



BULLETIN

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Donald W. Harold, 1931-2023

By Eric Oszustowicz, with the assistance of Tom Jablonski

On June 14, 2023, Don Harold died at the age of 91, but his legacy will last well into the foreseeable future. All of us owe so much to this one incredible human being.

Born in Brooklyn on August 18, 1931, Don would quickly become involved in the transportation industry in one form or another. At the age of 15, on March 31, 1947, he became a member of the ERA. By 1976, he would become one of its few honorary members.

Don's maternal grandfather, William Conrad Muessig, was a tremendously positive influence upon his life. Don idolized his grandfather, a Brooklyn trolley motorman, and later an inspector (a dispatcher today). His grandfather started working for the BRT in 1905 and then during the transition to the BMT. Although he died in 1943, his influence upon Don would last a lifetime.

Many are unaware that Don was employed as a trolley motorman in Atlantic City prior to that system's abandonment in 1955. The managers there wondered how someone in their early 20s needed no training, but they didn't know that Don had been operating trolleys in Brooklyn on "an unpaid basis."

By March of 1965, Donald Harold was a highly respected employee of the Internal Revenue Service and was known for being assigned the difficult and hardship tax cases. His handling of audits was legendary, and the audit usually wound up as a refund to the taxpayer or an acceptance of the tax return with "no changes". His managers knew that he was great at public relations, and that he was capable of charming even the most cynical people. His future at the IRS was

quite bright, although he outwardly expressed the fact to his managers that he did not believe in income taxes.

Early that month, Don was having a general discussion with a friend who happened to be a high-ranking Transit Authority official, Leonard Ingalls, Len to most. Mr. Ingalls brought up the fact that he was having difficulty in his

endeavor to preserve historic rolling stock that was being retired at the time. Don perked up and basically stated, "I think that I could get that done, but you don't want to know how I would do it."

Don joined the Transit Authority later that month. He was hired by Len Ingalls directly, with Don reporting to him for many years. Don left the IRS on good terms and his managers stated that he was welcome back at any time.

Another longtime friend of Don's was George Horn, whom Don had met while Mr. Horn was operating trolley cars in Brooklyn. Don would occasionally operate his trips. George Horn would later join the subway ranks and retire as a trainmaster, a Superintendent in today's world. In early 1965, George wrote a letter suggesting that rolling stock should be restored to celebrate the 50th anniversary of the subway coming to Queens, which would occur in June

of 1965. There was a cool reception to the letter. Don Harold, who had just joined the TA, got on the case with a vengeance. Don connected the anniversary to the World's Fair taking place in Flushing Meadows to give it a better case and pushed it through. This resulted in a restored train of five IRT Low Voltage cars, a restored set of BMT
Continued on page 3





Electric Railroaders Association

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

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Monthly Meeting

Friday, July 28, 2023 at 8:00 PM.

Presenting This Month: Noah Caplin

Our first in-person monthly meeting since 2020! Noah Caplin (E.R.A. #3751) will have a presentation that will include aerial images of subway and railroad locations in the New York City region. This will once again be held at Manducatis restaurant in Long Island City. Dinner will be included and attendance is limited to 50 members. For details, visit <https://erausa.org/monthly-meetings/2023/07/>. NOTE: As of publication time, this meeting is already at capacity and reservations are closed.

Trips

August 12-16: MNYBA annual five-day extravaganza to Boston and Maine. Visit <https://erausa.org/regional-trips/2023/08/> for all the details. NOTE: Reservations must be made by July 17!

2024 Benelux Trip

ERA is planning a tour next year to Belgium, the Netherlands and Luxembourg. The tour will begin in Amsterdam on May 10 and end in Brussels on May 25. Pre and post tour days will be available. The tour will be based in Amsterdam and Brussels and we are planning to visit many tram operations and tram and railway museums in Amsterdam, Den Haag, Rotterdam, Arnhem, Utrecht, Brussels, Antwerp, the Oostende-Knokke Coastal Tram, Brugge, Gent, Charleroi, Thuin and Luxembourg. Group and optional sightseeing will be available. Included travel will be by rail and day passes will be provided for local transit. Baggage handling between our two hotels is included with a coach transfer. The dates are firm and booking will begin later this year in August or September.



