgium. PCC No. 10409 (La Brugeoise et Nivelles, 1950) has stopped for photos on the Avenue de la Couture, a little more than one quarter of a mile north of the museum. Alex Krakowski photo

Worldwide Suburban Electric Railway, Metro and Tramway Openings in March 2025

Date	Country	City	Segment	Distance (miles)	Railway/ Metro/ Tram
3/2	Luxembourg	Luxembourg	LuxExpo to Findel/Luxembourg Airport	2.4	T

URBAN RAIL NEWS, MARCH 31

The Lo-Vs staged on Track M just north of the 161 Street-Yankee Stadium Station on March 27. Jack May photo

The Redbirds approach 40 Street Station on their way to the Mets' home game opener on April 4. Matt Csenge photo

Rail News in Review

New York Metropolitan Area

METROPOLITAN TRANSPORTATION AUTHORITY (MTA)

Interborough Express Project Open Houses

The MTA announced it will host a series of Open Houses on the Interborough Express throughout the Spring. The first Open House took place on Thursday, March 27, at the Queens Public Library in Ridgewood. Members of the public are encouraged to attend to learn more about the project.

The Open House features a short presentation followed by an exhibition of informational posters explaining key elements of the project. Agency representatives will also be on hand to answer questions and discuss comments and concerns.

The MTA will host additional Open Houses on Thursday, April 3, from 6:00 to 8:00 PM at South Shore High School in Canarsie, Brooklyn, Tuesday, April 22 at Maimonides Medical Center in Borough Park, Brooklyn from 6:00 to 8:00 PM and in Jackson Heights, Queens on Thursday, May 8 at Renaissance Charter School from 6:00 to 8:00 PM.

MTA PRESS RELEASE, March 14

NEW YORK CITY TRANSIT (NYCT)

Platform Edge Barrier Update

Work to install platform edge barriers at various stations continued during March. As has been the custom, the northbound platforms (or platform edges) were done on Saturday and the southbound platforms on Sunday. From midnight to noon on each day, trains bypassed the stations while the work was underway.

- March 15-16, 6 Avenue L
- March 22-23, 125 Street 4 5 6

More Stations Now Equipped with LED Lighting

Crews have now replaced fluorescent light fixtures with LED lights at 250 stations across the subway system, ahead of their original year-end target, part of an initiative to convert more than 150,000 fluorescent light fixtures by mid-2026.

When complete, this project will generate an estimated $5.9 million in annual recurring energy and material cost savings. It will brighten every subway platform and mezzanine, increasing safety systemwide and enhancing the passenger experience. The new LED light fixtures will also provide greater illumination for the 15,000 security cameras in the subway system, creating more detailed images for the NYPD to use when necessary.

Installing these LED light fixtures in subway stations has the MTA on pace to save $1.6 million this year. On top of that, 77 percent of the subway fleet has been converted to LED lights for an additional savings of $1 million. LED installations in tunnels will save the MTA another $2.3 million. In total, the LED conversion will save nearly $5 million this year, with further savings coming as other tunnel and station conversions are completed.
MTA Press Release, March 17

R-211T Trains Now on IND Crosstown G Line

On Tuesday, March 4, the 10 R-211T (soft-shell open gangway) cars that had been assigned to the C, were transferred from Pitkin Yard to Coney Island Yard so they could operate on the G. There, they are operating as two, five-car trains. The other 10 R-211T (hard-shell open gangway) cars remain based at Pitkin Yard.

R-211T 4059-4058-4057-4056-4055 (Kawasaki Rail Car, 4/2023), on the 1323+ G Church Av-Court Sq, is seen arriving at 21 Street Station in Long Island City, Queens, on March 20, 2025. Jeff Erlitz photo

The January *ERA Bulletin* (page 6) mentioned the option order for 80 R-211T cars, specifically for the G Line.
MTA Press Release, March 4

MetroCard Sales End This Year

The final day for MetroCard sales and distribution will be December 31, 2025, as the MTA's popular contactless tap-and-go payment system fully replaces the three-decade old swipe system. The tap-and-go payment system allows riders to pay fares directly with digital wallets, contactless credit and debit cards, and OMNY cards.

Riders who prefer to use a physical card and/or pay with cash can buy an OMNY card for $1 and load or reload their card at thousands of retail locations, online, Mobile Sales Van locations, or at subway stations throughout New York City where OMNY vending machines are currently available. Rollout will be complete by the fall when all 472 subway stations will have an OMNY vending machine. Riders can check this progress online and find out whether their station features an OMNY vending machine. Retail partner locations will no longer sell MetroCards as of the Fall of 2025.

MetroCards will still be accepted into 2026 and the official final acceptance date will be announced at a later time. While riders are encouraged to spend down the value on their MetroCards, remaining balances will be eligible for transfer or reimbursement two years from the expiration date on the MetroCard. To transfer funds, riders can bring an OMNY card and their remaining MetroCards to any of the Mobile Van locations, Customer Service Centers located in 15 stations, or to Lower Manhattan at 3 Stone Street. To request a reimbursement, riders can visit any of the above locations.
MTA Press Release, March 19

Senior Operational Leaders Appointed

NYCT President Demetrius Crichlow has announced new appointments to senior roles.

Bernard Jackson has been appointed as the Chief Operating Officer. Jackson comes to the role with over 38 years of experience spanning multiple transit agencies across the nation, last serving as the Senior Executive Vice President and Chief Operating Officer for the Dallas Area Rapid Transit (DART).

Jackson will oversee and drive performance and service improvements across the departments of Subways, Buses, Paratransit, and Operations Planning. Previously at DART, Jackson oversaw bus, light and commuter rail, Paratransit, On Demand Services, Maintenance of Way and Facilities Maintenance divisions. Jackson also gained experience as the Chief Operations Officer, Service Delivery at Los Angeles County Metropolitan Transportation Authority. He began his career at the Chicago Transit Authority where he worked for 28 years, first starting as a bus operator and over the years rose through the ranks to become Vice President of Bus Operations and Director of Rail Operations.

William "Bill" Amarosa Jr. has been named Senior Vice President of Subways permanently, after serving in an acting capacity since the start of the year. He previously held the role of Vice President of Operations Support, which oversaw critical back of house functions to support subway operating divisions. Starting his career at NYCT as a high school intern, Amarosa gained ten years of private sector experience before returning to the MTA in operations planning and budgetary roles. For Amarosa, transit is more than just a career, it is his passion. He has visited transportation systems worldwide and in 2006, Amarosa broke the Guinness World Record for riding the entire NYC subway system in the shortest amount of time.

Rachel Cohen has been named the Vice President of Paratransit after serving in the acting role since May 2024 and first joining the NYCT Accessibility team in 2018 after working at NYC Taxi and Limousine Commission, the New York City regulatory authority for Access-A-Ride for-hire vehicles. In this role, she oversees a team that provides 30,000 daily rides to people who are unable to use the subway or bus system due to a disability. During her tenure, Cohen

oversaw Access-A-Ride ridership records including a single day high of 43,000 scheduled trips on Wednesday, March 19. Cohen joined NYCT in 2018 after working at NYC TLC as the Director of the Office of Systemwide Accessibility, which was newly formed. She grew the team and led the effort to increase accessibility across all MTA modes of service. In this role, Cohen will focus on more efficient scheduling for riders, fiscal responsibility, and improving vendor management.
MTA PRESS RELEASE, March 20

Service Reduction on E F Lines

Starting on Monday, March 24, and continuing to the end of this year, service on the E and F Lines is being reduced due to a car shortage for which no specific information was provided.

The peak period E trips that operate from and to 179 Street-Jamaica are suspended, as well as the F service that operates express in Brooklyn. In addition, the E Line's AM and PM peak train requirements dropped from 26 to 22 in the AM and 23 in the PM, four fewer train sets in the AM and three fewer in the PM. The F Line's AM and PM peak train requirements dropped from 45 and 46 to 40 and 41, five fewer train sets.

Adjacent Track Flagging Speed Increase

On March 28, after several apparently successful test periods in various locations on the subway system, the speed at which trains are allowed to proceed past work zones on an adjacent track was increased from 10 to 15 miles per hour. This change is now permanent.

LONG ISLAND RAIL ROAD (LIRR)

Schedule Adjustment on the Oyster Bay Branch

Two new trains and a schedule adjustment to another on the Oyster Bay Branch went into effect Monday, March 17. These changes are in addition to the new timetables that began March 3, and run through Sunday, May 18.

The following service changes were implemented:

Weekday Evening Eastbound Service

- The 11:25 PM train from Jamaica to Oyster Bay (#576) will depart 17 minutes earlier at 11:08 PM and arrive at Oyster Bay at 12:09 AM
- A new train (#578) will depart Jamaica at 11:43 PM, arriving Oyster Bay at 12:44 AM

Weekday Evening Westbound Service

- A new train (#567) will depart Oyster Bay at 7:09 PM, arriving at Jamaica at 8:05 PM

MTA PRESS RELEASE, March 10

Mastic-Shirley Station Renovated

March 12 saw the substantial completion of the renovation project at the Mastic-Shirley Station on the Montauk Branch. This renovation brings the station to a state of good repair and modernizes the station with a new sheltered 2,000-square-foot-plaza area featuring historic photos where the 65-year-old station building used to be, a reconstructed platform shelter, new LED lighting throughout for a brighter environment, complemented with illuminated bollards, a digital information screen, and an upgraded security and communication system.

