

The Bulletin



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R-32 FLEET RETIRED WITH CELEBRATORY FINAL RUNS



Famous photo of the R-32 inaugural run from the New York Central's Mott Haven Yard to Grand Central Terminal's Track 37 on September 9, 1964, taken from the E. 149th Street overpass.
New York Times photograph



R-32 3785-3784 (Budd, 1964) is seen resting over the weekend at Jamaica Yard on June 8, 2002.
Jeff Erlitz photograph

This Month's Cover Photo:

R-46 5670 (Pullman-Standard, 1975-78) leads a southbound ① train to Coney Island at the Avenue J station on the Brighton Line on December 12, 2021.
Jeff Erlitz photograph

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After 58 years of service, the R-32s, nicknamed the Brightliners and among the oldest subway cars to operate in the world, will officially retire from service. To commemorate the historic occasion of the train's retirement and its unique car design, New York City Transit (NYCT) placed one R-32 train into service to operate on four consecutive Sundays in December and early January.

Sundays, December 19 and 26; and January 2, 2022 R-32 Retirement Runs:

- Scheduled to depart Second Avenue station on the ⑤ line at 10 AM, 12 PM, 2 PM and 4 PM, making all express stops to 145th Street station on the ② line
- Scheduled to depart 145th Street station on the ② line at 11 AM, 1 PM, 3 PM and 5 PM, making all express stops to the 2nd Avenue station on the ⑤ line

Sunday, January 9, 2022 - Final Farewell to the R-32s

To commemorate its final run, the cars will run on the original debut route from 1964, on the ① line (the then-BMT Brighton Line).

- Departs Brighton Beach station on the ① line at 10 AM, 12:30 PM, 3 PM and 5:30 PM to 96th Street, making express stops on the Brighton and Broadway Lines, via the Manhattan Bridge
- Departs 96th Street station on the ① line at 11 AM, 1:30 PM, 4 PM and 6:30 PM to Brighton Beach, making express stops on the Brighton and Broadway Lines, via the Manhattan Bridge

About the R-32s

The R-32s were the first large fleet of mass-produced stainless-steel cars purchased by NYCT, comprising a total of 600 cars. Built in

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THE BOARD OF DIRECTORS EXPRESSES ITS DEEPEST APPRECIATION FOR 33 MEMBER DONATIONS IN NOVEMBER, 2021

AMOUNT	DONOR(S)		
\$5,000	Clive Foss		
\$200 to \$299	Jeffrey Stevens		
\$100 to \$199	James Baker	Robert Goffin	Sanders Saltzman
	Melvin Fox	Mark Kavanagh	
\$50 to \$99	Elliot Block	Joe Carlucci	David Varnum
	Philip Burton	Vincent Cipollo	Julien Wolfe
	Alexander Carlson	Burton Eisenberg	
\$15 to \$49	Richard Aaron	David Haase	Michael Nadler
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	Mark Feinman	Arthur Liberman	Mark Walbrun
	Charles Feuer	Bart Nadeau	William Welk

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R-32 Fleet Retired with Celebratory Final Runs

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Philadelphia by the Budd Company, they were nicknamed the Brightliners because of their washboard-like stainless steel exteriors. The first revenue train ran on September 14, 1964 on what is today's **C** line, and in recent years, they were mainly found on the **A**, **C**, **J** and **Z** lines.

With a state-of-the-art design for its time, the Brightliners quickly became a crowd favorite and continue to be a nostalgic favorite to many. The cars introduced design elements unlike any of their predecessors, but

one that the MTA has received inspiration from for its newest train cars. Notably, the R-32 cars are the last subway car class in service to have a front window that passengers can look out of.

On December 19, 2021, the consist was N-3894-3895+3888-3889+3646-3647+3840-3841+3361-3360-S. The following weekend, cars 3888-3889 did not run so the train was only eight cars long.

Many R-32s were retired in the late 2000s, when the R-160 cars began filtering into the subway system. A large portion of these cars were sunk in the Atlantic Ocean as part of an artificial reef program. (MTA press release, December 10)

SUBDIVISION "A" CAR ASSIGNMENTS

CARS REQUIRED DECEMBER 19, 2021

LINE	AM RUSH	PM RUSH	LINE	AM RUSH	PM RUSH
1	310 R-62A	310 R-62A	5	350 R-142	360 R-142
2	360 R-142	350 R-142	6	370 R-62A	370 R-62A
3	260 R-62	260 R-62	7	418 R-188	396 R-188
4	180 R-142, 170 R-142A	170 R-142, 160 R-142A	S (42nd Street)	12 R-62A	12 R-62A

NEW YORK CITY SUBWAY CAR UPDATE

Things with the (“store cold”) 222-car R-32 fleet pretty much remained status quo through the balance of 2021, until a communiqué from the New York Transit Museum was circulated on December 10 that one train was to be utilized in place of the former “holiday” train of vintage IND R-1 to R-9 motors on three Sundays from December 19 to January 2, followed by a final run on January 9 (see page 1). The last time any R-32 train made a trip or two actually carrying regular passengers was (very briefly) way back on October 8, 2020.

A removal plan was drawn up for the R-32 fleet long ago, at which point its execution could begin any week ahead. Best “intelligence” suggests that the R-32s are to leave the property by “low-boy” truck to a metals recycling facility in Ohio. This is much like the similarly retired legions of commuter rail cars that were shipped out over the previous decade-plus from Metro-North and the Long Island Rail Road. This project especially seems to be becoming more imperative with deliveries of the future R-211 fleet looking to commence in the foreseeable future. As for disposition of the retired 50-car Morrison-Knudsen-overhauled R-42 fleet, at least 24 had been held aside for ongoing work service by the Spring of 2021, which may since 2019 have actually replaced some or all of the small cadre of 10 earlier-withdrawn Phase 1s (3494-3495, 3510-3511, 3552-3553, 3642-3643 and 3694-3695). Those had been exclusively assigned to work service out of Coney Island since 2010. The 26 Morrison-Knudsen-overhauled R-42s not designated for utility use by that time (and probably a partial list) were: 4788-4789, 4792-4793, 4796-4797, 4800-4805, 4810-4813, 4820-4821, 4826-4827, 4830-4833 and 4836-4837).

To start consummation of the addition of CBTC hardware into the 90 R-160s that were traded from Jamaica to Coney Island in December 2020, 20 such units (9833-9852) were returned back to Queens on or about April 15, 2021, where when completed they would be added back to the huge pool of rolling stock in use on the **E****F** and **R**. This precipitated the exchange of sister cars 9923-9942 to Coney Island for continued service on the **N****Q** and **W** lines.

All then stayed calm afterward through the summertime and into the early fall. On October 8, a short series of changes then commenced which abruptly found the use of 5-car R-160s on the **G**, at first by a few, but within a week their proportion was switched to a majority, with the remainder of R-46 or R-68/68A (4-car) units found to be scarcer by the day. Concurrent with the realignment of equipment on the **G**, R-160B set 9918-9922 was found back at Jamaica to receive its CBTC equipment array, as the first from this group. The balance of Coney Island R-160s (9853-9917 and 9923-9942) were then seen almost entirely on the **G** for another couple of weeks, but for cameo appearances on **N****Q** or **W** as required. As best was able to be determined, there was but one final day each of **G** use by both 75-foot types: a

single R-68A link (5181-5184) on Monday, October 25 followed by a lone R-46 unit (5644-5647) the following Thursday, October 28. Finally, on November 4 all 85 cars in the contingent were totally transferred from Coney Island to Jamaica, thereby at last completing its long-planned and long-term equipment allocation of (eventually) Queens CBTC-equipped R-160s. Nevertheless, the actual crewing and layup needs of the **G** remained to be based at Coney Island, at least until December, but for the cars’ ongoing mileage-based inspections and any other shop needs to be moved back to Jamaica. In addition, the final deletion of those last 85 R-160Bs from Coney Island abruptly completely forestalled their operation on the **N****Q** and **W**, actually for the first time since the first such train (Alstom R-160B pilot cars 8713-8722) was placed in revenue test on the **N** August 17, 2006. Starting on November 7, the inevitable incursion of “pool” CBTC Queens-based R-160s on the **G** was started and at some point was anticipated to become completely arbitrary. On that particular day were observed R-160Bs 9273-9277 and 9343-9347, but subsequently could be any 65 of the 1,290 R-160s between 8653 and 9942.

Aside from a plethora of online surveillance images all around the entire Subdivision “B,” there was little of unusual news regarding the first R-211A train, which seemed to be progressing toward its revenue test phase as of mid-December of 2021. Given the last update regarding additional deliveries, arrivals were planned for sometime in the Spring of 2022. Noteworthy activity was expected to “wake up” by the middle of the New Year, but for that we ask you to continue to scrutinize the *Bulletin* and its ongoing conveyance of any significant events.

