



Volume 68, Number 5 | May 2025

New Subway Map Introduced

The MTA unveiled a new subway map on April 2, its first new design since 1979. The new map, which draws from previous versions, simplifies riders' primary wayfinding asset while providing the most essential travel information in an easily readable, bright, bold, and orderly manner.

The new map was designed by the MTA's Creative Services Mapping Department and, like many major subway systems around the world, utilizes a diagrammatic style, employing bold, straight lines, making it much easier for the eye to follow and more suitable for digital users. The white background, bold colors, horizontal writing and use of black dots make the map more ADA-friendly and easier for people with low-vision or cognitive disabilities to read.

Designers also focused on text legibility, keeping text on one line wherever possible, making better use of open space to alleviate crowding and using a black subway bullet with a white character to provide maximum contrast for easier reading.

The legend on the map is now more detailed and includes accessibility, transfer, and safety information, as well as a QR code that leads users to the MTA website.

Although this map is a new design, the creative team drew inspiration from previous maps including:

- Preserving the official brand colors established by the 1979 and 1998 Hertz maps
- Using a similar geometric and diagrammatic aesthetic introduced to the New York City Subway with the 1972 Vignelli diagram and revived by its successors, Waterhouse Cifuentes Design

The new subway map for weekdays, late nights, and *Continued on page 3*

Electric Railroaders Association

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

Editorial Staff

Editor-in-Chief

Jeff Erlitz

Associate Editors

Subutay Musluoglu, David Ross

Circulation Managers

Robert Colorafi (Electronic) David Ross (Print)

Contact

erausa.org/contact

Subscriptions

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

Worldwide Electric Railway, Metro and Tramway Openings	3
Rail News in Review	3
An Interesting Tramway Diversion in Vienna	17
A Dive in the Archive	19
Book Review	21
Travels with Jack May	22

Trip Notices/Save the Dates

July 12: Motor Bus Society/Friends of the NJ Transportation Heritage Center joint Northern New Jersey Trip. Visit https://erausa.org/regional-trips/2025/07/12/ for all the details, or to make your reservation.

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 April 2025.

\$1000 and Above

Richard Cotton, Edward Sawtell

\$200 to \$499

Arthur Jones

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: erausa.org/donate. Your donation helps to maintain ERA's 91-year long tradition of traction education and entertainment!

Monthly Zoom Meeting

Friday, May 16, 2025 at 7:30 PM.

Presenting This Month: David Wilson

David's program is titled **PCCs and More as a Graduation Present**. What better high school graduation present
than a trip to Boston and Philadelphia to tour the transit
systems? In the summer of 1967, 58 years ago, our speaker
spent four days in Boston, a day riding the New Haven
and Pennsylvania Railroads down the Northeast Corridor,
then four days in Philadelphia at the Electric Railroaders
Association convention. David will share his exhilarating
experience of riding PCCs, various El cars, Reading MUs,
Liberty Liners, Brilliners, Red Arrow Bullets, trolleybuses
and more.

How to Join Our Zoom Meeting

The Zoom registration link for this meeting is: https://us02web.zoom.us/meeting/register/0EkIj_Z8TouPnu_8DvnzRQ. 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 eleventh and final day of scheduled activities on the ERA's 2024 European tour took place on Friday, May 24, at the Belgian Coastal Tramway, which runs between De Panne, in the south, and Knokke, in the north. Seen at the TTO Noordzee depot in De Panne are SNCV/NMVB Type SO No. 10041 (SNCV Shops, 3/1956) and SNCV/NMVB Standard motor No. 9942 (SNCV Shops, 1932). Alex Krakowski photo



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

Date	Country	City	Segment	Distance (miles)	Railway/ Metro/ Tram
4/1	Italy	Naples	Line 1: Garibaldi to Centro Direzionale	1.2	М
4/17	China	Urumqi	Airport MRT: International Airport to North International Airport	2.4	М
4/21	Spain	Madrid	Line 3: Villaverde Alto to El Casar	2.2	М
4/28	Belgium	Liege	Line T1: Sclessin Standard to Place Coronmeuse/Liege Expo	6.8	Т

URBAN RAIL NEWS, APRIL 30

weekends is already displayed on station digital screens and soon will be onboard R-211 cars. Replacing physical maps in the remaining subway cars will be done in phases over the coming weeks. The MTA plans on celebrating the redesigned map throughout 2025. Both the redesigned map and older versions will be available for download on the MTA website.

Passengers are also seeing a software redesign of digital subway station screens that increase the frequency of real-time data, updating every five seconds, to better match countdown clocks to real-time train arrivals. These improvements, based on rider feedback, surveys, and analysis of all 472 stations, prioritize arrival information, streamline the presentation of customer information, and consistently feature white text on a black background for improved clarity and visibility.

Crews increased the number of screens that flash to alert riders when a train is approaching and feature an arrow on overhead digital screens that point to the side of the platform where the train is arriving. New vinyl stickers will also indicate which side of the screen contains information and which side displays advertisements. Screens at all stations are monitored remotely via cloud technology and can instantly alert crews to a malfunction, eliminating the time-consuming step of manually reporting issues.

MTA PRESS RELEASE, April 2

New York City Subway

The Brox

The

(Right) The new subway diagram. MTA

Rail News in Review

New York Metropolitan Area

NEW YORK CITY TRANSIT (NYCT)

Subway Accessibility and Housing Projects to Proceed at Essex Crossing

Officials have announced the commencement of projects to make the Delancey Street–Essex Street [3] [M] 2 Station

complex accessible and compliant with the Americans with Disabilities Act (ADA), and to develop mixed-income housing on the former site of the Essex Market.



A current view of the northeast corner of Delancey and Essex, formerly the location of the Essex Street Market. This is Site 9 of the Essex Crossing redevelopment project. Lo-Down Productions LLC photo

and a comprehensive set of accessibility upgrades needed to make the station complex fully ADA-accessible. This will include three elevators to ensure that all connections and transfers within the station can be made step-free.

With the project proceeding, New York City Economic Development Corporation (NYCEDC), MTA, and Delancey Street Associates will enter into a binding agreement and advance the new station entrance design. Delancey Street Associates expects to start construction in 2026 on 99 mixed income units of housing.

Delancey Street Associates' proposed building will rise at the site of the former Essex Street Market building, also known as Essex Crossing's Site 9. Essex Crossing is the result of a successful collaboration between the local community, the City – through NYCEDC and the New York City Department of Housing Preservation and Development — Manhattan Community Board 3, and Delancey Street Associates. The project, which originally received land use approval in 2012, has delivered a new home for Essex Street Market, 175,000 square feet of retail space, 64,000 square feet of community space, and with Site 9, will deliver approximately 1,100 units of housing overall, 50% of which will be affordable.

MTA PRESS RELEASE, April 4

Platform Edge Barrier Update

Work to install platform edge barriers at various stations continued during April. As has been the custom, the north-bound 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.

- April 5-6, Eastern Parkway 2345
- April 5-6, Bowery **J**
- April 12-13, Fulton Street <a>O

An additional Queensboro Plaza N W Elevator
An additional new elevator at the Queensboro Plaza N W
Station has been completed, giving the station accessible
entrances on each side of the busy approach to the Queensboro
Bridge. This project was completed through Zoning for
Accessibility (ZFA), a bonus provision which allows developers
to improve access to public transit in the busiest areas of the
city in exchange for an increase in their building's density.

As part of the agreement at Queensboro Plaza Station, Grubb Properties, which owns 25–01 Queens Plaza North, financed and constructed the new accessible entrance on the north side of the station, furthering the MTA's cost savings. The new entrance includes a 10–foot-wide staircase and a larger elevator cab that will accommodate more riders with strollers, carrying luggage, or using mobility devices. Grubb Properties will be responsible for maintaining the entrance and elevator. This is the first ZFA bonus project in the transit system opening to the public and the second approved by the City Planning Commission, with more on the way in the future. MTA PRESS RELEASE, April 10

IRT Flushing 7 Line Schedule Adjustment

Starting on April 7, a supplementary timetable is being operated for all Mets weekday night games. This supplement suspends northbound express service beginning with the 2100+ ("+" denotes half-minute) 34 Street-Main Street express. This is to allow selected southbound extra service to operate express from Willets Point at the conclusion of weekday evening games.

IND Prospect Park [3 G] Line Special Operation

From 10 p.m. Friday, April 11, to 5 a.m. Monday, April 21, the lower level yard south of Church Avenue Station was out of service continuously. This was enable TC Electric, LLC, under contract S-48012 (Crosstown Line CBTC) to install signals, train stops, axle counters, Cable Management System, pull cable, wire up junction boxes, and perform testing.

Since © trains were not able to relay through the lower level at Church Avenue, they operated express from north of Fourth Avenue to Church Avenue. After discharging passengers, they relayed on express Tracks B3 or B4 south of the station. They then went into service on Track B4 and operated express from Church Avenue to north of Fourth Avenue, where they resumed normal service.

The trains that normally operate express between Church Avenue and Jay Street-MetroTech have not been operating anyway, due to the service reduction mentioned in last month's *ERA Bulletin* (page 5).

New Artwork Unveiled

MTA Arts & Design unveiled Abstract Futures, a new artwork by Hilma's Ghost, at 42 Street-Grand Central Station. The



View of the art installation Abstract Futures at the Third Avenue entrance to 42 Street-Grand Central Station on April 19.

Etienne Frossard/MTA photo

600-square-foot glass mosaic is installed at the 42nd Street/Third Avenue entrance leading directly to the 7 train, on the Flushing Line. The mosaic is a contemporary and dynamic contribution to Grand Central's ongoing station rehabilitation. Fabricated by Miotto Mosaic Art Studios, *Abstract Futures* is the first public commission for the artist duo Sharmistha Ray and Dannielle Tegeder. The artwork centers around the themes of "portals" and "journeys." It is intended as metaphor for an individual's transformation and spiritual development in the city. The recent reveal marks a new chapter in artistic expression within the city's iconic transit hub.

MTA PRESS RELEASE, April 28

LONG ISLAND RAIL ROAD (LIRR)

New Yaphank Station

Officials broke ground on the new Yaphank Station, which is being relocated to be closer to William Floyd Parkway, the Long Island Expressway and Brookhaven National Laboratory.

