BULLETIN

Volume 66, Number 8 | August 2023

MTA Approves Fare Increases

The Metropolitan Transportation Authority (MTA) Board approved a slate of toll increases to go into effect on August 6 and fare increases that go into effect on August 20. Between June 22 and June 26 the MTA Board held four hybrid public hearings to receive public comments on the proposed fare changes. The MTA further invited and received written and video statements from members of the public commenting on the proposals.

In a move that increases convenience and financial flexibility for riders, the seven-day "best fare" fare-cap will allow OMNY riders to start their seven-day fare capping period any day of the week. Giving riders the best deal for any seven-day period will mark a change from the original fare-capping pilot, which calculated capped fares only on a Monday-through-Sunday schedule, regardless of what day a rider's first tap came. Now the seven-day period will begin automatically the first time a rider taps their contactless payment device or OMNY card and will renew upon the rider's first tap after the seven-day period has concluded.

Unlike the 7-day MetroCard, which requires an upfront $34 payment, the OMNY "best fare" initiative will give riders the financial flexibility to pay-as-they-go until they have spent $34 in any consecutive seven days, after which the cap will be in effect through the end of seven days. This new fare-capping structure will bring the financial flexibility and convenience of OMNY pay-as-you-go to many riders who have not yet made the switch to OMNY, particularly 7-day MetroCard pass riders, 75% of whom do not activate on Monday.

OMNY's market share systemwide is over 42%, and in the latest Spring 2023 Riders Count Survey OMNY posted a 79% fare payment satisfaction rate.

The Long Island Rail Road and Metro-North Railroad will continue the fare discounts that initially debuted in February 2022. Those discounts include an additional 10% discount on monthly tickets.

The $5.00 CityTicket for all off-peak trains will also continue as both railroads further expand CityTicket to peak trains at a $7.00 fare. Additionally, the LIRR will

Continued on page 3

Electric Railroaders Association

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In This Issue

Announcements

August 25: North American Transit Historical Society's 40th Annual Hoosier Traction Meet, Normal, Ill.
Visit https://erausa.org/regional-trips/2023/08/25/

October 13–15: The MBS invites our fellow ERA members to join our Fall 2023 Motor Bus Society Convention in San Diego. The convention will be held in San Diego, Orange County and the I-10 Corridor (California). Visit https://erausa.org/regional-trips/2023/10/

Monthly Zoom Meeting

There is no meeting in August.

Donations

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

$500 to $999

Dino Mandros (in memory of Don Harold)
Barbara and Jürgen Senst

$200 to $499

Howard Clark

ERA is a 501(c)(3) tax exempt corporation. Your donations are fully tax deductible and can be made either with your membership renewal or using our donation form on our website: www.erausa.org/donate. Your donation helps to maintain ERA's 88-year long tradition of traction education and entertainment!

2024 Benelux Trip

ERA is planning a tour next year to Belgium, the Netherlands and Luxembourg. It will begin in Amsterdam on May 10 and end in Brussels on May 25. The tour will be based in Amsterdam and Brussels and we are planning to visit many tram operations and tram and railway museums in Amsterdam, Den Haag, Rotterdam, Arnhem, Utrecht, Brussels, Antwerp, the Oostende-Knokke Coastal Tram, Brugge, Gent, Charleroi, Thuin and Luxembourg. Group and optional sightseeing will be available. Included travel will be by rail and day passes will be provided for local transit. Booking has now begun! Visit https://erausa.org/international-tours/2024/ for all the details.

Cover Photo

A tale of two T3s in Brno. On the left is T3R.PV 1517 (ČKD-Tatra, 1966) and on the right is T3M 1603 (ČKD-Tatra, 1972). Taken during the ERA's 2003 tour of the Czech Republic, these Route 4 cars are awaiting their turn to depart from the Obřany terminal on May 20. T3 1517 had been outshopped from its conversion from a standard T3 just three months before this picture was taken. It was built as number 517 but was renumbered in 1969. 1603 was converted from a standard T3 in 1981 and retains its original fleet number. Jeff Erlitz photo

introduce the Far Rockaway Ticket, which will mirror CityTicket prices. *(Editor's note: The 20-Trip Peak and Atlantic Tickets were discontinued as part of this package).*

Fares were frozen for Metro-North's West-of-Hudson service, the Pascack Valley Line and Port Jervis Line.

The base fare for subways, local buses, the Staten Island Railway and Paratransit will rise to $2.90, up from the current fare of $2.75. Express bus fares will rise to $7.00, from the current $6.75. Modest changes to unlimited ride passes: 7-day unlimited-ride MetroCards will rise to $34.00 from the current $33.00, 30-day unlimited MetroCards rise to $132.00 from the current $127.00. Riders can avoid paying these costs up-front by tapping with OMNY to have fares capped at no more than $34.00 every seven days as described above. Riders never pay for rides they don't take with OMNY.

Single rides on subways and buses will increase to $3.25 from the current $3.00; 7-Day Express Bus Plus MetroCards will rise to $64.00 from the current $62.00.

All discounts for seniors, reduced fares, will remain in place.

MTA PRESS RELEASE, July 19

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

Date	Country	City	Segment	Distance (miles)	Rail/ Metro/ Tram
7/1	South Korea	Seoul	Seohae Line: Sosa to Daegok	11.4	M
"	China	Hefei	Line 1: Heifei Railway Station to Zhangwa	2.8	M
7/4	Italy	Milano	M4: Dateo to San Babila	1.1	M
7/8	France	Angers	Lines B & C: Belle-Beille Campus to Molière Line B: Centre de Congrès to Monplaisir	3.0 2.2	T
7/22	Poland	Gorzów	Lines 1/3: Szarych Szeregów (ex Silwana) to Fieldorfa-Nila	0.6	T
7/26	China	Shaoxing	Line 2: Jinghu Hospital to Tandu	6.7	M
7/31	Taiwan	Taoyuan	Line A: Huanbei to Laojie River	0.5	M
"	Canada	Montréal	REM Line A: Gare Centrale to Brossard	10.1	M

URBAN RAIL NEWS, JULY 31

Rail News in Review

New York Metropolitan Area

NEW YORK CITY TRANSIT (NYCT)

Rockaway Park Summer Beach Service

As has been done for many years now, Rockaway Shuttle S service was extended from Broad Channel to Rockaway Boulevard (Liberty Avenue) on weekends. This service extension started on May 27 (Memorial Day weekend) and will continue each weekend to Monday, September 4 (Labor Day).

The service operates roughly 9 AM to 9 PM each weekend. It also operated on Tuesday, July 4. These extended trips operate with full-length trains and have conductors. Regular Rockaway Park shuttle service operates with short four-car trains and are One Person Train Operations (O.P.T.O.).

On Saturdays, there are four trains per hour but they are not on a 15-minute headway. To properly mesh with A service on Liberty Avenue, the headway pattern is 10-10-20-20. On Sundays, there are three trains per hour on an even 20-minute headway.

The extended service requires many more crew members than usual. Saturdays require seven extra train operators, three AM jobs and four PM jobs. Sundays require five extra train operators, two AM and three PM.

Since the shuttle is normally O.P.T.O., all of the conductor jobs come from the extra list. Saturdays require 14 (8 AM and 6 PM) while Sundays require 11 (7 AM and 4 PM).

After discharging passengers at Rockaway Boulevard on the northbound trip, the crew then continues north to the relay position in the middle at 80th Street. That relay move is scheduled for 18½ minutes.

Long-Term Track Outages

Starting on Monday, June 26, and continuing through to the end of this year, Track M (the middle express track) from north of 33rd Street to south of 69th Street on the IRT Flushing 7 Line, will be out of service.

This will permit the joint venture of Skanska/Railworks to demolish, remove and replace steel girders and perform other structural repairs under contract A-46030.

The work under the terms of this contract includes state of good repair improvements at the 61st Street-Woodside Station, replacement of existing escalators there and at the 74th Street-Broadway Station and stripping and painting and the repair of structural defects between 48th Street and 72nd Street.

For the duration, 7 trains will operate local between Queensboro Plaza and 74th Street and operate express

between 74th Street and Main Street-Flushing.

From Saturday, July 8, to Monday, September 25, IRT Dyre Avenue Line Track Y3 (the middle track) is out of service for its entire length, from south of Dyre Avenue to south of Morris Park. J-Track LLC, under contract P-36494, will be doing trackwork, installing new negative return rails, installing new ductwork and conduits and pulling new cable through those ducts.

Monday, July 3 saw the beginning of Tracks B3, B4 and B3-4 (Culver middle) being taken out of service to let Tutor Perini Corporation (the lead contractor) and Five Star Electric Corporation (electrical sub-contractor) perform signal work under contract S-47009 (Culver Line CBTC Overlay).

The limits extend from south of Church Avenue to north of Avenue P. This track outage is scheduled to be completed on Friday, August 18.

Also starting on Monday, July 3, and running through to Friday, September 8, many of the lay-ups that normally are stored in 207th Street Yard are relocated to their cold weather lay-up locations, between 145th and 168th Streets.

Starting on Monday, July 17 and running to Friday, September 15, the single-track connection (Track C) between the IRT Broadway Line and the IND 207th Street Yard is temporarily out of service.

This is to let Walsh Contracting, who is working on contract C-34838 (207th Street Yard Flood Mitigation), to perform core drilling for a future flood gate at the base of the ramp.

Adjacent Track Flagging Speed Increase?

During July, a pilot program was tested out on the IND Eighth Avenue Line that increased the speed for trains under adjacent track flagging rules from 10 to 15 mph.

This test was performed from 59th Street to Canal Street on the southbound express Track A3 (7/14-7/17 and 7/21-7/24) and southbound local Track A1 (7/28-7/31).

Station Re-NEW-Vation Progress

Since we last reported (June *Bulletin*), the following stations have been completed in this station renovation program:

Station	Weekend
Myrtle-Wyckoff Avenues M	June 3-4
Kings Highway F	June 10-11
Jamaica Center-Parsons/Archer J	June 17-18
121st Street J Z	June 24-25
18th Avenue F	July 8-9
145th Street 1	July 15-16
Marcy Avenue J M Z	July 22-23
157th Street 1	July 29-30

MTA Press Releases, June 6-July 25

IND Queens Boulevard Line E F R Service Changes Continue

The service changes mentioned in the May *Bulletin* regarding the relocation of weeknight and weekend layups on Queens Boulevard have been extended six more weeks, from July 1 through to August 13.

This is to enable E-J Electric Installation Company, the contractor working on contract S-48010 (Queens Boulevard Line East Communication-Based Train Control Installation), to install signal cable and other equipment between the Briarwood and Jamaica-179th Street Stations.

Weekend-Only Subway Maps

Recently, the MTA started producing subway maps that are in effect only on specific weekends. This past Presidents' Day weekend (Feb. 18-20) *may* have been when this started. Mainly available only in electronic form as a PDF, there was at least one printed version, for this past Memorial Day weekend (May 27-29).

