



BULLETIN

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New President for NYC Transit

Janno Lieber announced on March 23 the appointment of former Massachusetts Secretary of Transportation Richard Davey as the next president of New York City Transit. As president, Davey will oversee the 54,000-person workforce, as well as operations for New York City subways, buses, paratransit services, and the Staten Island Railway.

Davey served in several high-ranking transit leadership posts in Massachusetts and has a background in every mode of public transportation. He was Secretary and Chief Executive Officer of the Massachusetts Department of Transportation from 2011 to 2014, but Davey's transit career began at Massachusetts Bay Commuter Railroad Company (MBCR) in 2003. He was promoted to general manager in 2008, and customer complaints dropped 40 percent during his first year leading the agency. In 2010, Davey

accepted the general manager position for the Massachusetts Bay Transportation Authority (MBTA), the fifth largest public transit system in the country. While he was there, MBTA had its highest annual ridership since 1946.

As the Secretary and CEO of the Massachusetts Department of Transportation, Davey was responsible for the operation of the state's highways, bridges and tunnels, freight and passenger rail programs, 15 regional transit agencies, and 36 airports. Beyond his operational duties, Davey led a campaign to raise revenue, including helping to raise the gas tax in Massachusetts for the first time in 23 years, which provided stable operating budgets and the largest statewide investment in transit in the state's history.

His reputation as a management efficiency expert led local leaders to choose Davey to be the CEO of Boston 2024, the organization that led the campaign for Boston to host the 2024 Summer Olympics. Following his work
(continued on page 3)





Electric Railroaders’ Association, Inc.

Founded August 15, 1934 by E.J. Quinby
P.O. Box 3323,
New York, NY 10163
<https://erausa.org>

Editorial Staff

Editor-in-Chief

Jeff Erlitz

Associate Editor

Subutay Musluoglu

Circulation Managers

Robert Colorafi (Electronic)

David Ross (Print)

Contact

erausa.org/contact

Subscriptions

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Back Issues

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erausa.org/bulletin

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Important Announcements

ERA Trips Are Back!

Our 2022 convention, based in San Diego from July 7-10, is sold out. However, you may contact ERA via the contact form on our website to be placed on a waiting list.

ERA international tours also return in 2022 with an exciting trip to Greece, starting and ending in Athens from September 8-17 (leaving the U.S. on September 7). We will travel on high-speed railways, a narrow-gauge steam train, and a luxury tour coach. *Reservations must be received and paid for by April 30, 2022!* Check www.erausa.org/international-tours/2022 for details.

Cover Photo

World’s Fair Steinway Lo-V 5653 (St. Louis Car Company, 1938) is the last car of a southbound Flushing Local at 52nd Street on April 29, 1939. At this point, it is halfway through its trip from Willets Point Blvd-World’s Fair to Times Square. Photographer unknown.

Donations

The ERA Board of Directors express their deepest appreciation for seven member donations in February 2022.

\$200 to \$499

Rob Scaffardi

\$100 to \$199

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\$50 to \$99

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Up to \$49

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

Meeting

Our next Zoom Meeting is on Friday, April 8, 2022 at 7:30 p.m.

Presenting This Month: Jeff Erlitz

Our April Zoom program will be a PowerPoint presentation of the E.R.A.’s 2003 European trip to the Czech Republic. Cities visited include Prague, Brno, Liberec and Ostrava. Also included was a ride on the former Bechyně Railway, the first electrified railway line in the former Austro-Hungarian Empire. In 2003, coincident with our visit, this railway celebrated the 100th anniversary of its electrification.

Jeff has been a member of the E.R.A. for 52 years. In addition to being a Director of the Association, he has been the Editor-in-Chief of the *Bulletin* since he retired from MTA New York City Transit in 2018 after a career lasting 39 years.

You don’t want to miss this interesting meeting!

How to Join Our Zoom Meeting

A Zoom login button will be posted on www.erausa.org about five days before Jeff’s presentation. You can sign in at 7:15 p.m. The show begins at 7:30 p.m. 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.

as CEO of Boston 2024, Davey joined Transdev as a vice president and senior advisor before becoming a partner and director at Boston Consulting Group, where he served as one of the company’s top global experts on transit and the future of mobility.

His first day as President will be May 2. Craig Cipriano, who has served as Interim President since August 2021, will assume the role of New York City Transit Chief Operating Officer effective the same date.

Davey, who is 48, holds a B.A. from College of the Holy Cross and a J.D. summa cum laude from Gonzaga University School of Law. Davey lives with his wife and two rescue cats and has not owned an automobile in 12 years.

MTA PRESS RELEASE, MARCH 23

Rail News in Review

New York Metropolitan Area

NEW YORK CITY TRANSIT (NYCT)

New Entrance at Times Square S

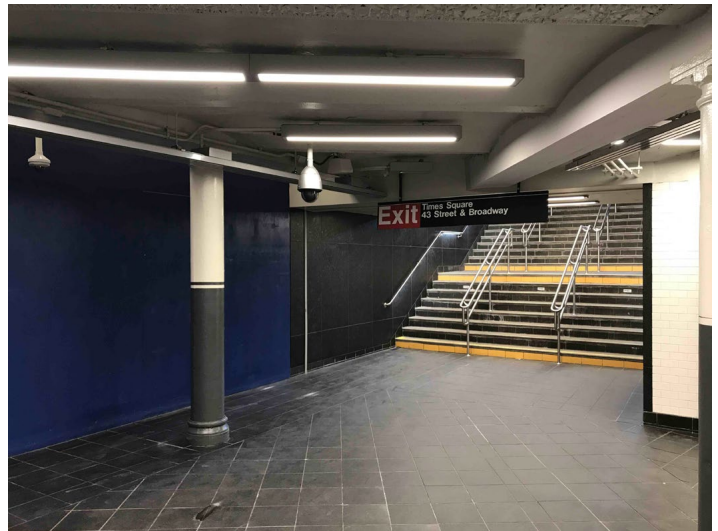
In mid-March the new entrance and fare control area opened to the public at the west end of Times Square’s shuttle station. The street entrance is located on the west side of Broadway between West 42nd and 43rd Streets in the pedestrian zone.



View looking northwest from the paid zone immediately west of the shuttle platform on March 29. The new street stairs are in the distance. Subutay Musluoglu photo



Looking southeast from the free zone towards the shuttle platform. The columns on the left used to be between Tracks 2 (left) and 1 (right). Subutay Musluoglu photo



Looking northwest in the free zone towards the triple-lane street stairs. Subutay Musluoglu photo

BMT Fourth Avenue Line Switch Work

Switch replacement work began on Monday, March 28 at 11:45 PM. Crews are replacing seven switches between 86th Street and Bay Ridge–95th Street.

On weeknights between Monday, March 28 and Friday, June 17, R train service will be suspended from 11:45 PM through 5:00 AM. Shuttle buses will replace service between 59th Street and 95th Street. N trains will provide service to the 45th Street, 53rd Street and 59th Street stations.