Amsterdam Type 1G (Beijnes, 9/1957) at the Havenstraat Depot on September 3, 2017. no-night photo via Urban Electric Transit

Cover Photo

Don Harold at Stillwell Terminal on May 29, 2004. Tom Jablonski photo

Q-Types painted in the 1939 World's Fair colors and a restored set of B-Types that would operate on the Astoria Line. The restoration of these cars was the first step to a Transit Museum, but Don still had to figure out how to get the museum created.

In the meantime, Don was doing whatever he could to save different types of rolling stock. This involved moving cars around the system to keep them from the managers who wanted to scrap whatever they could. Some cars were mysteriously renumbered, some a few times, to hide their true identity and vintage. This drama went on for 11 years and involved the work of many employees at all levels, almost entirely coordinated by Don himself. We now fast forward to a historic day in this process.



Don in his office at 370 Jay Street, January 20, 1982.
Steven Zabel photo

On May 12, 1976, a plaque was being created to present to a retiring high ranking official of the Transit Police. The plaque was being created by Transit Authority President John G. DeRoos, containing various police badges from around the New York City area with an emphasis on the Transit Police. Old badges from the BMT while it was still a private company were specifically included, but an example of a key badge could not be obtained. President DeRoos dropped in on Don Harold, who was not only a storehouse of Brooklyn transit knowledge, but also a storehouse of actual hardware that had been given to him over the years. Don, of course, provided the most important badge for the plaque. At that point, President DeRoos asked, "Wouldn't it be great if there was a museum for all of this?" (Rumors of using the abandoned IND Court Street Station as a museum were floating around since about January of 1965.)

Don's face lit up and pounced on the opportunity. Mr. DeRoos instructed Don to convene a meeting of all the personnel required to create a museum and he was given carte blanche to get the museum opened. On May 13, 1976, the meeting took

place on the 13th floor at 370 Jay Street, the administration floor. The bicentennial celebration was coming up on July 4th, so this date was set as the opening day target.

During the meeting, Don instructed that one of each car class be brought to Coney Island Shop for restoration. Someone then said, "Good, we can scrap the rest." Once again, Don's face lit up. Realizing that many old cars would be scrapped that he was trying save, Don needed to think fast, so he stated "No, we need them for the trains." After a brief silence, the same person asked, "What trains?" "The trains that we will run from 57th and 6th to the Transit Museum and then out to Rockaways," Don replied. So, in the spur of the moment, the Nostalgia Specials were created. From that day to early July 1976, Coney Island Shop was a beehive of activity. The cars were ready by the July 2nd opening. The rest is history. If you have never been to the New York City Transit Museum (originally known as the N.Y.C. Transit Exhibition) located at the old Court Street Station in Brooklyn, you are missing out on a grand experience. The cars present in the Transit Museum on the opening day were: D-Type 6112, IND R1/9s 100, 484 & 1575, R11 8013, R46s 1776 & 1976, aka 680 & 681, Low-Vs 4902 and 5466, R12 5760, R15 6239, Steeple Cabs 5 and 6 and Hopper Car H254. On July 26th, R17 6609, R33 9306 and R30 8506 were added. Standard 2204 and Q-Type 1612C would be added later. This equipment was saved thanks to Don Harold and many other like-minded individuals.

As a sidebar, Don had originally intended for a 10-car IRT Low Voltage train to be saved. Five cars were already restored in addition to car 4902 in the museum, but five more were being held to the side. During this period, other high-level people who had no interest in history were seeking to scrap whatever they could. Someone noticed the five Low Voltage cars on the TA records and was determined to scrap them. First, they needed to find them. Don got news of this and was determined to save these five cars. Don's phone got some heavy use. The cars were located at E. 180th Street at the time. Don discovered that an expedition was going to E. 180th Street Yard to find the cars. Don Harold had friends everywhere in the system. After a few calls, the cars were hidden on Y4 track south of Pelham Parkway. After the search of E. 180th Street was over, the cars were moved back.

The five additional cars were eventually scrapped or removed from the property. One of them, car 5600, is at the Trolley Museum of New York. The culture has much improved for the better. The atmosphere today is one of preservation and a respect for history, but much of this atmosphere started with Don Harold.

The attempt to create the Transit Museum occurred during the 1970s when times were different and the City was experiencing a dire fiscal crisis, so Don was up against many obstacles, both political and financial. Struggles to preserve history took place throughout the era. There was even the possibility of Grand Central Terminal being lost.