These maps are available when you sign up online to get weekend service alerts. Visit https://cloud.info.mta.org/weekend_update_subscription to enroll for these weekend service updates.

A sample of the recently-introduced weekend subway map.

LONG ISLAND RAIL ROAD (LIRR)

September Timetable Change

The next timetable change will take effect on Tuesday, September 5.

In the morning peak, they are changing when and from where the through trains to Brooklyn run. There will be new direct service to Brooklyn from the Far Rockaway, Long Beach, Hempstead and Port Jefferson Branches. They are also changing which trains stop at Locust Manor, Laurelton, Rosedale, Hollis and Queens Village Stations. Their data indicates that more riders from these stations are traveling to Brooklyn.

Starting at 10:30 PM each night and continuing until 2 AM weekdays and 7 AM weekends, schedules will be adjusted on all trains going into and out of Grand Central. Some trains will run to and from Penn Station instead.

On the TrainTime app, eastbound riders to the Oyster Bay and Montauk Branches will now see two options to get from Penn Station or Grand Central to Jamaica for their transfer opportunity.

Major changes to service are outlined below. All riders should check the TrainTime app for additional minor changes to departure and/or transfer times.

Port Washington Branch

- The 6:08 and 6:11 PM weekday trains from Grand Central will be combined into one train, making all stops to Port Washington;
- On weeknights from 10:30 PM to 1 AM, and on weekend mornings from midnight to 7 AM, all trains will run to and from Penn Station instead of Grand Central.

Ronkonkoma Branch

- The 5:42 AM weekday train from Ronkonkoma to Penn Station will no longer run. Alternate trains are available four minutes earlier or nine minutes later;
- A new weekday train will leave Penn Station at 2:55 PM, stopping at Jamaica, Mineola, Hicksville, and all stops to Ronkonkoma except Pinelawn;
- The 4:09 PM and 4:22 PM weekday trains will run from Penn Station instead of Grand Central;
- The 5:25 PM train from Penn Station to Brentwood will be extended to Central Islip and Ronkonkoma;
- The 10:05 PM weekday train from Grand Central to Ronkonkoma will run from Penn Station.

Port Jefferson Branch

- Two AM peak local trains to Penn Station have been added, leaving Westbury at 6:34 AM and Hicksville at 8:14 AM;
- Two AM Peak trains from Huntington will run express from Syosset or Hicksville to Jamaica;
- The 4:59 AM train from Huntington will run to Atlantic Terminal instead of Grand Central and leave five minutes earlier;
- The 7:52 AM train from Mineola will start in Westbury and run to Atlantic Terminal instead of Grand Central. These trains restore direct service to Brooklyn on the branch.

Oyster Bay Branch

- Riders on the 7:17 AM train from Oyster Bay who are traveling to Penn Station will transfer to a new train at Jamaica, reducing crowding.

Hempstead Branch

- They are changing which trains stop at Elmont-UBS Arena, Queens Village and Hollis stations during the morning peak. There will be four direct trains to Brooklyn from these stations each morning, up from one;
- The 5:50 AM weekday train from Hempstead will run to Penn Station instead of Grand Central;
- The 6:24 AM weekday train from Hempstead will run to Grand Central instead of Penn Station;
- The 8:32 AM weekday train from Hempstead will run to Atlantic Terminal instead of Penn Station.

Babylon Branch

Direct service to Brooklyn will no longer be available during the morning rush hour.

- The 7:49 AM train from Freeport will run to Grand Central;
- The 8:54 AM train from Freeport will no longer run. Alternate trains leave 16 minutes earlier or six minutes later.

Montauk Branch

No major changes.

Long Beach Branch

- The 6:16 AM weekday train from Long Beach will run to Atlantic Terminal instead of Grand Central, restoring direct service to Brooklyn on the branch;
- The 3:48 PM weekday train from Penn Station to Long Beach will leave at 3:24 PM to provide more evenly spaced service;
- On weekend mornings from midnight to 7 AM, trains will run to and from Penn Station instead of Grand Central.

Far Rockaway Branch

- Four of 10 AM peak trains from Far Rockaway will run to Atlantic Terminal instead of Manhattan, restoring direct service to Brooklyn on the branch;
- Trains that stop at Rosedale, Laurelton, and Locust Manor stations during the morning peak will mostly be made by trains going to Atlantic Terminal;
- On weeknights from 11 PM to 1 AM, trains will run to and from Penn Station instead of Grand Central.

West Hempstead Branch

- The 6:26 AM weekday train from West Hempstead will run to Grand Central instead of Atlantic Terminal.

Brooklyn service

- During the morning rush hour, trains will still run roughly every eight minutes between Jamaica and Brooklyn, but more trains will be leaving from tracks 3, 4, or 5 rather than 11 or 12;
- A 3:32 PM weekday train from Atlantic Terminal to Jamaica will be added;
- On weekdays between roughly 9:50 AM and 11:20 AM, Brooklyn service is reduced to one train per hour to allow for mandatory track inspections in the tunnel between East New York and Jamaica.

Kew Gardens, Forest Hills and Woodside service

- The trains that stop at Kew Gardens, Forest Hills, and/or Woodside are being changed to improve reliability for all;

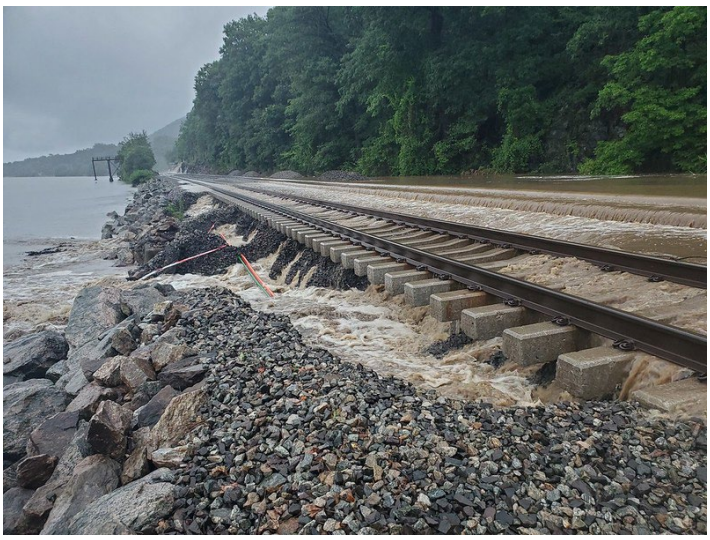
- During off-peak hours (midday, evening, night and weekend), most trains that stop at Kew Gardens will also stop at Forest Hills. This change was made in response to requests from riders who travel between the two stations.

MTA PRESS RELEASE, July 14

METRO-NORTH RAILROAD (MNR)

More Storm Damage

On Sunday afternoon, July 9, Hudson Line service was suspended north of Croton-Harmon due to the impact of severe storms in Northern Westchester, Putnam and Dutchess counties. The storms left behind high water, uprooted trees, boulders and other debris along sections of MNR's Hudson Line tracks.



Flooding on the Hudson Line north of Manitou Station on July 9.
MTA/Metro-North photo

A view of the upper Harlem Line north of Patterson on Monday, July 10.
MTA/Metro-North photo

The upper Harlem Line was also suspended, beginning Monday morning, July 10, between Southeast and Wassaic due to damage from the same storm.

Crews worked through the night into Monday morning to evaluate damage and clear tracks. Substitute bus service was provided starting on Monday afternoon on both lines.

Service was partially restored between Croton-Harmon and Peekskill on Tuesday, July 11. Limited northbound service to Poughkeepsie resumed at 6:15 PM that day.

Most service resumed on Wednesday morning, July 12 and full service resumed the following day.

MTA PRESS RELEASE, July 9

Danbury Branch All High-Level

At 1:00 AM on June 7, the new high-level platform at the Merritt 7 station in Norwalk, Conn. was placed into service. Merritt 7 was the last station on the Danbury Branch to have a low-level platform.

Train #1811 (Danbury-Grand Central) was the first train to use the new platform, at 6:06 AM. The last MNR train to use the old low-level platform was #1894, at 12:45 AM that morning.

THE WESTCONN MANIFEST, July 2023

NEW JERSEY TRANSIT (NJT)

New Headquarters

Following a competitive procurement process, the unanimous approval of its Board of Directors and authorization to proceed by the Office of the State Comptroller, NJT has signed a 25-year lease to establish offices in Two Gateway Center, with a direct pedestrian connection to Newark Penn Station.

NJT's current headquarters at Penn Plaza East is more than 30 years old and would require approximately $120 million in repairs and renovations over the next six years, including complete overhauls and replacements to elevators and the HVAC and other systems. The repairs and reconstruction would take several years, and require temporarily relocating employees.

The 25-year Two Gateway lease includes approximately 407,000 square feet of space in open floor plates which will be built to suit. Two Gateway has just been newly renovated, and the lease allows the potential to expand or contract NJT's footprint as needed.

Two Gateway Center provides direct access to Newark Penn Station via the Gateway Center's pedestrian bridge as well as Gateway's new street level entrance just across from the station's historic waiting room. The Murphy Administration has committed more than $190 million to renovating and restoring Newark Penn Station.

Onyx Equities, the owner of Two Gateway, has agreed to provide $130 per square foot toward design and construction, currently valued at approximately $53 million, specifically to meet NJT's needs and create a modern work environment, customized to maximize productivity and efficiency. The new, up-to-date work space will also help NJT attract and retain professional staff and will allow consolidation of administrative

employees from other locations throughout the state.

NJT expects to occupy the new headquarters by the end of 2024. The disposition of the current, Penn Plaza facility has yet to be determined.

NJT PRESS RELEASE, July 18

Improvements at Bloomfield Station

NJT is moving ahead with major improvements at its train station in Bloomfield. The NJT Board of Directors has approved a contract for the design and construction support for a project that will transform the station into a modern accessible station with high level platforms. The existing platform surfaces, canopy structures, station building, and pedestrian tunnel will be rehabilitated as part of the upgrade.

With this action, the Board authorized an amount not to exceed $4,737,874.02, plus five percent for contingencies, for the design and construction support services. The project is funded with $48 million in Debt Defeasance and Prevention Funds allocated by the State Legislature to rehabilitate the station and improve accessibility in compliance with the Americans with Disabilities Act.

Specific improvements include:

- The complete rehabilitation and restoration of existing platform surfaces and canopy structures;
- Restoration and renewal of station building grounds and adjacent retaining walls;
- Rehabilitation of pedestrian tunnel under the tracks;
- Low-level platforms raised to enhance accessibility;
- Preservation of the historic features of Bloomfield Station.

The station serves on average more than 1,500 riders every weekday. It is more than 100 years old, was listed on the State and National Registers of Historic Places in 1984 and is considered a valuable reminder of the New Jersey's vibrant transit history. The station is a centerpiece of the plan to revitalize Bloomfield's central business district, which is a Transit-Oriented Development transit village.