To quickly recap the significant transition events for the IRT’s 42nd Street Shuttle, Track 1 (northernmost, using a three-car consist) was closed on August 16, 2019 to facilitate its reconfiguration, leaving a four-car train on Track 3 and a three-car set on Track 4. The latter was then shut down for a start of construction on that side of the line beginning August 10, 2020. On November 7, Track 3 closed permanently, thereby to be removed in support of extended and widened platforms at both stations. Finally, on September 7, 2021 the completely rebuilt operation was opened with two permanently-linked 6-car R-62A units (1936-1933-1935-1932-1939-1955 and 1943-1944-1947-1948-1908-1949) providing all initial operation. Thereafter, the Shuttle’s then-former fleet of single or otherwise unitized R-62As was temporary put aside, with a third six-car set (1921-1928-1906-1907-1922-1925) created by the end of that first month. Most notable exceptions during this time were the consignments of single R-62As 1954 and 1958 to Corona for nominal summertime refuse train duty during 2021, while grouping sister cars 1957, 1959 and 1960 were similarly used at 239th Street in the Bronx.

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New York City Subway Car Update*(Continued from page 3)*

The former were eventually retrieved from Queens to return to their Westchester facility on October 20. As of November 10, 2021 the fourth (and final) R-62A six-car unit to be assigned to the S-Grand Central Shuttle was revealed as a “forever” teaming of cars 1950-1929-1946-1945-1953-1951, which had previously been arranged as separate three-car links on the Shuttle in its original version since March of 2013. It should be noted that most or all of the seating has (in some cases long since) been removed in all “middle” cars of the reborn 42 Street Shuttle fleet in common with one of its main rationales, those to ease accessibility and maximize its standing capacity. After being reunited, the five-car coupling of R-62As 1954-1957-1958-1959-1960 (with full-width cabs at each end) was again sighted on the 6 by the early days of December. As a result, five “loose” single unit R-62As are sidelined at Livonia as of December 15. Of those, 1910 still has four trip cocks for system-wide signal adaptability (useful during work service

moves), with full-width (Shuttle) cabs on one end of 1930, 1941 and 1956. Ergo, only 1937 is now left as the very last, single-unit R-62A of the original 825, not coupled as part of a set, and complete with its original “quarter-cab” arrangement, as delivered now so long ago (September, 1986).

On November 17, 2021 it was revealed that MTA had engaged into a contract with Brookville Equipment Corporation of Pennsylvania to complete the transformation of all four surviving R-110A IRT prototype cab cars (8001, 8005, 8006 and 8010) as two each pump and generator cars to support their former “B-cars” (now P8002-P8004 and P8007-P8009). Together they will create reachers for service against flooding or for other (construction or repair) needs which might arise. All had already arrived at Brookville’s facility after Thanksgiving, 2021 and should be back for their new assignments by 2024. NYCT stands to gain quite a utility from the conversion of all ten of the retired R-110As, whereas they are built of stainless-steel framing and car body, which should preserve indefinitely.

Rail News in Review

NEW YORK METROPOLITAN AREA***METROPOLITAN TRANSPORTATION AUTHORITY***

To encourage New York’s ridership recovery and reduce costs and uncertainty for public transportation passengers, the Metropolitan Transportation Authority (MTA) announced on December 15 a pilot program to test a series of temporary promotional changes to fare structures for New York City Transit, the Long Island Rail Road and Metro-North Railroad. The pilot will begin March 1 and last for at least four months.

Fare Capping Pilot for New York City Transit – a Weekly Cap on Charges

Under the pilot, the MTA would use the enhanced flexibility provided by OMNY to offer subway and local bus passengers, along with those of the Staten Island Railway, the best possible fare for all trips. Under this pilot, passengers who tap and go with OMNY would be charged the standard \$2.75 pay-per-ride fare for their first 12 trips starting every Monday. Any further trips through the following Sunday would be free of charge. As a result, no OMNY customer would pay more than \$33 per week, which is the current price of a seven-day unlimited-ride *MetroCard*, and passengers would receive the benefit of a seven-day unlimited-ride card without paying upfront.

Free transfers between subways and buses will be retained for all passengers. Two-part trips that are linked by a free transfer between a subway and bus are considered a single trip toward the 12 needed to reach the fare-free threshold each week.

Three Big Fare Changes for the Long Island Rail Road and Metro-North Railroad

For Long Island Rail Road and Metro-North Railroad passengers, the pilot will offer promotional fares designed to encourage railroad ridership, especially for trips within New York City, and to provide ticketing options more closely aligned with the evolving needs of those with flexible work schedules. Three major changes to railroad fares will be offered:

- When purchased through eTix, a new 20-trip ticket, which will offer 20% off the comparable 20 peak one-way fares
- Monthly tickets, which are currently discounted between 48% and 61% of the price of a comparable number of one-way peak tickets, will be discounted by an additional 10%
- City Ticket – which offers a reduced, flat fare for travel within New York City on weekends – will be extended to all weekday off-peak trains at a fare of \$5
- This is a \$2.25 or 31% discount from Metro-North’s current weekday fare between the Bronx and Manhattan, which is \$7.25. (City Ticket must be purchased and activated before boarding the train. Metro-North’s off-peak fare between the Bronx and Manhattan remains \$13 when purchased on board the train.)
- This is a \$2.75 or 35% discount from the LIRR’s current weekday fare between eastern Queens and Manhattan or Brooklyn, which is \$7.75. (City Ticket

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must be purchased and activated before boarding the train. The LIRR's off-peak fare between eastern Queens and Manhattan or Brooklyn remains \$14 when purchased on board the train.)

All LIRR and Metro-North fares will remain at the off-peak level through February 28, 2022.

Next Steps

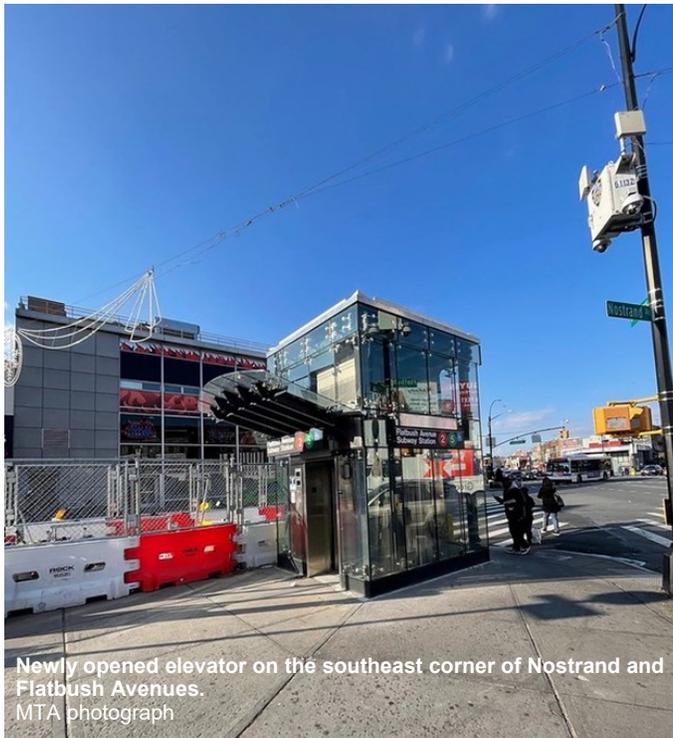
The MTA will evaluate the new fares' impact on operations, the passenger experience and farebox revenue. If the pilot proves successful, the new fare structures could become permanent, be discontinued, or be adjusted. (MTA press release, December 15, 2021)

MTA NEW YORK CITY TRANSIT

On December 22 the elevator at the Flatbush Avenue-Brooklyn College **2 5** station reopened ahead of schedule. The elevator was closed from July 7, 2021 as part of a larger ongoing project to replace 11 hydraulic elevators at seven stations throughout Manhattan, Brooklyn and Queens.

The elevator replacement project includes:

- Full replacement of elevator cab and associated equipment within the cab, shaft and pit
- Replacing and modernizing all machine room equipment
- Replacing and modernizing all CCTV and fire alarm equipment
- Upgrading the LiftNet remote monitoring equipment to allow crews to respond more quickly to future maintenance concerns



Newly opened elevator on the southeast corner of Nostrand and Flatbush Avenues.
MTA photograph

Work to install a new elevator serving the Manhattan-bound platform at the nearby Church Av **2 5** station

began on Wednesday, December 22, 2021 and is expected to be completed in Spring, 2022. The station will remain open, and the elevator to the Brooklyn-bound platform will remain open. (MTA press release, December 22, 2021)

Applying for a Reduced-Fare *MetroCard* is now easier. For the first time ever, seniors and people with qualifying disabilities can apply online for reduced subway and bus fares. Since the soft launch in early December, more than 800 people have applied for a Reduced-Fare *MetroCard* online.

Customers who qualify can apply at reducedfare.mta.info.

Previously, customers interested in a Reduced-Fare *MetroCard* would have to apply in person by visiting the Customer Service Center in Lower Manhattan, Mobile Sales or by mail.

The reduced fare is half the base fare. The base fare for subways and local buses is \$2.75, so the reduced fare is \$1.35. Reduced fares can be used on the subway and on local buses at any time. On express buses and commuter railroads, reduced fares are eligible any time excluding rush hour. (MTA press release, December 20, 2021)

On December 15, 2021 the MTA Board approved the first of three contract awards that will extend signal modernization along the IND Queens Line east of the Kew Gardens-Union Turnpike station with Communication-Based Train Control (CBTC). The upgrade of the signal system to CBTC will allow trains to safely run at a greater speed and at closer distances, providing more efficient and reliable service on the **E** and **F** lines.