The new station will be fully ADA, accessible to all in accordance with the Americans with Disabilities Act and outfitted with a number of improvements, including:

- A parking lot with space for 50 cars will have an integrated bus loop to accommodate pickups and dropoffs
- A plaza area with an information totem providing train schedules and bike rack
- A Help Point intercom on the platform

In the coming weeks, the construction site will be graded and utilities will be installed. Construction is targeted for substantial completion in the second quarter of 2026 with the station scheduled to be commissioned soon after. Once the new station is up and running the existing Yaphank Station will be demolished.

The \$20 million project to undertake the relocation of the existing Yaphank Station to a point further east on the LIRR's Main Line will be supported by funding from within the MTA capital program.
MTA PRESS RELEASE, April 3

Train-Car Collision at Pinelawn Station

At around 8:20 p.m. on Thursday, April 17, train 1977 from Ronkonkoma, and bound for Penn Station, struck an automobile that had gone around the lowered gates at the Wellwood Avenue crossing at the west end of Pinelawn Station, in East Farmingdale. The automobile was split in half on impact and burst into flames, killing the lone occupant of the vehicle.

The 10-car train was composed of M9s and the lead motor, No. 9157, was heavily damaged in the ensuing fire. Thankfully, none of the approximately 50 passengers on board were injured, nor any of the crew members.

It took until 11:55 p.m. to remove the pieces of the vehicle that were under the train. A rescue engine (MP15AC No. 158) was sent out from Jamaica to drag the incident train into the North Siding east of Farmingdale Station, and this was accomplished at 1:50 a.m. Friday.

In addition to westbound Track 1, some third rail repair work was necessary on eastbound Track 2, which was accomplished a little after 1 a.m. Track 2 was restored to service shortly before 2 a.m. After track repairs were completed on Track 1, service resumed at 11:44 a.m. The entire morning rush hour was single-tracked around the collision site between Danch Interlocking, west of Wyandanch, and Farm Interlocking, east of Farmingdale. There were many train combinations/cancellations and all trains made all local stops for the duration.

The eight east cars of the incident train were cut off from the damaged pair on the west end and operated from Farmingdale North Siding back to Ronkonkoma at a little after noon. At nearly 1:00 p.m., the rescue engine and damaged M9s left Farmingdale and headed to Hillside Yard, at no more than 15 mph.

New Schedules

New schedules, which will be in effect from May 19 to September 1, introduce new weekday Montauk service. The 5:13 p.m. train from Penn Station to Speonk, which normally operates to Montauk on summer Thursdays and Fridays, will now operate to Montauk, making all stops, Monday through Friday throughout the summer. This helps disperse ridership to Montauk throughout the week. This service is in addition to the weekend summer Montauk service starting Thursday, May 22.

For service to the city from Montauk, the 11:37 a.m. and 4:18 p.m. Sunday trains that normally terminate in Jamaica will operate through to Penn Station. These trains will operate on all Sundays except on holiday weekends, when they operate on Mondays (i.e. Memorial Day and Labor Day weekend).

To accommodate the peak ridership months from May to September, the western end of both platforms at Babylon Station will reopen, as scheduled, to accommodate greater passenger flow. The Babylon Station serves as a transfer point to/from Montauk trains for non-direct trains. The

opening of the platforms mark completion of Phase 1 of the ADA Babylon Rehabilitation project which began last year in September. The remaining half of each platform will close for construction in September 2025.

Elsewhere on the railroad, two new early morning trains will operate from Jamaica to Grand Central Madison on weekdays for greater transfer opportunities. The trains will depart Jamaica at 5:07 and 5:18 a.m.. On the Long Beach Branch, the 7:44 p.m. train from Penn Station to Long Beach will make an added stop at Lynbrook.

On the Port Washington Branch, one of two main tracks will be taken out of service during weekday middays to support track surfacing between Mets-Willets Point and Bayside Stations. As such, service at Mets-Willets Point, Murray Hill, Broadway, Auburndale, and Plandome will be reduced to hourly intervals temporarily. Service to/from Mets-Willets Point will be returned to normal intervals during Mets weekday afternoon games. Additionally, as common practice, the LIRR will add more stops to Mets-Willets Point in August to supplement service to US Open events.

Other projects supported during this timetable include East River Tunnel Hurricane Sandy Rehabilitation, Jamaica Capacity Improvements, rail replacement and maintenance in Brooklyn, and ADA station rehabilitation at Babylon, Hollis and Forest Hills Stations.

MTA PRESS RELEASE, April 28

METRO-NORTH RAILROAD (MNR)

Hudson Line Resiliency Work

The MTA announced an initiative to protect the Hudson Line from the effects of climate change through investments that will fortify the line against future stormwater runoff, tidal floods, and other risks. This effort, known as the Metro-North Hudson Line Climate Resilience Blueprint, will rebuild critical infrastructure — including culverts, drainage, retaining walls, slopes, shorelines, and track — with attention focused on a 20-mile stretch between Riverdale and Croton-Harmon that is vulnerable to the impacts of extreme weather.

The Blueprint will also outline design guidance and actions to protect the entirety of the Hudson Line from the effects of climate change, and ensure a coordinated approach is taken for all future Hudson Line projects. This includes target track elevations, standards for waterfront shoreline improvements, and performance criteria for drainage.

The agency hosted the first in a series of Open House on the Blueprint on Wednesday, April 23, at the Hastings-on-Hudson Library. The Open House featured a brief presentation given by MTA Construction & Development (C&D) representatives about the Blueprint and the Capital Plan and then a Q&A session that followed. Members of the public are encouraged to learn more about the project and share their thoughts on why it's important that the MTA make the Hudson Line resilient to climate change.

MTA PRESS RELEASE, April 9

Breakneck Ridge Station to Close for Two Years

The MTA and Hudson Highlands Fjord Trail Inc. (HHFT) announced that the Breakneck Ridge Station on the Hudson Line, along with Breakneck Ridge and other area trails, closed on April 21 as part of the first phase of construction of the Hudson Highlands Fjord Trail, a 7.5-mile linear park connecting Hudson Highlands State Park Preserve trailheads between Cold Spring and Beacon.

The closure will allow for the HHFT to complete construction of the Fjord Trail's Breakneck Connector and Bridge. The new trail will provide hikers with a safe alternative to walking along the dangerous and narrow State Route 9D to access popular area trailheads and will create cohesive access to and from the Metro-North station.

During the closure, HHFT will replace the existing low-level platforms at the Breakneck Ridge station with longer, higher platforms with ramps in an effort to improve safety and reduce the time needed for hikers to board and exit trains. HHFT will also build a pedestrian and bicycle path connection between the outbound platform of the station and the Breakneck Ridge trailhead.

MTA PRESS RELEASE, April 14

NEW JERSEY TRANSIT (NJT)/AMTRAK

Hamilton Station Escalator Replacement

NJT took a major step forward in advancing the full replacement of two escalators at Hamilton Station. The agency has awarded a \$5,183,000 contract to Hall Construction Co. Inc. for parts fabrication and installation. Under this new replacement plan, the timeline for completion has been advanced by nearly six months. Hamilton Station is one of the busiest stations on the Northeast Corridor.

NJT awarded the contract to Hall on March 31 following a competitive bid process. A Notice to Proceed was issued on April 7. Fabrication of parts and components is a complex process that is expected to take up to 10 months. Construction at the site will begin when all components of the replacement escalators are manufactured. The new escalators are scheduled to be operational by late spring/early summer of 2026. NJ TRANSIT PRESS RELEASE, April 9

New Fare Card Technology Introduced

NJT is introducing a new fare card as an easy and fast way to pay fares. The card, called "FARE-PAY," will begin its roll-out on the Newark Light Rail system beginning April 19, when monthly passes go on sale.

Beginning April 19, riders on Newark Light Rail purchasing monthly passes from Ticket Vending Machines (TVMs) will receive the new fare cards. Riders then simply tap their "FARE-PAY" cards at platform validating stations on Newark Light Rail. Additional locations, features, and travel modes will be added as the program continues to expand across the system.

Newark Light Rail riders who tap their "FARE-PAY" cards on platform validators will use that same "FARE-PAY" card



NJ Transit's new "FARE-PAY" card. NJ Transit

to tap a fare inspector's mobile validation device when requested by the fare inspector. The rider's validation information will be provided.

The new "FARE-PAY" fare cards, which are reusable, will provide riders the ability to manage their account online, view fare card activity, and auto-reload products and value. Riders will hold onto their "FARE-PAY" cards and reload tickets or passes onto them. A credit/debit card is not required. As part of future phases of "FARE-PAY," riders will be able to purchase and reload their cards at participating retail locations throughout the state. That feature is expected to be available at retail locations throughout New Jersey this summer.

Riders who use the mobile app to purchase tickets and passes can continue to do so and will not require a "FARE-PAY" card.

The goal of the "FARE-PAY" card is to reduce the use of paper tickets by using a more environmentally sustainable fare payment system, reducing the use of cash on board buses and speeding up the boarding process.

NJ TRANSIT PRESS RELEASE, April 17

New Lyndhurst Station Completed

NJT celebrated the completion of construction of the new Lyndhurst rail station. Trains will begin utilizing the new station June 8 to coincide with new rail schedules.

The new Lyndhurst Station, located at Delafield Avenue, just east of the current station, at Stuyvesant Avenue, is fully ADA accessible, with high-level platforms and elevators, stairs, and canopies, making for a safer, enhanced travel experience for all riders. The new facility, thanks to \$30.9 million provided by the Federal Transit Administration, replaces a station more than a century old which was not accessible. The new station building is designed to replicate the historic style of the neighborhood. Lyndhurst Station, located on the Main Line, serves more than 800 weekday passenger trips.

Once service begins at the new Lyndhurst Station on June 8, the Kingsland Station, which is only 2,000 feet to the east, will close. NJ TRANSIT PRESS RELEASE, April 28



Looking southwest along Delafield Avenue, immediately north of the new Lyndhurst Station. Google Street View

Other U.S. Systems

CHICAGO, ILL.

Improved Subway Service

The Chicago Transit Authority (CTA) introduced new rail schedules, which into effect on April 20. The new schedules are providing riders with reduced wait times, particularly on weekends, and overall, more frequent and reliable service.

Specific improvements for the new schedules include:

- Blue Line O'Hare Branch: two extra trips added each weekday and six extra trips added on Saturdays. Sundays will see five additional trips
- Blue Line Forest Park Branch: 30 extra trips added each weekday, 17 extra trips added on Saturdays, and two extra trips added on Sundays
- Yellow Line: early morning weekday service will better align with the Red Line early morning weekday service.
 The first northbound Yellow Line train will depart Howard at 4:40 a.m., and the southbound service from Dempster-Skokie will start at 4:55 a.m.