NJT PRESS RELEASE, July 19

AMTRAK

Hudson River Tunnel Project Update

The Hudson Tunnel Project has been approved to enter the Engineering Phase of the Federal Transit Administration's (FTA) Capital Investment Grants (CIG) Program . This represents a significant advancement for the project, which entered New Starts Project Development through the CIG Program in July 2016.

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

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

Looking east towards the west portals of the Hudson (North) River tunnels as a westbound Amtrak train approaches. Amtrak photo

The Hudson Tunnel Project's sponsor, Gateway Development Commission (GDC), will be able to incur costs for engineering activities, demolition and utility relocation, property acquisition and other non-construction costs, including procurement of specialized equipment and materials with the FTA's approval to enter the Engineering Phase of the CIG program.

One noted change FTA included in the Hudson Tunnel updated project document was a revision to the maximum amount of a potential Full Funding Agreement. The original request was for $7.408 billion, with the FTA moving the amount down to $6.88 billion.

The $17.18 billion Hudson Tunnel Project is being funded with local commitments to repay a Railroad Rehabilitation and Improvement Financing loan, funding from the Port Authority of New York and New Jersey, Amtrak and the New Jersey Turnpike Authority. GDC said it expected the remainder of the federal funding to become available to the project through the approximately $4 billion in Federal-State Partnership for Intercity Passenger Rail Grant Program , Rebuilding American Infrastructure with Sustainability and Equity (RAISE) and Consolidated Rail Infrastructure and Safety Improvements Grants that have already been applied for.

GDC says with the project's financial footing stabilized, early construction work could begin this year and major construction could begin in 2024. Early work is expected to begin later this year on the Tonnelle Avenue Bridge and Utility Relocation Project in New Jersey, which was awarded a RAISE grant recently, and the Hudson Yards Concrete Casing-Section 3 in New York, which received a National Infrastructure Project Assistance Grant in February 2023.

MASS TRANSIT, July 7

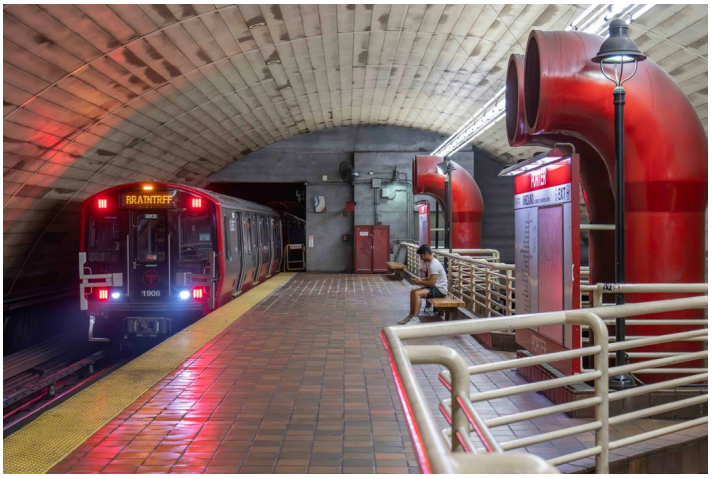
Other U.S. Systems

BOSTON

New Cars on the Red Line in Regular Service

As of the end of July, 10 of the 12 new #4 Red Line cars were in service, cars 1900-1909. Cars 1910-1911 were still being tested. The Red Line normally operates six-car trains, so there is only one train of these new CRRC-built trains in service on any given day.

After a very long absence from this city, your editor spent a long weekend there towards the end of July. As luck would have it, he was in "a right spot at a right time" and was able to photograph that single train set.



In the late morning of July 22, #4 Red Line cars 1908-1909+1907-1906+1901-1900 (CRRC, 2019) are seen entering Porter Station on a southbound trip to Braintree. Jeff Erlitz photo

Sumner Tunnel Closure Mitigation

From Wednesday, July 5, through Thursday, August 31, during the Sumner Tunnel Restoration Project, measures were taken to encourage the use of the parallel Blue Line. These included:

- The entire Blue Line in both directions is free to riders;
- Gates are open at all Blue Line stations from Wonderland to Bowdoin;
- An additional train was added to the Blue Line in the midday period to help support higher ridership;
- All MBTA parking lots and garages on the Blue Line were reduced to $2/day. Additional free parking is available near Wood Island Station.

Built in the 1930s, the Sumner Tunnel was the first traffic tunnel in Massachusetts and one of the oldest in the nation. It is one of four ways into the City of Boston and processes over 39,000 vehicles per day and is the main connection for East Boston, Logan Airport, and a main entry point for the North Shore.

In addition to the free Blue Line service, the MBTA and Keolis Commuter Services (the agency's operating partner for Commuter Rail), stated that Zone 1A fares will apply for the entire Newburyport/Rockport Line. The Zone 1A fare is $2.40 one-way and is equivalent to the cost of a subway ride.
MBTA Press Release, June 9
MBTA Press Release, June 22

CHICAGO

Red and Purple Line Modernization Progress

The final major stage of the Lawrence to Bryn Mawr Modernization project, which is part of Chicago Transit Authority (CTA)'s Red and Purple Modernization (RPM) Phase One Project began on July 28. This stage includes the construction of four new, fully accessible Red Line stations at Lawrence, Argyle, Berwyn and Bryn Mawr. This phase of work will be completed and the new stations opened in 2025.

Rendering of the rebuilt Argyle Station. CTA

Red and Purple line service will continue throughout construction. During Stage B, the following temporary service impacts will be in place:

- New temporary rail station locations for Argyle & Bryn Mawr. Stage A temporary stations will close when Stage B temporary stations open:
  - The new Argyle temporary station will have entrances on W. Foster and W. Winona;
  - The new Bryn Mawr temporary station will have an entrance on W. Bryn Mawr, with an auxiliary exit at W. Catalpa.
- The Bryn Mawr temporary station will be southbound-only during Stage B because there is no space to build a platform that can serve northbound trains. Riders traveling northbound can:
  - Board a southbound train at Bryn Mawr to the next station at Argyle, then cross the platform to board a northbound train;
  - Use the Thorndale Red Line station ¼-mile north of the Bryn Mawr station.
- Lawrence and Berwyn stations will remain closed during Stage B;
- Red and Purple line service will run on the two new easternmost tracks instead of the usual four tracks;
- Red Line trains will stop at the two temporary stations (except for northbound trains at Bryn Mawr), while Purple Line Express trains will continue to run nonstop between

Howard and Wilson.

CTA's contractor, Walsh-Fluor, will demolish the southbound Red and Purple Line track structures (the two westernmost tracks). This includes complete demolition of the embankment wall and bridges over cross streets in the Uptown and Edgewater communities between W. Ardmore and W. Lawrence Avenues.

- Walsh-Fluor will build new track support columns on the west side of the CTA track structure;
- The contractor will drill deep shafts, about 60-80 feet below ground, and fill with concrete, to create the foundations for new track support columns;
- Support columns will be installed on top of the drilled shafts to support new track structure.

The new bridges and tracks will be built via an overhead gantry system that will install pre-cast concrete bridge segments that are manufactured off-site and trucked into the RPM project area, similar to how construction was performed during Stage A work. The construction method minimizes impacts to the community and the area needed by the contractor around the Red Line tracks to perform the construction work.

Rendering of Lawrence Station. CTA

The new, permanent, fully accessible stations at Lawrence, Argyle, Berwyn, and Bryn Mawr will be built during this stage. The new stations will be modern, larger and fully accessible stations that will include elevators, wider platforms, and vastly improved amenities. Additional hi-res renderings of the stations can be found at https://drive.google.com/drive/folders/1RsThgEGr-lObjL2elwk43xk2hZHzlVIo. CTA PRESS RELEASE, July 14

4000-Series Rail Car Centennial

The Chicago Transit Authority (CTA) marked the 100 "birthday" of its vintage 4000-series railcars by inviting passengers to take a ride back in time.

On Saturday, July 29, the CTA ran the historic 4000-series rail cars around the Loop "L" from 10 AM to 2 PM. The regular CTA rail fare ($2.50 full fare; $1.25 reduced fare) applied.

The 4000-series railcars, built by the long-defunct Cincinnati Car Company, are the oldest vehicles in CTA's Heritage Fleet — a collection of vintage buses and railcars from the 1920s through the 1970s. The 4000-series were built in two phases: from 1914-15 and from 1922-24.

The 4000s were Chicago's first steel body cars. The first phase of cars were affectionately referred to as "baldies" because of their plain arched roofs, while the second phase of cars were known as the "plushies," featuring canvas-covered wood roofs, more luxurious interiors with green plush seats, circulating fans, and opal shades on the lights.

The 4000-series railcars in CTA's Heritage Fleet, cars 4271-4272, have been lovingly maintained by the agency since the entire series was retired in the early 1970s. Both vintage railcars feature the burnt orange and brown paint scheme they wore in the 1940s, while inside, they feature replica advertisements from the era.

4271-4272 at Garfield Station. CTA photo

In addition to being the 100th anniversary of the delivery of 4271-4272, it is also the 50th anniversary of their retirement from regular passenger service. The last of the 4000-series cars were retired in October 1973, serving out their last days on the Evanston Express (today's Purple Line Express). Cars 4271-4272 were selected by CTA for preservation shortly after retirement, chosen in part because they were last pair of 4000s to receive a full overhaul and thus would need the least amount of work to be brought to good operating condition; they had also received fewer modifications than other 4000s.

CTA distributed a limited quantity of commemorative posters from a table at the Washington-Wabash station. CTA PRESS RELEASE, July 29

CLEVELAND

New LRVs Ordered

The Greater Cleveland Regional Transit Authority (GCRTA) has selected Siemens Mobility to replace GCRTA's Red Line fleet. GCRTA's purchase of 24 S200 Light Rail Vehicles (LRVs) includes an option for up to 36 additional vehicles which would replace GCRTA's Blue and Green Line fleet.

GCRTA's current heavy and light rail fleets are 39 and 42 years old, exceeding the design life of typical transit passenger rail cars. Delivery of the new S200 LRVs is scheduled to be completed in four years. The new high floor

vehicles will feature two door heights for high- and low-level platform accessibility, allowing the trains to operate on both the Red Line and the Blue and Green Lines.

The base order will serve the Red Line and as modifications to the existing platforms on the Blue and Green Lines are made, additional options may be exercised. GCRTA received a grant of $130 million from the Federal Transit Administration through the FY22/23 Rail Vehicle Replacement Program, a new program created by the Bipartisan Infrastructure Law.

The S200 LRVs feature a modern design with 52 easy-to-clean seats, additional standing room, four wheelchair areas for enhanced accessibility, two bicycle racks and an advanced passenger information system. In addition, the vehicles will be built to withstand the coldest Cleveland days, with ice cutting technology and a modern operator cab area with a dedicated heating, ventilation, and air conditioning unit, heated windshield and enhanced visibility. The final design will be co-created by GCRTA and Siemens Mobility over the next 15-month period, before being built at Siemens Mobility's rail manufacturing facility in Sacramento, Calif. GCRTA Press Release, July 10

HONOLULU

Skyline Ridership Falls

The first day of paid rail ridership saw a drop in interest, as expected, with only 1, 245 passengers boarding Skyline trains.