The Queens Boulevard Line East Project will modernize four interlockings, at Jamaica-179th Street, 169th Street, Parsons Boulevard, and Briarwood. The interlocking at Union Turnpike, which currently has CBTC functionality only toward the west, will be fully equipped with that functionality.

This first contract award is for the design, delivery and testing of the CBTC equipment, and is valued at \$62.6 million over 55 months. The second award will be for the installation of the CBTC equipment. The third contract will be for the installation of the Data Communication System. CBTC uses radio communications to constantly connect the MTA's trains and signal system, with service managed dynamically by a computer system in New York City Transit's (NYCT) Rail Control Center.

Trains operate with CBTC on the **7** and **L** lines, which were brought online in 2018 and 2004 respectively. Work is currently underway installing CBTC on two line segments expected to go into service next year: the IND Queens Boulevard Line between Kew Gardens-Union Turnpike and 50th Street in Manhattan, and the **F** line between Church Avenue and W. 8th Street-New York Aquarium. Work is also underway installing CBTC on the IND Eighth Avenue Line **ACE** between 59th Street-Columbus Circle and Jay Street-MetroTech, which is expected to be completed in 2025. Future line

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segments to receive CBTC are the IND Crosstown Line between Hoyt-Schermerhorn and Court Square, the IND Fulton Street Line between High Street and Euclid Avenue and the IND Houston-Essex Street Line between Jay Street-MetroTech and Broadway-Lafayette Street. (MTA press release, December 15, 2021)

MTA Construction & Development will present to the MTA Board for approval at its December meeting plans for historic improvements to further accessibility at 26 New York City Transit stations. If approved, plans include making 19 stations newly accessible and the rehabilitation of existing elevators at seven stations.

At December, 2021's Board meeting, MTA Construction & Development sought Board approval for a Private Public Partnership (P3) to deliver 13 station projects, including making eight stations newly accessible and rehabilitating existing elevators at five stations through the Rapid Station Accessibility Upgrade Program. This approach, while new for the MTA, is also known as Design-Build-Finance-Maintain and has been used around the world to effectively deliver infrastructure projects efficiently. The Authority will engage with a private partner who will be responsible for accessibility projects at a quicker timeframe and lower cost — including a contractual obligation to maintain the elevators for 15 years. Under this agreement, failure to do so would result in the private entity not receiving compensation.

The MTA Board was requested to adopt a resolution to utilize a competitive Request for Proposal (RFP) to procure a Public Private Partnership agreement for the design, construction, financing and maintenance of elevators and other ADA improvements at selected New York City Transit subway stations in the 2020-2024 Capital Plan. These projects include accessibility upgrades including new elevators at 8 stations:

- Church Avenue **B Q**
- Sheepshead Bay **B Q**
- Rockaway Boulevard **A**
- Kings Highway **F**
- Woodhaven Boulevard **M R**
- Steinway Street **M R**
- Junius Street **3**
- Mosholu Parkway **4**

This component also includes the replacement of existing elevators at five stations: 125th Street **A B C D**; 34th Street-Penn Station **A C E**; Euclid Avenue **A C**; 161st Street-Yankee Stadium **4**; and Third Avenue-149th Street **2 5**.

Additionally, the proposed ADA bundle of projects will include implementation of the Design-Build-Finance-Maintain method in which a private entity will be selected through a Private Public Partnership to be held responsible for the initial construction of the ADA improvements and elevator upgrades and will maintain ongoing maintenance for a period of 15 years, with two five-year options. The proposal would include a payment plan in

which the P3 partner would receive a combination of progress and milestone payments during construction, completion payments following substantial competition and availability payments through the term to cover the remaining capital costs and ongoing maintenance.

Following Board approval, MTA Construction & Development intends to advertise and release the Request for Qualifications to select three to four respondents to receive the Request for Proposals. Construction & Development expects the proposals to be due in late 2022 and award to the preferred P3 Partner, subject to further approval of the Board, in late 2022.

MTA Construction & Development also requested Board approval to award a publicly advertised and competitively solicited contract for the Design and Construction of accessibility upgrades at the 68th Street-Hunter College station to Forte-Citnalta JV in the amount of \$101,750,000 and a duration of 1,080 calendar days. Approval will also be sought to award a long-term elevator Maintenance Contract to Mid-American Elevator Company, Incorporated in the amount of \$3,027,395 and a duration of 15 years.

MTA Construction & Development also requested Board approval to award a publicly advertised and competitively solicited Public Works contract for the design and construction of accessibility upgrades at eight New York City Transit stations including new elevators at six stations and replacement of existing elevators at two stations to MLJ Contracting Corporation/TC Electric JV in the amount of \$242,400,000 and a duration of 1,068 calendar days.

The contract will include the installation of 11 new elevators that will provide full accessibility at the following six elevated, open cut and below-ground subway stations:

- Westchester Square **6**
- 8th Avenue **N**
- 181st Street **A**
- Woodhaven Boulevard **J Z**
- Court Square **G**
- Queensboro Plaza **N W 7**

This contract also includes the replacement of existing elevators at two stations on the BMT Jamaica Line: Marcy Avenue **J M Z** and Flushing Avenue **J M**.

In addition to Board actions taken at the December, 2021 meeting, MTA Construction & Development planned to award a contract later that month to make three stations on the **1 2 3**, **F M** and **L** lines at 14th Street-6th Avenue-7th Avenue fully accessible, an action approved by the Board in November, 2021.

In December, 2021, the first project under the recently passed Zoning for Accessibility initiative was also approved. This project, a partnership with the developer Sedesco, will bring two new elevators to the 57th Street **F** station, making it fully accessible. Sedesco will also reimburse the MTA for the cost of maintaining the two new elevators. Work is expected to begin in 2022.

There are 13 new accessible stations currently in con-

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struction. Of these, four are forecasted for completion in 2022 and nine in 2023. (MTA press release, December 10)

Also on December 10, 2021, two elevators at the Jamaica Center–Parsons/Archer **EJZ** station were reopened. The elevators were closed in June, 2021 as part of a larger project to replace 11 hydraulic elevators at seven stations throughout Manhattan, Brooklyn and Queens.

In addition to installing modernized elevator equipment to increase reliability and provide a smoother ride, crews installed new CCTV cameras inside the elevator cabs, upgraded the fire alarm system and made structural repairs in elevator cabs and machine rooms.

Work to install a new elevator at the Sutphin Boulevard–Archer Avenue/JFK Airport station began on December 14, 2021 and is expected to be completed in June, 2022. The station will remain open, but there will be no elevator access to the **EJZ** platforms. For a travel alternative, passengers are encouraged to use the Jamaica Center–Parsons/Archer **EJZ** station with newly reopened elevators. The Q24 bus provides accessible service between the two stations. (MTA press release, December 10, 2021)

The completion of the elevator replacement project at the 181st Street **1** station was announced on December 1, 2021. The project included the full replacement of four elevators at the station, providing direct access to the northbound platform. Also included in this project was the installation of a new LiftNet system that will improve incident response time and a battery back-up system that will allow passengers to exit the station by elevators even during a power outage. A new CCTV camera system was installed, including two CCTV cameras per elevator, along with a new fire alarm system.

The completion at 181st Street signals the end of the broader elevator replacement work at five separate “deep” stations in the Washington Heights section of Manhattan. For many passengers, the elevators are utilized both for accessing the subway as well as more easily traversing the neighborhood’s unique, steep topography.

The 181st Street station opened in 1906 and is listed on the U.S. Register of Historic Places. Elevators in the station reach a depth of 122 feet below ground. The station was closed during construction. Alternate bus service was provided throughout the duration of the project in close consultation with community leaders and elected officials.

The Authority previously completed elevator replacements on the **1** line at 168th Street in 2019 and most recently 191st Street on the **1** line. The replacement work at 181st Street was originally slated to begin in March, 2021 but was accelerated to a December, 2020 start following the early completion of the replacement efforts at 191st Street.

On the **A** line, replacements were completed at the 181st Street station. At 190th Street, all three elevators were replaced with two already operating, and the final elevator is expected to be put in service in the near future. (MTA press release, December 1, 2021)

MTA LONG ISLAND RAIL ROAD

On Monday, January 3, 2022, new timetables took effect on all Long Island Rail Road branches. On the Main Line (Ronkonkoma Branch), several morning rush hour trains were restored to their prior schedule east of Hicksville following the end of speed restrictions related to Autumn leaf season and slippery rail/low-adhesion conditions. As has been current practice, printed timetables will not be distributed, but PDF copies of timetables are available online.