After he retired, highly skilled and right-minded people took over the mantle to maintain the museum and its fleet

for the good of the City. These people should be thanked at every opportunity. These people are preserving and continuing Don Harold's legacy.

Don Harold's devotion to the Catholic faith was intense, and at one point early in his life he was in a seminary studying for the priesthood. Numerous priests were counted among his closest friends who often consulted with Don concerning theological and procedural matters. For much of the 1970s and 1980s, Don was president of the BMT Holy Name Society. At 17 years of age in 1983, I was invited to one of their meetings by Don for the first time, where I met people that were to become lifelong friends. Tom Jablonski met Don for the first time at one of these meetings, a communion breakfast in this case, in 1976.

Not generally known is the fact that Catholic masses were held, and even confessions heard, in Don Harold's home and even on museum cars in the Transit Museum while it was closed to the public.

Don's loyalty, generosity and kindness are legendary. Don Harold personally assisted and mentored a multitude of people to not only obtain jobs at the Transit Authority, but also to obtain promotions once there. Don also assisted countless people when they got into trouble while working at the Authority. He saved their jobs and careers by vouching for their integrity, placing his good name on the line while doing so.

On a personal note, Tom Jablonski and I, as well as many others, enjoyed visiting Don and listening to his literally hundreds of stories regarding his experiences. Don was a mentor to both of us. Don's primary interest from the time he was a child was the Brooklyn trolley system and Brooklyn itself. He was a walking encyclopedia of knowledge. He would share this knowledge with all who cared to listen, and a visit to Don's home was a guarantee that you would hear at least a few of these astoundingly interesting stories. Regarding some stories, he would occasionally repeat one that I had already heard, but I never stopped him since listening to the same story again was like watching your favorite film again.

One of his favorite stories was that involving his good friend, the Reverend Francis J. Cosgrove, who was also the Chaplain for the New York City Transit Authority. He was known as Father Cosgrove to all of his friends. Father Cosgrove was also qualified to operate subway trains. As Don would tell it, one Sunday, Father Cosgrove conducted a mass at St. Ignatius Loyola, which is located at Park Avenue and 84th Street. He then went to take the IRT subway at 86th Street. The change booth clerk recognized Father Cosgrove and asked him to take over the booth while he visited the restroom. While in the booth, a St. Ignatius parishioner who had just attended the aforementioned mass, bought a token from Father Cosgrove who nonchalantly said hello. Father Cosgrove then left the booth to ride a train. The train operator recognized him and allowed him to take over the controls. Father Cosgrove arrived at 125th Street, and that same parishioner exited the train to see him now operating

the train. Father Cosgrove waved at him, said nothing, and wrapped up the controller. The parishioner was left on the platform looking dumbfounded. In later years, this true story as told by Don appeared in *The New York Times* and the *New York Post*. Father Cosgrove died in 2000.

Other stories regarded Don's influence on certain motion pictures. Don was instrumental in the coordination of the subway-oriented scenes in the Oscar winning "The French Connection" film. In fact, the famous elevated structure chase scene near the end was supposed to take place in the Bronx. Don had to appear on the set each day, so he convinced the director to move production of the sequence to Brooklyn. Don stated to newspapers that he did this because "I didn't want to schlep up to the Bronx every morning". Don was also instrumental with the film utilizing a real motorman and conductor in the film. There are many intricate details regarding the "French Connection" subway scenes that will be delved into in a future ERA publication. These many details are quite fascinating and led to R42s 4572, 4573 and R17 6609 becoming museum cars.



Don Harold in the D-Type, November 13, 1994.

Another story involves a later film. Don was also instrumental in "The Taking of Pelham One Two Three" novel, but not in its 1973-1974 filming. While the late John Godey (aka Morton Freedgood) was writing this novel, Don was an unofficial technical advisor, but hardly anyone knew of this fact, and for good reason. Don Harold is the reason for the book being technically correct in many of its aspects, although John Godey himself was also reportedly a train enthusiast. For years afterwards, trains were not permitted to be scheduled to leave Pelham Bay Park at 1:23.

During the above-mentioned visits to his home, Don would always offer you an egg cream, vanilla or chocolate. Watching him utilizing U-Bet syrup and an old-fashioned seltzer bottle is something that I will never forget. An egg cream and a great story. How "Brooklyn" can one get?