Wednesday, July 5's ridership numbers represented a steep contrast to the 8,952 passengers who packed trains for the inaugural four hours of free service on Friday, June 30 that culminated through the Fourth of July with a total of 71, 722 passengers who all rode for free.

With the beginning of paid service on July 5 to ride the first leg of 11 miles of track along nine stations from East Kapolei to Halawa, the city Department of Transportation Services (DTS) said that it "anticipated reduced ridership on Skyline following the fare-free period which ended after the July Fourth holiday."

The Honolulu Authority for Rapid Transportation continues to build the rail system for a total of 19 miles of track and 19 stations ending in Kakaako by 2031 for a total cost of $9.8 billion.

Discussions continue to generate funding to reach rail's original destination at Ala Moana Center, Hawaii's largest transit hub.

As more stations enter service, DTS said it expects ridership to grow, especially with the completion of the Airport Project Segment by mid-2025.

How many people ride rail, how much fare revenue the city generates and how much it costs to maintain America's first driverless, automated system remain unknown.

Roger Morton, director of the city Department of Transportation Services, which in June assumed responsibility for operating Skyline, earlier said the contract with Hitachi Rail Honolulu is a $54 million-per-year expense, while operational costs, including use of electricity

Skyline train with car 13-E2 (Hitachi).
Jamm Aquino/Star-Advertiser photo

throughout the system, adds up to $75 million annually.

DTS expects about 8,000 to 10,000 riders per day by the end of the year, with the next segment from Halawa past the airport to Middle Street likely generating about 25,000 riders per day.

Ridership is expected to grow to about 85,000 per day after the final segment opens from Middle Street to the downtown and Kakaako areas.

Ahead of paid ridership this week, Council members Andria Tupola and Val Okimoto told the Honolulu Star-Advertiser that they remain concerned whether HOLO card revenue will be enough to cover annual operational and maintenance costs.

Tupola said previously that the next year will represent a "pilot project" to determine a full year of paid ridership numbers, revenue and rail's actual operations and maintenance costs. Honolulu Star-Advertiser via Mass Transit, July 10

KANSAS CITY, MO.

Streetcar Track Failure and Repairs

Track repairs on the Main Street Bridge over I-670 were completed and KC Streetcar service resumed at 6:00 AM on Friday morning, July 21.

On Tuesday, July 4, the KC Streetcar required an unplanned suspension of service because of a track failure on a portion of the Main Street Bridge over I-670. The track failure was due to multiple factors including thermal expansion and degradation of the streetcar track slab and related repair materials around the failed rail. Repair work commenced early Thursday morning, July 6, and continued with multiple crews working around the clock. Repair work was estimated to take two to three weeks.

Work included repairing the failed track as well as reinforcing all of the rails on the bridge. Work included:

- Inspection, cut, demo, and cleaning of all four rails on the bridge;
- Fully reconstructed 800 linear feet of embedded track in 2,220 gallons of elastomeric grout;

- Re-welded all rail joints and constructed all four approach slabs using 45 cubic yards of concrete;
- Replaced deteriorating pavement within the Truman Road North and Main Street intersection;
- Installed five new surface drains to improve roadway and track drainage.

Additionally, while KC Streetcar service was suspended, the team fully inspected the entire downtown alignment and completed preventive maintenance in other areas and locations of need.

Looking north up Main Street towards downtown Kansas City from the pedestrian overpass at the Union Station terminal stop, the south end of the line. Urbos 3 803 (CAF, 2016) is crossing over to the northbound track to head back in to town. Jason Doss photo

With the resumption of KC Streetcar service, the Power & Light District northbound and the Kauffman Center northbound streetcar stops are back open and Main Street between Truman Road North and South has reopened to all traffic.

While KC Streetcar service was suspended, transit service continued on Main Street thanks to the partnership with the KC Area Transportation Authority. During this time, the Main MAX was re-routed from Grand Boulevard to Main Street, stopping at streetcar stops with frequencies of 20-30 minutes.
RIDE KC STREETCAR MEDIA ALERT, July 20

LOS ANGELES

Service Increase to Redlands?

Rail frequency between the University of Redlands and Los Angeles Union Station will be studied following the July 5 approval of a $480,000 cost sharing agreement between the San Bernardino County Transportation Authority (SBCTA) Board of Directors and Los Angeles County Metropolitan Transportation Authority (L.A. Metro).

SBCTA and L.A. Metro will split the costs of the study, which will be conducted by the Southern California Regional Rail Authority (SCRRA/Metrolink). In 2018, the Hybrid Rail Study was completed in partnership with SCRRA, L.A. Metro and SBCTA to analyze the feasibility and operating parameters for supplementing or converting existing Metrolink service on the San Bernardino Line with multiple-unit service. The goal was to reduce overall operating costs for rail service in the corridor and provide more frequent service with a focus on a convenient overall schedule for passengers.

The joint study, which is expected to be completed by late spring in 2024, will look at how to best implement Diesel Multiple Unit and Zero Emission Multiple Unit service to all Metrolink stations on the San Bernardino Line within San Bernardino County, emphasizing timed connections to other Metrolink and passenger rail trains at Los Angeles Union Station.

SBCTA explains that as transit operators recover from the effects of the COVID pandemic, this study will provide a pathway for more frequent and cost-effective Metrolink service to more commuters in San Bernardino and Los Angeles counties.
MASS TRANSIT, July 11

PHILADELPHIA

Design Contract for Three Trolley Stations

The Southeastern Pennsylvania Transportation Authority (SEPTA) has awarded a contract to advance accessibility improvements at three trolley stations. CDM Smith, Inc. will do architectural, design, and construction-related services for the 22nd, 33rd, and 36th Street Stations.

SEPTA's 36th Street Station as seen on December 17, 2008. camera_obscura [busy] photo via Urban Electric Transit

This project supports Trolley Modernization, SEPTA's program to transform its trolley network into an accessible, fast, and easy-to-use system. In February, SEPTA awarded a contract to Alstom Transportation Inc. for the purchase of modern, fully ADA-compliant trolley vehicles to replace the Authority's entire aging fleet of trolleys.

SEPTA's investments in Trolley Modernization and accessibility projects on the Broad Street Line and Market-Frankford Line means that 99% of subway and trolley trips will be through an accessible station by 2035.

The $4,987,421 contract with CDM Smith, Inc. will progress the design of the 22nd, 33rd, and 36th Street Stations to 100 percent. Once design is completed, SEPTA can advance on

the construction phase.

These stations were built decades before the enactment of the Americans with Disabilities Act (ADA) and are currently only accessible via stairs. Improvements that will make the 22nd, 33rd, and 36th Street Stations fully ADA accessible and in a state of good repair include elevator installation, platform renovation, new signage, lighting and security cameras and waterproofing.

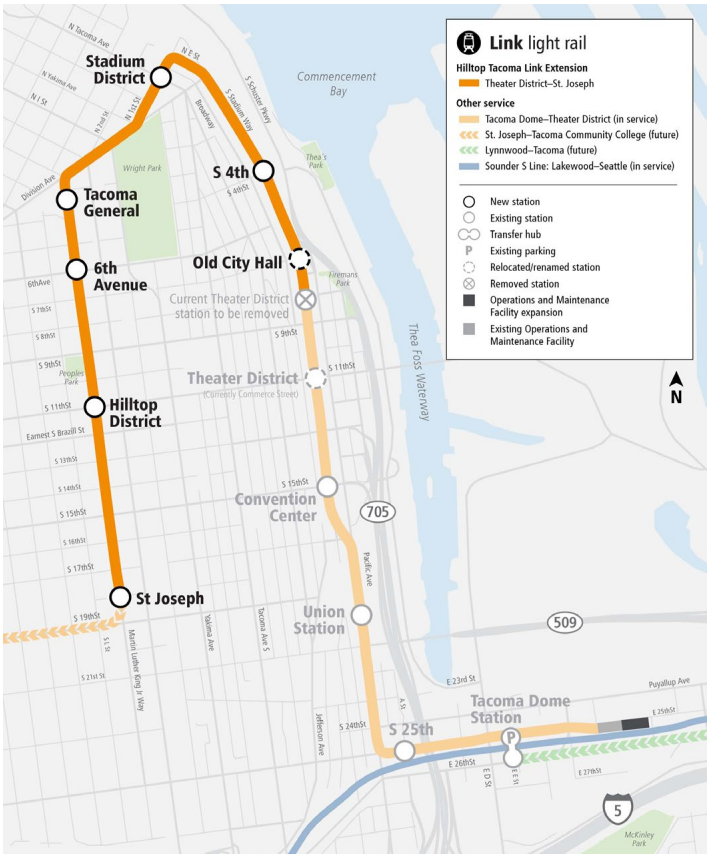
In addition to the three trolley stations that will advance with this Board approval, SEPTA is nearly finished with an ADA improvement project at Susquehanna-Dauphin Station, and construction is underway at Tasker-Morris Station, both along the Broad Street Line.

SEPTA PRESS RELEASE, July 27

TACOMA, WASH.

Simulated Service to Begin on Hilltop Extension

With the completion of civil construction, test trains will begin running on the entire length of the T Line from Tacoma Dome to the Hilltop District every 20 minutes as part of preparation for opening, called simulated service. Passengers headed north will still need to deboard at the old Commerce Street/new Theater District station.



Map of the alignment of the Link Hilltop extension. Sound Transit

Due to train car availability, the 20-minute frequency will run at least through the weekend of July 15-16, typical of T-Line Sunday service, but less frequent than the usual 12-minute headways Monday through Saturday. Frequencies were expected to improve the following week.

Running the simulated service on this altered schedule over the next several days allows for the stress testing of operations in anticipation of opening late this summer.

People in the Stadium and Hilltop areas should stay alert and be aware of the regular trains now traversing the neighborhood. Pause and look both ways before crossing any intersection and use crosswalks, not shortcuts.

The 2.4-mile Hilltop extension doubles the length of the T Line and includes one relocated station and six new stations. Passengers will have access to Wright Park and major medical facilities. The project also includes an expansion of Sound Transit's Operations and Maintenance Facility in Tacoma.

SOUND TRANSIT PRESS RELEASE, July 13

WASHINGTON, D.C.

Orange Line Stations Reopen

On Monday, July 17, two Orange Line stations reopened following the completion of rail replacement and fiber-optics installation between Vienna and Dunn Loring stations.

In total, Metro installed nearly 25 miles of new rail during this phase of construction, replacing some of the oldest rail in the system. This work also included 415 new rail welds and the removal of more than 97,000 linear feet of vegetation from around the stations.