The new shelter/waiting area on March 12. This took the place of the former station building. Glen Sager/LIRR photo

The former Mastic-Shirley station building, which is actually located in the hamlet of Shirley, in June of 1966. This station was opened on July 15, 1960, when the station in Mastic, a mile and a third to the east, was abandoned. David Keller photo and archive

Additionally, crews made concrete repairs to the platform, under-platform support, the ADA accessible ramp, replaced the entire platform tactile strip, and installed a new wave-shaped bike rack as Mastic-Shirley was one of seven LIRR stations to receive additional bike parking under the MTA's Bike, Pedestrian, and Micromobility Strategic Action Plan. Project crews also refinished and repainted railings throughout the station, furnished new station signage, put up a LIRR system map, and included new benches, granite seating, and granite planter.

The project is on track to be finished within budget of $7.49 million. The work was performed by LIRR in-house teams and Orange County Engineering Contracting, a Wallkill, N.Y.-based contracting company.
MTA Press Release, March 12

METRO-NORTH RAILROAD (MNR)

New Timetables in Effect

New train schedules took effect Sunday, March 30, that improved run times on multiple New Haven Line trains, added stops at Yankee Stadium and Marble Hill, and adjusted departure times to support major Construction & Development, Connecticut DOT, and Maintenance of Way projects that require extensive track outages on all three lines. The projects include switch replacements, track and tie renewals, the continuation of the Park Avenue Viaduct renewal, and Walk bridge replacement between South Norwalk and East Norwalk on the New Haven Line.

Hudson Line

- The 6:13 AM train from Poughkeepsie to Grand Central Terminal departs five minutes earlier at 6:08 AM and will have a total run time of 94 minutes
- The 6:11 AM train from Croton-Harmon to Grand Central Terminal added a station stop at Marble Hill
- The 8:11 AM train from Croton-Harmon to Grand Central Terminal added a station stop at Yankees-E. 153rd Street

The following weekend inbound trains from Poughkeepsie had stops at Ossining and Tarrytown Stations removed: 8:58 AM, 9:58 AM, 10:58 AM, 11:58 AM, 5:52 PM, and 6:52 PM. The following weekend outbound trains from Grand Central Terminal to Poughkeepsie had stops at Ossining and Tarrytown Stations removed: 7:50 AM, 8:50 AM, 9:50 AM, 10:50 AM, 3:50 PM, 4:16 PM (Saturdays only), 5:16 PM, 6:16 PM, 6:50 PM, and 7:50 PM.

Harlem Line

Two weeknight trains have been added to the Harlem Line with service to North White Plains; one departs Grand Central Terminal at 9:53 PM, and another departs Grand Central Terminal at 10:55 PM.

Some Harlem Line trains have adjusted departure times from Grand Central Terminal:

- The 9:52 PM train to Wassaic departs Grand Central Terminal at 9:50 PM, two minutes earlier than previously scheduled
- The 10:31 PM train to North White Plains departs Grand Central Terminal at 10:25 PM, six minutes earlier than previously scheduled
- The 11:04 PM to Southeast departs Grand Central Terminal at 10:52 PM, 12 minutes earlier than previously scheduled
- The 11:44 PM train to North White Plains will departs Grand Central Terminal at 11:19 PM, 25 minutes earlier than previously scheduled
- The 12:10 AM train to Dover Plains departs Grand Central Terminal at 12:01 AM, nine minutes earlier than previously scheduled
- The 12:28 AM train to North White Plains departs Grand Central Terminal at 12:19 AM, nine minutes earlier than previously scheduled
- The 1:04 AM train to Southeast departs Grand Central Terminal at 12:55 AM, nine minutes earlier than previously scheduled

New Haven Line

Improvements to Metro-North's signaling infrastructure allowed the railroad to increase train speeds and optimize schedules along the New Haven Line, resulting in improved run times for some trains.

- The 5:06 AM train from New Haven to Grand Central Terminal departs two minutes later at 5:08 AM and have an improved run time of 88 minutes
- The 5:32 AM train from New Haven to Grand Central Terminal has an improved run time of 90 minutes and arrives at Grand Central Terminal at 7:02 AM, 10 minutes earlier than previous scheduled
- The 7:52 AM train from New Haven to Grand Central Terminal has an improved run time and arrives at Grand Central Terminal three minutes earlier than previously scheduled at 9:30 AM
- The 4:16 PM train from Grand Central Terminal to New Haven departs five minutes earlier at 4:11 PM and has an improved run time of 90 minutes
- The 4:49 PM train from Grand Central Terminal to New Haven has an improved run time of 90 minutes, and arrives at New Haven Station nine minutes earlier than previously scheduled
- The 6:26 PM train from Grand Central Terminal to New Haven has an improved run time of 90 minutes, arriving at New Haven Station at 7:57 PM, seven minutes earlier than previously scheduled

MTA Press Release, March 24

NEW JERSEY TRANSIT (NJT)

Multilevel Car Window Replacement

NJT is speeding up its efforts to replace windows on all of its multilevel rail cars in revenue service. The plan includes completing installation on one third of the fleet each year for the next three years.

Over time, exposure to elements (acid rain, heat, UV rays) has damaged the polycarbonate window coating, causing the cloudy appearance. Other railroads have experienced similar issues with the windows on their rail cars. Through a partnership with Rutgers Center for Advanced Infrastructure and Transportation, NJT thoroughly evaluated the current condition of the multilevel rail car windows to determine if the damage could be reversed. It was determined that refurbishing the windows wasn't a viable option, so the decision was made to replace them.

The replacement of the windows has already begun. Under

the timeline announced, all of the replacement materials have been ordered to assure that NJT will have all the necessary supplies on-hand to complete installation on the entire fleet of Multilevel II rail cars in revenue service by December 31, 2025.

Replacement of all windows on the entire fleet of nearly 400 Multilevel I and Multilevel II rail cars in revenue service will be complete by April 2028. In all, more than 13,000 windows will be replaced.

RAILWAY TRACK AND STRUCTURES, February 27

Other U.S. Systems

CLEVELAND, OHIO

Additional LRVs Ordered

The Greater Cleveland Regional Transit Authority (GCRTA) has exercised an option to order an additional 18 S200 light-rail vehicles (LRVs) from Siemens Mobility to replace its current fleet operating on the Red, Blue, and Green lines.

Siemens Mobility notes the order builds on GCRTA's initial purchase in 2023 for 24 S200 LRVs and the exercise of the first option for an additional six cars in 2024 to replace the current fleet. According to Siemens Mobility, the new order brings the total number of S200 LRVs in GCRTA's fleet to 48. Vehicles from the initial order are currently in production at Siemens Mobility's rail manufacturing facility in Sacramento, Calif.

According to Siemens Mobility, GCRTA's existing fleet is more than 40 years old, exceeding the design life of typical transit passenger rail cars. Delivery of the first S200 LRVs is expected in 2026. Siemens Mobility notes the new high-floor vehicles feature two door heights for high- and low-level platform accessibility, allowing the trains to operate on both the Red Line and the Blue and Green Line tracks.

Siemens Mobility says the S200 LRVs feature a modern design with 52 easy-to-clean seats with additional standing room, four wheelchair areas for enhanced accessibility, two bicycle racks, and an advanced infotainment system. Siemens Mobility notes the vehicles are built to withstand winter weather with ice cutting technology and a modern operator cab area with a dedicated heating, ventilation, and air conditioning unit, heated windshield, and enhanced visibility.

MASS TRANSIT, March 4

LOS ANGELES, CALIF.

San Fernando Valley Light Rail Transit Project

AECOM was selected by the San Fernando Transit Constructors joint venture team to advance the Phase 2 final design for Los Angeles County Metropolitan Transportation Authority's (L.A. Metro) East San Fernando Valley Light Rail Transit Project. The 6.7-mile project will feature at-grade tracks and 11 stations to create a more efficient and reliable transit service in the San Fernando Valley area.

As the lead designer, AECOM will provide services to manage the design integration for multiple facilities. AECOM says all project elements will be designed in 3D using building information modeling (BIM) to increase efficiency, enable clash and design constructibility detection. AECOM's BIM practice will promote better decision-making by leveraging current BIM design practice supported by its digital delivery and practice leaders.

Aerial rendering of the East San Fernando Valley light rail project line on Van Nuys Boulevard at Victory Boulevard. AECOM

Once completed, the transit line will create connections with regional transit services, including Metrolink, Amtrak, L.A. Metro's G and B Lines and other planned L.A. Metro projects.

AECOM says Phase 2 of the project will also include comprehensive street improvements to enhance accessibility and safety and a new 22-acre maintenance and storage facility. According to AECOM, several buildings within the facility are planned with a solar-powered system equipped with excess power storage capabilities.

The project will be built on Van Nuys Boulevard, one of the valley's busiest corridors, and will provide a new light-rail alternative for the residents of Van Nuys, Panorama City, Arleta and Pacoima, Calif. The project is currently forecast to open in 2031.