Improved headways on the O'Hare Branch are primarily in the weekday morning and afternoon hours, and Saturday and Sunday mornings. Other headway improvements can also be seen in the morning and late evenings on weekdays and Saturday. In collaboration with the Illinois Department of Transportation, the additional service on the O'Hare Branch was specifically added to accommodate an uptick in riders switching to the Blue Line to avoid construction traffic during the Kennedy Expressway Bridge Reconstruction project.

Blue Line trains on the Forest Park Branch are scheduled to arrive every 7½ minutes between 6:30 p.m. and midnight on weekdays, and between 9 p.m. and midnight on Saturday. This is a significant improvement with trains currently scheduled to arrive every 15 minutes.

Also effective with this timetable change, the temporary speed restriction for the Yellow Line was lifted and trains

resumed operating at posted speeds, which can reach 55 m.p.h. on portions of the line. Trains are continuing to run at restricted speeds of 35 m.p.h. or less in a few areas, including the approach to Howard station.

CTA PRESS RELEASE, April 19

DENVER, COLO.

D Line's Last Speed Restriction Lifted

The Regional Transportation District (RTD) has eliminated its final speed restriction along the D Line, and light rail trains have now resumed regular speeds along the corridor. During the week of April 14, maintenance crews installed approximately 300 feet of rail along the D Line, between Littleton/Downtown and Littleton/Mineral Stations, allowing for the agency to remove the speed restriction.



A trio of SD100 cars, Nos. 141+114+129 (Siemens, 2001, 2000, 1999 respectively) are operating on Route D and are about to take the turn off 19th Street and onto Stout Street in downtown Denver in this view southeast on June 25, 2022.

Alex Krakowsky photo via Urban Electric Transit

On April 3, RTD announced an updated timeline that targeted lifting all remaining speed restrictions in May. The adjusted timeline takes into account work delays caused by inclement weather and the availability of third-party contractors. With this announcement, two of the four light rail speed restriction zones have now been successfully eliminated from the system.

RTD PRESS RELEASE, April 18

PHILADELPHIA, PA.

PATCO's Franklin Square Station Reopens

The Delaware River Port Authority (DRPA) and Port Authority Transit Co. announced the official reopening of the newly renovated Franklin Square Station on Thursday, April 3, 2025, at 12 p.m. with a ribbon-cutting ceremony. Located at Seventh and Race Streets, the reopening will



Franklin Square station entrance on opening day, April 3. WinstonAtlasA photo via Wikimedia Commons

bring Franklin Square Station into PATCO's rapid transit system as its fourteenth station, enhancing connectivity between Philadelphia and Lindenwold, NJ. With 5.6 million riders using PATCO annually, the reopening of this station will enhance access and connectivity for the region's residents and visitors.

Franklin Square Station, originally opened on June 7, 1936, as part of the Bridge Line connecting Philadelphia and Camden, has played a key role in the region's transit history. Though its use has been intermittent over the years, the station last underwent a major refurbishment in the 1970s, reopening to serve visitors during the United States Bicentennial celebration. The station's last passenger service was in 1979. Over the decades, both the city and its transit needs have evolved significantly. The revitalization preserves the station's historic legacy while transforming it into a modern transit station for today's riders.

Franklin Square Station underwent a \$29.3 million renovation, with construction beginning in March 2022. This project included the following upgrades:

- Full Accessibility: The station is now fully ADA compliant, featuring an elevator, escalator, and ramps for easy access
- Sustainability: The station includes eco-friendly upgrades such as a green roof to manage stormwater runoff, bird-friendly glass to reduce bird collisions, and energyefficient LED lighting throughout the station
- Powered by the Sun: PATCO trains run on electrified thirdrail power, with 50% of the energy supplied from solar panels installed at PATCO station parking lots
- Modernized Systems: The station has been updated with new mechanical, electrical, and communication systems
- Historical Preservation: The renovation keeps the station's original 1930s green and white subway tiles, cleaned and restored to preserve its historic character
- Passenger Convenience: The station features benches, leaning benches, electrical outlets, and USB plugs for riders.

This summer, fare gates will begin accepting additional payment options, including mobile payments, Apple Pay, Google Pay, and more

 Bike-Friendly: The station includes bike storage racks within the paid area and a bike runnel along the stairwell, providing cyclists with a track to walk their bikes up or down the stairs

PATCO PRESS RELEASE, March 19

Contactless Payment Technology Extended to Regional Rail

After a successful rollout on Transit, SEPTA expanded contactless payment options to Regional Rail starting on Friday, April 4. Riders on all modes, trains, buses, subways, and trolleys, can now easily tap on using their credit or debit card, or mobile wallet.

Regional Rail riders can now simply tap any credit or debit card, in physical form or through mobile wallets using Apple Pay, Google Pay, and Samsung Pay, at a turnstile or platform validator. Riders must tap on and tap off, just like the SEPTA Key Card. Regional Rail contactless fares are the same as the current Travel Wallet fares.

SEPTA launched contactless payment technology on Transit in September 2023. Since then, SEPTA has generated \$31 million in revenue from contactless payments.

Riders paying for Regional Rail or Transit with Apple Pay can also use Express Mode. With Express Mode, riders do not need to wake or unlock their iPhone or Apple Watch to ride on SEPTA, just hold the device near a reader to securely pay with Apple Pay.

Any validator with credit card icons displayed on the screen is ready to accept contactless payments. Riders are encouraged to separate their credit/debit cards, Key Card, and phone to ensure the correct account is charged. Those traveling to or from New Jersey on SEPTA cannot use contactless payments at this time. SEPTA is working to install validators at these stations. SEPTA PRESS RELEASE, April 4

SEATTLE, WASH.

West Seattle Link Extension Approved

Sound Transit has received the Federal Transit Administration's Record of Decision for the West Seattle Link Extension project. This major milestone allows the project to advance into the next stage of development, the design phase.

The 4.1-mile West Seattle light rail extension was approved by voters in 2016 as part of ST3, and this approval of environmental work is the culmination of the planning phase that began in 2017. In that time, the project team has worked closely with the West Seattle community and agency partners to develop an alignment and future station locations that will serve more than 24,000 riders a day and cut travel times from Alaska Junction to Westlake in half, while enhancing station access and the transfer experience from buses to light rail.

With this record of decision, Sound Transit will advance engineering and design on the route and station locations



Map of the West Link Seattle extension. Sound Transit

selected by the Board in October 2024. At the same time, Sound Transit is continuing work to inform a financially sound West Seattle Link Extension project, including financial, programmatic and project-level measures to improve affordability. SOUND TRANSIT PRESS RELEASE, April 29

International

BERGEN, NORWAY

Signaling Contract Awarded

Stadler has announced a significant contract to supply signaling systems for the expansion of Bergen's Bybanen light rail network.



Variobahn No. 223 (Stadler, 2015) is heading south on the Vilhelm Bjerknes' vei, just south of the Sletten stop, operating on Route 1 on August 28, 2017. Alex Krakowsky photo via Urban Electric Transit

On April 23, the company said it had prevailed over competitors to win the contract worth up to €50 million. The initial phase covers the first section of the 12.7-kilometer extension from Kaigaten in the city center north to Vagsbotn in Asane, with options covering additional sections of line and expansion west towards Loddefjord.

Stadler has previously supplied Variobahn trams to Bergen, along with onboard signaling equipment and associated trackside components. From the second construction phase onward it took responsibility for the entire signaling system.

The latest contract includes track circuits, wheel sensors, train protection systems, train identification, signals, switch point heaters, and a fully equipped control center with multiple workstations and training consoles, including comprehensive simulation of the entire system. Nearly all the components will be produced at Stadler's signaling site in Braunschweig from September 2025.

METRO REPORT INTERNATIONAL, April 24

BOGOTA, COLUMBIA

First Metro Trainset Starts Testing

The first of 30 six-car fully automated trainsets for Bogota Metro Line 1 is on test at CRRC Changchun's plant in China. Being built under a October 2020 contract, the trainset is 134.3 meters long and 2.9 meters wide. It is equipped with CBTC onboard equipment as well as internal and external CCTV cameras and passenger information systems.

The trainset has a capacity of 1,800 passengers, 252 of whom can be seated, with 36 priority seats and two spaces for wheelchair users. The capacity of one metro trainset is equivalent to 12 articulated or seven twin-articulated buses operating on the city's TransMilenio bus rapid transit routes, which have been developed as a priority ahead of construction of a metro. The first Line 1 trainset is scheduled to arrive in the Colombian capital in September.



The first of Bogota's new trainsets, at the CRRC plant in Changchun. Metro de Bogota photo

The 23.8-kilometer Line 1, running north-south from Carrera 94 to Calle 72, is expected to open in 2028. It is being built by the APCA Transmimetro consortium of China Harbour Engineering Company (85%) and operating partner Xi'an Metro Company (15%) under a build (eight years) and operate (20 years) concession agreement with Metro de Bogota. Line 1 is expected to carry 43,000 passengers/direction/hour, with trains initially running at 2 minute 20 second headways in the peaks. The average commercial speed is expected to be 42.5 km/h.

METRO REPORT INTERNATIONAL, April 25

BULGARIA

New EMUs Ordered

Bulgaria has signed a contract with Alstom for the supply of 35 Coradia Stream EMUs and the provision of maintenance over 15 years for Bulgarian Railways' (BDZ) new fleet.

Alstom is the lead partner in the BulEMU consortium with local company RVP Invest, which will provide the fleet maintenance facility. Alstom says that its share of the €720 million contract is worth €600 million. The contract was signed on April 25. Tendering the contract has proved controversial, with Stadler withdrawing its bid after being selected as preferred bidder in June 2024.

The first 12 trains will be delivered by August 2026 and funded entirely using Lev 363 million (\$US 210.7 million) from the National Recovery and Sustainability Plan. Funding of Lev 696 million for the remaining 23 trains will come from the Social Climate Plan of the Republic of Bulgaria.

The multi-voltage, six-car trains will be deployed on both regional and long-distance routes with journey times of four to five hours. They will be equipped with ETCS Level 2 and will have a top speed of 160 km/h. The 100% low-floor sets will have 351 seats. There will be two doors on each side of the intermediate cars and one door per side on the end cars.

Modern passenger information systems will be installed along with large luggage racks in each car, along with power sockets, and a digital passenger counting system. There will be designated spaces for bicycles and wheelchairs, and each train will have four toilets, including one for passengers with reduced mobility.