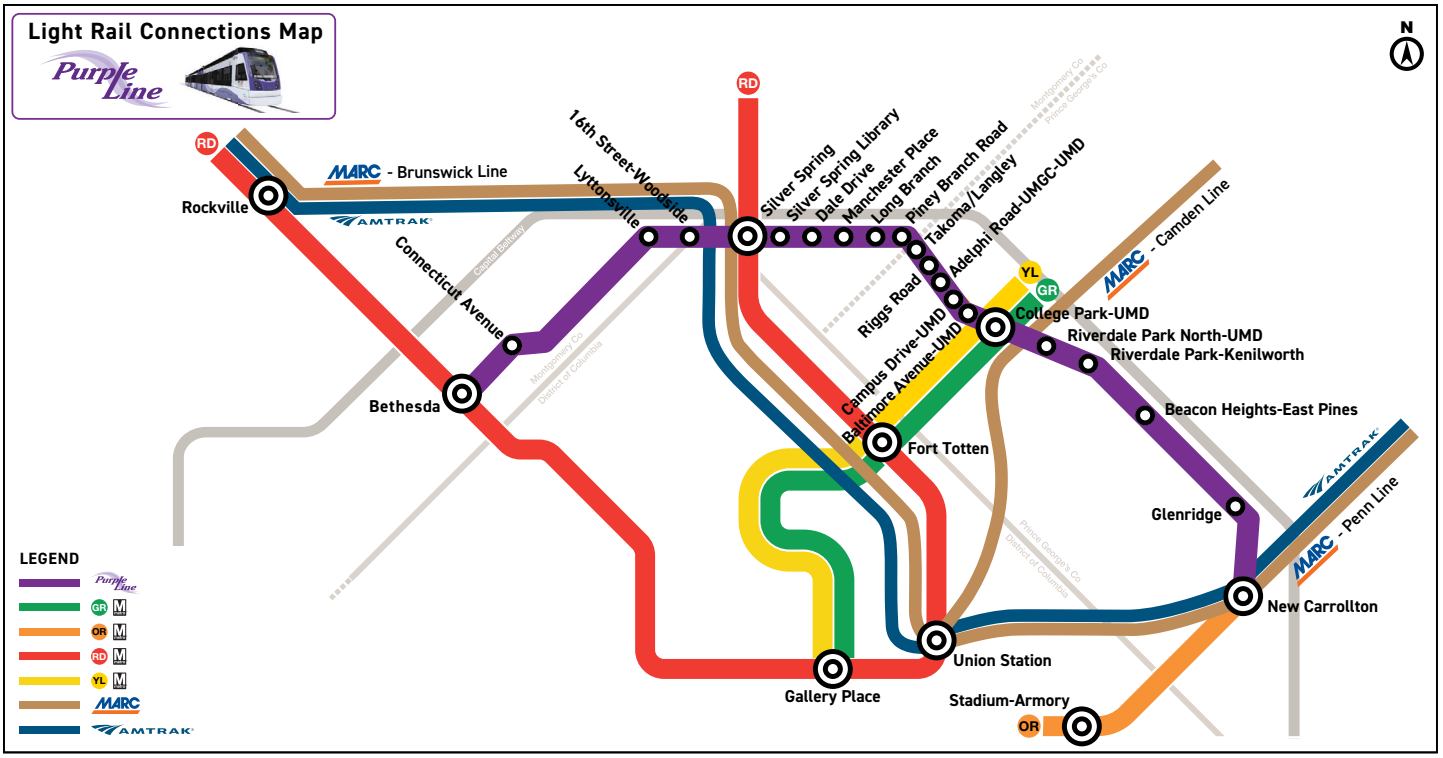
In June, Metro closed four Orange Line stations in Virginia while construction teams worked to replace the original 40-year-old steel rail between Ballston-MU and Vienna. West Falls Church and East Falls Church stations reopened earlier in July. Summer construction then moved to the Green Line, which began July 22. Working at the Greenbelt, College Park-U of Md, Hyattsville Crossing and West Hyattsville stations, Metro is installing fiber-optic cable, replacing platform edge lighting and replacing power cables and switch machines.

Green Line stations between Fort Totten and Greenbelt closed Saturday, July 22, and will continue to Monday, September 4. Green Line service at Fort Totten was unavailable on the weekend of July 22-23. Red Line service will remain available at Ft. Totten. Frequent free shuttle buses will replace trains between the affected stations.

WMATA PRESS RELEASE, July 13

Purple Line Opening Set

An agreement between the Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) and Purple Line Transit Partners (PLTP) will see the 16-mile Purple Line open for service in the spring of 2027. Additionally, MDOT MTA has agreed to provide $148 million to PLTP, which includes an increase of $205 million paid during the construction period, less a $57 million reduction to payments made during the operations and maintenance



Map of the Purple Line and its connections. Maryland Transit Administration

period. MDOT MTA says the change in net compensation reflects months of collaboration to identify and mitigate delays and reach a resolution.

The revised opening date and change of net compensation will require a change to the Purple Line Public-Private Partnership Agreement, which needs approval from the Maryland Board of Public Works. The board was set to meet July 19.

MDOT MTA explains the change in the project's schedule reflects delays in utility relocation, constructing a complex project in an urban environment, the national workforce shortage, supply chain issues and "the unique history of the Purple Line Light Rail Project." The project's environmental clearance was reinstated following dismissal of a lawsuit brought by opponents of the project. The project also saw a replacement of its design-build contractor in 2022.

The delays brought on by the significant legal and contracting challenges left some construction sites dormant for nearly two years before PLTP was able to restart construction.

The project has reached 50 percent completion, with construction progressing along the entire alignment, including utility relocation work and replacement and upgrading of storm drain systems, construction at nine stations, bridge and retaining wall construction, light-rail track being laid and vertical excavation of a 130-foot shaft at the Bethesda Station that will connect Purple Line riders to the Washington Metropolitan Area Transit Authority Metrorail Red Line.

PLTP is developing a grant program to support community initiatives and to provide tangible resources to organizations in Prince George's and Montgomery counties. The grant program will be in addition to grants available through a partnership with the Maryland Department of Commerce and Montgomery and Prince George's counties to local businesses negatively affected through revenue loss by the construction of the Purple Line.

To ensure the project continues to make progress, the MTA and PLTP meet weekly to review construction progress, anticipate potential schedule impacts and develop mitigation strategies to reduce the risk of further delays.
MASS TRANSIT, July 17

New Faregates on Metro

Metro has begun installing new higher, stronger faregates at Fort Totten Station as part of a systemwide rollout. The design improves upon the original prototype door following months of testing and modifications. The new doors are now 55-inches tall, twice as strong, and more resilient.

The installation at Fort Totten was completed overnight, followed by Pentagon City. The faregate modifications will be installed in phases with plans to retrofit faregates throughout the system over the next year. The first 10 stations are expected to be completed by early fall.

The new design includes an L-shape door panel that extends over the faregate to minimize gaps between the openings. The increase in barrier height from the original 28 to 48-inch prototype to 55 inches will also make it more difficult to jump over faregates. The new height is taller than a hockey net or nearly half the height of a standard basketball hoop.

The swing doors are made of a polycarbonate which is 200 times stronger than glass, lighter weight, and more durable. The final design also includes more robust hinges and a

The new fare gate array is shown here at the Fort Totten Station.
WMATA photo

Citadis 305 2009 (Alstom, 2022) is operating on Route A as it crosses the Pont Confluences on May 31, 2023.
Pascal via photo Urban Electric Transit

more powerful motor to strengthen the door. As stations are retrofitted with the new barriers, Metro is also raising the height of fencing and emergency gates.

Metro will install a single door panel for all regular faregates, and double door panels at the wider gates for accessibility and wheelchairs. Following Fort Totten and Pentagon City, the first phase of new faregates will be installed at Bethesda, Vienna, Mt Vernon Sq, Addison Rd, Congress Heights, Wheaton, Federal Center SW, and Court House stations. Metro will notify customers prior to work beginning at stations through in-station signage and on Metro's Faregate Retrofit Project page.

In addition to the faregate modifications, Metro's stepped-up enforcement efforts have also helped to change behaviors and reduce fare evasion.

Last month, Metro also launched a new income-qualified reduced fare program, Metro Lift, to provide a 50 percent fare discount to customers who qualify for SNAP (Supplemental Nutrition Assistance Program) benefits in the District, Maryland, and Virginia. To-date, more than 1,600 riders have enrolled, taking nearly 17,000 combined trips.
WMATA Press Release, July 24

International

ANGERS, FRANCE

Tram Network Extended

The Angers-Loire Metropolitan Authority inaugurated two new light rail lines and unveiled its new and improved public transport network on July 7, with operation beginning a day later. Services on the full network were free until July 14, to allow passengers to become familiar with the new route structure.

The network now includes the new 4.8-kilometer (3.0-mile) Belle-Beille Campus to Molière and the 3.6-kilometer (2.2-mile) Centre de Congrès to Monplaisir sections, taking light rail services to the west and the east, respectively. Line A continues to run north-south from Avrillé-Ardennes to Angers-Roseraie; Line B runs from Belle-Beille Campus to Monplaisir; and Line C runs from Belle-Beille Campus to Angers-Roseraie.

The network now serves 35 percent of the population of Angers, with 19 new stops added at an average distance of 500 meters (⅓ mile) between stops. Services operate every eight minutes, increasing to every four minutes at peak times for sections served by two lines. RATP Dev Angers, which has been responsible for operating the Irigo network since 2011, will continue to operate the expanded network. More than 50 companies were involved in the construction of the network, including Colas and Durand.

Alstom has supplied 20 new 30-meter-long (98 foot) Citadis LRVs with capacity for 210 passengers each, under a €55 million contract awarded in December 2019.

Park-and-ride facilities have been built at the La Barre and Montaigne stops, with a car park constructed at Monplaisir. Services will operate between 6:00 AM and 1:00 AM Monday-Saturday, and 7:15 AM-11:00 PM on Sundays.

The extension project cost €270 million, with €249.5 million funded by the Angers Loire Méropole, €25 million from the central government, €10 million from the Pays de la Loire region and €700,000 from the European Regional Development Fund.

Consultation on the extensions began in 2014 and tendering started in 2015, but in 2016 the city voted to defer the start of construction amid concerns over a shortage of financial resources.
International Railway Journal, July 19

AUSTRIA

Additional Railjet and Cityjet Trains Ordered

Austrian Federal Railways (ÖBB) has ordered more double-deck trains under its framework agreement with

Artist's impression of the Kiss double-deck Railjet EMU to be supplied by Stadler to ÖBB. ÖBB/Stadler Rail

Stadler, comprising 14 six-car double-deck Railjet EMUs for inter-city services and 21 four-car Cityjet EMUs for local services in eastern Austria worth a total of around €600 million, split roughly 50:50.

The first Railjet Kiss double-deck trains are scheduled to enter service on the Vienna-Salzburg-Innsbruck route in 2026, where ÖBB competes with open-access operator Westbahn which also uses Kiss trains. The new Railjet trains will also be deployed on the Vienna-Graz route when the 27.3-kilometer Semmering base tunnel is completed in 2030.