The world has truly lost a great human being. To have been his friend since 1983 was truly an honor.

Rail News in Review

New York Metropolitan Area

METROPOLITAN TRANSPORTATION AUTHORITY (MTA)

Former MTA Chair Richard Ravitch Dies at 89

Richard Ravitch, a politically savvy, civic-minded developer and public citizen who helped rescue New York City from the brink of bankruptcy and its decaying subways from fiscal collapse, died on June 24 in Manhattan.



Mr. Ravitch at Coney Island Yard in 1983.
Don Hogan Charles/The New York Times photo

Mr. Ravitch never won elective office. But he left an outsize mark on government at every level as one of the backstage wise

men recruited to stave off the financial collapse of New York’s Urban Development Corporation in 1975 and, a few months later, of New York City’s own overdrawn municipal accounts.

By rallying public support for inventive means of raising revenue, in 1979 Mr. Ravitch was again enlisted by the governor, this time to salvage the transit system, when he was appointed chairman of the Metropolitan Transportation Authority.

He was uniquely qualified; as a rarity among public officials, he was a regular subway rider.

He warned that fares would rise unless legislators approved a tax increase. They complied. He weathered an 11-day transit strike in 1980 and lived with a police escort after an intruder shot his police bodyguard in the thigh at MTA headquarters.

Lobbying for long-term financing to rebuild the transit system, Mr. Ravitch fashioned an \$8.5 billion plan under which private corporations would buy buses and railroad cars from the MTA and lease them back at a saving to the authority, and the companies would receive tax benefits.

Mr. Ravitch retired from the transit agency in 1983. In the decades that followed, he continued to serve as a trusted advisor to the governors and others in the state on matters of critical financial and legislative affairs.

[NEW YORK TIMES](#), June 26

Congestion Pricing Moves Forward

The Federal Highway Administration has completed the environmental review of the State’s nation-leading congestion pricing program—Manhattan Central Business District Tolling—following a 30-day public availability period of the Final Environmental Assessment. The federal agency issued

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

Date	Country	City	Segment	Distance (miles)	Rail/Metro/Tram
6/6	China	Changchun	Line 4: Tiangong Road to Tianxin Road	2.8	T
6/7	Scotland	Edinburgh	St. Andrew Square to Newhaven	2.9	T
6/11	Australia	Perth	Lakelands Station between Warnbro and Mandurah	n/a	R
6/16	U.S.A.	Los Angeles	Regional Connector: Little Tokyo/Arts District to 7th St/Metro Center	1.9	T
6/24	China	Suzhou	Line 11: Weiting to Huaqiao	25.7	M
"	France	Paris	T10: Antony-Croix de Berny to Jardin Parisien	4.2	T
6/27	China	Xi'an	Line 2: Xi'anbeizhan to Caotan and Weiqunan to Changninggong Line 16: Shijingli to Qinchuangyuanzhongxin	4.3 9.4	M M
6/28	"	Changsha	Xihuan Line: Shantang to Xiangtan North Railway Station	10.7	M
"	"	Nanjing	Line S4: Chahe to Chuzhou Railway Station	27.5	R
6/29	"	Lanzhou	Line 2: Dongfanghong Square to Yanbai Bridge	5.7	M
6/30	U.S.A.	Honolulu	Skyline: Kualaka'i (East Kapolei) to Halawa (Aloha Stadium)	11.1	M

a Finding of No Significant Impact, confirming the conclusion of the Final Environmental Assessment, which includes mitigation measures to be undertaken by the program, that the program will have no significant environmental impacts.

The Environmental Assessment, prepared by the Triborough Bridge and Tunnel Authority (TBTA), an affiliate agency of the MTA, New York State Department of Transportation, and New York City Department of Transportation in consultation with the Federal Highway Administration, found the program is expected to meet its objectives by reducing congestion and overall vehicle miles traveled, with related regional air quality benefits, while providing financial support to capital upgrades for the MTA's public transportation system.

Before a tolling rate structure can be set, the Traffic Mobility Review Board (TMRB), a body required by the April 2019 State Legislation that established the Central Business District Tolling Program, will develop a recommended toll structure after considering factors such as traffic patterns, traffic mitigation measures, operating costs, public impact, public safety, vehicle types, discounts, peak and off-peak rates, air quality and emissions trends. The TMRB will provide a report explaining its recommendations, including the underlying review and analysis, to the Board of TBTA, which is coterminous with the MTA Board. The TBTA Board will adopt and establish the tolling structure.