MASS TRANSIT, March 3

International

ALMATY, KAZAKHSTAN

Light Metro Train Production Underway

Production of 19 four-car trainsets for Astana's future elevated light metro line is underway at the CRRC Tangshan plant in China.

The 60-meter-long 1,520 mm gauge trainsets will have a capacity of more than 600 passengers at 6/m2. They will be equipped for Grade of Automation (GoA)4 unmanned automatic operation at a maximum speed of 80 km/h.

Noise-reduction features will include large-diameter wheels, and an electric heating system will prevent the windows fogging up during sudden temperature changes.

Astana light metro car in CRRC Tangshan factory. City Transportation Systems - Astana photo

Work to build a 41.8-kilometer north-south line began in 2011, but the project was halted in 2014. It was revived in 2017 with the 22.4-kilometer first phase to run between the airport and main railway station, but stopped again in 2019 after a bank backing the project ran into problems. The city announced funding to relaunch the project for a second time in 2022, and CRRC Tangshan was awarded the rolling stock contract in 2023.

Test running is now expected to begin in September, with the start of revenue services planned for early 2026.
METRO REPORT INTERNATIONAL, March 20

AUSTRIA

Westbahn Orders 250 km/h Smile Trains

Open access operator Westbahn has awarded Stadler a contract to supply three Smile high speed trainsets to enable it to introduce Vienna-Graz-Klagenfurt-Villach services from March 2026.

Announcing the order on March 12, Stadler said the 250 km/h trains to be built at its Bussnang plant in Switzerland would significantly enhance the passenger experience.

In technical terms, they will be similar to the SMILE (Schneller Mehrsystemfahiger Innovativer Leichter Expresszug, or "fast multi-system innovative light express train") EMUs operated by Swiss Federal Railways under the name Giruno and will benefit from their approvals process. There will be some design refinements to suit Westbahn's requirements.

The 11-car trains for Westbahn will have a light, airy, open design, with air-conditioned and pressure-resistant vehicles, areas for bicycles, adjustable seats in all classes, free wi-fi, USB ports, and power sockets at every seat.

They will have step-free access from 550 mm and 760 mm high platforms and accessible toilets in each coach.

Rendering of Westbahn's SMILE train set. Stadler

Stadler said commissioning normally takes four to five years, but it has set a target for all three trainsets to enter service within two years of contract signature.
RAILWAY GAZETTE INTERNATIONAL, March 12

BELGIUM

SNCB's DC Fleet Renewal

National passenger train operator SNCB has selected CAF as preferred bidder to supply the future AM30 electric and battery-electric multiple-units.

Typical of the older type of EMUs to be replaced under this new order is Class AM 80 No. 336 (La Brugeoise et Nivelles, 1980-83), seen at Antwerpen-Centraal on May 2, 2019. Jeff Erlitz photo

At the end of 2022. SNCB called tenders for a 12-year framework agreement covering the supply of 160 km/h 3 kV DC units offering a total of up to 170,000 seats. This would allow SNCB to replace much of its older rolling stock and rationalize its fleet on a smaller number of designs.

On March 5 CAF said there would be an initial base commitment worth €1.7 billion covering trains offering 54,000 seats.

SNCB said the preferred bidder had been selected on the basis of the best price to quality ratio, and CAF's higher quality proposal had beaten a lower priced offer. The operator said the difference in ranking of the three bids had been small, however the higher quality offer was expected to bring benefits to the operator.

Responding to media criticism of the selection of the Spanish manufacturer, rather than Alstom which has local plants, SNCB said European Union procurement rules prevented it requiring or preferring local production.
RAILWAY GAZETTE INTERNATIONAL, March 6

BUENOS AIRES, ARGENTINA

Plan to Build Long-Planned Metro Line F

Tenders for construction of the five-kilometer initial phase of the driverless metro Line F in Buenos Aires are to be called in June, it was announced on March 5.

That first section is to serve six stations, linking Brandsen in the south with Tucuman in the center, where interchange would be provided to Lines B and D. The estimated cost of this section is US$1.1 billion, which includes the procurement of 14 trainsets.

Map of the new Line F. Jorge Macri

A four-kilometer second phase with five stations is planned to extend the line to Plaza Italia in the northwest of the city center. The decision to build Line F was made as long ago as 2001. It aims to relieve overcrowding on Line C.

Construction on the first section is expected to start in 2026, tenders for rolling stock procurement are expected to be called by June 2027, and inauguration of the line is planned for 2031.

The first section of Line F is planned to carry 307,000 passengers a day, growing to 600,000 passengers a day when the extension to Plaza Italia is completed.
METRO REPORT INTERNATIONAL, March 25

FINLAND

Allegro Trainsets to Return to Service

National operator VR is to return to traffic four Alstom Sm6 trainsets that were used on the Helsinki-St. Petersburg Allegro service until it ceased operating following Russia's full-scale invasion of Ukraine.

The seven-car dual-voltage trainsets were operated by the Karelian Trains 50:50 joint venture between VR and Russian Railways from 2010 until services stopped in late March 2022.

VR said Russian Railways subsequently broke the joint venture agreement by failing to maintain the trains and provide contracted financing. Negotiations to resolve the situation failed, and as a result VR solely redeemed the joint venture's loans and on December 2023 took possession of the trainsets which were all stored in Finland.

VR has now confirmed plans to use them on services from Helsinki to Turku and Oulu from late 2025. They will be branded Pendolino Plus and carry VR's green and white livery, applied by VR FleetCare.

Rendering of Sm6 trainset in VR livery. VR

They will partly replace current IC and Pendolino trains, and also enable the operation of a new early morning service from Oulu to Helsinki targeted at business passengers.

They will have an extra ticket category Ekstra Plus, with passengers able to order a meal in advance to be delivered to their seat, which VR said has often been requested in

customer surveys.

Ukrainian operator Ukrzaliznytsia had previously suggested that it could take over the Sm6 trainsets, but VR said they are valuable assets which would provide an opportunity to improve its services. The Finnish operator noted that it had given Ukrainians free travel, provided humanitarian aid and sent 200 stoves in winter 2023.
RAILWAY GAZETTE INTERNATIONAL, March 5

HELSINKI, FINLAND

Tram Deliveries Begin

Skoda Transtech's Otanmaki factory has delivered the first of 23 ForCity Smart Artic X54 trams ordered for Helsinki's future Crown Bridges light rail line.

Following testing, the tram will initially be used in revenue service on Route 13 from Kalasatama to Pasila. Deliveries are to be completed by the end of 2026, ahead of the planned 2027 opening of the 10-kilometer Crown Bridges Line, which will have three major bridges across the waters of the Kronbergsfjarden.

ForCity Smart Artic X54 No. 630 (Skoda, 2/2025), now being tested. Metro Report International photo

The trams for the new line were ordered in 2023 as an option on a previous order for 29 identical vehicles for the Raide-Jokeri orbital light rail Route 15. The five-section X54 tram has a higher capacity than Helsinki's previous X34 cars, with 136 standing places and 78 seats, compared to 100 standing places and 74 seats.
METRO REPORT INTERNATIONAL, March 7

New Work Tram

Helsinki transport operator Kaupunkiliikenne's maintenance division has converted an old tram into a overhead electrification de-icing vehicle for use on light rail Line 15.

The original tram dates from the 1980s. The conversion involved removing the seats and a central low-floor section which had been added in 1999, and adding a second cab to enable bidirectional operation.

The catenary de-icer had been a Valmet MLNRV2. It was originally a class Nr II. When modernized between 1996 and 2005, it was redesignated as Nr II+ class. It had received a low-floor middle section between 2006 and 2011. Helsinki City Transport (HKL) photo

The vehicle applies an anti-fogging agent using a spray rather than a traditional felt roll, monitored with 10 CCTV cameras. It has been nicknamed Ananas (pineapple) because of its livery.
METRO REPORT INTERNATIONAL, March 11

HONG KONG, CHINA

Tour Tram Starts

Hong Kong's MTR Corporation has launched the Tuen Mun Voyager light rail sightseeing tour to boost tourism in the Tuen Mun area.

Inspired by Iceland's Golden Circle tourist route, the Tuen Mun Voyager follows a circular route with 12 stops. Passengers who have purchased the HK$50 Light Rail Travel Pass can alight to visit attractions including the Beyond the Dream Bridge and the Sam Shing Hui Seafood Market.

PM110 No. 1140 (CRRC, 2021), the new tour tram. MTR Corp. photo

A dedicated vehicle has been branded inside and out with hand-painted illustrations of Tuen Mun's urban and rural landscapes, cuisine, and culture. Travel ambassadors and onboard announcements provide introductions to the sightseeing highlights, and souvenirs are sold on the LRVs.

The service runs from 10:15 AM to 6:45 PM on weekends and public holidays, and full a round trip takes 75 minutes. METRO REPORT INTERNATIONAL, March 4

KRAKOW, POLAND

High-Floor Trams to Be Replaced

Operator MPK Krakow has selected Pesa Bydgoszcz as the preferred bidder to supply up to 90 light rail vehicles through three different tenders. The total value of the three lots announced on March 4 is 1.8 billion zloty and the duration of the agreements is for four years from contract signature, which is expected after a formal standstill period.