For eight weekends between Friday, April 15 and Monday June 6, R train service will also be suspended between 36th Street and 95th Street. Passengers are being advised to take D N Q trains, or free shuttle buses that will run between 95th Street and 36th Street. During affected weekends, shuttle buses will run every two minutes during the day, every four minutes during early evenings and every 10 to 20

minutes during late nights.
MTA PRESS RELEASE, MARCH 28

Another Pandemic-Era Ridership Record

The subway set a new record for single-day ridership since the Omicron wave hit New York City. The subway system carried 3,145,294 riders on March 1. This record beats the previous record set on February 10 when subways carried 3,118,851 riders, a period in which subway ridership surpassed 3 million on seven out of eight consecutive days. The latest ridership figure is a 56 percent increase since subway ridership hit a weekday Omicron low of 2,011,675 on December 27, 2021.

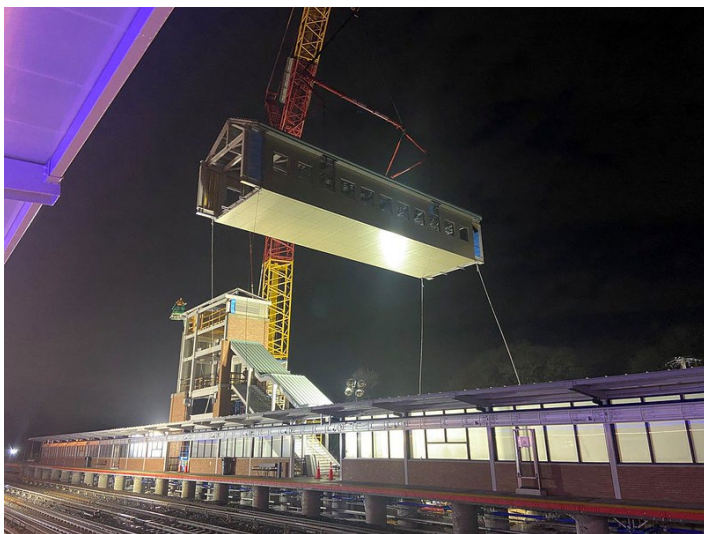
MTA PRESS RELEASE, MARCH 28

LONG ISLAND RAIL ROAD (LIRR)

Elmont/UBS Arena Station

A pedestrian overpass was installed at the new Elmont/UBS Arena Station over the weekend of March 19-20. When the station is complete, the overpass will connect the eastbound and westbound platforms and help LIRR passengers cross safely from one side of the station to the other.

The pedestrian bridge was designed to be wider than a normal LIRR overpass in order to accommodate large crowds. It was built by MTA Construction & Development (C&D) crews along the right of way nearby and they added the architectural panels and roofing to complete the structure. C&D crews piggybacked part of this project on a weekend Main Line outage where LIRR forces removed old switches and realigned track as part of the Third Track project. C&D crews had to “thread the needle” in between trains operating to and from Hempstead, by lifting and anchoring the completed 85-ton pedestrian bridge in less than two hours.



The new overpass gets lifted into position over all four Main Line tracks at Elmont/UBS Arena station during a two-hour break in train traffic. MTA photo

The LIRR also used a Track Laying Machine, a special piece of equipment that replaced old wooden ties with concrete ties from east of Bellerose station to Floral Park. These new, resilient concrete ties have the potential to require little or no maintenance for decades.

Elmont/UBS Station, the first new LIRR station built in almost 50 years, began service to coincide with the New York Islanders first home game in November 2021 at the brand-new UBS Arena.

Currently, only the eastbound platform is open for service. Service at the station will increase later this year when the westbound platform opens. At that time, the station will begin full-time year-round service to the local community and will begin to provide westbound service to and from events at UBS Arena and Belmont Park. Long Islanders who live east of Belmont on the Hempstead, Oyster Bay, Port Jefferson and Ronkonkoma (Main Line) Branches will have a one-seat ride straight to events for the first time. This will reduce travel times and is expected to increase the number of event attendees who use public transportation, helping alleviate traffic congestion on Long Island.

When both platforms are complete, the new station will feature two 12-car-long high-level platforms with canopies, elevators that are compliant with the Americans with Disabilities Act, USB charging stations, Help Points, security cameras, digital signs with train arrival information, Wi-Fi and a state-of-the-art snow melting system embedded in the concrete of the platforms to ensure they remain free of snow and ice during winter storms

MTA PRESS RELEASE, MARCH 21

Main Line Third Track Update

Also over the weekend of March 19-20, the single crossover switch between Tracks 1 and 2 at Divide 1 Interlocking was removed from service. This crossover had mainly been used by westbound trains that operated on eastbound Track 2 between this point and Nassau 3 Interlocking (formerly in Carle Place and now in Mineola) during single-track operations.

The whole Divide 1 area is now being reconfigured. The new third track will be installed on the north side of the right of way from this point to west of the Urban Avenue underpass in New Cassel. Two new single crossover switches will be installed to provide a straight path, as it were, from eastbound Track 2 to the soon-to-be-electrified “Runaround” Track, east of the Wantagh Parkway overpass.

Over the weekend of March 26-27, the west end of the first of these new crossovers, between Tracks 2 and 1, was installed.

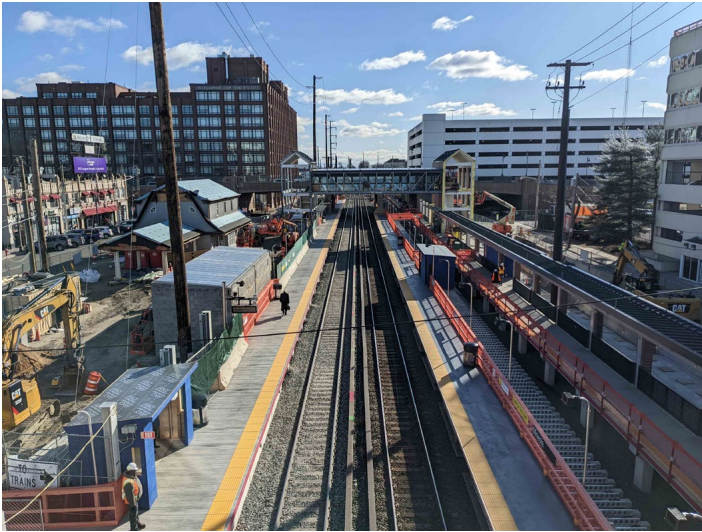
On Monday, March 28, station operations at Mineola were shifted from the western remnants of the original platforms, with their temporary extensions further to the west, to the newly-constructed permanent platforms at the east end of the station.

As was done at New Hyde Park, Merillon Avenue, Carle Place and Westbury, the eastbound platform is a temporary

one built over a section of newly-installed third track. It is connected to the permanent eastbound platform via “bridges” over the third track.

The new westbound platform actually has a short temporary extension of roughly 170 feet on its east end so that it can accommodate eight cars. The temporary eastbound platform also accommodates eight cars.

Over at Westbury, construction has started on two new pedestrian overpasses. One is at the extreme eastern end of the station and the other one is located more towards the center.