If a tolling structure is adopted on a timeline as expected, toll collection could begin as early as May 2024, which gives contractors a contractually obligated 310 days to finish designing, developing, testing, and installing the tolling system and equipment.

[MTA PRESS RELEASE](#), June 27

NEW YORK CITY TRANSIT (NYCT)

BMT Centennial

On June 15, the historic milestone of the Brooklyn-Manhattan Transit Corporation's (BMT) 100th anniversary since its creation was celebrated with commemorative rides on a vintage BMT-era train in Brooklyn. NYCT President Richard Davey and New York Transit Museum Director Concetta Bencivenga joined rail fans for a ride on a BMT Standard nostalgia train from Kings Highway Station in Sheepshead Bay to 18th Avenue Station in Kensington. The train operated every half hour from 11:00 AM to 2:30 PM to mark the historic occasion.

On June 15, 1923, the BMT took over operations of the bankrupt Brooklyn Rapid Transit Company. Some of the BMT's original transit routes are still in existence today. The BMT remained a competitor to the Interborough Rapid Transit Company and the Independent Subway System until June 12, 1940, when the BMT and IRT were sold to New York City and the subways became unified, forming the basis of today's system.

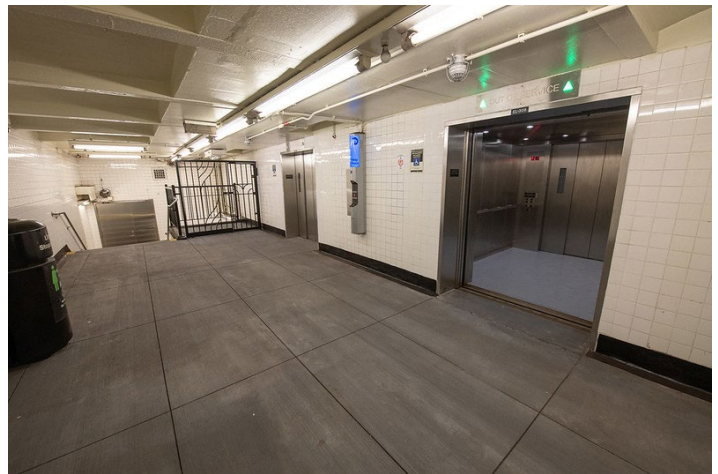
[MTA PRESS RELEASE](#), June 15



B-Type 2390-2391-2392 is seen at Kings Highway on the Culver Line during the June 15 Centennial celebration. Randy Glucksman photo

Court Street Elevator Work Completed

Two newly replaced elevators at the Court Street Station in Brooklyn were placed in service on June 20. The entrance at Montague Street also reopened after being closed during construction for a period of 13 months, which required riders to walk a greater distance to enter and exit the station during the rehabilitation work.



The new elevators, at the lower mezzanine level, at the Court Street Station on June 20. Trent Reeves/MTA photo

The two brand new elevators replaced the original elevators, which were in service for more than half a century and were beyond their useful lives. NYCT crews also made station enhancements during the replacement work to maximize the number of repairs made during the outage, including power washing the station platforms, street stairs and mezzanine areas; new lighting; newly painted staircases, ceilings, and railings and replacement of tiling. Crews also made upgrades to the communication system within the station.

[MTA PRESS RELEASE](#), June 20

Second R-211A Train Set Enters Service

Following a successful pilot phase, a second R-211 train was put into service on June 29, consisting of S 4079-4078-4077-4076-4075+4070-4071-4072-4073-4074 N. A press conference was held at the Hoyt-Schermerhorn **A C G** Station that morning.

The first R-211 debuted on the **A** line on March 10 following a ribbon-cutting at the Inwood-207th Street terminal in Upper Manhattan. The R-211 cars feature 58-inch-wide door openings that are eight inches wider than standard door openings on existing cars, designed to speed up boarding and reduce the amount of time trains sit in stations.