One agreement is for up to 30 bidirectional trams, 32 to 34 meters long, which are the priority purchase. For this batch, the operator has already submitted a request for co-financing from the EU's European Funds for Infrastructure, Climate, Environment 2021-2027 program. Deliveries of these trams are stipulated to start in 2028 at the latest.

One of Krakow's newest trams in their current fleet, Tango NF2 No. HY745 (Stadler, 2023) is about to turn south at Rondo Hipokratesa on Route 17 on October 31, 2024. XXL1219 photo via Urban Electric Transit

The vehicles are planned to be used on a future tramway running to the Azory district in the northwest of the city, as well as strengthening other routes. The arrival of these trams would allow MPK Krakow to withdraw all remaining high-floor trams without air-conditioning from service.

A second agreement covers the purchase of up to 30 unidirectional trams 32 to 34 meters long, while the third is for up to 30 unidirectional trams 42 to 45 meters long. The purchase of these 60 vehicles is subject to obtaining financing from other sources, including the EU's Recovery & Resilience Fund. METRO REPORT INTERNATIONAL, March 10

LUXEMBOURG

Tramway Extended to Airport

A 3.9-kilometer tramway extension to Luxembourg airport opened on March 2. The airport extension completes Luxembourg's first modern tram line, which is now 16.4 kilometers long, with 24 stops. Of these, 10 provide interchanges with other transport modes.

From the former terminus at Luxexpo on the northeast edge of the city, the extension runs east passing the tram depot before climbing onto a 110-meter viaduct spanning the A1 motorway. This structure was prefabricated in Belgium and assembled in two halves on either side of the motorway, then slid together in spring 2023.

The line then runs through the Grengewald forest for two kilometers, with a running speed of up to 70 km/h. After passing under motorway slip roads and the Route de Treves, the extension serves a stop at Heienhaff, where there is a multimodal interchange and park-and-ride facilities. Here the line turns south through the Findel business park to terminate just east of the Findel-Luxembourg Airport terminal.

The immediate surroundings of the line have been landscaped using local species that do not require additional watering. Local materials were used for stops, and a natural rainwater diffusion system was built.
METRO REPORT INTERNATIONAL, March 7

NETHERLANDS

New Double-Deck EMUs

National passenger operator NS has unveiled a mock-up of its future Dubbeldekker Nieuwe Generatie EMUs.

In December 2022, NS awarded CAF a €600 million contract to supply 30 four-car and 30 six-car DDNG trainsets. It was the operator's second order for rolling stock based on CAF's Civity platform, after the Sprinter New Generation single-deck EMUs ordered from 2014. It was the first order for a double-deck version of the Civity. Design work has now been completed and production of the first trains is set to start in the second half of this year for entry into service in 2029. They will replace DDZ trainsets manufactured by Waggonfabrik Talbot, De Dietrich Ferroviaire, and Adtranz in 1992-98.

The 160 km/h DDNG units will have double-deck intermediate cars offering a high capacity, and single-deck end cars to provide level access for wheelchair users and carriages. The interior design is inspired by the NS 2018 vision, tested by more than 600 passengers as well as railway staff. Most seats will be equipped with power outlets and USB-C charging points, and there will be high tables along the windows for laptop users. Raised four-person seating areas will have additional luggage space.

There will be standard and wheelchair-accessible toilets. Digital screens will display comprehensive travel information, and there will be visual design elements by artist

Mock-up of new double-decker EMU. NS photo

Marieke van Diemen on the walls and doors.
RAILWAY GAZETTE INTERNATIONAL, March 7

OSIJEK, CROATIA

New Tram Delivered

Operator GPP Osijek has taken delivery of the first of 10 low-floor trams ordered from Koncar KEV as part of a program to modernize the city's network.

The three-section 100 percent low-floor tram is 20.8 meters long and 2.5 meters wide, with a capacity of 135 passengers including 44 seated.

Brand-new TMK 2500 No. 2501 (Koncar, 3/2025) at Trg Ante Starcevica on March 29. Z87 photo via Urban Electric Transit

Croatia's share of the EU-backed National Recovery & Resilience Plan contributed €20 million towards the €25 million order placed in September 2023.

Tram services in Osijek were suspended from August 2023 to December 2024 while a €45 million modernization of the infrastructure was undertaken.
METRO REPORT INTERNATIONAL, March 21

PARIS, FRANCE

CBTC Contract Awarded

Paris Metro operator RATP has awarded Hitachi Rail a contract to supply lineside communications-based train control technology for Line 12. The framework contract announced on February 27 has been awarded under RATP's OCTYS (Open Control Train Interchangeable Integrated System) 2030 program.

MF67C2 No. 3 045 (Brissonneau et Lotz, 1971) at the northern terminal of Line 12, Mairie d'Aubervilliers, on July 20, 2022.
Leonid Andronov photo via Urban Electric Transit

There is a €20 million firm order for design and installation services on Line 12, and options for additional provisions including maintenance which could take the value to €65 million. The 17.2-kilometer Line 12, with 31 stations, is Hitachi Rail's third CBTC project in Paris, with the technology already in operation on Line 3 and due to be commissioned on Line 6 later this year. Siemens Mobility has a contract to install Trainguard MT CBTC equipment on the Line 12 trains by 2028.
METRO REPORT INTERNATIONAL, March 6

PORTO, PORTUGAL

Suburban Passenger Trains Return

Suburban services in the Matosinhos district of Porto were enhanced on February 9 with the partial reopening of the Leixoes Line to passengers after a hiatus of 14 years. Trains are now running over a 19-kilometer section of the railway that links Porto with the nearby port of Leixoes. Starting from Porto's Contumil Station, the revived service serves Sao Gemil, Sao Joao Hospital, Sao Mamede de Infesta, Arroteia and Leca do Balio.

Opened in 1938, the Leixoes line has seen mixed fortunes as a passenger route despite passing through densely populated areas of Portugal's second city. After opening, passenger

Class 3400 No. 3425 (Siemens/Bombardier, 2002) on opening day, February 9, 2025. This fleet was modernized in 2020. Matosinhos municipality photo

services lasted until 1966, after which the line saw only freight traffic. It was electrified in 1998, and passenger trains were reintroduced in 2009. However, two years later they were suspended due to low ridership. These services only operated between Leca do Balio and Ermesinde, and did not serve all the intermediate stations.

Two trains per hour are now running in each direction on weekdays, with 30 trains per day running at weekends. The reopening has been delivered rapidly following an agreement signed in March last year between national infrastructure manager IP, operator Comboios de Portugal and Matosinhos municipality, in which the three entities committed to modernize stations, improve accessibility, and ensure rolling stock was available for the service.

The Leixoes Line is now part of CP's Porto suburban network, and interchange with long-distance trains is available at Contumil. IP has managed the construction of new stations at Hospital de Sao Joao and Arroteia.

The project partners have plans to extend the service through to Leixoes, although no date has yet been set for this second phase. RAILWAY GAZETTE INTERNATIONAL, March 5

New Trams Ordered

Metro do Porto has awarded CRRC Tangshan a contract to supply trams equipped for Grade of Automation (GoA) 2 attended automatic operation on the future Line H (Ruby).

The €69.5 million order placed following an international tender covers 22 trams, including 18 equipped with communication-based train control for attended automatic operation on Line H. The aluminum-bodied vehicles will have a capacity of 244 passengers, including 64 seated, with space for passengers with reduced mobility and bicycles.

The styling developed by CRRC and Portuguese company AlmaDesign aims to be modern, attractive, and functional. Features will include LED lighting and a collision avoidance system. The order is being financed by EU's Sustainable 2030

One of Porto do Metro's CRRC Porto light rail cars from the first order, No. MP 217, built in 2023, is at the Trindade station on Route C on March 16, 2024. Kotofey photo via Urban Electric Transit

program and the Portuguese Environmental Fund, with deliveries to begin in the second half of 2026, ahead of the completion of Line H. There is an option for 10 more trams.

Line H will connect Casa da Musica with Santo Ovidio at Gaia, and provide an interchange with the planned Lisboa-Porto high speed line. The 6.4-kilometer route will have eight stops and a new bridge over the River Douro. The €435 million civil works package is being partly funded by EU's Recovery & Resilience Fund.

Metro do Porto currently has a total of 120 trams, including 18 supplied by CRRC Tangshan, which entered service in 2023. Tangshan had beat Siemens Mobility and Skoda Transportation to win that €49.6 million contract, signed in January 2020. METRO REPORT INTERNATIONAL, March 12

POTSDAM, GERMANY

The first Tramlink, No. 441 (Stadler, 2/2025), seen shortly after its delivery. Verkehrsbetrieb Potsdam photo

New Tram Unveiled

Verkehrsbetrieb Potsdam has unveiled its first Stadler Tramlink tram, which will help shape Potsdam's cityscape for decades to come.

An order for 10 trams was placed in December 2021, followed by an option for a further three. Stadler will provide 10 years of maintenance, with the possibility of extension for a further six years.