These schedules will be in effect through March 20, 2022. Highlights of the changes are listed below:

Babylon Branch

- The 5:43 AM from Freeport to Penn will be restored. This train will stop at Baldwin, Rockville Centre, Jamaica and Penn Station, arriving at 6:24 AM
- The 5:56 AM from Babylon to Penn will be restored. This train will stop at Lindenhurst, Copiague, Amityville, Wantagh, Bellmore, Merrick, Jamaica, Woodside and Penn Station, arriving at 6:59 AM
- The 5:59 AM from Massapequa Park to Penn will be restored. This train will stop at Massapequa, Seaforth, Freeport, Baldwin, Rockville Centre, Jamaica, Kew Gardens, Forest Hills and Penn Station, arriving at 6:55 AM
- The 4:16 PM from Atlantic Terminal to Babylon will be restored. This train will stop at Nostrand Avenue, East New York, Jamaica and Rockville Centre, then make all stops to Babylon
- The 6:10 PM from Penn to Babylon will depart 1 minute earlier at 6:09 PM
- The 10:52 PM from Penn to Babylon will be restored. This train will stop at Woodside, Jamaica and Rockville Centre, then make all stops to Babylon

Huntington/Port Jefferson Branch

- The 6:25 AM from Hicksville to Penn Station will be restored. This train will make all stops to New Hyde Park, then Jamaica and Penn Station, arriving at 7:11 AM

Montauk Branch

- The 5:30 AM from Speonk to Hunterspoint will be restored. This train will make all stops to Bay Shore, then Jamaica and Hunterspoint Avenue, arriving at 7:26 AM
- A 6:27 PM train from Penn to Speonk will be added. This train will stop at Woodside, Jamaica, and Babylon, then make all stops to Speonk

Oyster Bay Branch

- The 8:14 AM from Oyster Bay to Long Island City will be restored. This train will make all stops to Mineola, then Jamaica, Hunterspoint Avenue, and Long Island City, arriving at 9:37 AM

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- The 6 PM from Jamaica to Oyster Bay will be restored. This train will make all stops from East Williston to Oyster Bay. If you are coming from Penn Station, board the 5:33 PM train to Hicksville and change at Jamaica for this train

Port Washington Branch

- The 7:19 AM from Port Washington to Penn Station will be restored. This train will stop at Plandome, Manhasset, Great Neck, Woodside and Penn Station, arriving at 7:58 AM
- The 6:08 PM from Penn Station to Great Neck will depart 18 minutes earlier at 5:50 PM
- The 6:11 PM from Penn Station to Port Washington will be split into two trains. A train to Port Washington will leave Penn Station at 6:10 PM, making its first stop at Great Neck. A train to Great Neck will leave Penn Station at 6:14 PM, making all stops
- The 6:44 PM from Great Neck to Penn Station will be restored. This train will stop at Little Neck, Douglaston, Bayside, Flushing-Main Street, Woodside and Penn Station

Main Line (Ronkonkoma Branch)

- The 5:22 AM from Greenport to Ronkonkoma will depart three minutes later at 5:25 AM
- The 6:56 AM from Ronkonkoma to Atlantic Terminal will be restored. This train will make all stops to Hicksville, then Mineola, Jamaica, East New York, Nostrand Avenue and Atlantic Terminal, arriving at 8:17 AM
- The 7 AM from Ronkonkoma to Penn will depart four minutes later at 7:04 AM, and will no longer stop at Central Islip, Brentwood, Hicksville or Mineola. Passengers at these stations should take the Atlantic Terminal train up to three minutes earlier and change at Jamaica for Penn Station
- The 7:23 AM from Ronkonkoma to Penn Station will depart three minutes later at 7:26 AM
- The 7:29 AM from Ronkonkoma to Penn Station will depart three minutes later at 7:32 AM
- A 4:09 PM train from Penn to Ronkonkoma will be added. This train will stop at Woodside, Jamaica, Mineola, Hicksville, Bethpage, Farmingdale and Ronkonkoma. (<https://new.mta.info/article/january-3-new-lirr-timetables-effect>)

On December 15, 2021, the MTA Board approved a contract to Hitachi Rail STS, USA Incorporated, for the design and installation of a new signal system for Queens Interlocking. This interlocking extends for nearly 1½ miles from the east end of the Queens Village station to the west end of the Floral Park station.

Queens Interlocking is divided into four separate remote control interlockings that manage switching on the active tracks and provides access to the new Elmont/UBS station as well as the existing Belmont Park station. The contract provides for the design, fabrication, assembly, delivery, systems integration and testing of a new signal system, including pre-wired central instru-

ment locations (CILs), auxiliary huts, track cases, switches, signals and ancillary equipment. The Design-Builder will also set and secure the assembled CILs and auxiliary huts at the Project site. LIRR Force Account will install all wayside signal and switch equipment and connect all cables to the CILs and auxiliary huts.

This design-build project is part of the MTA's 2015-2019 Capital Program.

Queens Interlocking had been partially rebuilt back in 2008 when some crossovers were removed, and very high speed #32.7 crossovers were installed for the first time. Though allowing speeds of up to 80 miles per hour, each crossover requires ten switch machines for the switch points (three each) and movable point frogs (two each). The railroad apparently felt that the additional maintenance to enable 80 mph crossover moves was not worth it so the new crossovers will be their standard "high-speed" #26.5 switches which are good for 60 mph diverging moves.

When Queens was partially rebuilt in 2008 an Alstom PTM Office Control System with computer workstations was installed. This replaced the 43-lever US&S Model 14 interlocking machine, as well as the two all-relay push-button control panels for the Bellerose end of the interlocking and Garden Interlocking on the Hempstead Branch.

Hitachi Rail STS is the successor to Ansaldo STS, owner of Union Switch and Signal, whose hardware will undoubtedly be used on this project. (MTA press release, December 15, 2021, with additional information from the Editor)

MTA METRO-NORTH RAILROAD

A design-build contract was approved on December 15, 2021 for the Penn Station Access Project, which will provide direct Metro-North service from the Bronx, Westchester and Connecticut to Penn Station. Penn Station Access will drastically reduce travel times for people who live and work in the east Bronx, an area currently without any rail service. The contract will be awarded to Halmar International, LLC/RailWorks, J.V.

There are almost 250,000 residents and over 100,000 jobs within a half-mile of the four stations, which can have service as frequent as every 20 minutes in the peak period. The new service will save east Bronx riders up to approximately 50 minutes in each direction to Penn Station, and up to 75 minutes in each direction to Connecticut. Current New Haven Line riders with destinations on the west side will save up to 40 minutes per day since travel from Grand Central will not be necessary.

The project also will improve regional transportation connectivity, enhance network resiliency by providing a second Metro-North terminal in Manhattan, promote sustainability and bridge communities. By using Amtrak's existing Hell Gate Line, the project will maximize the potential of existing infrastructure, while minimizing impacts on the community.

It will bring the Hell Gate Line into a state of good repair and improve reliability and on-time performance for

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intercity passengers and prepare the corridor for high-speed rail in the future. Amtrak will contribute \$500 million toward the project. Amtrak has also agreed to pay the costs of delay if they fail to meet commitments to provide outages or workforce.

In addition to the four new stations, the project will turn the existing two-track railroad into a largely four-track railroad, with over 19 miles of new and rehabilitated trackwork. The project also includes four bridge rehabilitations, the reconfiguration of Metro-North's New Rochelle Yard, four new and one reconfigured interlockings, five new and two upgraded substations, and the modernization of signal, power and communication infrastructure.

The current project construction schedule is estimated at 63 months and \$2.87 billion. It is estimated the project will create or retain approximately 4,500 direct jobs and another 10,000 indirect jobs. (MTA press release, December 15, 2021)

OTHER SYSTEMS

SAN FRANCISCO, CALIFORNIA

Caltrain has unveiled a repainted AEM-7 in a variant of the red, black, and white scheme worn by its MP36 diesels. The ex-Amtrak unit will be used to test the Caltrain catenary system, in advance of the arrival of its Stadler-built EMU trainsets, as it prepares to switch from diesel to electrified operation between San Francisco and San Jose. In a Facebook post unveiling the locomotive, Caltrain thanks rail contractor Herzog for sponsoring the repainting. The catenary system is slated to be completely installed by Summer, 2022.



Ex-Amtrak AEM-7 938 (EMD, 1981, s/n 806004-9).
Caltrain photograph via Facebook

On June 7, 2018, the Peninsula Corridor Joint Powers Board awarded two contracts totaling approximately \$600,000: one to purchase two AEM-7ACs from Mitsui & Company, and the other to Amtrak for refurbishment, training and transportation to the Caltrain maintenance facility in San Jose. Locomotives 929 and 938 were delivered to California by Amtrak in June, 2019. (Wikipedia and Facebook)