Looking east from the existing overpass to the Mineola Intermodal Center on Monday morning, March 28, the first day of shifted station operations. The new permanent westbound platform is on the left. The temporary eastbound platform, built partially over the new third track and connected to the permanent eastbound platform via several “bridges,” is on the right. Sunny Zheng photo

Other New LIRR Construction

Bids were opened on March 11 for Contract 6478, Design-Build Services for LIRR ADA Stations Improvements Package #1. This project aims to address deficiencies in accessibility and update station elements to comply with Americans with Disabilities Act (ADA) codes and standards as well as bring various station elements into a state of good repair at nine stations. These stations are Amityville, Copiague, Lindenhurst, Locust Manor, St. Albans, Valley Stream, Laurelton, Massapequa Park and Auburndale. The oldest of these stations, St. Albans, was opened in October 1935, 87 years ago and many years before the ADA was passed into law.

Bids are scheduled to be opened on April 7 for Contract 6382, Design-Build Services for Hall Interlocking Expansion. The work includes, among other things, new track, new turnouts and crossovers, modifications to and/or reconstruction of the existing Atlantic Branch retaining walls flanking E-Yard (the two stub-end tracks just east of Jamaica station), various utility infrastructure improvements, and

state-of-good-repair work on the existing Atlantic Portal tunnel structure east of 150th Street, the 150th Street Bridges, and the Guy R. Brewer Boulevard Bridge, as well as bridge infills at that same bridge to support future track reconfigurations.

Lastly, bids were scheduled to be opened on April 18 for Contract VS250, Interim Maintenance of the East Side Access (ESA) Project-Part 2. This work is to be performed on assets located on ESA Project territory before the revenue service date while the construction, testing and railroad training are still ongoing, and possibly for a few months after the revenue service date. This contract includes preventive maintenance tasks, operation tasks and 24/7 service for unanticipated corrective repairs as needed on all assets included in the contract. The contractor shall be able to respond to and address emergency issues and non-emergency issues under a Service Allowance. The assets in Contract VS250 include but are not limited to, the following: mechanical and plumbing, electrical, communication, fire protection, security and facilities. The contract includes performing operations for the chiller and steam plant, tunnel ventilation system, and the Grand Central Terminal building management system and automatic temperature control.

ALL OF THE ABOVE ITEMS, MTA CONSTRUCTION & DEVELOPMENT WEBSITE, MARCH 24

METRO-NORTH RAILROAD (MNR)

Dobbs Ferry Culvert Work Completed

Crews have completed the permanent repairs of a 110-year-old culvert in Dobbs Ferry and the track structure above it that was washed out by heavy rain and high winds from Tropical Storm Ida. The completion of the emergency culvert replacement enabled MNR to cut Hudson Line travel times through the area by up to five minutes on March 27, in conjunction with the new timetables that increased MNR service systemwide to 89% of pre-pandemic levels.

C&D actively managed the team of contractors and consultants who replaced the culvert in its entirety, where Wickers Creek drains into the Hudson, which serves as an emergency overflow drain during times of extraordinarily high rainwater events. All the work was undertaken while trains continued to travel over the culvert under slow speed restrictions. Following the completion of this work in early March, track crews installed rails, ties and ballast which was followed by surfacing the entire track area. They installed and tested the third rail and ensured all signal systems and Positive Train Control were working flawlessly.

The announcement brings an end to delays that began September 1, 2021, when Tropical Storm Ida unleashed torrential downpours on the region. MNR implemented a new schedule on the Hudson Line on September 20 to accommodate the culvert repair work and reduced line capacity.

MTA PRESS RELEASE, MARCH 23



Looking west at the new culvert over Wickers Creek in Dobbs Ferry on the Hudson Line. Marc A. Hermann photo



Downed catenary support near Maplewood. NJTransit photo

Other New MNR Construction

Bids were opened on March 16 for Contract 157548, Design-Build Services for the Replacement of Mobile Substation C-16 and associated switchgear. This work involves the design and construction for the replacement of the existing modular Substation C-16 with a new permanent (fixed) substation on MNR's New Haven Line in Mount Vernon, near the border of Pelham.

FOS Development Corporation is the apparent low bidder for Contract 181671, Upper Hudson & Harlem Station Priority Repairs, with a bid of \$26,301,955. These bids were opened on March 17. A combination of age and salt due to winter conditions has caused deterioration of station platforms, stairs, and associated components of each station. There are six stations on the Hudson Line and twelve stations on the Harlem Line that are part of this project. The repairs include full replacement of trackside and field-side platform edges, replacement or rehabilitation of piers, spall and crack repair, stair repair and rehabilitation, railing installation, wearing surface replacement, tactile warning surface installation, and painting.

MTA CONSTRUCTION & DEVELOPMENT WEBSITE, MARCH 25

NEW JERSEY TRANSIT

Storm Knocks Out Morris & Essex Line

On Monday, March 7, a storm with high winds caused a tree to fall and bring down a catenary support structure near Maplewood station. Initially, service from New York and Hoboken operated only as far as South Orange with no service on the Gladstone Branch. Service was enhanced on the Montclair-Boonton Line to help as an alternate.

This very limited service remained in effect through the week and weekend of March 12-13. To make matters worse, over that weekend another storm brought down another tree, damaging the catenary near Mountain Station. Fortunately, the catenary structure itself was not damaged.

Partial service was finally restored to Dover on Tuesday, March 15, with Gladstone Branch trains shuttling between Gladstone and Summit. Beginning Thursday, March 17, additional service was restored, enabling through service from Gladstone to New York and Hoboken. Full service was finally restored on Friday, March 18. The Montclair-Boonton Line also resumed regular weekday service on Friday after having been enhanced during the shutdown.

NJ TRANSIT PRESS RELEASES, MARCH 11-17

Other US Systems

BOSTON

First Segment of Green Line Extension Opens

Local, regional and federal officials joined other project stakeholders and community partners to celebrate the opening of the Green Line Extension (GLX) Union Square Branch with a ribbon-cutting event at the Union Square Station and Lechmere Station on Monday, March 21.

The GLX Project extends the Green Line approximately 4.7 miles along two branches – the Union Square Branch and the Medford Branch – from the relocated Lechmere Station in East Cambridge. The Medford Branch of GLX, which is anticipated to open in summer 2022, will run approximately 3.7 miles parallel to the Lowell Commuter Rail Line to College Avenue in Medford. Seven new stations were constructed as part of the project, including the relocated Lechmere Station, along with a new vehicle storage and maintenance facility in Somerville.

Union Square station will be served temporarily by the Green Line's E service from Heath Street, but will switch to the Green Line's D service from Riverside later this year when testing concludes on the new Medford Branch.

The Union Square branch is the first of two segments to be completed on this \$2.3 billion design-build. STV serves as the lead designer for GLX as part of the design-build

team led by Fluor Corporation/Middlesex Corporation/Herzog Contracting Corp/Balfour Beatty joint venture (GLX Constructors).