INTERNATIONAL RAILWAY JOURNAL, April 28

COPENHAGEN, DENMARK

Metro Project Approved

The city of Copenhagen and the national government have approved the construction of the proposed metro Line M5 as part of a wider agreement for the development of the artificial island of Lynetteholm as a new urban district, and to protect the capital from rising sea levels and storm surges.

Under the agreement signed on March 28 the DKr18.7 billion first phase of M5 is to open in 2036. It would start at the main Copenhagen railway station and transport hub

and run in bored tunnel to stations at Bryggebroen, DR Byen, Amagerbrogade Syd, and Lergravsparken, ending at an elevated station at Prags Boulevard.



Map of the new M5 route. Metroselskabet

The DKr3.9 billion elevated Phase 2, planned to open in 2045, would extend the line to Refshaleoen, Lynetteholm Syd, and Lynetteholm Nord.

M5's Copenhagen main railway station would have provision for a possible extension to Gammel Kongevej and to Osterport, subject to future funding.

METRO REPORT INTERNATIONAL, April 10

CORK, IRELAND

Light Rail Planned

Transport Infrastructure Ireland has published the emerging preferred route for a proposed 18-kilometer light rail line in Cork. Luas Cork will have up to 25 stops and run from Ballincollig to Mahon Point, connecting destinations such as Munster Technological University, Cork University Hospital, University College Cork, Cork city center, Kent station, Cork Docklands, Blackrock, and Mahon.

The project includes a new public transport bridge connecting Kent Station with Kennedy Quay and new cycling infrastructure along much of the route. The Emerging Preferred Route also includes a proposed 1000-vehicle park and ride facility in Ballincollig and a mobility hub in Mahon.

Cork has been selected by the European Commission as a future climate-neutral city under the EU's 100 Climate-Neutral and Smart Cities by 2030 initiative, which aims to accelerate sustainable urban transformation across Europe.

The light rail project is considered a key initiative towards achieving this goal and reducing reliance on the private car, while supporting sustainable population growth, as Cork is expected to grow by 50-60% over the next 20 years.

The preferred route is now out for public consultation, which runs until June 8.

INTERNATIONAL RAILWAY JOURNAL, April 22



Map of Cork's proposed light rail line. Luas Cork, Transport Infrastructure Ireland

GRANADA, SPAIN

Light Rail Extension Progress

The Andalucia regional government reports that work is advancing rapidly on the €87 million second section of the southern extension of Granada's single north-south light rail line, known as the Granada Metro.

The southern extension will run for a total of 4.6 kilometers on the surface from Armilla to Churriana de la Vega and Las Gabias, serving seven new stops. It is expected to carry two million passengers a year. Construction of the first section between Armilla and Churriana de la Vega began in December 2023, followed by the second section from Churriana de la Vega to Las Gabias in April 2024. Last month, Andalucia's development minister visited the work site on the second section close to the future La Gloria interchange, where a new bridge is under construction to take the light rail line over the Dilar River. La Gloria will provide interchange with bus services and will have a park and ride facility with spaces for 250 cars.

The first beams have now been lifted into place for the new single-span bridge, which is 26 meters long. The bridge deck will be 56 meters wide, and as well as the two light rail tracks, it will accommodate a footpath, cycle path, and new public space with street furniture enabling visitors to enjoy the view over the plain of Granada.

Catenary masts are now being installed on the second section of the extension. It is expected that tracklaying could begin during the second quarter of this year if work continues at its present rapid pace.

The southern extension is being co-financed with Next Generation EU funding. This does not include the €40 million that will be needed to acquire eight new LRVs to operate on the extension and enable service frequencies to be increased on the Granada Metro.

INTERNATIONAL RAILWAY JOURNAL, April 17

GURGAON, INDIA

New Metro Lines

Gurgaon, a satellite city of Delhi, is planning to build two new metro lines. Regional operator Haryana Mass Rapid Transit Corporation has called tenders to produce detailed project reports for lines that would connect old Gurgaon with new Gurgaon. The first proposed new line would run for 17 kilometers from Gurgaon railway station to Bhondsi. Designed to relieve congestion around the Sohna Road and NH–8 districts, it would run via Vatika Chowk, Subhash Chowk, Rajiv Chowk, Sohna Chowk, Sector 4–7 Chowk and Railway Road. The new line would provide interchanges with the Cyber City to Millennium City Center extension (see below) of Gurgaon's current single metro line at Subhash Chowk and Sector 5, as well as with the planned rapid rail corridor at Rajiv Chowk.

The second new line would run for 13.6 kilometers from Golf Course Extension Road to Sector 5. It would connect residential areas with office districts, running via Hong Kong Market, Ardee City, Millennium City Center, Signature Tower, Maharana Pratap Chowk, Atul Kataria Chowk, and Sheetla Mata Road. The line would provide interchange with both Delhi Metro's Yellow Line and the extension of Gurgaon's existing metro line at Millennium City Center.

Known as Rapid Metro Gurgaon, the city's existing metro line runs for 12.1 kilometers between Cyber City and Sector 55–56 via Sikandapur where there is an interchange with Delhi Metro's Yellow Line.

A 28.5-kilometer extension from Cyber City to Millennium City Center is planned, serving 27 elevated stations. Gurugram Metro Rail (GMRL) was set up by Haryana's state government at the end of last year as a special purpose vehicle to deliver the project.

GMRL plans to construct the extension in two phases: from Millennium City Center to Sector 9, and from Sector 9 to Cyber City. Work on the first phase is expected to start later this year after GMRL issued a Rs 12.9 billion (\$US 149.7 million) tender last month for construction of 15.2 kilometers of elevated line and 15 stations, with bids due to be opened on April 22. GMRL is expected to separately issue a tender for the detailed design of a new rolling stock maintenance depot, to be built in Sector 33.

The new stations to be constructed in the first phase include Sector 45, Cyber Park (Sector 46), Sector 47, Subhash Chowk, Sector 48, Sector 33, Hero Honda Chowk, Udyog Vihar Phase 6, Sector 10, Sector 37, Basai, Sector 9, and Sector 101.

INTERNATIONAL RAILWAY JOURNAL, April 8

LIEGE, BELGIUM

Tramway Opens

The Belgian city of Liege opened its new 12-kilometer light rail line on April 28. Plans to return LRVs to the country's

fourth-largest city were first discussed in 2008. The total cost of the project is estimated at €785 million, around €250 million more than originally planned.

Liege's original light rail network closed in 1967. The new line serves 23 stops plus three interchanges, running from Standard in the southwest via Liege's main railway station to Coronmeuse, and a branch to Liege Expo in the northwest.



Urbos 100 No. 5120 (CAF, 2021) is seen on a test run at Quai Saint-Leonard on October 16, 2024.

Alex Krakowsky photo via Urban Electric Transit

Up to 18 CAF-built 45-meter-long Urbos LRVs will operate during peak hours, with services running from 5:00 a.m. until 1:00 a.m., Monday to Sunday, all year round. Walloon public transport operator TEC aims for a 30% reduction in road traffic in the city center and says that the project has led to the redevelopment of more than 123 acres of additional space across the city, notably new green spaces and cycle paths.

Test running started in February 2025 and services on April 28 started in "degraded mode." Union representatives claimed that drivers would not initially be able to work the advertised timetable where LRVs run every five or six minutes, instead of four-and-a-half, during peak times.

The line was built by the Tram'Ardent consortium, comprising Colas Belgium, Colas Projects, Colas Rail Belgium, CAF Investment Projects, and investment fund DIF Infrastructure V. The consortium will receive regular payments from TEC to cover both capital and maintenance costs under the terms of the 31-year concession. International Railway Journal, April 28

LISBON, PORTUGAL

New Riverside Tram Link

A project to build the first new tramway in central Lisbon for more than 60 years has been formally launched at a ceremony held in the Parque das Nacoes. Branded as tram line 16, this forms part of the city's LIOS program to create a new set of mass transit routes linking neighborhoods poorly



served by the existing tram and metro networks. Route 16 will connect Terreiro do Paco in the city center with Parque Tejo in Loures, a distance of 12 kilometers.

The alignment will be dedicated solely for use by trams on Route 16. Trams will run through from Cais do Sodre to Parque das Nacoes Norte, complementing the existing riverside Route 15, which runs between Cais do Sodre and Alges.

Being developed at a cost of €160 million, the link will serve 18 stops along the riverside. These will include the main cruise ship terminal, Santa Apolonia Station —which will be served by trams after a hiatus of more than three decades — Rotunda da Colombia, Parque Tejo and Parque das Nacoes Norte. There, passengers will be able to interchange with a planned 8-kilometer bus rapid transit route that will serve destinations in the district of Loures. Together, the tram line and BRT route are expected to cut peak hour journey times between Loures and central Lisbon from around 60 minutes currently to 35 minutes.

Municipal operator Carris expects to deploy the CAF Urbos low-floor trams it received in 2023–24 on Route 16 when it fully opens in 2028. Final environmental assessments for the project are ongoing, with civil works expected to start in 2027. METRO REPORT INTERNATIONAL, April 21

LONDON, ENGLAND

Next Docklands Operating Contract Begins

KeolisAmey's latest contract to operate the Docklands Light Railway automated light metro in east London came into effect on April 1. The contract awarded to the incumbent joint venture of Keolis (70%) and Amey (30%) following a competitive tender runs for eight years, with an option for a two-year extension. Transport for London will pay the operator a fee along with performance-based incentives and deductions.

The 38-kilometer network with 45 stations has been operated by KeolisAmey since 2014, and carried 98.9 million passengers in 2023-24.

KeolisAmey said it would be investing in developing the network's social value for customers, staff, and its local communities. The contract period will also see the delayed introduction of 54 new CAF trains to replace the 33 oldest trains in the fleet and boost overall capacity.

METRO REPORT INTERNATIONAL, April 1

Underground Power Upgrade Work

UK Power Networks Services has begun work on a £24 million project to upgrade sections of London Underground's high voltage power network to support the introduction of Siemens Mobility trains on the Piccadilly Line.

The scope includes substation improvements at Neasden, Acton Town, and Ravenscourt Park, as well as high voltage equipment enhancement, extensions, and modifications. Some of the work will also support the resilience of the Northern Line. Work began on March 25 and is due to be completed in 2027.

UK Power Networks Services previously won a £40 million Piccadilly Line contract in June 2022, and has undertaken 16 substation upgrades along the Metropolitan, Circle, Hammersmith & City, and District lines.