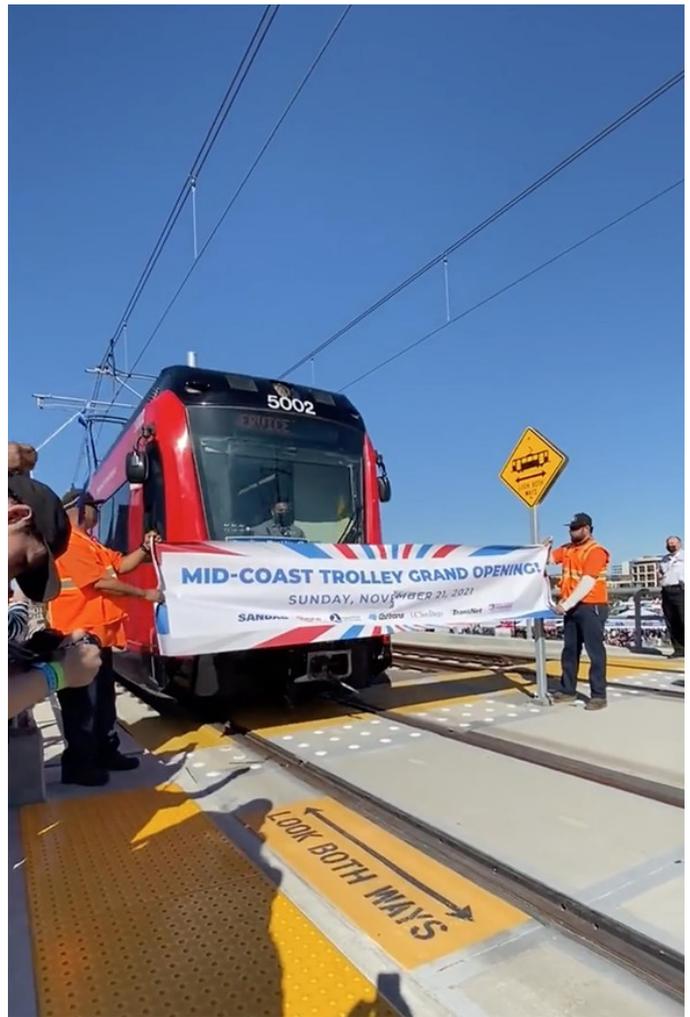
SAN DIEGO, CALIFORNIA

The Mid-Coast Extension of San Diego's light rail network was opened for revenue service on November 21,

2021, when the San Diego Association of Governments hosted celebrations at the University of California San Diego Central Campus in La Jolla.

The 11-mile extension adds a further nine stops to the network, running north from a junction with the Green Line at Old Town. After bridging the San Diego River, it parallels the existing railway used by Amtrak and Coaster commuter rail services and the San Diego Freeway as far as the University campus before turning east to reach UTC Transit Center.

The route is operated by San Diego MTS as an extension of its north-south Blue Line from San Ysidro, which previously terminated in Downtown San Diego. Free travel was provided on the opening day, when services began with the 5:03 AM departure from UTC Transit Center.



Metro Report International photograph

The extension is expected to improve access to growing employment, education, and expanding residential areas, as well as relieving congested roads. The population in the corridor is predicted to increase by 19% by 2030, while employment is forecast to rise by 12%. Ridership is expected to be around 20,000 passengers per

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day.

Budgeted at \$2.2 billion, the line was designated as a priority project by the San Diego Association of Governments, which in 2014 selected the Mid Coast Transit Constructors joint venture of Stacy & Witbeck, Skanska USA and Herzog Contracting Corporation as main contractor. The Federal Transit Administration signed a Full Funding Grant Agreement in September, 2016 covering 50% of the cost, with the remainder coming from TransNet, the region's half-cent sales tax for transport improvements.

Construction began in Autumn, 2016, and SANDAG handed the route over to MTS for test running to start in July, 2021. According to the agency, the final cost was about \$13 million below budget.

In November, 2016 MTS ordered 45 S70 low-floor LRVs from Siemens Mobility to operate the Mid-Coast Extension and increase capacity on the rest of the network. These were assembled at the Siemens plant in Sacramento, with the last being delivered in October, 2020. A further 25 vehicles were ordered in 2019. (*Metro Report International*, November 22, 2021)

MONTREAL, QUEBEC, CANADA

While construction continues on Montreal's new automated light metro, known as the Réseau Express Métropolitain (REM for Metropolitan Express Network), some issues have been revealed with the new rolling stock destined for the system.

A leaked letter from the REM's project sponsor CDPQ Infra to the consortium building the new trains reveals that several defects have been discovered in the initial trains delivered so far. The defects include damaged and exposed electrical wiring, faulty welding and poorly fitted doors.

The Groupe PPM consortium has a €1.8 billion contract covering rolling stock, systems, operations and maintenance. Consortium member Alstom is supplying 106 two-car sets, which are based on their Metropolis platform and will be operated as two- or four-car formations.

The REM system's first route will be 42 miles in length with 26 stations, equipped with overhead catenary electrified at 1.5 kV DC. It is primarily aligned east to west, with two western branches, one of which will serve Montreal Trudeau International Airport. The system utilizes a combination of new at-grade and elevated structures, while also incorporating some existing alignments, including the historic Deux-Montagnes Line via the Mont Royal Tunnel, previously Canada's only electrified suburban railway. Service on the line was suspended on December 31, 2020, to allow for its conversion. The closure came six months earlier than planned, brought forward due to a 90% drop in ridership brought on by the pandemic.

REM will have transfers to Montreal's rubber-tired heavy metro at three locations and will also allow interchange with the Mascouche commuter railway at Cote-de-Liesse. A second route, REM de l'Est, is projected to run out east from downtown Montreal, with two eastern branches, and could add approximately 20 route miles and 23 stations.

The sponsor and consortium have both vowed to fix the rail car defects and a remediation plan has been implemented. There is currently no indication that the situation will jeopardize the inauguration of limited service on the initial line segment between South Shore and Bonaventure-Central station later in 2022. The full first route is anticipated to be in service by the end of 2024, with the second route to follow in 2029. (*International Railway Journal*, November 17, 2021)

GLASGOW, SCOTLAND

Testing of the first of 17 four-car driverless Stadler metro trains is underway on the Glasgow subway.

The four-foot-gauge Strathclyde Passenger Transport (SPT) trains are equipped for Unattended Train Operation and are being manufactured at Stadler's Altenrhein plant in eastern Switzerland.

The initial test involved operating a train under its own power from the Broomloan depot to the Govan station. The second involved testing the ability of shunting locomotives based at the depot to rescue the train. Both tests were described as successful by SPT. The next stage is for intensive testing to begin in early 2022.



Montreal REM trainset. Alstom photograph



New Glasgow subway cars. SPT photograph

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SPT Subway Director Antony Smith says the start of testing away from the depot is an indication that the project is moving forward following delays caused by COVID-19. The first two trains arrived in Scotland in 2019, while the first train was unveiled at InnoTrans in 2018. Smith says that various lockdowns and travel restrictions for contractors have affected the project.

Previous testing of the trains had been conducted using a half-mile-long test track at the Broomloan depot.

The trains are part of a £203.2 million contract to modernize electrical and mechanical systems on the subway. In addition to rolling stock, the contract includes installation of CBTC and automation technology, communications systems, a new operational control center and the Broomloan test track. This is the main element of the £288 million Subway Modernization Program which also includes the refurbishment of the circular line's 15 stations as well as track and tunnel upgrades.

The 129-foot-long trains have seating capacity for 118 passengers including 12 tip-up seats and 204 standing passengers. For the first time on the subway, the new trains will have wheelchair accommodation. (*International Railway Journal*, December 23, 2021)

BRUSSELS, BELGIUM

The extension of Brussels' tram line 9 northwest of the capital has been completed and it now connects Simonis to the Roi Baudouin station, near the Heysel plateau, in 20 minutes.

The route serves the center of Jette, the Square du Centenaire, UZ Brussel and the Cité Modèle.

Open to the public as of December 11, 2021, this new section provides a quick connection between the municipalities of Jette, Koekelberg, Ganshoren and Laeken, while ensuring a connection with metro lines 2 and 6 and several bus and tram lines.

Line 9 has been in existence since 2018, with the first 2½-mile section linking Simonis to Avenue de l'Arbre Ballon, in 10 stops and 14 minutes.

The line proved to be immediately popular and currently there are an average of 12,000 travelers per day on this first part of the line. The extension is one mile long and has four stops for an extra ride time of six minutes.

Brussels Mobility has given a facelift to the districts crossed by the tram, with a complete fitting out of the public space on the route, the creation of exclusive tram lanes, the resolution of safety problems at the various crossroads and the improvement of the pedestrian and cycle routes.

The materials were chosen to maintain the permeability of the soil and thus avoid runoff and flooding in the event of heavy rain. The project favored grass and semi-permeable materials such as small paving stones, instead of hard surfaces.

The route will have a total of 210 trees. The green character of the tram route will be reinforced by the greening of the tram's right of way within six months and

by the planting of hedges and grasses along the line.

A third phase is in the works with the extension of Line 9 to the Heysel metro station. (*The Bulletin* [Belgium], December 12, 2021)

KARLSRUHE, GERMANY

It took more than two decades, €1.5 billion were spent, and now the time has come. After long discussions at the political level and with citizens and city officials, a referendum and finally 12 years of construction, the so-called Kombilösung ("combined solution") in Karlsruhe's city center went into operation. The light rail (TramTrain) and tramway tunnel under Kaiserstraße with the southern branch from Marktplatz to Ettlinger Straße and the above-ground track in Kriegsstraße are part of it, as well as a (not yet completed) road tunnel under Kriegsstraße.



No more tram and light rail service on the surface of Kaiserstraße. GT8-100C/2S (Düwag, 1994) 828 of the AVG (Albtal-Verkehrs-Gesellschaft, or Albtalbahn) is operating eastbound on an S5 short-turn trip to Berghausen (Baden). Julian Klein photograph

The Kombilösung consists of the light rail and tram tunnel under Kaiserstraße with a length of 1½ miles and four new stops as well as the approximately ¾-mile-long southern tunnel branch from Marktplatz into Ettlinger Straße with three new stops. The project also includes the reconstruction of Kriegsstraße with a new track on surface and a one-mile-long car tunnel underneath. In the tunnel, as in the entire Karlsruhe public transport system, the Intermodal Transport Control System MOBILE-ITCS from INIT is used.