At 42 meters, the Tramlink is 12 meters longer than the operator's existing Variobahns. It is 2.3 meters wide and has a capacity of 246 passengers, including 74 seated, with four multifunctional areas, including two areas for wheelchair users.
METRO REPORT INTERNATIONAL, March 31

PRAGUE, CZECH REPUBLIC

Modernized Hloubetin Depot Opens

Prague has a new tram depot for the first time in 74 years, as Prague Public Transport Company (DPP) officially opened the modernized Hloubetin facility on Friday evening, March 21. The former Hloubetin depot was demolished in 2019 after structural problems were discovered in its roof.

As of Saturday, March 22, the new depot is in full service, dispatching trams for regular passenger routes after nearly six years of reconstruction. While the opening will not affect passenger timetables, DPP expects the upgraded depot to significantly reduce operational mileage as trams will no longer need to travel from other depots.

The extensive modernization of the Hloubetin depot began in September 2022 and was carried out by VCES and CH&T Pardubice. The project was fully funded by Prague's municipal budget. In the future, the depot will serve as a home base for the city's new Skoda 52T trams.

View of the modernized depot. DPP photo

The new depot features a 22-track hall divided into two sections: one for parking up to 61 articulated trams of up to 32 meters in length, and another for maintenance with capacity for 12 vehicles. The maintenance hall is equipped with modern technology, including work platforms, lifts, and a paint shop for tram components.

Designed for energy efficiency, the depot includes photovoltaic panels on the roof and solar panels on the southern and eastern facades. Heating is supplemented by a cascade of heat pumps, and ventilation systems use heat recovery.

DPP will also recycle rainwater for tram washing and reuse grey water from showers and sinks for toilet flushing.

Additional upgrades to the site include new service buildings for DPP's overhead lines and internal transport divisions, modernized washing facilities, new tracks, overhead lines, and green spaces with 17 new trees and over 3,000 shrubs and flowers.
EXPATS.CZ, March 22

SLOVENIA

Freight Operator Orders 30 Locos

Freight operator SZ Tovorni Promet has awarded Alstom a contract to supply 30 Traxx Universal multisystem electric locomotives for hauling heavy trains in central Europe. Deliveries under the €152 million+VAT contract signed on March 21 are scheduled between April 2027 and September 2028.

The locos will be equipped with Alstom's Onvia Cab ETCS. They will be approved for use in Slovenia, Germany, Austria, the Czech Republic, Slovakia, Hungary, Croatia, and Serbia, and will also be able to access the Italian border station of Opicina and interchanges between Italy and Austria.

Rendering of SZ TP's new Traxx locos. Alstom

The operator said the locomotives would be able to haul trains around 30 percent heavier than its Class 363 locos built by Alsthom in the 1970s, and their maximum speed would be a third higher. They will consume around 20 percent less electricity and be significantly quieter than existing locomotives, while maintenance costs will be halved.
RAILWAY GAZETTE INTERNATIONAL, March 24

STRASBOURG/LE HAVRE, FRANCE

New Trams Ordered

Alstom has been awarded contracts to supply 27 additional trams to Strasbourg and eight trams for Le Havre's future Line C, the manufacturer announced on March 19.

The contract signed by local authority Eurometropole de Strasbourg and operator CTS is exercising an option under an eight-year, €250 million framework agreement, signed in April 2023, of which a firm order of 12 trams has now been called. The new trams are planned to gradually replace the city's fleet of distinctive Eurotram vehicles supplied by Bombardier, which are reaching the end of their service life. Deliveries are scheduled to start in 2026.

Rendering of Strasbourg's new tram. Alstom

Le Havre Seine Metropole meanwhile has signed a four-year framework agreement with Alstom for the supply of at least eight trams. These are to run on the future north-west-to-east cross-city Line C. Deliveries are scheduled to start in 2027, when Line C is due to open for revenue services.

Strasbourg's trams will be 45 meters long, with a capacity of 286 passengers, featuring eight double doors 1.3 meters wide on each side. Le Havre's trams will be 33 meters long, with a capacity of 206 passengers.

Each of the trams are to be 100 percent low-floor, 2.4 meters wide, and will have door opening buttons at the suitable height for people with reduced mobility, and dedicated areas for wheelchair users and baby carriages.

The trams are also to feature passenger information systems, as well as illuminated and audio signals to assist visually and hearing-impaired passengers when they are boarding and alighting. The vehicles are also to be equipped with air-conditioning, LED lighting, and CCTV.

The trams allocated for use on Strasbourg's tram Line D are to be certified for operation in Germany.

Alstom says that the new trams will have a 25 percent reduced energy consumption, and a will require 16 percent less preventive maintenance over their 30-year service life when compared to current rolling stock. The trams are made of 95 percent recyclable and 98 percent reusable materials.

The vehicles will be designed and assembled at nine of Alstom's facilities in France.

METRO REPORT INTERNATIONAL, March 19

SWITZERLAND

First Saphir II Trainset Delivered

Aargau Verkehr has taken delivery of the first of five Stadler ABe4/8 Saphir II EMUs ordered for use on the 22-kilometer Wynental and 10-kilometer Suhrental lines west of Zurich from December 2025.

The two-car 750 V DC EMUs were ordered in early 2023 as an option on a 2016 contract for five three-car Saphir I sets delivered in 2019. They will replace older Be 4/4 vehicles, enabling the operator to standardize its fleet.

The two-car low-floor sets are 41 meters long and 2.65 meters wide, with air-conditioning, a passenger information system, CCTV, 73 standard and 12 first class seats, and space for 168 standing passengers. There are two multifunctional spaces for wheelchair users, pushchairs, luggage, or bicycles.

The first trainset arrived at Schoftland depot from Stadler's Bussnang factory by rail on March 10. Aargau Verkehr photo

The meter-gauge units have a maximum speed of 80 km/h and can work in multiple, including with the longer sets, to match demand.

RAILWAY GAZETTE INTERNATIONAL, March 19

TAIYUAN, CHINA

Second Metro Line Opens

The capital of Shanxi province gained a second metro line on February 22 with the opening of Line 1, celebrated at an event held at Xiayuan station.

The 28.7-kilometer line connects western and southeastern areas of Taiyuan, a city of 5.3 million people 400 kilometers southwest of Beijing. It runs from Helongwan east across the city center, then southeast to Taiyuan Wusu International Airport, with 24 stations. A second airport metro station as part of a planned 1.9-kilometer extension.

The city center station at Dananmen provides interchange with north-south Line 2, which opened in December 2020.

One of Taiyuan's metro train sets. Metro Report International photo

Line 1 also serves Taiyuan Station West Square and East Square stations, which provide interchange with mainline services at Taiyuan's central station, and a second mainline interchange at Taiyuan South.

Line 1 was approved by the city authority in 2010 and received National Development & Reform Commission approval in 2012, but it wasn't until December 2019 that construction began.

The line was built by the China Railway Fifth Survey & Design Institute and the China Railway 22nd Bureau.

Line 1 is operated by 28 six-car 80 km/h Type A trainsets manufactured by CRRC Dalian.

METRO REPORT INTERNATIONAL, March 3

TOKYO, JAPAN

New EMUs on Tobu Railway

Tobu Railway put its first Series 80000 EMU into revenue service on the Urban Park Line on March 9.

The route serves the northern and eastern parts of the Tokyo metropolitan area, linking Omiya in Saitama prefecture with Funabashi in Chiba via Kashiwa. Opened in 1930 as the Noda Line, the 62.7-kilometer, partially single-track route is 1,067 mm gauge and electrified at 1.5 kV DC.

Kinki Sharyo is supplying 25 Series 80000 trainsets, which are intended to operate as five-car formations. Seven are being built as such, but the other 18 will be supplied as four-car units and augmented by one vehicle transferred from the railway's existing Series 60000 units; these are to be shortened from six to five cars. The new trains are intended to replace Tobu's aging Series 8000 and 10030 EMUs which are to be withdrawn.

The Series 80000 units are formed with two driving trailers, two motor cars, and a central trailer, and have a maximum speed of 120 km/h. Each will be able to carry up to 697 passengers, including 239 seated. A feature of the new trains is the Tanoshiito ("enjoyable seat") family areas behind each cab; these have glazed partitions allowing the

Tobu Urban Park Line 80000 EMU. Akihiro Nakamura photo

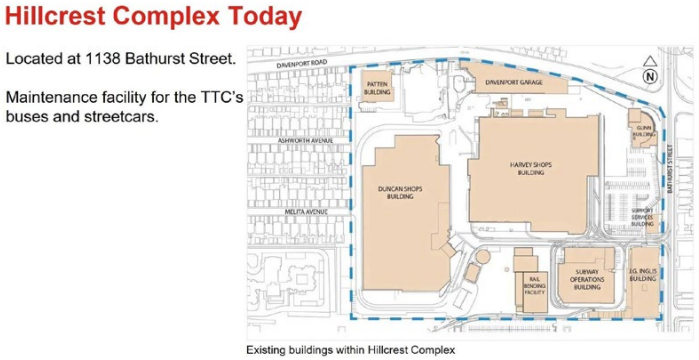
children to watch the driver and enjoy the forward view. The aluminum-bodied EMUs are fitted with a SynTRACS traction package supplied by Mitsubishi Electric. This includes SynRM 250 kW self-cooled synchronous reluctance motors, an inverter drive using silicon carbide elements, and a lithium-ion battery pack, which also provides power for the lighting and air conditioning. The more efficient traction drive and greater use of regenerative braking are expected to reduce power consumption by more than 40 percent compared with the Series 8000 EMUs.