METRO REPORT INTERNATIONAL, April 25

MADRID, SPAIN

Metro Line M3 Extension Opens

The 3.5-kilometer extension of Madrid Metro Line 3 from Villaverde Alto to El Casar opened on April 21, the first addition to the metro network in the Spanish capital in the last 10 years.

The €129 million project has involved the construction of 2.6 kilometers of tunnel using traditional methods and, for the first time in Madrid, sequential excavation in areas where crystallized gypsum was present. The sequential excavation method involves removing small sections using an excavator and then applying shotcrete to the sides, ceiling, and floor of the tunnel.

Construction took three years to complete and involved the deployment of a workforce of 2000.

The project has also seen El Casar Station rebuilt as a major public transport interchange with a 670-square-meter ticket hall, and is now fully accessible with six escalators and three elevators. A 565-space surface car park has been built, free of charge for users of public transport, as well as a future electric vehicle charging area. Interchange is provided with Line C3 of the Madrid commuter network operated by Renfe as well as local and inter-city bus services.

El Casar is also served by Metro Line 12, the circular line in Madrid's southern suburbs also known as MetroSur, and the new extension provides it with a second direct connection to the city center alongside Line 10. Line 12 carried 46.5 million passengers in 2024 and Line 3 a total of 76 million. Madrid Metro expects the Line 3 extension to El Casar to be used by 35,000 passengers a day.

INTERNATIONAL RAILWAY JOURNAL, April 24

MALAGA, SPAIN

Metro Extension Contract Awarded

The Andalucia regional government in Spain has awarded a joint venture of FCC, Eiffage Infraestructuras and Canteras de Almargen a €46.4 million contract to build the second section of the extension of Malaga Metro Line 2.

Work on Section 2 is due to take 36 months to complete, and comprises the construction of 653 meters running from the end of the first section at Hilera. The extension will run for a total of 1.8 kilometers in tunnel, Guadalmedina in the city center to Malaga's new hospital, and is being built using the cut and cover method employed on all existing underground sections of the Malaga Metro light rail network.

The contract includes construction of a new station at La Trinidad, tracklaying, and work to restore surface roads once

tunneling has been completed. Civil works on the extension have been divided into three contracts, with the contract for the final Section 3 to be tendered shortly, according to the development minister in the Andalucia regional government. There will be three new stations at Hilera, La Trinidad, and Hospital.

Two systemwide contracts will also be tendered, respectively covering station fit-out and signaling work throughout the extension. Preliminary works, including changes to the road layout, are already underway for Section 2. Construction of Section 1 from Guadalmedina to Hilera began at the start of 2024 and the regional government reports that over 50% of the walls lining the new cut and cover tunnel have been completed.

Extending Line 2 to the new hospital will also serve the Cruz de Humilladero and Bailen-Miraflores districts of Malaga. The latter is the fourth most densely populated district of the city with over 60,000 inhabitants.

The extension is part-financed by a €150 million loan to the Andalucia regional government from the European Investment Bank (EIB), announced on March 25. Total cost of the project is €310 million, according to EIB.

Forecast ridership on the extension is between 3.5 million and 4 million passengers a year. This would increase total network ridership to 21 million passengers a year, which according to the Andalucia regional government would enable breakeven under the concession contract to operate Lines 1 and 2 of the Malaga Metro.

Lines 1 and 2 currently run for a total of 13.6 kilometers serving 19 stations. At 18.3 million, ridership on the Malaga Metro set a new record in 2024, up 34.2% on the previous record set the year before.

INTERNATIONAL RAILWAY JOURNAL, April 2

PARIS, FRANCE

More RER NG EMUs Ordered

The board of Paris transport authority Ile-de-France Mobility (IdFM) has approved an order for an additional 96 RER NG double-deck EMUs from Alstom at a cost of €2.1 billion. The new trains will complete the renewal of the RER Line D fleet.

The RER NG first entered service in November 2023 on RER Line E, which is to receive 130 of the new trains. It was first deployed on Line D in December 2024, and has now replaced the Z2N EMU fleet on this line, where the Malesherbes branch continues to be operated with Regio 2N EMUs.

Of the initial batch of 36 RER NG EMUs ordered for Line D (Class Z58500), IdFM says that around a dozen are now in service on the branch to Corbeil-Essonnes, with around 30 due to be in service by the end of this year if deliveries are completed to the schedule established by the supply contract.

Deployment of a total of 132 REG NG trains on Line D is due to be completed by 2029. The new fleet will be maintained at Villeneuve Saint-Georges, where a major upgrade program began in June 2024, and at Les Joncherolles where modernization work is also underway.

INTERNATIONAL RAILWAY JOURNAL, April 22



An example of one of the RER NG train sets, Class Z58000 No. 010K, at the Neuilly Porte Maillot stop of Line E on May 8, 2024.

Adnane 302 photo via Wikimedia Commons

Tramway Line T14 Begins Service

Ile-de-France tram-train line T14 began operating as such on March 22, taking over the 9.9-kilometer Esbly to Crecy-la-Chapelle suburban rail branch to the east of Paris. The service is operated by the Stretto consortium of Keolis and SNCF Voyageurs using a single Alstom Citadis Dualis vehicle.

This line had been operating as a branch of Transilien Line P, with tram-train rolling stock (SNCF No. U 25500), since July 4, 2011. At 9.9 kilometers in length, T14 is not the shortest tram or tram-train operation in the Paris region, but it does have the fewest number of stops, only five. It travels through a decidedly semi-rural area, passing through forests, villages, and within sight of some farms. Of all the Paris tram lines, this route is the furthest away from the city.

METRO REPORT INTERNATIONAL, April 16



SNCF Citadis Dualis No. U 53600 is about to cross the Rue Mondet, a short distance south of the Couilly - Saint-Germain - Quincy stop.

Jean-Paul Masse/Metro Report International photo

PRAGUE, CZECH REPUBLIC

New Commuter Services

Czech private operator RegioJet began running trains on a new commuter route in Prague on April 1. Services were originally due to start on Line 61 with the timetable change in December, but delays in authorizing new Pesa class 655 Elf EMUs resulted in the inauguration of the new route being pushed back until this month.

RegioJet ordered seven dual-voltage Elf EMUs from Pesa after winning a tender in November 2021 to operate commuter services on lines S61 and S49. Line S61 connects Prague Vrsovice Station and Prague main station with Uvaly, located on the border between Greater Prague and Central Bohemia and on the main line between Prague and Kolin.

Trains will serve stations to the east of Prague, including Liben, Kyje, Dolni Pocernice, Bechovice, Bechovice stred, and Klanovice. Services will run half-hourly on weekdays and hourly at weekends and on public holidays.

A delay in the completion of infrastructure work in central Prague means Line 61 services are unlikely to run as originally planned for several years. For the time being they will operate between Uvaly and Prague main station on weekdays, while at weekends they will continue to Prague Vrsovice.

RegioJet was also able to take over services on Prague commuter Line S49 on April 1 with the new three-car Elf EMUs. As with Line 61, this had been due to take place with the timetable change in December, but the delay in authorizing the new trains meant that previous operator Arriva Vlaky continued to run the services on behalf of RegioJet with class 845 DMUs. Line S49 is now operated with two Elf EMUs, while one Arriva DMU is kept as a spare. International Railway Journal, April 9

New Tram Arrives

The first new Skoda ForCity Plus 52T tram left the Skoda Group factory for Prague on Thursday, April 3, on a tractor.

During the night, the new tram, with car number 9503, arrived at the Central Workshops in Hostivar and the following day it rolled off the tractor onto the Prague tracks. The vehicle took to the streets of the metropolis for its first test drive without passengers on Wednesday, April 9. The new tram thus began to check the most extreme places in the Prague tram network to see if there were any clearance issues.

After meeting the requirements of the Railway Authority of the Czech Republic and successfully completing the test run, the trams will receive approval for operation in the Czech Republic. In the meantime, serial production of other vehicles continues in Pilsen, which will be delivered to Prague gradually according to the contract.

Skoda Group has won a public tender for the purchase of up to 200 one-way articulated trams. The carrier has initially placed a binding order for 40 trams. The first 20 vehicles are expected to be delivered this year, and another 20 trams should arrive in the capital in 2026. DPP will dispatch the



The first Skoda 52T delivered, No. 9503, is seen operating on Na porici, one block west of the Bila labut stop of several tram routes.

Dopravacek photo

new trams from the Hloubetin depot.

The new 100% low-floor trams are designed to suit Prague's transport needs, especially the complex historical center. The 52T tram has five sections and moves on four trucks, the outer two of which are freely rotatable and the inner two are partially rotatable. This makes the tram's interior spacious and, at 32 meters long, offers 70 seats (mostly in the direction of travel) and 173 standing places. DOPRAVACEK, April 20

STOCKHOLM, SWEDEN

New Metro Line to Be Driverless

Stockholm's Metro Expansion Authority (FUT) has awarded Systra a SKr 23 million (\$US 2.3 million) contract to provide initial technical support for the development of the city's planned eight-kilometer driverless Yellow Line.

Over the contract term of up to four years, Systra will create technical procurement documentation and functional requirements relating to the train control system for the new line. It will also provide technical support during procurement, bid evaluation, and potentially during the negotiation phase. Systra says that it will draw on expertise gathered from similar metro automation projects in Brussels and the construction of a new line in Toulouse.

The Yellow Line is a north-south line to the west of the city center that will run completely underground from the current Green Line station at Fridhemsplan to a new station at Alvsjo, via the existing Red Line station at Liljeholmen and new stations at Arstaberg, Arstafaltet and Ostbergahojden.

The line will be the first in Sweden to be driverless, featuring automatic train operation at Grade of Automation 4. It will be equipped with full-height platform screen doors and shorter trains, 70 meters long rather than up 140 meters as on the rest of the network, with higher service frequencies to reduce waiting times at stations.

A fleet of up to 10 new trains will be procured in due course and they will be maintained at a new depot to be built at Alvsjo. The planning phase for the Yellow Line, which started in 2020, is due to conclude later this year as the estimated nine-year construction phase starts.

The Yellow Line is part of a comprehensive expansion of Stockholm's metro network that also includes extensions to existing lines and a total of 18 new stations, as well as expansion of the existing depot at Hogdalen. The Green Line is currently being extended north from Odenplan to Arenastaden, and the Blue Line west from Akalla to Barkarby, as well as east from Kungstradgarden to Nacka and south to Soderort via Gullmarsplan.