The GLX design-build program included the design and construction of a vehicle maintenance facility, an administration building, three traction power substations, a viaduct with more than 50 spans, seven stations, six bridges and a community path with a pedestrian bridge. STV was able to overcome multiple design challenges, delivering a sustainable and reliable new transit system while also responding to the requests of residents by providing bicycle and pedestrian amenities that will connect to other communities, all within an extremely narrow corridor that cuts through the most densely populated area in New England.



On the morning of March 21, Type 7 3619 (Kinki Sharyo, 1986) is about to leave the Union Square station on a Line E trip to Heath Street.

Sunny Zheng photo

Once fully completed, Green Line trains will operate every five to six minutes in the peak periods, providing fast and efficient service in areas that did not previously have access to reliable public transit. GLX will also significantly reduce vehicle emissions on the road by supporting anticipated increased ridership and dramatically improve local and regional air quality when GLX is complete. About 20 percent of Somerville's population is within walking distance of rail transit today, and 80 percent will be within walking distance to a station at the completion of the project.

It should be noted that the first attempt to build GLX was cancelled due to high cost. GLX was subsequently procured through a framework which set strict limitations on the project's total cost while allowing bidders to include additive options ensuring the MBTA could procure a project that

maximized the benefits without jeopardizing its budget. In addition to track infrastructure and seven station stops, construction included six additive options: platform canopies, additional elevators at select stations, public art, an extension of the community path with additional connections and an enhanced vehicle maintenance facility.

The total project cost is nearly \$2.3 billion, which includes other project components such as real estate, professional services, contingency and the procurement of 24 new trolleys to augment the existing Green Line fleet. When fully complete, GLX will have installed 100,000 railroad ties, 21,000 linear feet (nearly four miles) of pilings, 22 million pounds of steel (which includes 16.5 million pounds of steel girders), 17 miles of permanent track and two miles of multiuse community path.

MASS TRANSIT, MARCH 22

Orange and Green Line Service Suspended After Structure Collapse

Service on the Orange and Green Lines was suspended on Saturday, March 26 through the Haymarket station in downtown Boston after a partial collapse of the Government Center parking garage above the station. The building is undergoing demolition for a development project known as Bulfinch Crossing. The garage spans Merrimac Street between Sudbury and New Chardon Streets.

Orange Line service resumed on Tuesday, March 29 with trains bypassing Haymarket station with a speed restriction in place. As of publication time, Green Line service remained suspended between North Station and Government Center.

A separate investigation of what, if any, impact the falling debris had on the integrity of the tunnels was delayed through the start of the week due to fears of damage severe enough to endanger inspectors.

A drone's video feed proved the tunnels were safe to walk and inspectors were able to determine the debris had fallen directly on top of the Green Line, but not close enough to the Orange Line to damage it.

MBTA WEBSITE, BOSTON GLOBE, MARCH 30

LOS ANGELES

Crenshaw/LAX Line Update

The Los Angeles County Metropolitan Transportation Authority (L.A. Metro) marked the substantial completion of two construction segments in the Crenshaw/LAX transit corridor project.

Construction has been nearly completed for the project between the C Line (Green) and 48th Street in Inglewood. A third and final section between 48th Street and the E Line (Expo) is anticipated to be substantially completed in the coming months.

Contractor Walsh-Shea Corridor Constructors has finished system integration testing to validate the proper operation of all equipment and systems, including train control signals,

underground station and tunnel ventilation, radio systems, back-up power, fire and smoke alarms, and electricity to trains and stations.



Map of the Crenshaw/LAX line. LAMTA map



P3010 1143 is seen testing along Florence Avenue in Inglewood on the Crenshaw/LAX line. LAMTA photo

The agency will begin its own a five- to six-month testing period for the new rail line. It started training Metro operations and maintenance staff in preparation for the line's future public opening in late summer 2022. An exact opening date has not yet been determined.

The agency also marked the phasing out of its Business Solution Center, Business Interruption Fund and the Eat, Shop, Play construction mitigation programs, which helped fund local businesses during the prolonged rail construction period for the 8.5-mile project. PROGRESSIVE RAILROADING, MARCH 31

MEMPHIS

San Diego U2 Car in Memphis

The Memphis Area Transit Authority (MATA) gave the city a preview on Sunday, March 29 of what their upgraded high-frequency light rail service will look like once they re-open the Madison Avenue rail line.

The new service will have one calling card in particular that has already been attracting a lot of attention from rolling stock aficionados on social media: the use of the Siemens-Düwag U2 streetcars.

MATA was testing the U2 cars on the Madison Avenue line over the previous weekend, as evidenced by photos shared on the transit agency's Twitter feed.



U2 1036 (Düwag, 1986) poses next to ex Melbourne W2 class 539 (M&MTB, 1928) outside MATA's maintenance facility on North Main Street and Mill Avenue. MATA photo

The U2 tests are the latest step in a dramatic turnaround for transit in Memphis. MATA shut down all light rail lines in Memphis after two trolleys caught fire in a six-month span during 2014. They initiated what they called a "total system renewal," aiming to set a national standard for vintage trolley operations around the country. MATA re-opened the Main Street trolley line in 2018.

MATA is expecting to open the new vintage trolley lines by the end of the year.

PLANETIZEN, MARCH 29

TACOMA

Brookville Liberty Car Arrives

The first of five all new Brookville Liberty NXT light-rail vehicles (LRV) have been delivered to Sound Transit for its Tacoma Link system.

The new LRVs will support the 2.4-mile Hilltop Tacoma Link Extension of the current 1.6-mile Tacoma Link line, slated to open in 2023.



The first of Brookville's Liberty cars for Sound Transit's Tacoma operation. Brookville photo

The 66-foot vehicles are part of a \$26.5 million contract for the design and build of the five LRVs for the extension. The Liberty NXT LRVs will expand the service from the Theater District to popular destinations such as the Stadium District, Wright Park and major medical facilities before reaching the Hilltop neighborhood.

The Sound Transit Tacoma Link LRVs will include an eight-foot-wide car body with seating for up to 26 passengers, including four accessibility seats for passengers with bikes, wheelchairs and the ability to comfortably transport more than 100 passengers. The new fleet will be ADA compliant with deployable bridge plates for easy boarding and roughly 68.57 percent low-floor available standing area.

Brookville will continue the manufacturing of the remaining four vehicles for the Hilltop Tacoma Link Extension. Deliveries of the Liberty NXT LRVs will continue through 2022 in preparation for the opening in 2023.

MASS TRANSIT, MARCH 23

International News

BUCUREȘTI

Tram Delivery Ahead of Schedule

The first of 100 Imperio trams being built for the București

network is nearing completion at the Astra Vagoane Călători factory in Arad, and is now expected to be delivered in early June.

The trams were ordered from a consortium of Astra Vagoane Călători and CRRC Qingdao Sifang in May 2021, with the €200 million (\$220.9 million) contract being partly funded by the EU. This envisaged an initial vehicle being delivered to the capital in August, with the remaining trams following at a rate of four per month.



Imperio trams at the Astra plant in Arad. Metro Report International photo

They are due to be deployed on routes 1, 10, 21, 25, 32, 40, 41 and 55.