RAILWAY GAZETTE INTERNATIONAL, March 20

TORONTO, CANADA

Hillcrest Construction Begins

Construction was officially launched March 6 at the TTC's Hillcrest complex. Hillcrest Complex will undergo comprehensive upgrades to store and maintain approximately 25 new streetcars. The upgrades are being funded by contributions from the federal government and the City of Toronto.



Plan of the TTC's Hillcrest Shops. TTC

The TTC is currently receiving 60 new streetcars, which

are jointly funded by $568 million in contributions from the federal government, the Ontario government, and the City of Toronto. The Hillcrest Complex construction project will be done in two phases and is expected to take approximately five years to complete. In addition to the upgrades for streetcar storage and maintenance, the project will include much-needed maintenance work and landscaping improvements.

Currently, the TTC's existing streetcar facilities can accommodate a total of approximately 239 streetcars. The upgrades to Hillcrest will allow for a total fleet size of 264 vehicles. Since 2020, the TTC has operated only low-floor, high-capacity, fully accessible streetcars on its network.
TTC Press Release, March 6

TOURS, FRANCE

New Trams Ordered

Transport authority Syndicat des Mobilites de Touraine has awarded CAF a contract to supply 19 Urbos trams for use on the future Tours Line 2.

The order, which includes depot tools, has been placed as part of the Lignes2tram project to build a 12.5-kilometer route running from La Riche in the west, through the city center, to Chambray-les-Tours in the southeast, with 22 stops. Line 2 is scheduled to open in 2028, serving residential and commercial areas, and destinations including hospitals, schools, universities and sports, leisure, and cultural facilities.

CAF has adapted its Urbos design to meet Tours' specification for use on both the new line and the existing Line A. This includes a two-kilometer catenary-free section where the new trams will be powered by batteries rather than Alstom's APS ground-level power supply system used by the existing Citadis trams.

From Tours' current fleet, Citadis 402 No. 053 (Alstom, 12/2012) on route A at Place Jean Jaures on July 4, 2023.
Frantisek Vanasek photo via Urban Electric Transit

CAF's fully low-floor air-conditioned trams will be 42 meters long, with 76 seats and a capacity of up to 280 passengers. There will be multi-purpose areas for wheelchair users, baby carriages, and bicycles. The eight doors will include six double doors for rapid passenger flows.

The interior and exterior styling will follow the striped theme of the Line A trams, adapted to suit the Urbos platform.
Railway Gazette International, March 18

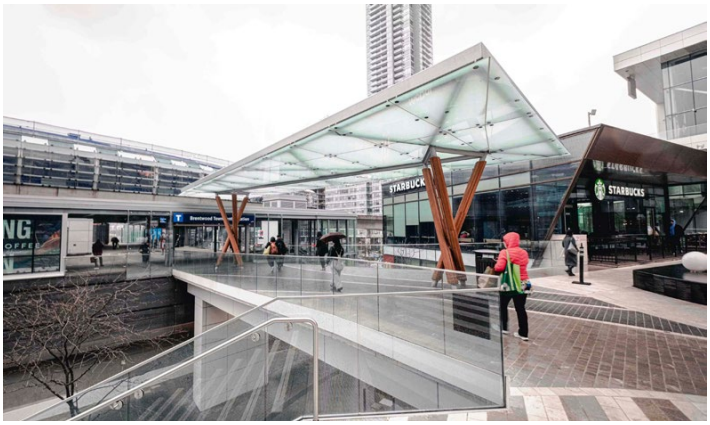
VANCOUVER, CANADA

Brentwood Town Centre SkyTrain Station Completed

TransLink has completed upgrades to its Brentwood Town Centre SkyTrain Station, enhancing the station's accessibility, capacity and customer flow. TransLink says these changes will also improve integration with the mall, surrounding bus service and nearby residential buildings.

The Brentwood Town Centre Station upgrades include:

- A new street-level elevator and two new escalators
- An expanded mezzanine for more space and three new fare gates for improved passenger flow
- Two enhanced stairwells with enclosed glass to provide weather protection
- Improved lighting



Upgrades to Brentwood Town Centre SkyTrain Station have been completed. TransLink photo

The station will also feature new permanent wayfinding to direct riders, including additional maps and transit information panels. TransLink notes its Brentwood Town Centre Station is the first Millennium Line station to receive upgrades since the line opened in 2002. It is one of the busiest stations on the Millennium Line and a transfer point for seven different bus routes. In recent years, the area surrounding the station has been transitioning into a dense, mixed-use neighborhood with increased transit needs.

The C$32 million (US$22.5 million) investment for this upgrade project was part of the Investing in Canada Infrastructure Program, with contributions from the government of Canada and TransLink.
Mass Transit, March 26

A Dive in the ERA Archive

By Paul Grether (ERA #6933)

This month's feature comes from a folder labeled "Pennsylvania Railroad Electrification" with interesting photos. One of the sets of photographs in the folder is of the Metroliner "Pioneer III" prototypes operated by the Pennsylvania Railroad and some early production car pictures.

The High Speed Ground Transportation Act of 1965 caused the US Department of Transportation to begin work with the Pennsylvania Railroad to develop high speed rail operations on the Northeast Corridor. The Act encompassed a large scope of infrastructure improvements, including upgrade of mainline Track 3 between New Brunswick and Trenton, New Jersey, but the most visible element would be the equipment. Before delivery of the Pennsylvania Metroliners by Budd, the USDOT placed a predecessor order with Budd for four Pioneer III/Silverliner EMUs. 55 cars had been ordered for Philadelphia-area commuter service and these additional four cars would be modified for high-speed rail operations with the addition of a streamlined nose cap and special trucks, propulsion and braking systems and would be outfitted with a large amount of test equipment.

Pioneer high speed test car T-1 leading the four-car test train. The train was owned by the US Department of Transportation and did not have Pennsylvania Railroad markings. Location, date and photographer unknown. ERA collection.

Pioneer III high speed test car T-3 with production Metroliner coach car #803 in the background. This view shows the detail of the high-speed end cap and some of the exterior writing for the test equipment. Location, date and photographer unknown. ERA collection.

Color view of high-speed test car T-3 leading the four-car test train. Visible on the letterboard along the side of the car is the text "US DEPARTMENT OF TRANSPORTATION TEST CAR." The Lee clothing factory in the background means that this is Trenton, New Jersey. Date and photographer unknown. ERA Collection.

The cars, numbered T-1 through T-4, were operated only for testing the Pennsylvania's infrastructure at high speeds. This culminated on April 2, 1967, with the cars reaching 156 miles per hour. These tests were critical to the subsequent introduction of revenue Metroliner services in January 1969.

Information about the Metroliner prototypes came from the following books in the author's collection:

1. *Pennsy Power II: Steam Diesel and Electric Locomotives of the Pennsylvania Railroad* by Alvin Staufer and Bert Pennypacker. Link to book information: www.libib.com/u/grether?solo=106080177

2. *Metroliners: Trains that Changed the Course of American Rail Travel* by Bruce Goldberg, David C. Warner. Link to book information: www.libib.com/u/grether?solo=54395264

Note: This book was reviewed in *ERA Bulletin* Volume 66 Number 7: 2023-07-bulletin.pdf

An additional reference is *A General Chronology of the Pennsylvania Railroad Company, Its Predecessors and Successors and Its Historical Context: 1967* by Christopher T. Baer, and published by the Pennsylvania Railroad Technical & Historical Society, available at http://www.prrths.com/

newprr_files/Hagley/PRR1967.pdf.

Do you have additional information about the Pioneer III high speed test train or the pictures from the ERA collection? Email grether@mindspring.com and perhaps more information can be shared in a future *Bulletin*.

Metroliner production snack bar coach car #850 at Jenkintown, Pennsylvania shortly after delivery by Budd in 1967. This was the first car equipped with G.E. propulsion (versus Westinghouse) delivered. Date and photographer unknown. ERA Collection.

Metroliner production coach car #800 along the Reading Railroad's New York Branch shortly after delivery by Budd in 1967. This was the first car equipped with Westinghouse propulsion delivered. The Metroliner cars would later cause problems with the Pennsylvania Railroad MP-54 fleet (later Penn Central) by blowing out the old cars' windows when passing an oncoming train at high speed. ERA Collection.

(Below) Metroliner production coach car #803 in the shop at Morrisville, New Jersey on February 13, 1968, being modified with a new Stemmann pantograph. Photographer unknown. ERA Collection.