Opening day, December 12, 2021, at the Marktplatz station, GT6-70DN 233 (Düwag, 1996) of the KVG (Verkehrsbetriebe Karlsruhe) is operating eastbound on a Line 1 trip to Durlach. Nicolas Lutterbach photograph

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The route network has been completely redesigned and tram and light rail services through Karlsruhe's main shopping street, Kaiserstraße, ended on the same day.

The previous and the new line routes are as follows:

Line 1

Previously: Durlach–Tullastraße–Marktplatz–Europaplatz–Oberreut

New: Durlach–Tullastraße–Marktplatz (U)–Europaplatz (U)–Heide

Line 2

Previously: Wolfartsweier–Tullastraße–Rüppurrer Tor–Hauptbahnhof–ZKM–Karlstor–Europaplatz–Knielingen North

New: Wolfartsweier–Tullastraße–Marktplatz (U)–Ettlinger Tor (U)–Hauptbahnhof–ZKM–Europaplatz–Knielingen North

Line 3

Previously: Tivoli–Main Station–Karlstor–Europaplatz–Heide

New: Rintheim–Durlacher Tor–Rüppurrer Tor–Tivoli–Hauptbahnhof–Karlstor–Europaplatz–Entenfang–Daxlanden/Rappenwört

Line 4

Previously: European School–Durlacher Tor–Marktplatz–Europaplatz–Karlstor–Hauptbahnhof–Tivoli

New: European School–Durlacher Tor–Rüppurrer Tor–Ettlinger Tor–Karlstor–Europaplatz–Oberreut

Line 5

Previously: Rintheim–Durlacher Tor–Rüppurrer Tor–Entenfang–Rheinhafen

New: Durlach train station–Tullastraße–Rüppurrer Tor–Ettlinger Tor–Karlstor–Weinbrennerplatz–Entenfang–Rheinhafen

Line 6

Previously: Hirtenweg–Konzerthaus–Karlstor–Europaplatz–Entenfang–Daxlanden/Rappenwört

Discontinued as of December 12, 2021

Line 8

unchanged

Line S2

Previously: Stutensee–Durlacher Tor–Marktplatz–Europaplatz–Entenfang–Rheinstetten

New: Stutensee–Hauptfriedhof–Tullastraße–Durlacher Tor (U)–Marktplatz (U)–Europaplatz (U)–Entenfang–Rheinstetten

AVG (Albtalbahn) lines:

The S-Bahn lines S1, S11, S4, S5, S51, S7 and S8 of the AVG will all run through the new light rail tunnel from December 12, 2021. The new line S12 will run as an "express train" from Ittersbach/Ettlingen from Albtalbahnhof via Karlstraße, Europaplatz and Mühlburger Tor to Rheinhafen. The route Konzerthaus–Volkswohnung (in future Kongresszentrum Gleis 1 und 2)–Philipp-Reis-Straße will continue to be used for transfer as well as depot access trips. In the future, the Philipp-Reis-Straße

stop will only be served by express trains of line S2 and by the school tram line 16. (***Urban Transport***, December 12, 2021)

SZCZECIN, POLAND

A western extension of Szczecin tram routes 1 and 3 to serve the city's Netto Arena was opened for revenue service on December 18, 2021.

Running for approximately ¼-mile along ulice Władysława Szafera, the double-track extension from Rondo Olszewskiego shares a dedicated tram and bus lane which has been built as part of an urban redevelopment program. Intermediate stops are provided at Arena Szczecin and Szafera, along with a four-track turning circle at the Osiedle Zawadzkiego terminus.



Moderus Beta MF 29 AC BD 622 (Modertrans, 12/2020) at the Arena Szczecin stop, the first of three stops on the new extension.

Metro Report International photograph

Construction of the transport infrastructure as part of the neighborhood remodeling has been undertaken by Eurovia Polska at a total cost of 125.2 million zloty. This included major changes to the local road layout and the construction of four roundabouts as well as a park-and-ride interchange. The tram extension required 1½ miles of new track and 115 overhead line poles. As well as the reserved alignment for public transport, the road has two lanes in each direction plus dedicated infrastructure for pedestrians and cyclists.

Provision has been made for a further 0.8-mile extension of the tramway turning south to connect with the existing tracks in Żołnierska served by Routes 5 and 7. (***Metro Report International***, December 20, 2021)

MILANO, ITALY

Ferrovienord, the operator of regional rail services in Lombardia, Italy, continues to invest in the legacy network serving the suburbs and rural areas to the north of Milano. On November 3, 2021 it was announced that a €451.9 million contract had been signed with Hitachi Rail for 40 five-car and 10 four-car Caravaggio double-deck EMUs.

This is the third order placed under a 2018 framework agreement — the first order was for 35 four-car sets, of which 21 are now in revenue service. This was followed by a second order for 20 five-car sets, the first of which were due to be delivered from December, 2021 on.

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Ferrovienord's Caravaggio EMU.
Hitachi Rail photograph

Ferrovienord's overall fleet renewal plan anticipates an investment of €1.96 billion to procure 222 new trains.



The current Ferrovienord network has 200 route miles, and is based on the legacy Ferrovie Nord Milano, the earliest segments of which first opened in 1879. Electrification was inaugurated in 1929, and today over 65% of the network is wired with overhead catenary for 3 kV DC operation.

The order for new cars was then followed by an announcement by the Lombardia provincial government that it will fund €59 million worth of various infrastructure improvements to the Ferrovienord network. The program includes double tracking the Milano Bovisio-Asso line between Seveso and Meda, as well as the diverging chord between Seveso and Camnago, where the Ferrovienord network meets RFI's main line from Monza to Como. The historic Seveso Station itself will be substantially rehabilitated, and the work there will include a pedestrian/bicycle overpass and a road underpass. The platforms at the Meda station will be lengthened.

The work also includes the elimination of grade crossings; and a local control center will be built at Seveso Baruccana on the east-west route linking Saronno with

Seregno. (*International Railway Journal, Railway Gazette International*, November 3, 2021; *Railway Gazette International*, November 14, 2021)

WARSAWA, POLAND

Škoda Transportation has unveiled the first of the trainsets it is producing for the Warszawa metro. Testing is to be undertaken the Czech manufacturer's Plzeň plant, ahead of further trials at the Velim test center and on the Praha metro network before delivery to Poland in Spring, 2022.



Skoda Transportation Varsovia trainset for Warszawa.
Metro Report International photograph

The contract awarded in June, 2018 covers 37 six-car trainsets, spare parts, a simulator, an extended guarantee and staff training, with options for eight more trainsets which would take a total value to almost KC8 billion. Škoda Transportation beat bids from Stadler, CAF, Alstom and a Siemens-Newag consortium to win the contract, which it said was "a breakthrough order" in the urban rail market as it was one of the largest tenders of its type in Europe. The order is being financed by Metro Warszawskie with contributions from the EU.



Interior showing open gangways.
Metro Report International photograph

The walk-through train is 388 feet long with a capacity of 1,500 passengers, and spaces for wheelchair users, baby carriages and bicycles. The choice of materials,

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shapes and colors for the interior is intended to provide a pleasant environment for passengers and the driver. There is an internal and external audio-visual information system and CCTV.

The trains will have a maximum speed of 56 mph, with full electro-dynamic braking and a preference for regenerative braking. (*Metro Report International*, December 21, 2021)

SLOVAKIA

Slovakian national passenger operator ŽSSK has commenced using Stadler GTWclass 495.95 three-car EMUs on the Electric Tatra Railways (TEŽ) network in the High Tatra mountains.

However, operation has yet to restart on the 3.1-mile rack section of the meter-gauge line between Strba and Štrbské Pleso due to the delays in the modernization of that section.

ŽSSK is currently operating two of the five 50 mph EMUs, which use 1.5kV DC overhead electrification. These trains have entered service around six months late and only operate as single sets for the time being, with Slovak national rail safety authority Dopravný Úrad yet to authorize the EMUs to operate in multiple. This is expected to be approved when the rack line reopens early next year.



Stadler Rail EMUs have commenced operating on the High Tatra network.

Quintus Vosman photograph

ŽSSK ordered five EMUs and one hybrid diesel-electric locomotive from Stadler in 2018, all suitable for both conventional and rack operation. The Stadler EMUs are replacing class 405 EMUs and enable through operations from Štrba and the rest of the TEŽ network for the first time.

Each class 495 offers 91 seats, two spaces for wheelchairs and space for skis, bicycles and other outdoor equipment. (*International Railway Journal*, December 20, 2021)

ATHENS, GREECE

Attiko Metro has commenced using 25 Alstom Citadis X05 LRVs on the Athens light rail network.