A delegation from Societatea de Transport București recently visited the Arad factory to inspect progress with the 100% low-floor vehicles, which are 118 feet long with a capacity for 322 passengers including 56 seated.

They will be equipped with air-conditioning, CCTV, wi-fi and a passenger information system, and will have priority seats and areas for wheelchairs, pushchairs and bicycles.

METRO REPORT INTERNATIONAL, MARCH 31

BUDAPEST

Nyugati Station Redevelopment Plans Advance

In the February *Bulletin* we described the program to transform the Budapest region's rail network by the building of a tunnel until the River Danube to link the rail networks that lie on either side of the city. The work includes substantial work at Nyugati Station, involving the construction of a new set of underground platforms. Now, the dedicated agency which has been created specifically to see this project through, the Budapest Development Agency, known by its Hungarian acronym BFK, has selected a multi-discipline team of design and engineering consultants led by the British architecture firm Grimshaw.



Rendering of platform level. Budapest Development Center rendering

Special attention will be paid to the station's heritage, noted for its glass and metal trainshed designed and built by Gustave Eiffel in 1877. The work will improve and increase passenger flows by rationalizing existing, and creating new, internal spaces, while opening the station up with new entrance porticos along its east and west elevations. Retail spaces, a food hall, and new escalators and elevators will be inserted carefully into the station's historic fabric.



Rendering of mezzanine with restored train shed. Budapest Development Center rendering

The areas immediately surrounding the station will be softened with landscaping and parkland, providing a distinct and improved public realm, and fully integrating the station with the city as a whole. Existing connections to the adjacent Budapest Metro Line 3 station will be expanded and the aforementioned streetscape improvements will benefit pedestrian access to and from the tram lines across from the station.

The team led by Grimshaw includes Budapest based architects Nautes Architects, Canadian engineering firm WSP, Zürich based landscape architects Vogt, and UK based project management company Turner & Townsend. Grimshaw is well experienced working on signature railway stations,

having designed Eurostar's first London terminal at Waterloo Station back in the early 1990s, the recent rebuilding of London Bridge Station, Melbourne's Southern Cross Station, New York City Transit's Fulton Center, and the future High Speed 2 terminal at London's Euston Station.



Rendering of the view looking east towards the station. Budapest Development Center rendering

On a side note, Nyugati Station has become a critically important transit point for Ukrainian refugees fleeing the Russian invasion of their country.

RAILWAY GAZETTE INTERNATIONAL, MARCH 30

<https://www.railwaygazette.com/infrastructure/beautiful-but-usable-proposal-wins-budapest-nyugati-station-design-competition/61268.article>

CHEMNITZ, GERMANY

Second Generation Citylink Tram-Trains Ordered

Mittelsachsen transport authority VMS has awarded Stadler a contract to supply and maintain 19 Citylink tram-trains for use around Chemnitz, with options for 27 more.



Rendering of Stadler's new Citylink tram-trains for Chemnitz. Stadler rendering

The vehicles will be similar to Chemnitz's first generation electro-diesel Citylink tram-trains supplied beginning in 2014 by Vossloh's light rail business, which was subsequently

acquired by Stadler, but will be electric-only. They will use 600/750 V DC in the city area and 15 kV 16.7 Hz elsewhere, with a 900 kW rating and a maximum speed of 62 mph.

The three-section LRVs will be 123 feet long. They will have capacity for 236 passengers, including 88 seated, and four areas for pushchairs, wheelchairs and bicycles. There will be four double doors per side, with level boarding from 1¼ foot and 1¾ foot high platforms.

The tram-trains are scheduled to be delivered from mid-2025 for passenger operation from June 2026. They will be used on services from Chemnitz to Mittweida, to Glauchau via Stollberg and Oelsnitz, to Burgstädt and to Hainichen, once these routes are fully electrified. They will also be used on a planned future route to Limbach-Oberfrohna.

VMS Managing Director Mathias Korda said the vehicles would be more cost-effective and environmentally friendly than the first generation Citylinks, which will be dedicated to the non-electrified routes.

The overall costs of the vehicle procurement confirmed on March 31 is €234.5 million, including maintenance and the construction of a depot on Sachsen-Allee. This is being financed from the VMS's own resources, loans and the Land of Sachsen. Planning for the depot will begin this year, with opening scheduled by 2026.

METRO REPORT INTERNATIONAL, MARCH 31

GERMANY

Ulm-Wendlingen Neubaustrecke (New Railway Line) to Open by the End of the Year

The overhead catenary on Germany's newest high-speed railway, the Ulm-Wendlingen Neubaustrecke, was energized on January 31, and testing trials have started to prepare the line for opening on December 11. Though only 37 miles in length, the line forms a major component of the overall route between Stuttgart and München. It is engineered for 155 mph operation, which will enable a 15-minute reduction in running times between Frankfurt and München, shortening other long distance ICE trip times, as well as for French TGVs operating between Paris and München.

At its Wendlingen end, the new line meets the work of the Stuttgart 21 program, which is a major rearrangement of the regional network around Stuttgart and has as its centerpiece the conversion of Stuttgart's central station from a stub-end terminal to a through station and includes a new station at Stuttgart's airport. The Neubaustrecke will have a new station at Merklingen, which will be served by hourly Interregio Express Services. This station was not in the original plans for the line and was funded separately at a cost of €53 million.

Work on the Neubaustrecke began in May 2012 and has costed €3.7 billion. A major reason for such a high cost for a relatively short line is due to the amount of complex civil and structural works, with 37 bridges and viaducts, and over half the line is in tunnel driven through very challenging geology.

RAILWAY GAZETTE INTERNATIONAL JANUARY 21

TODAY'S RAILWAYS EUROPE, MARCH 2022

<https://www.railwaygazette.com/high-speed/test-running-to-start-on-ulm-wendlingen-high-speed-line/60763.article>

Deutsche Bahn Orders More High-Speed Trains

German national railway operator Deutsche Bahn (DB) announced on February 1 that it would order an additional 43 ICE3neo trains from Siemens, at a cost of a €1.5 billion. DB's CEO Dr. Richard Lutz made the announcement at an event at DB's Berlin-Rummelsburg shops to celebrate the unveiling the first of 30 new ICE3neo high-speed trainsets.



The new ICE3neo. Siemens Mobility photo

The base order was placed in July 2020 and all 30 trains for this order should in service by 2026. The contract included an option for up to 60 additional trains, and the 43 trains under this option should be delivered by 2029. Testing of the initial sets started in January, and it is anticipated that they will begin to enter service by the end of this year on services between Dortmund and München via the Frankfurt-Köln high speed line.

The ICE3 is based on the Velaro high-speed EMU platform, which is organized into four sub classes - 403, 406, 407, and 408. This particular order is designated as Class 408, also known as the Velaro MS (for multi-system), and the units are arranged as eight car half sets, allowing for formations of 16 car trains. They are equipped with a quad-voltage traction package capable of operating under 15 kV 16.7 Hz AC in Germany, Austria, and Switzerland; 3 kV DC in Belgium; and 1.5 kV DC/25 kV 50 Hz AC for use in both France and the Netherlands.