According to FUT, construction of the Yellow Line will bring the metro closer to nearly 50,000 residents, and the line is expected to carry up to 75,000 passengers a day by 2050. The journey time for the full length of the line is expected to be 10 minutes.

INTERNATIONAL RAILWAY JOURNAL, April 10

SYDNEY, AUSTRALIA

Train Testing Begins on City & Southwest

Train testing started on the newly converted 13.4-kilometer section of Sydney's City & Southwest metro line on April 3. Trial running follows extensive work to transform the 130-year-old former Bankstown Line to modern driverless metro standards.

The first train traveled along the length of the line in 5 hours, traveling at no more than 5 km/h. When the extended metro line from Sydenham to Bankstown opens next year, the estimated journey time will be 11 minutes. The inaugural trip is the start of a rigorous testing and commissioning program that includes more than 6,500 hours of train testing between Sydenham and Bankstown.



In a view of the currently-operating section of metro line M1, Metropolis No. 1501 (Alstom, 2024?) is approaching the northern terminal station at Tallawong on February 14, 2025.

jiachen photo via Urban Electric Transit

The initial testing phase will see trains traveling at speeds of less than 25 km/h, driven manually with two staff onboard. The tests will include checking clearance on curves and turnouts and gauge clearance on platforms, as well as platform screen door interface, mechanical gap filler, and communications checks. Trains will be tested under loaded conditions to simulate full passenger loads.

Future testing phases will involve traveling at higher speeds and a transition from manual to automated train operations.

The first 17.1-kilometer section of Sydney's 30.5-kilometer City & Southwest metro opened last August.

INTERNATIONAL RAILWAY JOURNAL, April 10

TANGIER, MOROCCO

Three Light Rail Lines Planned

Tangier is due to become the next city in Morocco with a light rail system following the announcement of a Dirhams 8.4 billion (\$US 840 million) project to build three new lines with a total length of 25-30 kilometers.

The project aims to improve public transport capacity in Tangier as one of the host cities for the 2030 FIFA football World Cup, taking place in Morocco, Spain, Portugal, and Uruguay. Tangier has 1.1 million inhabitants and covers an area of 200 square kilometers, but transport provision was awarded only 2.6 out of 5 in a FIFA evaluation report last December, which notably highlighted traffic congestion on the main road from the city center to the main stadium.

The new light rail lines are being taken forward by the municipality of Tangier, the Tangier-Tetouan-Al Hoceima regional council, the Northern Regions Development Agency, and Morocco's Ministry of Transport and Logistics.

Project implementation will be overseen by Alstom, according to local media, which also report that city officials recently met with Thi-Mai Tran, managing director of Alstom Transport Morocco.

Grants and loans from French public institutions, and a contribution from the European Investment Bank (EIB), will provide 65% of project cost. The remaining 35% will be provided from Moroccan public sources.

According to preliminary studies, one of the three light rail lines will run from the offshore zone near Tangier's mainline railway terminus to Moghogha and Beni Makada. A second line will traverse the city along Moulay Ismail Boulevard, serving the Hassani district, sports complex, Gzenaya industrial areas and the Tangier Free Zone, while passing through Beni Makada, Souani, and the university area.

The light rail project dates back to 2014 when the mayor of Tangier met with representatives of Alstom, public transport operator Transdev, and French National Railways. The mayor and members of his team were later invited to visit the Alstom rolling stock plant at La Rochelle in western France. International Railway Journal, April 16

An Interesting Tramway Diversion in Vienna

By Jeff Erlitz (ERA #3997), all photographs by Klaus Matzka

For a period of 10 days, from April 12 to 22, the Vienna transit company, Wiener Linien, performed switch replacement work between the Keplerplatz and Reumannplatz stops on metro Line U1. During this time, service on the U1 was split in half, with trains operating from Leopoldau on the north end to Sudtirolerplatz/Hauptbahnhof and from Reumannplatz to Oberlaa on the south end.

In between, Wiener Linien operated a "tramway bridge," instead of a "bus bridge." This four-stop service was labeled as Line E1 (E for Ersatz — replacement). This partial line closure was specifically chosen for these dates as it was during the Easter holiday, when ridership is much lower due to school holidays and vacations.

Below are the map and several photos of the replacement tram service. Some of the locations are not in regular revenue service any more.



Map of the U1 diversion. Wiener Linien



Type D (Flexity Vienna) No. 334 (Bombardier Transportation, 11/2022) is seen turning right from the Gurtel onto Arsenalstrasse. This curve is normally non-revenue trackage but it enabled the £1 route to turn around on the loop at Quartier Belvedere, which is only about 100 feet south of this point. In background are the "Euro-Houses," colored as the currency bills; from the gray €5 bill on the right to the (no longer issued) lilac €500 bill on the left.



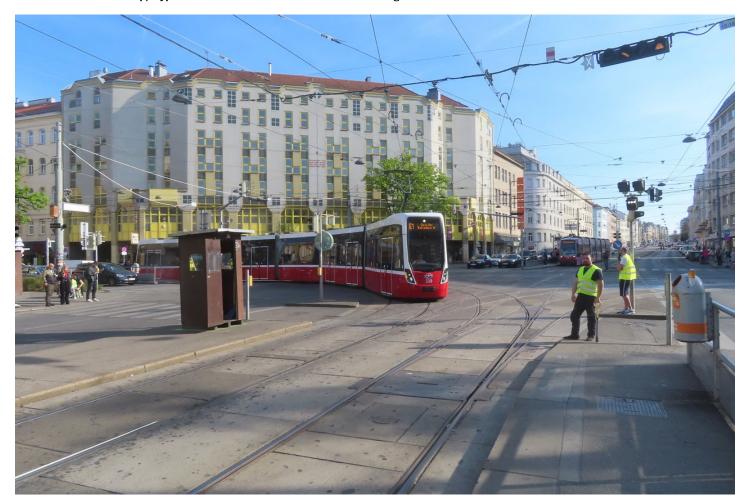
The Quartier Belvedere loop, which is not used for regular service anymore. These loops were were previously known as Sudbahnhof which, before the redevelopment of this area, was located across the Arsenalstrasse from here. This was the northern of the E1 route. The yellow triangles, hanging on the wires, show the priority when leaving the loop. The middle track is out of use. Tram Route D last used these loops on December 8, 2012. The following day, the route was extended two stops south to Alfred-Adler-Strasse. On December 2, 2019, the line was extended two more stops to the south and east, to its current southern terminal at Absberggasse. In this view, two Type D cars, Nos. 345 (built 3/2023) and 334, are awaiting their trip south.



The normal stop has been replaced by a striped, "zebra" stop. This means that not all lines stop here. This is because the platform is too short for the E1 service. (We suspect that no Viennese except railfans know about the zebra stop). Type D No. 343 was built in 3/2023.



Type D No. 343 is seen again in this view west along the Buchengasse at the southern terminal of Line E1. The Reumannplatz stop is out of view to the right, on Favoritenstrasse. This loop is also not normally used in regular service.



Type D No. 339 (Bombardier Transportation, 12/2022) is turning off Quellenstraße and onto Laxenburger Strasse, at Quellenplatz, on another piece of normally non-revenue trackage. This is currently Vienna's only $\frac{3}{4}$ Grand Union (Vienna never had a complete one). The switchmen here set rarely used switch points that are not electrified. An interesting feature here is the sign "X" on the wires above (next to the signal) with an arrow pointing to the left. This means a ban on meeting in the bend due to clearance issues. Once upon a time, there were many "XZ" signs around the system. The Type Zs were the former Third Avenue Railway cars from New York. Due to their considerably greater width than the normal Viennese cars, there were often bans on meeting in curves.



A Dive in the Archive

By Paul Grether (ERA #6933), All photographs from the ERA collection

This month's feature continues in the folder labeled "Pennsylvania R. R. Electrification" with interesting photos. One of the sets of photographs in the folder is of the early prototype electric locomotives developed jointly by the Pennsylvania Railroad and Westinghouse Corporation.

As the Pennsylvania Railroad was building Pennsylvania Station and the North and East River tubes to establish the New York Terminal, the motive power had not been designed yet. Electrification was required for tunnel operation and the 2% grades, but technology for electric locomotives was in its infancy. As civil construction progressed, the railroad developed prototypes to test various motive power configurations and determine whether an alternating current (AC) or direct current (DC) system would be the most favorable. In 1905 the Pennsylvania Railroad established a Motive Power Committee led by George Gibbs of the Long Island Rail Road to develop an electric locomotive for the New York Terminal.

Juniata Shops built two prototypes, numbered 10001 and 10002, with Westinghouse propulsion equipment for 650 V DC third rail operation already in use on the Long Island Rail Road (LIRR). Both had two double-axle trucks connected through an articulation and were designated Class AA1. No. 10001 featured traditional nose-suspended traction motors geared to the respective axle. No. 10002 featured a gearless quill drive like earlier Baltimore & Ohio Railroad and New Haven Railroad electric locomotives. Initial tests on the LIRR revealed that the locomotives had poor tracking qualities at higher speeds and damaged track.

The Pennsylvania wanted to test alternating current and a different wheel arrangement of a "non-symmetrical" design. Baldwin Locomotive Works and Westinghouse built prototype No. 10003 to a Pennsylvania design, designated as Class "Odd D." Since the LIRR had too much traffic that would interfere with detailed testing of the tracking qualities, the Pennsylvania used its West Jersey & Seashore Railroad subsidiary trackage, also electrified with 650 VDC, near Franklinville, N.J., as a test track to compare the tracking qualities of the prototype locomotives against each other, steam designs, and a borrowed New Haven EP-1 locomotive. A baggage car had a motor-generator and third rail shoes mounted, and converted the 650 V DC to 11,000 V AC for locomotive 10003 and the New Haven EP-1. The "non-symmetrical" design of the Odd D wheel arrangement proved superior and formed the basis of what would become the DD1 locomotive.

Remaining tests were needed to determine whether AC or DC would be used. The Pennsylvania built another test track on the LIRR in 1908 on five miles of the Central Branch between Garden City and Bethpage, electrified at 11,000 volts single phase AC. This track included simulated grades and tunnel clearances for what was to be encountered in the new under river tunnels. Despite some successes, Gibbs' committee determined DC was the way to go.

Ultimately, the DD1 would be a DC locomotive but with the non-symmetrical wheel arrangement of the Odd D. The DD1 is laid out as two back-to-back Odd D types. The application of large high-horsepower DC traction motors without the troubles encountered by the prototypes led to the design of new drives that used-frame mounted motors and a jackshaft design, which would become the defining characteristic of the successful type.