The LRVs are fitted with double doors along their en-

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TALES OF THE INTERBOROUGH — THE ELEVATED BREEZERS by Nate Gerstein

Around the turn of the nineteenth century all the studies, experimentation, testing and development was coming to a successful end and electrification was to begin. The Manhattan Elevated Railway Company (MER) was working feverishly in the conversion from steam power to the electrification of their system. The Forney steam locomotives had served them well. It was time, however, to move on. The populace was anxiously waiting for the end of the engine noise, billowing smoke and the cinders and soot that had become part of their everyday life. MER was doing away with the practice of switching engines for changing direction at terminals. This practice required much time and personnel. Water and coal would be done away with as well. Stations would be lit, and the cars would be lit and heated with electricity. The Interborough Rapid Transit Company was also in the process of the construction of New York City's first subway. This was also made possible due to the development of electricity. The IRT was also in the process of taking over the MER and connecting the two

roads to their new and proposed elevated extensions in the Bronx and Queens.

Steam-pulled coaches were converted to electric motor cars and trailers. Cars not suitable for conversion were converted to work equipment, sold or scrapped and many new cars were ordered.

To promote the electrification, it was decided to order some open-air cars. Many trolley companies used this type of car, and they were known as Breezers. This type of vehicle was for summer only use and was stored in the barns during the colder months. As there would be no more soot and smoke the passengers would be able to enjoy the breeze rather than the stifling heat in the closed cars.

The storage of these cars in the off season was a problem as room was not available. This issue was resolved by constructing a storage yard underneath the Bronx Park Terminal station of the Third Avenue Elevated. As the length was an issue and the grade would be

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Tales of the Interborough—The Elevated Breezers*(Continued from page 14)*

too long, a hydraulic elevator was constructed south of the northbound station platform which enabled the cars to be lowered to the yard. The base of the elevator was also designed as the base of a transfer table to move the cars sideways in this four-track yard. The yard contained a train shed for protection. The yard was never electrified so a steam engine was utilized to switch cars.

The first car, built by American Car and Foundry, was delivered in January, 1902 and was numbered 142. It was the prototype test car. The body was painted in the MER/IRT colors of maroon with a buff-colored roof. Doors and seats were clear varnish, and it was adorned with gold and red pin striping. The side sills bore the company name, Manhattan in gold letters. When the other cars arrived, it was renumbered 1219. The car had a steel structure with a typical canvas covered wooden roof and wooden flip over full-width bench cross seats from one side of the car to the other. The ends were steel with glass windows that dropped down. There were wooden Dutch-type doors that slid into the panels at the end of each seat. They were operated by conductors using mechanical levers. The first and last seats were stationary. The cars were equipped with shades for protection from the rain or sun. They dropped down to the floors. All of the cars were non-powered trailers.

They were in service from 1902 until 1917 and were exclusively assigned to Third Avenue Elevated in City Hall-Bronx Park local service with one car per train. On rare occasions they had two cars in a train. They could never be coupled together as it was not company policy for trailer car operation, but there was another reason which will be explained. The cars were also set aside for smokers and were taken out of service starting after 9 PM.

The cars did not last that long due to some problems. The Conductors found it difficult with the door operation. The door controls were difficult to operate. It took much longer with the open cars. The Conductor was responsible for half of both a gate and an open car. The cross seats required the passengers to climb over one another to get on and off depending on which position they were sitting on. This increased dwell time in the stations. When the Conductor closed the gate on one car, he had to wait for the open car to load before closing the doors on his half side. As the doors all closed the same time there were many issues with passengers. The Conductors needed strong arms to work the mechanical levers. Since the cars had no storm doors there was no way for passengers or the crew to get through to the next car. This would isolate the entire train into two sections. If ever two open cars would be coupled together the Conductor would be trapped between the cars. Passengers would sometimes try and climb over the doors to get on and off. As hanging on the sides of open trolley car was an accepted practice, they would try to hang on to the open cars holding on to

the posts or handles. This condition also made the Conductors' job difficult and was the cause of many injuries. To alleviate the safety issue the company installed vertical triangular plates on the side sills to make it difficult for one to gain a foothold on the outside of the car. It was not done to all of the cars, so I do not believe it corrected the problem. If it rained, the closing of the shades would make the situation impossible. Passengers would not utilize the cars and it was lost until the rain stopped and the seats dried. The Conductors would not be able to walk through the cars to close or open the shades. To sum it up the side doors were a major time-consuming problem resulting in constant delays. This resulted in their downfall.

The cars were withdrawn from service at the end of the summer of 1917. 28 cars were sold and sent to Norfolk, Virginia for the World War I war industries in 1918. Of the remaining cars, were eight cars were put into storage, five were stored on the Flushing Line, one car on the Astoria Line and two in 239th Street Yard.

In 1923 the Interborough Manhattan Division, in an attempt to attract more riders, came out with a spruce-up campaign. They started painting elevated cars and composites traction orange with black roofs and trim. The "L" cars had "The Open Air Line" embossed on their sides with blue lettering. Some of the station houses were done as well. At that time two open cars were painted in the orange and black paint scheme and were used to transport bands of musicians on the Manhattan portion of the "L" as a publicity gesture. After that they were no longer used in service and were stored inside the barns. In 1925 five cars were stripped and converted to flat cars. Due to their heavy steel framing, they became strong work cars that lasted well into the seventies. The three remaining cars were sent to 239th Street Yard and stored with other unused cars until the mass scrapping of excess equipment in 1938.

The yard below the Bronx Park station was later used to store excess el trailers until they were scrapped. By that time the elevators and transfer table were inoperative, so the cars were taken apart by hand on site and were moved around by hand using pinch bars. The yard was then demolished as well.

In my teens I was given a tour of the 147th Street Shop. I was asked to sit in the waiting room for the Superintendent. There was a long train seat that was covered in rattan. I was practically underneath the seat when he came in. He introduced himself and asked me if I lost something. I said no but I was curious about the seat. I told him that I could see that it was originally a flip-over that was welded in place and that the only cars it could have come out of was an open "L" car. Since the open car seats were wood, I was confused. He smiled and said it was in fact from an open car, but the shop padded it and covered it in rattan. He asked me how I could possibly know that, and I told him of my interest in the transit system. He showed me all over the shop. Since this was in the fifties there were mostly first-generation cars in there. What a day that was for me.

(Continued on page 16)

Tales of the Interborough—The Elevated Breezers*(Continued from page 15)*

NUMBER	BUILDER	DELIVERED	DISPOSITION
1219	American Car & Foundry	1/1902	Ex-142, sold 9/21/1918 to W&M
1220	Jewett Car	5/1902	Sold 9/21/1918 to W&M
1221	Jewett Car	5/1902	Converted to flat car 15 2/27/1925, then to sub-way clearance car, then back to flat car
1222	Jewett Car	5/1902	Sold 10/24/1918 to W&M
1223	Jewett Car	5/1902	Scrapped 10/17/1938
1224	Jewett Car	5/1902	Sold 9/21/1918 to W&M
1225	Jewett Car	5/1902	Sold 8/10/1918 to W&M
1226	Jewett Car	5/1902	Sold 8/24/1918 to W&M
1227	Jewett Car	5/1902	Sold 8/27/1918 to W&M
1228	Jewett Car	6/1902	Converted to flat car 16 3/11/1925
1229	Jewett Car	6/1902	Sold 5/10/1918 to W&M
1230	Jewett Car	6/1902	Sold 8/10/1918 to W&M
1231	Jewett Car	6/1902	Sold 8/10/1918 to W&M
1232	Jewett Car	6/1902	Sold 8/10/1918 to W&M
1233	Jewett Car	6/1902	Sold 8/18/1918 to W&M and scrapped
1234	Jewett Car	6/1902	Sold 9/21/1918 to W&M
1235	Jewett Car	6/1902	Sold 9/21/1918 to W&M
1236	Jewett Car	7/1902	Sold 9/21/1918 to W&M
1237	Jewett Car	7/1902	Sold 10/18/1938 to W&M and scrapped
1238	Jewett Car	7/1902	Sold 10/24/1918 to W&M
1239	Jewett Car	7/1902	Sold 10/24/1918 to W&M
1240	Jewett Car	7/1902	Converted to flat car 18 6/13/1925
1241	Jewett Car	7/1902	Sold 10/24/1918 to W&M
1242	Jewett Car	7/1902	Sold 10/24/1918 to W&M
1243	Jewett Car	7/1902	Sold 10/24/1918 to W&M
1244	Jewett Car	7/1902	Sold 9/21/1918 to W&M
1245	American Car & Foundry	1/1902	Converted to flat car 19 7/9/1925
1246	American Car & Foundry	2/1902	Sold 8/10/1918 to W&M
1247	American Car & Foundry	2/1902	Converted to flat car 17 5/8/1925
1248	American Car & Foundry	3/1902	Sold 9/21/1918 to W&M
1249	American Car & Foundry	3/1902	Sold 8/10/1918 to W&M
1250	American Car & Foundry	3/1902	Sold 8/10/1918 to W&M
1251	American Car & Foundry	3/1902	Sold 9/21/1918 to W&M
1252	American Car & Foundry	3/1902	Sold 8/10/1918 to W&M
1253	American Car & Foundry	3/1902	Sold 9/21/1918 to W&M
1254	American Car & Foundry	3/1902	Sold 9/21/1918 to W&M

Disposition Note:

W&B was Wendell & MacDuffie, used railroad car brokers, acting for the U.S. Navy in acquiring cars for the World War I war effort. These cars went to a shipyard in Norfolk, Virginia.