RAILWAY GAZETTE INTERNATIONAL, FEBRUARY 1

TODAY'S RAILWAYS EUROPE, MARCH 2022

<https://www.railwaygazette.com/traction-and-rolling-stock/db-orders-more-ice3neo-sets-as-first-unit-is-unveiled/60850.article>

DB to invest €13.6 Billion in Rail Infrastructure

Coming on the heels of the aforementioned news, DB has

also announced it will spend €13.6 billion on railway infrastructure in 2022, which represents a €900 million increase over 2021, and represents a new record spend for Germany. The budget will cover the renewal or upgrading of over 1100 miles of track, 2000 turnouts, 140 bridges, and 800 stations, all towards the creation of additional network capacity while also making the existing infrastructure more resilient. The work also includes the introduction of the European Train Control System (ETCS) on more segments of the German rail network and the building of a digital interlocking at Donauwörth, the first to control a section of high-speed line.

The ramped up investment is all towards achieving the objective of the *Taktfahrplan* - a new service plan to accommodate a doubling of DB's annual ridership by the end of this decade through the implementation of a national clockface timetable for Germany, similar to Switzerland. Prior to the pandemic, DB moved a record 151 million long-distance passengers in 2019.

RAILWAY GAZETTE INTERNATIONAL, FEBRUARY 10

<https://www.railwaygazette.com/infrastructure/germany-to-invest-136bn-in-rail-infrastructure/60927.article>

KATOWICE, POLAND

Tramway Contract Signed

Tramwaje Śląskie has awarded a consortium of Spaw-Tor, Silesia Invest and Grotex a 39.7 million złoty contract to build a 1.2 mile tram line along Grundmanna in the center of Katowice.



102Na 209 (Konstal, 1971) is seen operating on route 37 in downtown Katowice on May 28, 2006. This location is less than one half mile from the street where a new segment will be built. Jeff Erlitz photo

This will provide an alternative to existing routes, and reinstate a direct connection between the eastern districts and Park Śląski, the Śląski Stadium and the Tysiaclecia estate, which has been missing since the reconstruction of the market square.

The line will be mostly single track, with 0.4 miles of double-track and a viaduct over a motorway.

The project is being partly co-financed by the EU, and is scheduled to be completed within 14 months of the contract signing on March 16.

METRO REPORT INTERNATIONAL, MARCH 25

KHARKIV, UKRAINE

War Takes Its Toll

In addition to the untold suffering to the citizens of Ukraine, another casualty of the war was the destruction of at least one of Kharkiv's museum trams, MTV-82 844. It was built in 1960 by Rīgas Vagonbūves Rūpnīca in Riga, Latvia.

In passenger service, it usually operated on route 1. It was transferred to work service in 1971. In 2006 it was restored back to like-new condition for excursion service and renumbered 55. Two years later it was renumbered 055. In July of last year it was renumbered 844. It was wrecked in a rocket attack on the Saltovskoye tramway depot on March 3.



MTV-82 844 after the rocket attack on the Saltovskoye depot on March 3. Anonymous photographer via transphoto.org



MTV-82 844 in happier times (2008) in Kharkiv. Jack May photo

If the MTV-82 reminds you of old look General Motors buses, there's a reason for that. After the Second World War, a massive conversion from trams to trolley buses in many cities in the USSR occurred. To help out, the Motor and Automobile Research Institute developed a unified vehicle body for buses and trolleybuses, which was a copy of the ones produced by General Motors. After producing too many bodies, these were eventually adapted to be used for trams.



Another casualty of the rocket attack on the Saltovskoye depot on March 3, T6A5 8648 (ČKD Tatra, 1995) lays in ruins. This car was owned by Tekhnologii Elektrotransporta, LLC and was originally from Prague, where it wore the same number. It arrived in Kharkiv December 8, 2021. Anonymous photographer via transphoto.org

MONTREAL

Blue Line Extension

Société de transport de Montréal (STM) is moving forward with an eastern extension of the Montreal Blue Line with five new stations between Saint-Michel and Anjou, the extended line's new terminus.

New infrastructure plan



Map of the Blue Line extension. STM website

The C\$6.4 billion (US\$5.12 billion) extension is being funded in part by the province of Quebec, which will provide a C\$1.12 billion (US\$0.9 billion) grant to STM, which will be used to continue planning the extension, as well as for metro

asset maintenance programs and its universal accessibility program. The federal government committed C\$1.3 billion (US\$1.04 billion) toward the project through the Investing in Canada Infrastructure Plan.

The planned extension went through a review by an action group in 2021. The group consisted of representatives from Autorité régionale de transport métropolitain (ARTM), the city of Montreal, STM, the Société québécoise des infrastructures (SQI) and the Ministère des Transports (MTQ). The action group provided recommendations on how to best serve the mobility needs of residents in eastern Montreal. The recommendations included:

- The location of a secondary entrance kiosk at the Anjou terminal, east of Highway 25, which will allow an entire sector to have access to the Blue Line
- The maintenance of several local businesses in Anjou by relocating several structures of the terminal station
- Removal of incentive parking at Anjou station
- Maintenance of the shopping center at the intersection of Jean-Talon Street and Pie-IX Boulevard
- Integration with CDPQ Infra's planned REM de l'Est project

The province has authorized STM to issue a Request for Qualifications with the aim of awarding a contract for the main tunnel of the project.

The nearly 3.7-mile project is expected to open in 2029. MASS TRANSIT, MARCH 30

NAGASAKI

Unique Low-Floor Trams Ordered

Nagasaki Electric Tramway has unveiled its first Alna Sharyo Type 6000 tram, which it says is the first 100% low-floor car to have longitudinal seating throughout.

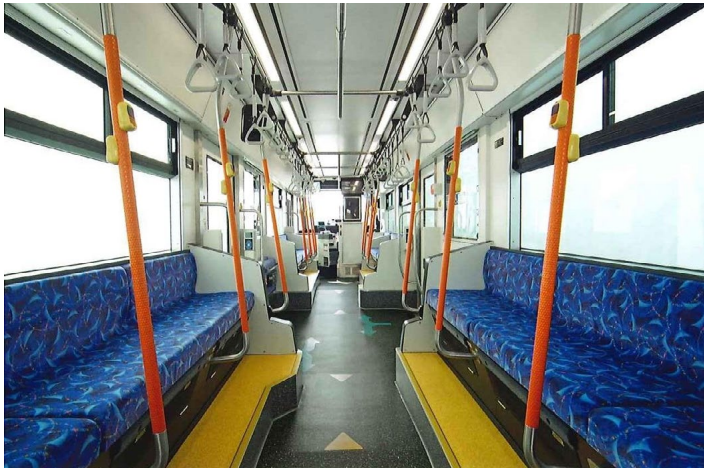
The single-section tram is 40 feet long, 7½ feet wide and 12¼ feet high and weighs 18 tons. It has a capacity of 28 seated and up to 34 standing passengers, and two wheelchair spaces.