Information about the early Pennsylvania Railroad electric locomotive prototypes comes from the following books in the author's collection:

- When the Steam Railroads Electrified by William D.
 Middleton. Link to book information: www.libib.com/u/grether?solo=62028757
- Westinghouse Electric Railway Transportation by Westinghouse Electric Corporation (reprint by Central Electric Railfans' Association). Link to book information: www.libib.com/u/grether?solo=62002524
- Electric Traction on the Pennsylvania Railroad, 1895-1968 by Michael Bezilla. Link to book information: www.libib. com/u/grether?solo=62157422
- Pennsy Power: Steam and Electric Locomotives of the Pennsylvania Railroad, 1900-1957 by Alvin F Staufer. Link to book information: www.libib.com/u/grether?solo=62252089
- 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
- Pennsy Power III: Steam, Electric, MU's, Motor Cars, Diesel Cars, Buses, Trucks, Airplanes, Boats, Art, 1847–1968 by Alvin F. Staufer. Link to book information: www.libib.com/u/ grether?solo=90077286

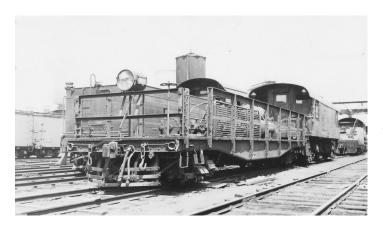
Do you have additional information about locomotives 10001, 10002, or 10003, or the pictures from the ERA collection? Email grether@mindspring.com and perhaps more information can be shared in a future *Bulletin*.

Number	Locomotive Class	Wheel Arrangement	Date Built	Builder	Voltage	Power	Weight	Drive
10001	AA1	B-B	8/1905	Juniata / Westinghouse	650 V DC	1,500 hp	87.5 tons	Geared
10002	AA1	B-B	1905	Juniata / Westinghouse	650 V DC	1,500 hp	87.5 tons	Quill
10003	Odd D	2-B	1907	Baldwin / Westinghouse	11,000 V AC	750 hp	70 tons	Quill





(Above) Direct current prototype locomotive No. 10001, likely at a Long Island Rail Road facility early in the testing program in 1905. Note the double third rail shoes on the shoe beam for high current application. Pennsylvania Railroad company photograph.





(Above left and right and below) Single-Phase alternating current electric prototype locomotive No. 10003, with two Pennsylvania Railroad coaches (No. 3018 and unknown No.), comprising a demonstration train. Note the brass air whistle following steam locomotive practice, and a carbody designed for high platform access. Location is likely the 1½-mile electrified test track at the Westinghouse East Pittsburgh works at a press event unveiling the "black monster" in 1907. Pennsylvania Railroad company photograph.



(Left) PRR AA1 No. 10001 was acquired by the Long Island Rail Road in May of 1916, where the Long Island renumbered it to 323. On the Long Island, the unit always operated with the flat car you see pictured here, which was taken at Morris Park on May 10, 1936. This flat car was also equipped with additional air compressors. Note that the car also is equipped with third rail shoes. The AA1, as well as the Long Island's DD1s, operated with third rail "reacher cars" to minimize the risk of getting gapped at breaks in the third rail while switching freight sidings. The Long Island installed third rail on all, or most, of the freight sidings in their electrified territory in 1927. No. 323 was retired on July 31, 1937. Third rail was removed from the freight sidings in 1952, after the last of the DD1s, which had been used in freight, as well as passenger, service until 1951. Photographer unknown, ERA collection.

Book Review

By Paul Grether (ERA #6933)

Boston's MTA: through Riverside and Beyond by Bradley H. Clarke, published by Boston Street Railway Association, Inc., Boston, Mass. in 2015, hardcover, 240 pages, with appendices including endnotes, line by line abandonment tables, and reference list and recommended reading. All color illustrations including detailed time period system maps. ISBN 978-0938315070.

This is the second volume in a series about transit in Boston with a focus on streetcar service. The first volume covered the 1940s, which represented a zenith in transit ridership. This volume picks up with the creation of the Metropolitan Transit Authority (MTA), which takes over from the Boston Elevated Railway in 1947 with the intent of increasing ridership and constructing a series of rapid transit lines. The MTA did not fulfill its mission and transit ridership in Boston continued to decline under MTA management. The MTA was in turn succeeded by the Massachusetts Bay Transportation Authority (MBTA) in 1964, when the struggling private commuter railroad services were added to an agency which now had a statewide service area.

Chapters cover all the routes grouped geographically

Boston's MTA
THROUGH RIVERSIDE AND BEYOND

Bradley H. Clarke

during the MTA period when most of the Boston streetcar system was abandoned and converted to bus or trackless trolley. An introductory chapter covers a detailed background history of the MTA. There are detailed route maps included and appendices covering the disposition of the Type 5 cars, abandonments between 1947–1964 (MTA era), route statistics and a comprehensive bibliography and end notes. All photos are in color and of high quality illustrating the topics nicely.

This volume will appeal to those interested in Boston transit history, the transition from private to public operation and the history of the decline of public transportation despite initial efforts to provide public support. Additionally, there are many interesting high quality photos of the system and the City of Boston from the MTA era.

Link to book information:

https://www.libib.com/u/grether?solo=139688299



Boston Elevated Railway No. 5645 at the Connecticut Trolley Museum on February 14, 2020. Built by the Laconia Car Company in 1923, it was retired by the MTA in 1959. Paul Grether photo

Travels with Jack May

Modern Streetcars in Three Midwestern Cities — Part 6

By Jack May (ERA #2275)

Part 5 ended with photos of the northern portion of the Q-Line. This part starts with the narrative of my 48-hour trip and then continues with photos of the inner portion of the line.

As mentioned earlier, Julien Wolfe picked me up at Detroit Metro Airport on the afternoon of Sunday, May 14, 2017. It took us about 20 minutes to drive to the northern end of the line and he easily found a curbside parking place on one of the side streets that runs into Woodward Avenue, adjacent to the Q-Line's maintenance facility. Julien had indicated that the day began cloudy, but by the time I had alighted from my Frontier flight a little before its scheduled 3:24 p.m. arrival time, the sky had cleared. It was a hop, skip, and jump from the auto to the line's Grand Boulevard terminal, but first we took some photos.



An inbound car pauses at the Ferry Street stop as it enters Detroit's Arts and Cultural District. In the next few blocks, it will pass the Detroit Historical Museum, the Public Library, the Institute for the Arts, the Michigan Science Center and the Charles H. Wright Museum. Overhead wire stretches through this area as far as Warren Avenue, a relatively short distance.

Since this is a description of what I saw of the Q-Line just two days after its opening, during the period when it was subject to a great many teething problems, the observations I recount here do not necessarily relate to its current operational state. However, I've had some difficulties keeping up with exact developments, specifically about current ridership levels, and am not sure about exact headways and number of cars used for service during different periods of the day and week. According to the Q-Line's website, on Mondays to Saturdays five of their six cars operate between 10 a.m. and 7 p.m., with four at other times (which includes the morning peak). This, along with an assertion that scheduled running time each way varies from 20 to 25 minutes (depending on traffic), makes me think that after taking layover time at



(Above and below) These photos along Woodward Avenue portray two major Detroit landmarks within its Arts and Cultural District. The upper view shows southbound car 290 heading downtown, as taken from the grounds of the Detroit Public Library with the Detroit Institute of Arts in the background. The lower photo shows the library, whose arch windows are similar to those of the art museum. Putnam Street approaches Woodward Avenue from the west and continues on the other side as Farnsworth Street. It is odd (at least to me) that overhead wire is used on this portion of the line, with its lovely architecture, as opposed to the unremarkable area immediately north and south.



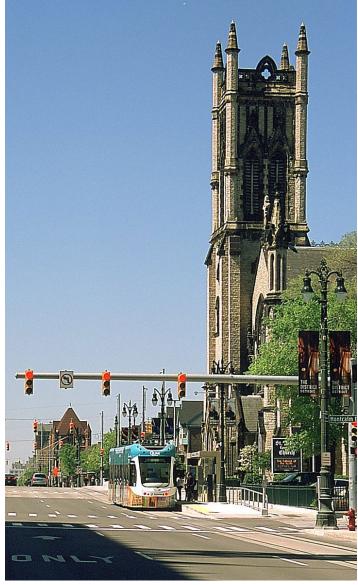
terminals into account, service frequency should be every 10 to 12 minutes during most of the day and every 15 minutes or slightly less at other times. On Sundays only three cars are out on the line. Of course, if the running time is longer, say 30 minutes, then headways would be every 14, 18 and 24 minutes, respectively. As for ridership, a "one year of service" report from this past May indicated that the line carried about 5,000 passengers daily when travel was free, but after Labor Day, when fares of \$1.50 one-way and \$3.00 for a day pass were instituted, ridership dropped to about 3,000 per



By the time the line reaches Garfield it no longer sports overhead wire, which comes to an end at the Warren Avenue stop. The large building in the background is the Department of Computer Science of Wayne State University. When Woodward Avenue's PCCs were discontinued in 1956 there were very few computers and virtually no computer science curriculum, and the structure, another one of Detroit's beautiful examples of Art Deco architecture, was known as the Maccabees Building. The studios and transmitter of radio station WXYZ occupied a portion of the 15-story skyscraper. Being a great fan of old-time radio, I find it enjoyable to visualize talented actors such as Brace Beemer, Fred Foy, and Paul Sutton, standing at microphones and performing in The Lone Ranger, Challenge of the Yukon, and The Green Hornet, sending their voices over the airwaves to appreciative listeners throughout the U. S. and Canada. I wonder if they ever rode the streetcar to work.

day. Tickets may be purchased at machines positioned at stops or on the cars themselves, as well as via the internet. Cash is accepted only onboard the cars themselves.