The double-deck Railjet trains will supplement ÖBB's fleet of single-deck push-pull Railjet trains supplied by Siemens. ÖBB has decided to order double-deck EMUs rather than more single-deck trains to meet a surge in demand.

Each six-car Railjet double-deck train will be 160 meters (525 feet) long and have around 480 seats, almost 19 percent more than a seven-car single-deck Railjet. The trains will have a maximum speed of 200 kph (124 mph), lower than the 230 kph (143 mph) for the Siemens Railjet fleet. However, the Stadler trains will have a high rate of acceleration which ÖBB says is ideal for operation on long-distance routes with frequent stops. The trains will have 12 doors per side with spacious low-floor vestibules to speed boarding and alighting.

The new Railjet trains will have catering zones with vending machines for snacks and drinks, sockets including USB ports in every row of seats, free Wi-Fi and access to the onboard portal ÖBB Railnet. The trains will have a real-time passenger information system, automatic air-conditioning and onboard CCTV. For passengers with reduced mobility, there will be two wheelchair spaces in the center of the train with height-adjustable side wall tables. There will be space for eight bicycles on each train.

The order for 21 four-car Cityjet double-deck trains is worth around €300 million and follows the first call under the framework deal with Stadler which was made in April 2022 for 20 six-car and 21 four-car Cityjet double-deck EMUs. The first of the new trains is expected to enter service in Vienna, Lower Austria and Burgenland at the beginning of 2026.
INTERNATIONAL RAILWAY JOURNAL, July 7

BERGAMO, ITALY

Trams for New Line T2 Ordered

Škoda Group has finalized a contract to supply 10 customized trams to Bergamo over the next three years and provide three years of full-service maintenance.

The tram order, which was formally announced on July 12, forms part of a larger turnkey contract for a consortium of Impresa Milesi Geom Sergio, Generale Costruzioni Ferroviarie, Impresa Edile Stradale Artifoni and Škoda Transportation to build the 11.5-kilometer (7.1-mile) Line T2 from the city to Villa d'Almè. Opening is planned for September 2026.

Škoda said the trams from the ForCity Classic family would be based on a proven platform but with "even better parameters" than previous models.

The 70 kph (43 mph) bidirectional vehicles will have five sections with one unpowered and two powered trucks. They will be 100 percent low floor and the doors close to the areas for persons with reduced mobility will have driver-operated devices to span the gap to the platform edge.

The cabs will offer 'unparalleled comfort" and a wide view, and they will be the first Škoda Group trams to have an "advanced" anti-collision system. Other features will include air-conditioning and remote diagnostics for real-time monitoring and proactive maintenance.
METRO REPORT INTERNATIONAL, July 17

BERLIN

U-Bahn to the Airport?

Funding has been agreed to study the economic feasibility of a proposed extension of Berlin U-Bahn Line U7 south from Rudow to Berlin Brandenburg Airport.

The study is to be funded by stakeholders including the Länder of Berlin and Brandenburg, local authorities and the airport operator. The aim is to produce a cost-benefit analysis which would be needed to apply for federal funding for the project.
METRO REPORT INTERNATIONAL, July 20

BILBAO, SPAIN

Line 5 Trains Ordered

Euskotren has awarded CAF a contract to supply five Class 980 trainsets in 2026-27 for use on the future Bilbao metro Line 5. The 6.6-kilometer (4.1-mile) Line 5 is under construction between Sarratu and Gldakao in the eastern suburbs of Bilbao. The four-car meter gauge trainsets will be an updated version of Euskotren's current Class 940 cars, with wide gangways and updated technology.

The €60 million contract announced on July 13 includes the supply of onboard equipment to support ETCS Level 1 operation by the five trainsets as well as 28 existing Class 950 EMUs.
METRO REPORT INTERNATIONAL, July 13

CALGARY, CANADA

Light Rail Extension to Airport?

The provincial government of Alberta and the city of Calgary are partnering to study the optimal rail alignment between downtown and the Calgary International Airport.

The province allocated C$3 million in its 2023 budget to Calgary to lead The Calgary Airport Rail Connection Study. The study will include a ridership review, development and evaluation of different alignment scenarios and will identify the optimal connection from downtown to airport.

The technical study will include engagement with Canada Infrastructure Bank, the Calgary International Airport, Canadian Pacific Kansas City Railway and various private rail developers who are developing private project plans to connect downtown with the airport and the surrounding region.

SD160NG 2323 (Siemens, 2011) is about to enter the Sunalta Station on the 202 route on its trip to 69th Street. City of Calgary photo

A request for proposals is currently in market for an engineering consultant to assist with the study. Once a consultant has been selected through the competitive process, the study is expected to begin in October 2023 and be complete in August 2024.

Recommendations from the study will be provided to Calgary city council to help guide the city's short to long-term transportation and land use planning.
MASS TRANSIT, July 11

GERMANY

Coradia Stream EMUs Ordered

Alstom has signed a contract to supply 40 Coradia Stream high-capacity electric multiple units to Nahverkehrsverbund Schleswig-Holstein (NAH.SH), the integrated transport association that organizes the railway passenger transport in Schleswig-Holstein, on behalf of the state. The order also includes a full-service package for the trains' maintenance over a period of 30 years to ensure their availability. The contract is valued at close to €900 million. Furthermore, an option to order up to 55 additional trains with a corresponding full-service package is also part of the contract.

The four-car trainsets consist of two double-deck end cars and two single-deck cars. They are 106 meters (348 feet) long and can operate in multiple. The trains have a maximum speed of 160 kph (100 mph) and will be operated in two networks, each with an individual vehicle layout providing 360 and 390 seats, respectively, and thus considerably increasing the capacity compared to the trains in service today. Wide double-leaf doors facilitate a passenger access and egress.

The trains are built in accordance with the requirements of NAH.SH and introduce various features to improve the passenger experience. With air conditioning using antibacterial and antiviral filters, power sockets and Wi-Fi as well as improved mobile phone reception, they offer numerous amenities to ensure an excellent level of comfort. A seat reservation system and a live occupancy display function

Rendering of the Coradia Stream high-capacity electric multiple units for Nahverkehrsverbund Schleswig-Holstein. Alstom

further contribute to a pleasant journey experience.

Thanks to multi-purpose compartments in each car, the trains provide ample space for baby carriages and large luggage as well as room for two wheelchairs and up to 24 bicycles. The trains' accessibility ensures an equally high standard of travel comfort for all passengers. In the entrance areas of the single-deck cars, there are neither steps nor height differences that would require ramps. Each train is equipped with three lavatories, one of which is accessible to wheelchair users. Furthermore, each train set provides more than 40 dedicated seats for passengers with reduced mobility.
ALSTOM PRESS RELEASE, July 24

INDUSTRY

Akiem Orders 100 New Electrics

Alstom and Akiem European rolling stock leasing company have signed a framework contract for 100 Traxx Universal multi-system (MS3) locomotives. The firm part of the order includes 65 locomotives. The total amount of the framework agreement is up €500 million. Akiem confirms its leadership on the leasing European market and its ambition to contribute

Rendering of Akiem's new Traxx electric locomotive. Alstom

to the rail market's accelerating activities, with major investment on corridors from France to 12 other European countries.

The Traxx Multi-system locomotives benefit from optimized energy consumption and can run both freight and passenger operations at a speed of up to 160 kph (100 mph). They will cover operations in 12 European countries: Germany, Austria, Switzerland, France, Italy, Belgium, Netherlands, Luxemburg, Hungary, Poland, Czech Republic and Slovakia. As a unique feature for multi-system locomotives, a part of them will be delivered with the last mile feature enabling to access ports, terminals or industrial sites without the need of a shunting locomotive.
ALSTOM PRESS RELEASE, July 17

Railpool Orders 50 New Electrics

Alstom and RAILPOOL, one of Europe's leading rail vehicle leasing companies, have signed a contract for 50 Traxx Universal multi-purpose locomotives. The contract is valued at up to €260 million.

Rendering of Railpool's new Traxx electric locomotive. Alstom

The Traxx Universal multi-purpose locomotives can be operated for freight and passenger corridor services. Characterized by both high reliability and flexibility in combination with an optimized power consumption, the locomotives are a proven solution for efficient cross-border operations. Extended maintenance intervals allow for less interventions to ease operational planning, reduce costs and increase availability. The locomotives will cover operations in eight countries, namely Germany, Austria, Switzerland, France, Italy, Belgium, Luxemburg and Poland.

All locomotives will be equipped with the Atlas signaling system, Alstom's onboard solution for the European Train Control System (ETCS). This system enables operation on extended corridors with the broadest coverage of countries and lines, both in ETCS as well as for legacy system operation.
ALSTOM PRESS RELEASE, July 24

KASSEL, GERMANY

Škoda Trams Ordered

Kassel operator KVG has awarded Škoda Group a €88 million firm order to supply 22 trams, with options for 18 more.

The bidirectional low-floor trams will be 30 meters (98 feet) long with four doors per side, and will be equipped for working in multiple or with a trailer. They will be among the first trams to be equipped with an anti-collision system, which Škoda Group presented at the InnoTrans 2022 trade fair.

Rendering of Kassel's new trams. Škoda Group

This creates a "virtual tunnel" in front of the vehicle within which static and dynamic obstacles are detected. The driver is then alerted and the emergency brake activated.

LiDAR is used for 3D mapping of the surroundings within a range of 100 to 150 meters (328 to 492 feet) horizontally and vertically. An inertial measurement unit feeds information about the tram's movements, and a camera provides high-resolution 2D images to capture more detail.

The first of the trams is scheduled for delivery in 2026, for entry into passenger service the following year.
METRO REPORT INTERNATIONAL, July 24

LONDON

Additional Cars for Docklands

Transport for London has exercised an option for CAF to supply a further 11 automated light metro trainsets for the

Detail of Melbourne's rail system map showing the route of the Metro Tunnel in a dashed line. Victoria Department of Transport and Planning

Docklands Light Railway network in the east of the capital.

TfL ordered 43 walk-through driverless trainsets from CAF in June 2019, with options for up to 34 more. Of the initial batch, 33 were ordered to replace existing stock and 10 to increase capacity.

The follow-on order for a further 11 which was announced on June 30 is supported by funding from the government's Department for Levelling Up, Housing & Communities, in order to support the development of 10,000 new homes across the DLR network, particularly in the Royal Docks and on the Isle of Dogs.

The five-car B23 trainsets for 750v DC operation have wide gangways, real-time audio and visual passenger information, air-conditioning and mobile device charging points. There are three multi-purpose areas for baby carriages, bicycles and luggage, and three dedicated wheelchair spaces. Each trainset can carry up to 792 passengers, with 141 fixed and 15 tip-up seats.

The first of the initial build was delivered in January, and TfL reports that two sets are now on test. All 54 are expected to be in service by the end of 2026, boosting overall capacity on the network by more than 60 percent.