(Continued next issue)

VIENNA-BRATISLAVA-UKRAINE

by Jack May

(Continued from December, 2021 issue)

(Photographs by the author)

Before starting this chapter I would like to relate the gist of correspondence I received from three readers regarding the origin of the Russian word, "Vokzal" that appeared in the December, 2021 issue, which means railway station. Essentially the story is that the derivation of the word is based on events that occurred during the first half of the 19th century, when the Russian Tsar decided to develop a railroad system for his empire. Apparently he sent a delegation in 1840 (or visited himself in 1844) to London to study Britain's railways. At that time, the terminal of London & South Western Railway was Vauxhall, as listed in the 1841 issue of the Bradshaw timetable (the line was later extended to Waterloo). Thus many rail historians say that Vokzal is a direct transliteration of Vauxhall. However, there is no consensus about whether this is correct or just coincidental conjecture. Vauxhall remains the first station beyond Waterloo and is also a stop on London Underground's Victoria Line.

Wednesday, June 21 in Kiev (Continued)

I planned to work my way back to Lepsy in order to ride regular Routes 14 and 15 from where they cross over the express tramway, but before I could accomplish that I encountered an interval where nothing was running inbound, perhaps for as long as 20 minutes. I found out later from the group that during their visit to the carhouse at the end of Route 1, a 750-series car suffered a broken pantograph and blocked everything! Glad I missed most of that, but it put the group behind schedule, which, as you will see below, worked out for me.

There is some attractive right-of-way on the joint 14/15 line and I stopped alongside a park for a few photos before continuing to the inner terminal of the 14 at Kontraktova Ploscha. At that point, on a one-way loop along two parallel streets shared by Routes 11, 12, 14, 18 and 19 on the outskirts of the city center (where connection is made with Metro Line 2), I transferred to a Route 12 car. (See [http://www.urbanrail.net/eu/ua/kiev/tram/kyiv-](http://www.urbanrail.net/eu/ua/kiev/tram/kyiv-tram-map.htm)

[tram-map.htm](http://www.urbanrail.net/eu/ua/kiev/tram/kyiv-tram-map.htm).)

Route 12 is my favorite of all the streetcar lines in Kiev, as major parts of its long outer end are extremely bucolic and wooded. Riding it the first time reminded me of PCC operation over some long-gone streetcar lines like Cabin John and Branchville in Washington, D.C. (Maryland), and Willow Grove in suburban Philadelphia, and I was not disappointed the second time. It literally runs through a forest and then through a very upscale-looking and picturesque town, Pushcha-Voditsa, a location, I am told, where the politically chosen used to have their dachas. Further, the operators are not bashful about stepping hard on the right-most pedal. The line is almost 5 miles long and service operates every 12 to 15 minutes.

After I finished my photography I headed back, but while looking out the front of my T3 I saw the tour group having a photo stop on their [running late] fantrip. I asked the operator of my car to stop here in the middle of nowhere (I think actually near where Peter met the Wolf), and she complied! Thus I was able to join the trip and ended up riding to the Pushcha Voditsa terminal again (but this time in a T6 cafe car).

While the charter was waiting at the loop Karl-Heinz joined me and we abandoned it and left on a regular car, which took us to the junction with the 11, 16 and 19 at Skliarenka. From there we rode outbound on the 16 aboard another T3 to its Heroiv Dnipra loop, where we changed to Metro Line 2 (after more photos). Finally we rode the underground line back to Maydan Nezalezhnosti downtown, changed to the 1 for one stop to Universtet and then walked to the Ibis.

Clare was already back from her day visiting museums, and we joined the group for dinner in the hotel at 20:00.

Thursday's activities will be covered next month.

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Rail News in Review

(Continued from page 14)

tire length to improve accessibility. They are equipped with LED lighting, 20% more glass surface, optimized air-conditioning and ventilation system as well as travel information on large screens via a telematic system.

Daily ridership is expected to be more than 60,000 passengers and the new LRVs will operate alongside the existing 35 AnsaldoBreda Siro LRV fleet.

Alstom is also responsible for on-site testing, training and three-year warranty services for the new LRVs, as well as supplying spare parts. (*International Railway Journal*, December 15, 2021)



Alstom Citadis LRVs have commenced operations in Greece.
Alstom photograph

Vienna-Bratislava-Ukraine

(Continued from page 17)



A T3 operating outbound along some verdant side-of-the-road trackage on Mykoly Vasylenka Street. The line continues on a reserved track along a boulevard as it approaches the express tramway.



A parade of Tatra T3 PCCs serving 5 routes operates along Kostiantynivska Street near the Kontrktova stop of Metro Line 2 just north of the city center.



After leaving the forest I alit at the first stop in Pushcha-Voditsa for the left photo and then walked back, along the prw for my second exposure at right. There was plenty of audible warning before a T3 would come and it was easy to avoid an accident by walking into the underbrush. The biggest problem was shadows.



I then walked back to the stop and continued outward along the center reservation, eventually finding this tree-lined segment of Mykoly Yunkerova Street (which roughly translates to Rhode Island Avenue).



My traveling companion was not sure riding in a PCC was really a treat.

(Continued on page 19)

Vienna-Bratislava-Ukraine

(Continued from page 18)



Stop the car! And she did. The tour group had already scurried aboard their chartered cars when I grabbed this photo in the forest, and then waved down the operator of the T6 to pick me up.



Tatra T6 001 was built in 1985 and recently was turned into a party car (or a cafe car), to be chartered for special occasions, which clearly included visits of tramway enthusiasts from Germany and other countries. It is shown at a photo stop along Mykoly Yunkerova Street near the end of Line 12 in Pushcha-Vodtsya.



My last photo, toward the end of the day, features Route 16's loop near the entrance to the Heroiv Dnipro terminal station of Metro line 2. Many of these passengers waiting to board the Tatra T3 PCC came from feeder bus lines. I tried to speculate on why there were so many used tires littering the landscape at this spot but came up as empty as a doughnut hole.

(Continued next issue)

NORTH AMERICAN TRANSIT OPENINGS SCHEDULED FOR 2022

by Randy Glucksman

Based on the latest available information, fifteen projects are proposed for completion this year, including eight holdovers from previous years:

DATE	AGENCY	CITY	TYPE	LINE	DETAILS	NOTES
March	Massachusetts Bay Transportation Authority	Boston, Massachusetts	LR	Green-Union Square Branch	Lechmere to Union Square 0.9 miles, 1 station	From 2021
April	Washington Metropolitan Area Transit Authority	Washington, D.C.	HR	Silver Phase 2	Wiehle Avenue to Dulles International Airport 11.5 miles, 6 stations	From 2018
Spring	Valley Metro Rail	Tempe, Arizona	SC	Tempe Streetcar	Marina Heights/Rio Salado Parkway to Dorsey Lane 3 miles, 14 stations	From 2021
May	Massachusetts Bay Transportation Authority	Boston, Massachusetts	LR	Green - Medford Branch	Lechmere to College Avenue, Medford 3.4 miles, 5 stations	From 2021
June 16	Rhode Island DOT	Pawtucket, Rhode Island	CR	Northeast Corridor	Pawtucket-Central Falls Station	
July 1	Southeastern Pennsylvania Transportation Authority	Philadelphia, Pennsylvania	CR	Media/Elwyn	Extension from Elwyn to Wawa Station 3.5 miles, 1 station	From 2021
August	Los Angeles County Metropolitan Transportation Authority	Los Angeles, California	LR	Downtown Regional Connector	Little Tokyo/Arts District Station to 7th Street/Metro Center Station 1.86 miles, 3 stations	
Summer	Edmonton Transit	Edmonton, Alberta	LR	Valley Line Southeast	102 Street to Mill Woods Town Center 8.07 miles, 11 stations	From 2020
October	San Francisco Municipal Transit Agency	San Francisco, California	LR	Central Subway (Third Street Light Rail) Phase 2	4 th & King to Chinatown 1.7 miles, 3 stations	From 2018
Fall	Washington Metropolitan Area Transit Authority	Washington, D.C.	HR	Blue and Yellow	Potomac Yard infill station (between Washington National Airport and Braddock Road) opens	
November	MTA Long Island Rail Road	Elmont, New York	CR	Main Line (Hempstead Branch)	Elmont Station (North [westbound] platform)	
November	Los Angeles Metropolitan Transportation Authority	Los Angeles, California	LR	K - Crenshaw/LAX Transit Corridor	Crenshaw/Expo to Westchester/Veterans 8.5 miles, 8 stations	From 2020
December 13	MTA Long Island Rail Road	New York and Queens Counties, New York	CR	East Side Access	Harold Interlocking to Grand Central Terminal 3.75 miles	
December	MTA Long Island Rail Road	Nassau County, New York	CR	Main Line Third Track	Floral Park to Hicksville 9.8 miles	
End	Toronto Transportation Commission	Toronto, Ontario	LR	Eglinton-Finch Avenue West Crosstown 5 Phase I	Kennedy-Mt. Dennis 11.8 miles, 25 stations	

Legend:

CR Commuter Rail
HR Heavy Rail

LR Light Rail
SC Streetcar