Nagasaki's new Type 6000 tram. Metro Report International photo

Interior lighting is provided by surface-emitting LEDs, with a softer light than conventional LEDs.

Nagasaki Prefecture's financial constraints prevent it from ordering large batches of new trams. The Type 6000 is first new tram acquired by Nagasaki Electric Tramway since three Alna Sharyo Type 5000 Little Dancer cars in 2011, 2012 and 2019, which along with three Type 3000 cars supplied in 2004–2006 are the only fully accessible vehicles in the operator's fleet of 71 trams.



Interior of Nagasaki's new Type 6000 tram showing longitudinal seating. Metro Report International photo

Details of which services are operated by accessible trams will be provided on the operator's website and on the LCD monitors at 12 stops.

METRO REPORT INTERNATIONAL, MARCH 21

SWEDEN

New High-Speed EMUs Ordered, X2000 Trains Renewed

SJ, the national passenger train operator of Sweden, has awarded Alstom a SEK 12 billion (\$1.3 billion) contract for 25 high-speed EMUs, one of the largest rolling stock investments in Sweden's history. The new EMUs will be the fastest trains in Sweden, capable of speeds up to 155 mph. Sweden's rail ridership has doubled over the last 20 years, and though the pandemic reduced demand, this is seen as temporary and the new trains are seen as a necessity to cope with projected future demand.

The procurement is a complementary effort to the ongoing life extension overhaul of 36 X2000 high-speed tilting trains, which were first introduced in 1990. Originally built by then Swedish-Swiss train builder ABB, the X2000 trainsets are comprised of a power car and five to six coaches, capable of operating off both 15 kV 16.7 Hz AC catenary in Sweden and 25 kV 50 Hz AC catenary for operation into Denmark at operational speeds of around 125–130 mph. It should be noted that an X2000 trainset was brought over by Amtrak

in 1992–1993 for testing on the Northeast Corridor, and though the model was considered for a larger procurement, it eventually lost out to the purchase of Acela trains from Bombardier.

The refurbishment is being carried out by Swiss train builder Stadler at a cost of SEK 3.5 billion, and the work covers both a technical upgrade and an interior upgrade. The technical work is a complete renewal of the propulsion system and traction power package, as well as all electrical systems, cab signal systems, and a strengthening of the structural body, while simultaneously achieving a weight reduction. The comprehensive interior upgrade features a brand-new cabin layout with improved seating, digital displays, and luggage/bicycle storage.

Rebuilding existing high-speed trains at this scale is a daunting challenge, and some experts questioned the wisdom of the decision to rehabilitate 30+ year old trains instead of procuring new ones. Nonetheless, SJ is confident in their strategy and has high hopes for the program, expecting the X2000 fleet to serve for at least another 20 years.

The first refurbished train was unveiled to the public at Stockholm Central Station on November 16, and further deliveries are planned at a rate of seven trains per year until the last arrives in 2026, which is also when the first of the new EMUs are anticipated to enter service.

TODAY'S RAILWAYS EUROPE, JANUARY & FEBRUARY 2022

Travels with Jack May

Britain and the Baltics-Part II

by Jack May (Photographs by the author)

Tuesday, August 15

After an excellent night's sleep, I awoke to overcast skies and headed down, across and down again to the hotel's breakfast room, where the aroma of frying bacon whetted my appetite for the quintessential full English breakfast. There were a number of couples at other tables when I took my seat next to a window and related my order to one of the proprietors—one breakfast with tea but hold the baked beans. The fried eggs, sausage, bacon, grilled tomato, mushrooms and hash browns were delicious (and not too greasy), and while I ate, conversing with some of the others nearby, I saw the weather begin to brighten, and then turn to rain again. The other visitors were all on "holiday," and lived in cities not too far away and were curious about why an American would come to Blackpool.

Of course I mentioned my interest in the tramway, but also said I enjoyed the laid-back ambience of British resorts, and mentioned the Richard Gere, Jennifer Lopez, Susan Sarandon movie "Shall We Dance," which was shot in Blackpool (by Harvey Weinstein's company). The same atmosphere is also prominent in one of my favorite British flicks, John Osbourne's "The Entertainer" (starring Laurence Olivier),

which takes place in a similar setting, but further north in the resort of Morecambe (I guess they didn't want the trams to distract moviegoers from the drama).



Not the Blackpool Tower. After stopping at their Fleetwood terminal, Blackpool trams navigate a clockwise loop through streets, passing the Pharos Lighthouse, a 93-foot structure constructed in 1840. Despite being located on a residential street inland, it was used to guide ships safely through the treacherous sandbanks of a nearby estuary when properly lined up with a shorter lighthouse on the Irish Sea's beachfront.

I soon finished, and saw the hotel had all sorts of brochures about Blackpool, including several for the historic tram operation, which I collected. I returned to the room, washed up and packed, finally going back down to check out and leave my bags until just before train time, which was scheduled for 5:12 PM that afternoon. At about 9:00 AM I stepped out into bright sunlight for the six-block trek down Banks Street to the Promenade, where I would begin my day's activities on the tramway. As I walked the sky got darker and darker. I heard thunder and soon big drops of rain were bouncing off me. I spied the possibility of getting some

protection from the elements from the marquee of a theater and raced toward it, almost getting there before the skies opened up. The pounding thundershower lasted about 15 minutes, and then I saw blue sky in the distance.

First, a little about this resort city. With a population of about 150,000, Blackpool was once Britain's largest and most famous destination for vacation goers, welcoming literally millions (17 at its peak after World War II) visitors every summer to its beaches and other warm-weather amusement venues. Located on the Irish Sea, it had a network of tramway lines into my lifetime (which I rode in 1960), but by 1963 reduced to a single route, operating parallel to the seacoast northward for 11½ miles to the town of Fleetwood, where in former years a ferry operated to the Isle of Man. The line was especially popular in the summer, carrying large numbers of tourists, many from nearby mill cities like Manchester, Leeds and Sheffield, to and from its amusement piers and bathing beaches, past Ferris wheels, roller coasters and the iconic Blackpool Tower, symbol of the city.



(Above and below) Two scenes along shopping streets in Fleetwood. In the top view two Bombardier-built Flexity 2 trams pass each other on North Albert Street. That thoroughfare feeds into Lord Street, the location of the lower photo. Fleetwood's retailers appear to be quite prosperous.



But time and technology have not been good for Blackpool's tourism, as the advent of low-cost jet flights and packaged vacations to resorts in countries like Spain and Portugal,

where the weather is more dependable, has reduced the appeal of this community for holiday goers. The future of the tramway, whose infrastructure and rolling stock were aging, had been in doubt, especially after a series of accidents crippled the line (including a tram catching fire), which led to a shutdown in 2007. Fortunately, the government decided to modernize the last of Britain's legacy tramways and upgrade it to contemporary standards with new cars and a hefty reconstruction of its track and roadbed.