Winterfest 2025 at the Rockhill Trolley Museum

Paul Grether (ERA No. 6933)
All photos by the author and taken on February 28 and March 1

Every year the Northeastern Alliance of Trolley Organizations (NEATO) organizes a winter social gathering for volunteers and staff of the various trolley museums in eastern North America at one of the constituent museums. In 2025, Winterfest was hosted by the Rockhill Trolley Museum, in Rockhill Furnace, Pa., who graciously displayed and operated many cars in their large collection, including some that do not often venture outside of the barns. A real treat was the debut operation of former SEPTA No. 162, a former Philadelphia & Western "Strafford" car that the museum has restored to operation. Additionally, the SEPTA "Libertyliner", a former Chicago, North Shore & Milwaukee Electroliner, operated. For further information on the Rockhill Trolley Museum including information about visiting and about the collection visit https://rockhilltrolley.org/

San Diego Trolley No. 1019, built in 1982 as part of the second batch of German Siemens–Duewag U2 cars for the opening of the system, retired in 2014 and donated to the museum.

Philadelphia Transportation Company PCC No. 2743 was built in 1947 by St. Louis Car Company and operated until 1993. It was used for a night photo session.

York Railways No. 163, built as part of a batch of five in 1924 by J. G. Brill Company as a copy of the Cincinnati Car Company curved-side design. Cincinnati claimed patent infringement and Brill never produced another curve-side car. No. 163 was retired in 1939 and sold as a cottage, it was later beautifully restored by the museum.

Liberty Liner "Independence Hall" is one of two former articulated high-speed interurban "Electroliners" built by the St. Louis Car Company in 1941 for the Chicago, North Shore & Milwaukee. Designed to operate on the Chicago "L", they were sold to the Philadelphia Suburban Transportation Company's Red Arrow system in 1963. SEPTA sold the interurban to the museum in 1981.

Porto, Portugal No. 172, built in-house in 1929 by the tramway system S.T.C.P. (Sociedade de Transportes Colectivos do Porto) and purchased by the museum after retirement.

Chicago Aurora & Elgin Railroad interurban No. 315 was built in 1909 by the Kuhlman Car Company as a high-speed car, with a top speed of 80mph. Retired in 1957 when No. 315 operated the last train on the CA&E. The car is nearing completion of a comprehensive restoration by the museum.

Scranton Transit No. 107 is a double-ended snow sweeper built in-house as number No. 99 by the Chicago and Joliet Electric Railway in 1910 and sold to Scranton Transit in 1933 after the C&JE abandoned streetcar service. When Scranton closed in 1954 No. 107 was in the collection of various museums until it ended up at Rockhill in 1973.

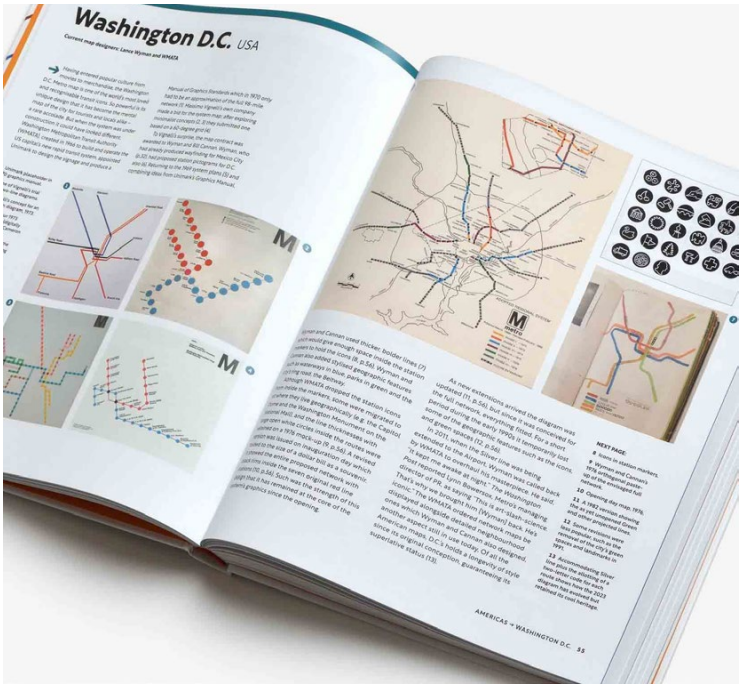
SEPTA No. 162 was built in 1927 by J. G. Brill Company for the Philadelphia & Western Railroad. Following rebuilding in 1931 the car was mostly assigned to the Strafford Branch of the P&W until abandonment of this branch in 1956, when it was reassigned to other lines, like the Norristown line. The Rockhill Museum worked to restore the car to operation, and it debuted at Winterfest. There is still cosmetic work to be done but it was great to see the car operate again.

The San Diego U2 and Philadelphia PCC side-by-side.

Book Review

By Paul Grether (ERA #6933)

Iconic Transit Maps: the World's Best Designs by Mark Ovenden, published by Prestel Verlag GmbH & Co, in 2024, large-format hardcover, 200 pages, with endnotes, city and system index and numerous color illustrations. ISBN 978-3791380254.



This month MTA New York City Transit released a new design for the subway system map. *(Editor's note: See next month's Bulletin for details.)* This is good timing to review a new volume published on transit maps around the world by one of the foremost experts on the topic, Mark Ovenden. Mr. Ovenden has published previous volumes on the topic including *Transit Maps of the World: The World's First Collection of Every Urban Train Map on Earth* from 2007 (updated second edition published in 2015 - www.libib.com/u/grether?solo=63790238), *Railway Maps of the World* from 2012 (www.libib.com/u/grether?solo=63140916), and *Underground Cities: Mapping the Tunnels, Transits and Networks of Our Cities* from 2020 (www.libib.com/u/grether?solo=89126937). Mr. Ovenden has also published multiple volumes on London, Paris, and system maps designed by Vignelli.

Iconic Transit Maps: the World's Best Designs is a collection of maps curated by Ovenden to illustrate designs from 50 cities organized almost equally by continents, but with most from Europe and including a strong African selection. The volume is organized by transit system, with example maps including both historical and contemporary examples with an explanation of their design and references to the designers and photos of the system. The attributes of each map that make the various maps usable or unique characteristics are explained. Often Ovenden has quotes or insights directly from each designer.

There are also short chapters by thought leaders in the design of transit maps. This includes an introduction, a chapter by Ovenden about why good design in transit system maps is important, and concluding chapters about the best designs, the maps from the transit user perspective, and the use of transit maps in popular culture.

The format of the book is a large-format hardback with bright, contrasting color illustrations. This format is equally at home in a transit enthusiast's library and on the coffee table of an architecture or design firm. The book itself incorporates beautiful design. This volume will appeal to those interested in design, cartography, global transit systems and certainly the evolution of transit wayfinding across the globe.

Link to book information: www.libib.com/u/grether?solo=138814384

Travels with Jack May

Modern Streetcars in Three Midwestern Cities — Part 5

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

The news that a new streetcar line would be opening in Detroit on Friday, May 12, 2017 came as no surprise, but it encouraged me to include that city in a list of places I'd want to visit in the summer. I rejected the idea of going to the inauguration of the Q Line, as I don't care for large crowds and prefer as little outside interference as possible while taking photos. Thus despite being urged to join some friends who would attend (similar to what occurred when the lines in Norfolk and Washington begun operations, whose openings I also passed up, but eventually visited), I decided to forgo the opportunity for the time being.

But that radically changed on Thursday, May 11 when I received an e-mail message from Frontier Airlines that included an offer I couldn't refuse, a round trip from Trenton Mercer Airport to Detroit for a mere $58! It applied to an outbound flight on Sunday, May 14 and a return on Tuesday, May 16. After quickly checking with Clare, I jumped at the opportunity (hoping it wouldn't sell out quickly) and bought my ticket.

I notified several other traction enthusiasts that I would be coming out, suggesting I might see them if their visits extended to the 14th or 15th. Among them was long-time friend and fellow railfan Julien Wolfe, who has lived for many decades in Windsor, Ontario, across the river from Detroit. He said he and his wife Martha could arrange accommodations for me in his condominium building, and that he would be happy to join me riding, inspecting, and photographing the new line. I happily agreed and he indicated he would pick me up at Detroit Metro Airport after my flight landed, which was scheduled for 3:24 PM on Sunday.

The logistics worked out well; I left home at 10:45 AM and reached the airport a few minutes after 12 noon, where I had to struggle a little to find a parking spot, finally settling for one in an overflow area serviced by a free shuttle bus. Parking would be $8.00 per 24-hour period. I had not opted to pay for a reserved seat and so had to check in at the Frontier desk on the upper level, where I was assigned to a window seat and received my boarding pass. Frontier charges for both checked baggage and carry-ons (the former is cheaper than the latter), but all I was taking with me was a "personal item" (my camera bag into which I stuffed my film, camera, toiletry kit, a clean shirt and two changes of underwear). The airport is small and passengers descend by escalator to the security checkpoint and then enter the waiting room. All of that took virtually no time, and soon enough loading began through a door leading to the waiting A-320 aircraft on the tarmac.

The 80 percent full plane departed on time and arrived in Detroit a few minutes early, similar to my Frontier flights in previous years from Trenton to Charlotte and Atlanta. Julien and I found each other quickly as planned, and soon we were on our way to the outer terminal of the new streetcar line, where we found a curbside parking spot on a side street close to Woodward Avenue.