METRO REPORT INTERNATIONAL, July 4

MELBOURNE, AUSTRALIA

Testing begins on Metro Tunnel

The project to build Melbourne's 9-kilometer (5.6-mile) Metro Tunnel reached a major milestone when the first two seven-car trains entered the twin-bore tunnel on July 25, traveling 1.7 kilometers (1.1 miles) from the South Yarra portal to Anzac station, directly under St. Kilda Road.

The project will transform Melbourne's rail network by diverting services on the Cranbourne, Pakenham and Sunbury lines into the new tunnel, reducing the number of trains operating on the City Loop. This will reduce journey times by up to 50 minutes.

The test runs mark the start of the next major testing phase for the project, which will continue until 2024. Over the coming months, crews will run trains between the five stations on the new line.

Testing will initially begin with basic operations such as stopping trains in the correction position at platforms, before the complexity will increase, from one train at low speed through to several trains at higher speeds in preparation for the project's opening in 2025, a year ahead of schedule.

The tunnel will provide capacity to accommodate over 500,000 more passengers a week during peak times across Melbourne's suburban rail network.

INTERNATIONAL RAILWAY JOURNAL, July 31

MILANO

Metro Line M4 Extended to Airport

An extension of Milano metro Line M4 has opened, providing a direct link from Linate airport to the city center.

The 5.3-kilometer (3.3-mile) first phase of M4 from the airport as far as Dateo opened in November 2022, but was initially isolated from the rest of the network.

On July 4 Infrastructure & Transport Minister Matteo Salvini and Mayor Giuseppe Sala opened a 1.7-kilometer (one mile) extension from Dateo to Tricolore and an interchange with M1 at San Babila in the city center, with celebrations including an afternoon of free travel.

Services will run every three minutes at peak times. Local bus services are being reconfigured from July 5.

A further 7.7-kilometer (4.8-mile) extension west to San

Cristoforo is scheduled to open in late 2024, taking the line to 15 kilometers (9.3 miles) and 21 stations. Completion of a 3.1-kilometer (1.9-mile) two-station eastern extension from the airport to Segrate is planned for 2026.

Line M4, also known as the Blue Line, is being developed under a design, build and maintain contract by the M4 consortium which includes civils contractor Webuild and railway systems supplier Hitachi Rail.

Hitachi Rail is supplying the driverless trains, CBTC, telecoms, ticketing and access control systems.

The 47 Class 4400 trainsets are similar to vehicles supplied to cities including København, Riyadh and Honolulu. The 750v DC third rail four-car sets are 50 meters (164 feet) long with a capacity of up to 500 passengers and a maximum speed of 80 kph (50 mph).

Hitachi Rail said the latest extension was expected to trigger a significant shift to public transport across the city by reducing the journey time to the airport from 33 to 12 minutes. METRO REPORT INTERNATIONAL, July 4

MONTRÉAL

REM Opens

Federal, provincial and municipal officials and stakeholders held a commissioning ceremony for the South Shore Branch of the Réseau express métropolitain (REM) light-rail system that will serve riders traveling from downtown Montréal to Brossard. The 16.6-kilometer (10.3-mile) automated rail line is the first phase of a larger build out that will eventually cover 67 kilometers (41.6 miles) and connect downtown Montréal to the south, west, north and serve Montréal-Trudeau Airport.

REM South Shore Branch is expected to serve 30,000 riders per day.

With REM being the largest public transit project undertaken in Québec during the past 50 years, a strong network of partners was needed to ensure its delivery. The government of Canada through the Canada Infrastructure Bank, CDPQ Infra, REM inc., the government of Québec, Aéroports de Montréal, and Hydro-Québec are all working to deliver the full REM system.

The project cost of the full REM build out is currently estimated at C$6.9 billion. The Canada Infrastructure Bank is investing a record C$1.28 billion into the REM public transit project and an additional C$300 million for the construction of the REM terminus station at the Montréal-Trudeau International Airport. Canada's Airport Critical Infrastructure Program is also investing an additional C$100 million in the airport's REM station.

In 2018, Groupe des Partenaires pour la Mobilité des Montréalais (Groupe PMM), the Alstom-led consortium with SNC-Lavalin, signed a contract with CDPQ Infra to deliver the REM project.

The contract includes supply of 12 Alstom Metropolis metro cars (106 two-car trainsets), Alstom's Urbalis GoA4 (Grade of Automation 4) driverless and automated communications-based train control solution, and Alstom's Iconis control center solution, as well as platform screen doors, Wi-Fi connectivity, cybersecurity, depot equipment and 30 years of operations and maintenance services, including HealthHub for predictive maintenance and fleet management.

Looking southeast along the Avenue des Cantons-de-l'Est at an outbound train to Brossard at the Station Du Quartier. This was on opening day, Monday, July 31. Sunny Zheng photo

Following the commissioning ceremony on July 28, the REM South Shore Branch opened for a free preview from July 29-30 where the public was able to experience the new light-rail service. REM started regular operations the morning of July 31. MASS TRANSIT, July 31

OTTAWA, CANADA

Confederation Line Shut Down

Ottawa's light rail Confederation Line will remain closed at least another week, city officials said on July 24, and a long-term fix for the bearing problems that plague the system could take a year.

The Ottawa Citizen reports that Renée Amilcar, Ottawa's general manager of transit services, said service could gradually resume beginning July 31 if three conditions are met:

- Inspections have been completed on the entire fleet of light rail vehicles. As of Monday morning, July 24, 44 of the 45 cars had been inspected, but six required further examination out of an "abundance of caution;"
- An analysis of the wheel hub which led to the system shutdown on July 17 must be completed by manufacturer Alstom. That is expected July 28;
- Alstom and system operator Rideau Transportation Group (RTG) must provide revised safety notes on operation. That is also expected by the end of the week.

Meanwhile, Alstom and RTG have committed to a redesign of the axles on the Citadis Spirit light rail equipment. A preliminary design has demonstrated the axle can be strengthened, Amilcar said; detailed design work and

Citadis Spirit 1127 (Alstom, 2019) is arriving at the western terminal at Tunney's Pasture on the first day of service, September 14, 2019.
Yuri Maller photo

development of a prototype should be completed within 12 months, but extensive testing will be required. RTG, which built the Confederation Line and has a 30-year contract to maintain it, will absorb the cost.

The light rail system was shut down abruptly July 17 when an axle bearing problem was discovered during routine maintenance. Bearing issues have played a part in two derailments that are part of the Confederation Line's problem-plagued history.
TRAINS, July 25

PARIS

Line 15 South Operator Selected

Transport authority Île-de-France-Mobilités has selected the ORA consortium of RATP Dev, ComfortDelGro and Alstom as preferred bidder to operate the future Grand Paris Express automated metro Line 15 South. The decision is due to be approved by the transport authority's board on July 18.

The joint venture was formed in 2020 to bid for Grand Paris Express operating contracts, with RATP Dev having the majority stake. The Line 15 South contract will include a two-year pre-operating phase ahead of the planned opening of the line at the end of 2025, followed by six years of operation.

The orbital line will run for 33 kilometers (20.5 miles) from Pont-de-Sèvres to Noisy-Champs, with 16 stations all offering interchanges with the current network. Services are expected to run at up to 110 kph (68 mph), with a train every 190 seconds at peak times.

Alstom is supplying 25 six-car trainsets. These will be maintained at a new depot in Champigny, where the first trainset was delivered on June 22.
METRO REPORT INTERNATIONAL, July 11

Line 15 West Construction Contract Awarded

Automated metro project promoter Société du Grand Paris has awarded the Intencités15 consortium a design-build contract for civil works on the first section of the orbital Line 15 West, running from Pont de Sèvres on Line 15 South to La Défense.

The €2.7 billion turnkey contract announced on July 13 covers 14 kilometers (8.7 miles) of tunnels, 16 service buildings and five stations at Saint-Cloud, Rueil-Suresnes Mont-Valérien, Nanterre La Boule, Nanterre La Folie and La Défense.

The contract requires 20 percent of the work to be undertaken by local SMEs. More than 2,000 people will work on the project at the peak of construction, with 10 percent of the hours allocated to people on employment programs. The consortium said it has an "ambitious" plan to reduce its environmental footprint, and would mostly use low-carbon and very-low-carbon concrete.

Opening is planned for the end of 2031.
METRO REPORT INTERNATIONAL, July 18

POLAND

New Electric Locomotives Ordered

Polish national long-distance passenger operator PKP Intercity has ordered five more type E4MSUa multi-system electric locomotives from Newag. These locomotives are in addition to the 10 ordered in October 2021 which has increased the total contract value from Złotys 258.6 million to Złotys 388 million.

The new 200 kph (124 mph) locomotives will be equipped for operation on lines electrified at 3kV DC as well as 15.7kV and 25kV AC. The locomotives will also be equipped with ETCS Level 2 and a remote diagnostics system that will allow real-time monitoring of locomotive operation, which will aid maintenance planning.

The contract between PKP IC and Newag requires the manufacturer to obtain certification for the locomotives to operate in Poland, Germany, Austria, the Czech Republic, Slovakia and Hungary.

Once approved for use in Germany and the Czech Republic, the new locomotives will be used on the following routes: Warsaw-Berlin, Przemyśl-Berlin, Gdynia-Berlin, Gdynia-Warsaw-Katowice-Vienna (on the section to Bohumín, Czech Republic) replacing older and leased locomotives.

The locomotives will also be operated on major domestic routes, such as Warsaw-Gdynia, Warsaw-Poznan, Warsaw-Wroclaw, Warsaw-Katowice, Warsaw-Krakow.

Newag has previously supplied 30 3kV DC-only versions of its Griffin locomotive to PKP IC which designates them as class EU160; another 20 of these locomotives were ordered in March 2023.

Both orders form part of PKP IC's Złotys 27bn rolling stock investment program which aims to double the size of its fleet by 2030.
INTERNATIONAL RAILWAY JOURNAL, July 8

Rendering of PKP's new E4MSUa electric. Newag

SOFIA, BULGARIA

Metro Line 3 Trains Ordered

Sofia metro operator Metropolitan JSC has awarded the Simetro consortium of Siemens Mobility and Newag a €68 million contract to supply a further eight trainsets for Line 3.

The order announced on July 20 will take the Line 3 fleet to 38 Inspiro trainsets ordered in three batches. The latest sets are needed for the €270 million phase four of the line. This comprises a six-kilometer (3.7-mile) six-station extension from the Military Academy at Evlog through the Slatina housing estate to Tsarigradsko Shose, and is scheduled to open in second half of 2026.

A previous order of Inspiro SF metro cars for Sofia were seen at the 2018 InnoTrans exhibition in Berlin. Siemens photo

The trainsets will be 60 meters (197 feet) long and 2.65 meters (eight feet, eight inches) wide, with the air-conditioned interiors having longitudinal seats and 12 wide doors on each side.