I'll let Julien describe the scene upon our arrival at the Grand Boulevard terminal two days after the grand opening: "We noted that the platform was jammed, and this crowd became more compressed when a northbound car discharged all of its passengers here. At one time, three of the five cars (they have six cars) being used were at the Grand Boulevard stop, or north of it. There did not appear to be any supervisory control of this mob with cars piling up at one place. Finally, a car reversed, switched to the southbound (downtown bound) track and loaded passengers, absorbing much of the crowd, but still we were kept waiting. When it finally left (there did not seem to be any sense of urgency to get things moving and clear up the standing crowd), another car came in and loaded up. We pressed ourselves into car 290 at 4:30 p.m., and with air conditioning not up to dealing with such a crowd on a warm (but not hot) day, we headed south five minutes later." Indeed, the car was very hot, which we first attributed to a possibly faulty air conditioner in this unit. [But later, we observed other cars just as hot and postulated this could be a real problem in the summer. It was a warm day with the thermometer nearing 80 degrees outside the car, but I suspect temperatures in Detroit easily get up into the 90s with high humidity during July and August. We wondered whether the line's wireless operation does not allow an adequate supply of electricity to



The Gothic Revival St. John's Episcopal Church was constructed in 1861 and is the oldest house of worship along Woodward Avenue. This area, now just south of the Fisher Freeway (I-75), was once called Piety Hill because of the large number of such religious edifices in the neighborhood.

operate both the car and its air conditioning equipment at their full potential. And along the same lines, would there be enough heat in the winter?]

We rode two stops to Amsterdam (see map at https://drive.google.com/file/d/0B6p5kZzKRHCBeW9SVTU5RDhvZ0U/view) where we paused for some photos. The cars were far between, but not necessarily few, as I noticed at least four different units in operation (of the six on the roster). But they tended to be running every 20 or so minutes, resulting in uncomfortable crowding and causing prospective passengers to wait for long periods before boarding. We didn't get to the Congress Street terminal until almost 5:20 and then still had to wait until almost 5:45 to return to the other end of line. Interestingly, Q-Line had a young representative there who



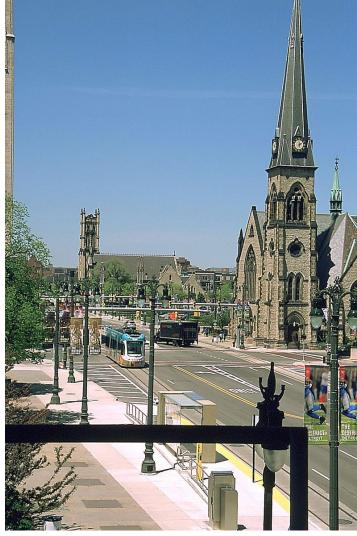
Comerica Park (home of the Detroit Tigers since 2000) and Ford Field (Detroit Lions since 2002) are in the background as outbound car 290 crosses Elizabeth Street. It will soon pass the Fillmore and Fox theaters (on the photographer's left), which are popular venues for live performances.

was answering questions and giving out descriptive folders. We found seats for our return trip and enjoyed a reasonably fast ride back to Grand Boulevard. It was clear the public was certainly interested in testing the new streetcar, and I hope they were not disappointed by the blemishes in the service.

I should have timed the return run, so I'm not sure how long it took us to get back to the car, but there certainly was a great deal less dawdling compared to our disconnected southbound trip. We then drove across the border into Canada to Julien and Martha's condo in Windsor. After resting for a short period, we went out to a steakhouse for an excellent dinner.

Fresh and early on Monday morning we had a light breakfast at a nearby Tim Hortons, and then Julien took me to the Via station for some pictures of the 9:05 a.m. train to Toronto, which we also photographed soon after its departure at a grade crossing up the line. We then drove back into the U. S. over the Ambassador Bridge (Detroit is separated from Windsor by the Detroit River, which has two crossings for motor traffic, a tunnel connecting the cities' respective downtown areas, and the Ambassador Bridge, further south [more west than south] which connects to Interstate 75). We found a parking spot almost identical to the one we used on the previous day and then decided to visit the Q-Line's office in the adjacent Penske Tech Center. Even though it was not yet officially open the clerk was anxious to please and provided us with canvas bags embossed with the Q-Line emblem and containing a Q-Line plastic water bottle inside. We had asked for timetables and other printed information, but none were available.

We took some more photos at the northern end of the line on this bright sunny day and then rode down to the Grand Circus Station, pausing for additional pictures along the way. The Detroit People Mover passes over the line at Grand Circus, and despite the automated railway running frequently, the long headways on the Q-Line made our attempt to get photos of



(Above and below) Grand Circus Park. The upper view is from the platform of the Detroit People Mover and shows the Central United Methodist Church, which was constructed in Tudor Revival style. Note St. John's Episcopal Church (Gothic) in the background. The lower photo shows an outbound streetcar with the lens facing much in the same direction, but taken from the surface of Woodward Avenue.



one of the trains passing above a streetcar proved futile (how many 15– to 20–minute intervals could we wait before the whole day was used up?). We then walked through the heart of downtown Detroit, passing many of the office skyscrapers that have recently been brought back to life. The city center seemed to be thriving, a great deal different than in years past, with crowded streets containing office workers and tourists. We photographed the line along the curving single track that encircles Campus Martius Park and the Soldiers and Sailors Monument, the only portions of the line that are not straight as an arrow.

It was getting to lunch time, so we walked to the nearby Renaissance Center for a slight repast but soon resumed our railfan activities at that location by taking photos of the people mover (the views of the people mover and of Via Rail Canada in Windsor will appear in Part 7). We then walked, paralleling the elevated single track counterclockwise loop line to the Cobo Convention Center, where we rode up an escalator to the fare control area and paid our 75-cent fares to access the platform of the line by depositing quarters into a turnstile (tokens can be purchased from change machines at the stations). We rode in a two-car train for four stops to Grand Circus Park, where the people mover crosses over Woodward Avenue and the Q-Line. It is possible to get photos of the streetcars from this stop's platform if you point your lens between the horizontal bars on the outer side of the track, but the sun wasn't perfect yet, so we came back about a half-hour later, after making a full circle (13 stops) with a stopover (at Fort/Cass) for photos. There were few riders.

Back at Grand Circus Park, after a few photos of the Q-Line from above, we came down to street level and began walking northward, stopping at various interesting points for photos, and then rode to Warren Avenue in the city's cultural arts district for more pictures. We then continued walking northward to the next stop, Ferry, where we boarded an outbound car back to Grand Boulevard. Julien's auto was undisturbed, and we drove back to Windsor, where we stopped off again at the Via station and the grade crossing for views of the 5:45 p.m. train to Toronto. All in all, we had an excellent day, followed by a nice meal near the Via station and a quiet evening of reminiscing, with Julien's wife Martha joining in.

Tuesday was getaway day, but also a bit cloudy, so we took our time and had a real breakfast with Martha before heading back to Detroit (with my bag in the trunk). By the time we parked near the cultural arts center the sun had come out, so we took a few more photos, however a bit half-heartedly, as we already had many from our efforts on Sunday afternoon and all day on Monday. We walked up to the Amsterdam stop and then rode back to Warren Avenue, the last streetcar ride of my visit. It seemed that the frequency and reliability of the line was much better on this Tuesday morning.

Since my flight wasn't due out until 2:55 p.m. (and I like to get to airports about 90 minutes before departure nowadays), we still had enough time to get in one more item of rail interest. Julien drove out to Dearborn (only 10 minutes out of the way in each direction) to inspect the new Amtrak station.



This inbound Q-Line car has just ducked under the people mover and is heading toward Grand River Avenue. There is no stop at this point, making it difficult to photograph the rolling stock of the two rail lines together.

It is very large, with its defining feature being a narrow-gauge steam locomotive displayed in its center. The waiting room was more like a visitor's center, in that it was full of tourist brochures and timetables. Of course, there were no current Amtrak timetables (they are no longer issued in hard copy), but among the bus schedules there were ones for Via Rail, and believe it or not, the White Pass and Yukon.

From here we drove to Metro Airport, where I thanked Julien for his kind hospitality and got my seat for my return flight to Trenton on Frontier. I was pleased it was a window seat again and then was even happier when we left on time at 2:55 p.m. with a plane that was about 75 percent full (there was nobody next to me in the middle seat of my row in the A-320). It's getting to be a cliche, but how many ways can you say the flight was uneventful? Arrival in our place on the tarmac was a few minutes early at 4:29 (33) and it just took a few minutes to walk through the airport's arrival area/baggage pick-up and get outside. After waiting for the shuttle bus, I was soon in my car for the drive home. Since it was now rush hour, there was considerable traffic. As such, I arrived home at 7:10 p.m..

To sum up the trip: First, I enjoyed it very much and am quite happy with the photographic record. I also want to thank Julien and Martha Wolfe for their kind hospitality. As for the Q-Line and Detroit, my reactions are mixed, but all leading up to the feeling that "Time Will Tell." If you take my experience as a playbook for the future, I'd have to say it's a fouled-up operation. But if someone cares, there is nothing preventing it from being fixed. The 20-minute or so headways I experienced must be improved, as well as the running times. I truly believe anything worse than a 10- or 12-minute headway would be a waste of the capital costs incurred in building the system. What good will the investment be if few people ride? Thus, its biggest problem is frequency and reliability. You cannot keep prospective riders waiting too long and then subject them to problems while reaching their destinations. I wish I knew the line's current

state, but I don't know anyone who is monitoring the situation, so without such information, I can't comment further.

As for the city itself, what I saw along the line was great. Lots of economic activity, both commercial/business and leisure. The sidewalks are clean, the culture and entertainment venues seem to be thriving, and the city's revival is reflected in a new atmosphere (ambience) that should attract lots of jobs and investment. On the other hand, there's still a l-o-n-g way to go. When you travel any distance along the side streets away from Woodward Avenue, you see a great deal of desolation (great deal might be an understatement). What should be neighborhoods of singlefamily dwelling units or garden apartments consist of grass and weed-covered empty spaces with the occasional house still standing (some in good repair and some not, with just a few undergoing repair). Due to its scope, it's hard for me to figure out how all of this problem is going to be remediated. However, it appears the current activities have been further strengthened by the recent announcement by the Ford Motor Company that it will convert the Michigan Central station and skyscraper in the Corktown area into a technology center. I wish Detroit the best of luck.

I've attempted to show many of the line's traffic generators in the photos.

Note the inventory of tall buildings shown in the last three photos. The older ones withstood Detroit's travails and look



(Above and below) Two views at Congress Street, the southern end of the line. The upper photo shows a car about to pull into the terminal stop, while the lower shows it laying over while its batteries are being charged. No. 292 will soon pull out and take the curve to the right. I suspect the special work shown above is a spring switch. In the background is Campus Martius Park, which is circumscribed by the line. Both roadways carry the Woodward Avenue designation.

like they will have a bright future.

Part 7 will continue with photos of the people mover and some Canadian intercity trains across the river.