First, a little bit about the line and the city. Detroit has suffered painfully over the last half-century, mostly driven by the loss of jobs in the automotive industry, white flight to the suburbs, and the tearing up of neighborhoods for freeways, which resulted in a high crime rate and large amounts of urban decay. In 1950 it was the nation's fifth largest city with a population of about 1.8 million, but by 2010 the number of the city's inhabitants had dropped to way less than half, just over 700,000. Despite the construction of the Renaissance Center in 1977 and other attempts at revitalization, including the construction of ballparks, arenas, and even a people mover, the city center suffered greatly, especially with the abandonment of tall office buildings, hotels, and the like.

But that may be in the process of reversal, as many downtown structures were not razed, but instead are now being renovated, both for commercial and residential purposes. And another sign pointing to Detroit's revival is its new 3.3-mile-long streetcar line, which is the subject of this report.

The city's public transit system deteriorated hand-in-hand with its decline. Like most large metropolitan areas, Detroit had an extensive network of streetcar routes, but the system was abandoned after World War II, despite its utilization of a large fleet of PCC cars. Some 186 modern streamliners were purchased new from St. Louis Car, but all were replaced by buses by the middle of 1956 (in the post-war era how could the stalwart automobile companies headquartered in the area countenance an effective transit system?). Detroit's first two PCCs were diverted from a 1944 order for Pittsburgh, making them the only air-electric units to operate in the Motor City. All but one of the remaining [all-electric] cars were sold to Mexico City, where I rode them on many occasions. (Julien Wolfe informs me that No. 2268 was returned to the U. S. back in 1984 and I wonder if preservationists south of the border have saved any of the others.)

Other blows to transit in the Motor City included the abandonment of the Grand Trunk Western Railway's commuter service in the Detroit-Pontiac corridor (and a small similar operation on the former New York Central to Ann Arbor) and the refusal of the city to accept becoming part of a unified regional bus system that included the suburbs, which meant it was not included in the Southeastern Michigan Transportation Authority (SEMTA), now SMART. The creation of a heritage streetcar operation, using mainly vintage streetcars from Lisbon occurred in 1976 as part of the bicentennial, but it withered away by 2003 due

to indifference and neglect. The creation of a single-track elevated people mover system was an attempt to reverse the decline. The automated line, which loops through Detroit's business center, opened in 1987, using technology that was pioneered in Toronto (Scarborough) and Vancouver. Considered by many to be a white elephant at the time, it now aids mobility and tourism in the city center.

This Brookville Liberty car is shown returning to the Grand Boulevard terminal to begin a southbound run after having its batteries charged in the area adjacent to the traffic signals at right. The double-track merges into one before fanning out again to enter the carhouse. Close-up views are on the right.

(Above and below) This Brookville Liberty streetcar had to be positioned carefully so its pantograph could be raised to allow its batteries to be charged from 750-volt DC overhead. The car will be battery-propelled from this point southward until it reaches the Ferry Street station and enters upon a stretch containing poles and wire. It is said that the use of ugly overhead on streetcar and light rail lines can destroy the quality of the views in the area. The upper photo shows the tracks turning right (eastward) into the Penske Tech Center, where rolling stock is maintained and stored overnight. This approach to charging batteries is also used on the Dallas Streetcar but is accomplished during the period while revenue cars lay over in the terminal station. The operator, M-1 Rail, states that the tech center is the only wireless facility in the U.S. One more track branches off one of the main tracks inside, to give a three-track facility.

Anyway, about a decade ago a new breed of local philanthropic and entrepreneurial business leaders decried the horrendous waste of people and resources that riddled Detroit and began the city's revitalization. Among them was Dan Gilbert, a local resident who was the founder of Quicken Loans, who never lost faith in his city. He decided to invest in the urban core and brought in casino gambling to raise funds, while purchasing a great deal of the abandoned real estate along with its infrastructure. Similarly other leaders, including Mike Ilitch, founder of Little Caesar's Pizza and owner of the Detroit Tigers and Red Wings, Roger Penske (Penske truck rental/leasing), and the Kresge Foundation (Detroit was S. S. Kresge's home town) did the same, and created organizations to guide the redevelopment. Detroit's banks, old line automobile companies and a new city administration installed after the city's bankruptcy cooperated.

To make a long complicated story short, things look much brighter in Detroit, and the streetcar line is a major catalyst. It runs for a little over three miles along Woodward Avenue, the city's historic main artery, from Congress Street, just short of the Detroit River in downtown, northward to Grand Boulevard. Much of the line, which uses six three-section, 100 percent low-floor Brookville Liberty streetcars, is wireless, and so the rolling stock has its batteries charged while traveling along stretches under the wire and when laying up. Its southern terminal has overhead, while at the northern end of the line, between the terminal station at Grand Boulevard and the three-track carhouse (which

is wire free) there is a spot where cars can raise their pantographs to obtain power. Just like in Cincinnati and Kansas City, the numbers for the new rolling stock picked up where the legacy system left off, in this case No. 287-292, as Detroit's last PCC was numbered 286.

Originally called the M-1 line (Woodward Avenue is Michigan state highway 1) and planned as a publicly financed project with support and some funding from the private sector, it received FTA money for a DEIS. But in 2011 it morphed into a much larger plan for BRT under the aegis of the Mayor, Governor, and the federal government, based on their [mistaken] opinion that it would be more affordable because operational costs for a rubber-tired system would be less than for steel-wheeled surface transit. This left no governmental entity supporting rail, but did not stop the consortium of corporate executives that had been involved to continue to plan a rail line, albeit a pared-down one. This effort garnered a great deal of impetus when the FTA-supported BRT nonsense became moot as the public voted and defeated the regional tax plan that was needed to provide the project's local share. Thus the privately created, more affordable, carefully thought-out streetcar line became the only option, albeit for only a much smaller portion of the corridor. Gilbert and Quicken Loans took over sponsorship by buying naming rights prior to its opening, and as a result it is called the Q Line. The public-private partnership that runs it, M-1 Rail, contracts out its operation to Transdev (the same organization that runs the Cincinnati Bell Connector).

The Grand Boulevard terminal with car 289 discharging passengers before heading further northward to charge its batteries and then turn back. The station furniture is simple, and is attractive.

The line has 12 stops and is 60 percent free of 750-volt DC overhead wire. Its double track runs both in the center and along the curbs of Woodward Avenue for almost its entire length, the exception being a short stretch of uni-directional single track circumscribing Campus Martius Park (Cadillac Square) near its southern end. There are many traffic generators along the line, and some will be highlighted in the captions of the photos below (and in part 6). See https://drive.google.com/file/d/0B6p5kZzKRHCBeW9SVTU5RDhvZ0U/view for a diagrammatic map.

The photos in this month's installment cover the northernmost portion of the line.

Looking toward downtown, a northbound car is shown just below the Grand Boulevard terminal. The overpass in the distance carries Amtrak Pontiac-Detroit-Chicago trains. The passenger station is just to the west of Woodward Avenue, a very short walk from the QLine's next stop, Baltimore Street.

The first five, on this and the previous page, were taken at or just beyond the line's Grand Boulevard terminal, near the intersection of Woodward and Lothrop (which was also the name of a famous department store chain in the Washington, D. C. area).

Just south of the Amsterdam Street stop, the tracks transition between the curb and center of Woodward Avenue. It is odd that this outbound car was displaying the last part of its "Congress Street" destination, as it is heading in the opposite direction. The steeple in the background is atop the Romanesque Our Lady of the Rosary Parish church, whose stone walls were built in 1896.

Detroit's Art Deco Fisher Building looms in the background of two of the photos on the next page. Located along Grand Boulevard, a few blocks west of the line's northern terminal

in a section of Detroit now known as New Center, the 30-story skyscraper was built by the seven Fisher brothers with funds realized from the sale of the automobile body company their uncle started to General Motors in 1926. It is noted for an ornate three-story lobby and its interior theater, which is Detroit's home for road productions of Broadway shows. It dwarfs the former Neo-Classical General Motors building, now called Cadillac Place (also in the views), used by GM as its headquarters from its completion in 1922 to 2001, when the corporation moved into Detroit's Renaissance Center. Ironically, in 2016 the current president of GM purchased the Fisher home, a 28-room mansion in which he and his family now dwell. (Take that, Eiji Toyoda.)

Part 6 continues with the narrative of my visit to Detroit and photos of the Q Line in the downtown area.

(Above) This view, taken by Andrew Grahl in 2017, is a close-up of No. 287 on a trailer, ready to make the trip from Brookville to Detroit. *Author's note: The cars are currently painted red, similar to what is shown above.*

(Left) Working our way southward, Woodward Avenue crosses over the Edsel Ford Freeway. Looking north from the service road, an inbound streetcar passes under a billboard erected prior to the line's opening, and thus before it was named the Q Line. When the cars left the manufacturer at Brookville, Pennsylvania, they were painted in the red and white livery shown on the sign.

(Left) The rear of a Grand Boulevard-bound car is shown crossing Palmer, just slightly south of the freeway. This view illustrates one of the sections of the line where the tracks have been placed to leave room for parallel parking along wide Woodward Avenue. However, this can result in delays, especially when automobiles are not parked close enough to the sidewalk, but fortunately there is much more leeway here than there is in Washington, D. C., where narrow H Street leaves virtually no room for error. I should point out that I found it a bit dangerous to jaywalk into the center of Woodward Avenue to take photos like the one with the billboard.