The floors will be made of a cork and aluminum composite to reduce weight and dampen noise. They will be fitted with Trainguard MT onboard CBTC equipment, and will have a maximum operating speed of 80 kph (50mph) with electrodynamic braking almost to a stop. The car bodies will be manufactured by Siemens Mobility in Wien, with final assembly and testing at Newag's plant at Nowy Sącz in Poland.
METRO REPORT INTERNATIONAL, July 20

TORONTO

Scarborough Line Derailment

The Toronto Transit Commission (TTC) says it is bringing in external experts to review what caused a Scarborough Rapid Transit (RT) train car to derail Monday, July 24, with the transit agency even considering shutting the line down permanently, months ahead of its scheduled decommissioning.

Five of the 45 people onboard were hurt when the rear car separated from the rest of the train and derailed just south of Ellesmere Station. The injured people were treated for "severe bumps and bruises" and taken to hospital as a precaution.

The derailed rear car of a Scarborough RT train. CBC photo

The TTC has replaced all trains with shuttle buses running from Kennedy to McCowan Stations. The closure will remain in place until further notice. The agency has already begun exploring what went wrong with the help of outside experts who specialize in train derailments. A TTC spokesperson stated that there are internal conversations happening about whether the light rail service will be resumed at all.

TTC's Line 3, the Scarborough RT, is a 6.4-kilometer (4.0-mile) rapid transit line with six stations that opened in 1985. Its trains have been in service 10 years past their design life, according to the TTC's own website. The line is scheduled to be decommissioned in November and is set to be replaced by buses until the Scarborough Subway Extension is finished, likely in 2030 at the earliest.

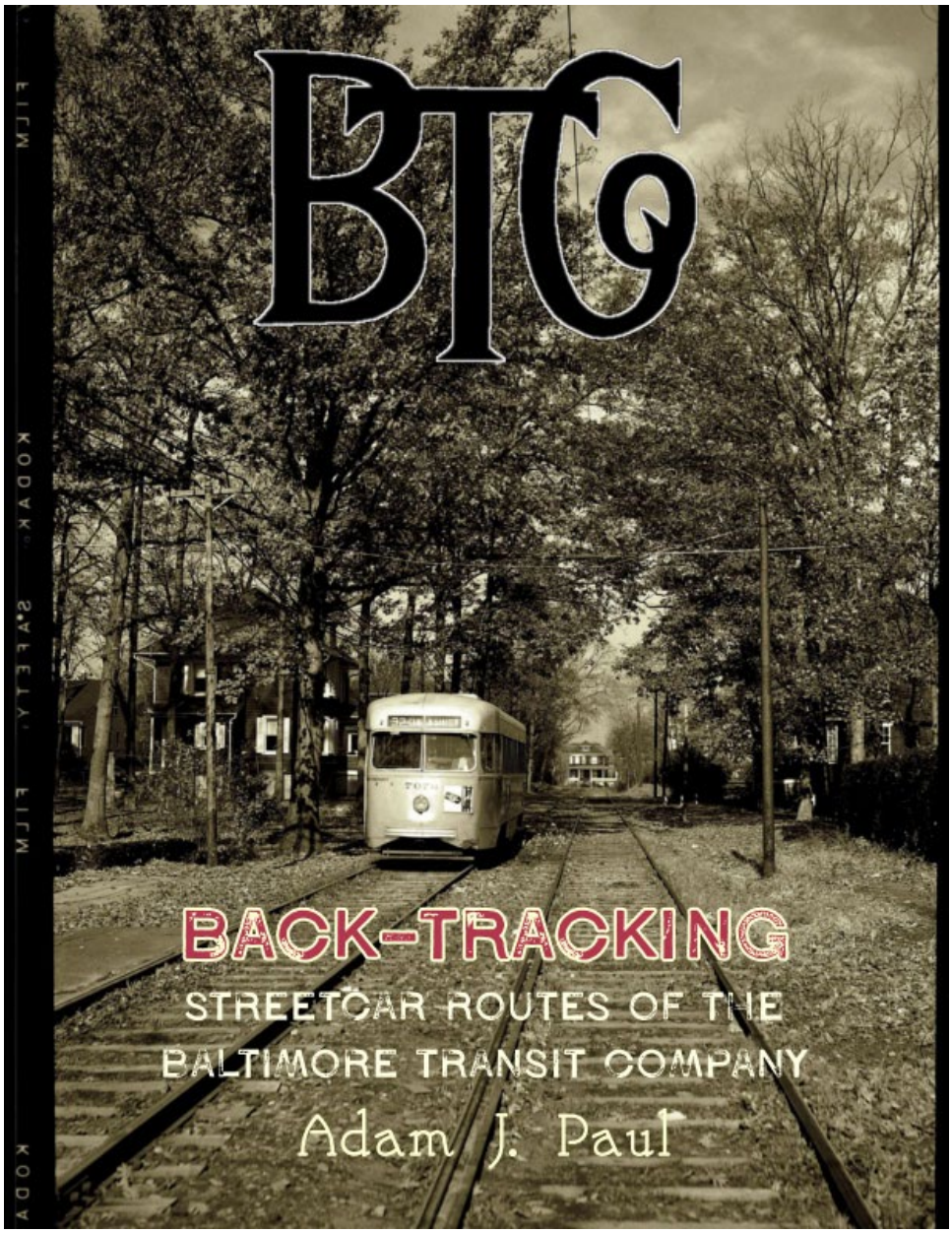
The November timeline would give the city time to prepare, including altering traffic signals and installing more rapid bus lanes. It also would give the TTC leeway to reroute other buses and allocate the staff and resources needed to operate the replacement bus network.

The TTC currently has capacity to move up its timeline if need be, but cautioned it would take some time to implement the bus network that it intends to replace the RT.
CBC NEWS, July 24

Book Review

By Paul Grether

Back-Tracking: Streetcar Routes of the Baltimore Transit Company
by Adam J. Paul, published in spring 2023 as a self-published book, softcover, 126 pages, color and black & white. ISBN 979-8-21-128999-4.



As acknowledged by the author in the introduction, Baltimore streetcar history has already received coverage in many books. *Back-Tracking* takes a new perspective. This is a historical route-by-route guide of the system with detailed descriptions. Included are "Artifacts" describing leftover infrastructure of the streetcar era that still exist and individual route histories. The text is peppered with small anecdotes about topics such as the historic photographic equipment used for the pictures, biographies of transit officials and route design. Also covered is the story of the conversion of the system to bus (with a detailed timeline), a description of the unique all-night service, a list of car houses and car allotments by route and year, PCC car renumbering, fantrips, a bibliography and a glossary.

One of the complaints with some works published about transit history is the lack of maps to put the subject matter in geographic context. This is odd given that transportation systems depend on maps as an integral means to plan service, determine right-of-way ownership, communicate with customers, and so many other critical functions. This book has no shortage of maps, which is its major strength. A 1945 ERA track map of Baltimore forms the basis of the many cartographic route descriptions.

The layout, design, and photographic reproduction quality is excellent. About 25 percent of the pictures are color and other ephemera are faithfully reproduced. Caption data is detailed. Despite being a softcover, Adam Paul's book achieves a "coffee-table" level of design quality.

In addition to Baltimore streetcar history, if you are interested in re-tracing urban streetcar routes this is an excellent guide. The book will also appeal to those with an interest in streetcar era city history, historical photographs, and the politics and process of the scrapping of a large urban rail transit system through bus substitution.

Link to book information: https://www.libib.com/u/grether?solo=112093744.

Note: A pre-publication copy of this book was provided to ERA for this review.

Travels with Jack May

Britain and the Baltics — Part XVIII

By Jack May (Photographs by the author)

Tuesday, August 22 (continued)
After our round trip on route 2 Julien, Karl-Heinz and I rode route 1 to Carhouse 5 and arrived a little after 1:30 PM, the time the group was supposed to gather, a half-hour before the afternoon fantrip was about to start. That gave us a little time for more photos.

(As I mentioned in the previous installment, the car numbers assigned to Riga's rolling stock contain five digits, with the first numeral being "3" or "5" for passenger trams (depending on which carhouse they are assigned) and "8" for work cars. Rob Hutchinson indicated that the next three digits of the passenger cars are actually their unique number (there is no duplication), which raised the question of what the last (fifth) digit represents. I guessed that perhaps it could be a mathematical check digit, although I determined the numbers do not directly compute into the popular mod 10 or mod 11 schemes. So I would be greatly appreciative if any readers know or can discover the answer to that question. Rob further indicated that the middle three digits (the actual car number) are 000–190 for Tatra T3s, 203–218 for unrebuilt T6s and 501–530 for rebuilt T6s. The Škoda low floors are numbered 701–720 for the three-section units and 801–806 for the four-section cars.

Another question I was asked is whether those Riga's cars equipped with poles use a fixed or swiveling trolley. The answer is swiveling, which is similar to the harps used on trolleybuses.)

Rail grinder 88001 still looks like it could haul passengers. The two-tone blue livery is reminiscent of the color scheme used for New York City buses in the recent past.

We had a pair of Tatra T3 PCCs for the charter, plus a bright and shiny T3 work car that followed us out route 10. We spent a long time at the loop that encircles Carhouse 4, which is no longer active but is used for storage of out-of-service equipment. Although the views below look like double track, the inbound rails are hiding behind the building on the right. The track on the left was being used by outbound route 10 cars.

The roof over the rear end of a Tatra T3 PCC was removed to fabricate this work car for the movement of materials. How about some seats in that section to supplement car 1901 for good weather sightseeing?

Our group rode in these two beautifully maintained Tatra T3 PCC cars that date from 1987.

We spent an inordinate time at that location, and by the time we continued on route 10 the clouds were rolling back in. But in any case it would have been difficult to have photo stops on the bi-directional single track and not hold up service, which was operating on an 18-minute headway at this time. As a result I went back to the line on Friday, during the period when the group had a fantrip on Riga's trolleybus system. Some photos from that visit on a dark, drizzly day, appear at the bottom of the following page.

Both of our chartered cars pause for photos at Telts iela, the location of the former Carhouse 4.

The VDVA held its "welcome" dinner this evening after the second fantrip was over. It was a buffet affair in the nearby Hotel Mercure, an upscale brand of the same chain, Accor Hotels, which also owns the Ibis, where we were staying. Accor sold its two budget American brands, Red Roof Inn (in 2007) and Motel 6 (in 2012). The multinational company still operates in North America though, but with upscale units including Novotel and Sofitel. It also has a historic connection with railroads through its current ownership of the Fairmont hotel chain, successor to Canadian Pacific and Canadian National hotels (such as the Chateau Lake Louise and Jasper Park Lodge), and it owns Pullman Hotels as well.

The last two photos were taken on Friday, August 25, three days later, and thus are out of chronological order. The series will continue with that day in Riga, our last, followed by our August 23rd and 24th visits to Latvia's other tramway systems, in Daugavpils and Liepaja.

(Above and below) The outer end of route 10 has seven stops and one passing siding before its terminal loop. Most of the line runs along Bauskas iela, the only arterial road in this quiet area. The lower photo shows the attractive Sterstu iela stop.