The resort city continues to attract famous performers to its entertainment venues and a proposal to introduce gambling a la Atlantic City was defeated (no doubt partly due to its "success" in that New Jersey seashore city). It puts a great deal of effort into its illuminations at the end of each summer, from late August to early November, where the city (and trams) are brightly lit up with over a million lights in unusual and attractive patterns and tableaux (see https://en.wikipedia.org/wiki/Blackpool_Illuminations). I witnessed it in 1960, and if I ever come back, I'd certainly bring a digital camera to record it.



After serving Fleetwood's business district, inbound trams are routed onto reserved track that first parallels a road, but then runs cross-country through fields and meadows like an interurban electric railway. It traverses the village of Cleveleys on private right-of-way along the side of a road to Blackpool. The location of this photo is the Lindel Road stop in Fleetwood.

The old traditional tram fleet operated for the last time on November 6, 2011, and on April 4, 2012 the new era began with 16 Bombardier Flexity-2 100-percent low-floor LRVs placed in service on the 38-stop line. Many of the heritage cars were retained and spun off to a separate organization, Heritage Tram Tours, which runs its own vintage tram service over portions of the line. I would ride both today.

From north to south the line operates in several milieus, starting with street running through a thriving traditional street-based commercial district of shops and services, to fast interurban-like reserved track between communities, and then along the paved seaside promenade past beaches and amusement venues to a terminal at the south end of

the city. Service runs every ten minutes and was heavily patronized on this August day. A branch is about to be constructed to bring trams from North Pier to the Blackpool North railroad station (basically through the neighborhood that houses the hotel I patronized) and two more identical Flexities have been added to the fleet for the extension. *Note: That 1800-foot long branch is scheduled to go into service later this year.* In addition, nine of the old Balloon double-deck cars from 1934 have been retained and modernized to handle summertime crowds (I saw one of them on the line later in the day).



(Above and below) Open-top Birkenhead tram 20, out for a test run, turns back just beyond the Cabin stop on the north side of Blackpool. The beautifully restored four-wheeler was built by G. F. Milnes in 1900, and is on loan to Blackpool from the Wirral Transport Museum and Heritage Tramway in Merseyside (which I would visit later in the week). Note the Irish Sea in the left background of both photos.



Still buffeted by strong winds and the occasional raindrop I walked over to the closest stop, North Pier, and soon a northbound tram appeared. I purchased a 24-hour ticket for £5 from the conductor and rode all the way to the end of the line, Fleetwood Ferry, watching the weather improve through overcast, mostly cloudy, partly cloudy to finally clear, which it remained for the rest of the day. I started my

photography there, working my way by foot and tram to the southern end of the line. See <http://www.urbanrail.net/eu/uk/black/blackpool.htm> for a map.



Blackpool Balloon 723 approaches its terminal at Cabin just before the heritage tram's 11:55 return to Pleasure Beach. The double-decker was built as part of an order of 27 such cars by English Electric for Blackpool in 1934 and 1935. Beloved and reliable, these trams constituted the backbone of the system's fleet until the Flexities came in 2012. Nine of them remain on call for operation during periods of high demand, while another seven are on the Heritage Tramway Tours' roster. A further few are in tramway museums. Note the yellow and green Heritage Tram Stop sign.

With a Heritage Tram Tours schedule in hand (which was among the many sightseeing brochures I Schrammed at the hotel), I continued toward Blackpool and saw there would be a 11:55 departure from the Cabin stop, and decided to photograph and ride it. Even though it was a bit early, I spied a museum tram through the windshield of my LRV and got off as planned at Cabin, at approximately 11:40. Alas, it was just a car out for a test run, and zipped past me, but I did get photos.

I eventually boarded Balloon car 723 when it came along and turned back on the advertised, paying the "guard" £3½ for a round trip to Pleasure Beach, the southern terminal of the heritage car service. The schedule of the vintage tram line (see <http://www.blackpoolheritage.com/httours/timetables/>) varies depending on the season, day of the week, and any planned special events. But on this typical summer weekday there were 20 scheduled round trips between North Pier and Pleasure Beach (on a 20-minute headway for the 12-minute run), with 4 extended further north to Cabin (5 more minutes). It should be noted that the running time over the entire transit line, from Fleetwood Ferry to Starr Gate, is 55 minutes, and heritage cars operate to Fleetwood for special events.

It was most enjoyable viewing the line from the railfan seat on the top deck, and I even took a photo or two from that vantage point, followed by more at the Pleasure Beach loop. By the way, the mission of Heritage Tram Tours, according to

its website:

Heritage Tram Tours is the custodian of the unique heritage tram fleet of Blackpool Transport – the last surviving first generation British tramcar fleet still on their original tramway. In co-operation with Blackpool Transport and Blackpool Borough Council, Heritage Tram Tours aims to retain the operation of vintage tramcars in Blackpool, alongside the new light rail fleet, for the enjoyment and educational benefit of future generations, and to work towards achieving charitable status through the formation of a charitable trust, to care for the trams in perpetuity.



The view through the glass of a rear window on the upper deck of the Balloon car I rode, showing the Manchester Road stop with a northbound Flexity LRV pulling away. Two of Blackpool's most important amusement venues are quite prominent in this photo, Blackpool Tower on the right and the "Big Wheel" on Central Pier at left.



Balloon car 715 lays over on the Pleasure Beach loop prior to its next run northward past the Tower to North Beach.

I continued on a regular car to the end of the line at Starr Gate (3 stops), returned to Pleasure Beach, and then rode another vintage car to the heart of the amusement area. That and more will be covered in part 3 of this report.

The History Corner

An occasional series showcasing a particular electric railway operation or locale. This month, we are featuring New York City Transit System's trolley operation in Brooklyn. All photographs here were taken by Max H. Hubacher (1900-1989) and are courtesy of the New York Public Library.



(Left) NYCTS 6176 (J G Brill, 1931-2) is southbound on Ashland Place, just south of Myrtle Avenue on August 9, 1945. It's operating on the Crosstown Line and is destined for Erie Basin. Above, a set of gate cars is stopped at the Navy Street station of the BMT Myrtle Avenue Elevated



NYCTS Peter Witt 8353 (J G Brill, 1925) just left Fulton Street and is heading west onto Joralemon Street approaching Brooklyn Borough Hall on a snowy and wet January 29, 1943. Operating on the DeKalb Avenue Line, it is destined for Park Row in Manhattan.



Peter Witt 8473 (Osgood-Bradley, 1925) is westbound on DeKalb Avenue at Washington Avenue. It's November 18, 1947 and this DeKalb Avenue car will in due time arrive at its Sands Street terminal.



A multi-modal scene on Livingston Street & Bond Street in Downtown Brooklyn. PCC 1028 (St Louis Car, 1936) is on the 67-Seventh route and is destined for 7th Avenue & 20th Street at the south end of Park Slope. Trolley coach 3093 (St Louis Car, 1948) is on the 45-St. Johns route and will terminate at Pennsylvania Avenue in East New York. The date is July 21, 1950.



It's Friday, August 18, 1950, and PCC 1087 (St Louis Car, 1936) is northbound on Vanderbilt Avenue at Lafayette Avenue on the 69-McDonald/Vanderbilt route. It will be terminating at Brooklyn Bridge.