[MTA PRESS RELEASE](#), June 29



The second R-211A trainset at Hoyt-Schermerhorn Station, during the press conference on June 29. Marc A. Hermann/MTA photo

Weekend Subway Service Improved

The first phase of the previously announced weekend service increase on the **G**, **J** and **M** lines began on June 30. Service frequency on the three lines increased to every 8 to 10 minutes instead of every 10 to 12 minutes. The enhancements were part of the final FY 2024 New York State Budget and began a week after a post-pandemic record 4.688 million paid riders rode the subway on Saturday, June 24 and Sunday, June 25 combined.

The planned subway service enhancements focus on periods where subway ridership has recovered the highest from its pre-pandemic baseline. Subway ridership overall continues to recover, with the latest trend showing 3.85 million riders on an average May weekday and 2.23 million riders on an average Saturday or Sunday.

Weekend ridership has outpaced weekday ridership in its recovery, with weekend paid ridership nearing 80% of its pre-COVID baseline, compared to weekdays when paid ridership has been around 65% to 70% of the pre-COVID baseline. That post-pandemic Saturday and Sunday record was capped off with 2.215 million paid rides on Sunday, June 25, the highest Sunday total since the pandemic.

[MTA PRESS RELEASE](#), June 29

LONG ISLAND RAIL ROAD (LIRR)

Belmont Stakes Service

Once again, the LIRR provided service direct to Belmont Park, for those attending the 155th running of the Belmont Stakes, part of horse racing's Triple Crown.

On Saturday, June 10, 21 extra eastbound trains operated, 15 from Penn Station (9:27 AM to 5:04 PM) and five from Grand Central (hourly from 11:21 AM to 4:21 PM).

After the event, 15 extra trains operated westbound from Belmont Park Station. The first three trains (at 4:08, 5:08 and 5:20 PM) just operated to Jamaica. Eight trains ran to Penn Station (5:45 to 8:59 PM) and four ran to Grand Central (6:02 to 8:15 PM).

For the first time, for this year's event, six of the 10 switches in Belmont Park Yard were controlled by a block operator, who was on duty there from 7:00 AM to 11:59 PM that day. Those six switches also had yard switch indicator signals associated with them. Yard switch indicator signals can also be found at Far Rockaway, Long Beach, Port Washington and Shea Yard.

The railroad carried 22,902 horse racing fans to and from Belmont that day, the 50th anniversary of Secretariat's record-setting win capturing the triple crown — 10,671 fans to the race and 12,231 fans (25.4% of the race attendance, reported as 48,089) returned home on the LIRR after the race.

[MTA PRESS RELEASE](#), June 11

METRO-NORTH RAILROAD (MNR)

New Canaan Branch Summer Shutdown

The Connecticut Department of Transportation started its track improvement project on the New Canaan Branch on May 30, with substitute bus service replacing all train service. This work is part of the tie replacement and track upgrades program. When completed, an existing speed restriction in the Stamford area will be eliminated. Train speeds through this section will increase from 30 miles per hour to 50 miles per hour.

The work will entail the replacement of approximately 8,000 ties with a Pandrol fastening system, 1,600 feet of rail, insulated rail joints, and bridge timbers over the Noroton River Bridge; remediation of mud spots at several locations; reinstatement of drainage along portions of the branch where needed; installation of new rail anchors as needed; and surfacing the entire branch.

The work on Track 5 at Stamford to lift the speed restriction includes the replacement of 830 ties, 1,200 feet of rail and bridge timbers over the Canal Street bridge, Elm Street bridge, and East Main Street bridge; surfacing the entire stretch; and maintenance of the turnout by Elm Street.

[MTA PRESS RELEASE](#), March 15

Williams Bridge Station Work

In response to deteriorating stairways leading to both platforms at the Williams Bridge Station on the Harlem Line, MNR installed temporary stairways two years ago. These temporary stairways were closed on June 20 and are now being replaced with new temporary ones. This closure is scheduled to continue through to July 12. These temporary staircases will be replaced with new permanent ones in a future Capital Program project. During this time, NYCT is cross-honoring MNR tickets on the parallel Bx41 bus route.

[MTA PRESS RELEASE](#), June 6

40th Anniversary Celebrated

On Wednesday, June 28, the New York Transit Museum and MNR held a reception at the museum’s gallery and annex in Grand Central Terminal. This was to hail the new exhibition detailing MNR’s history over the past 40 years, and before.

The director of the Transit Museum, Concetta Bencivenga, opened the ceremony and noted that this was the first Transit Museum reception since the pandemic started three years ago. As such, everyone was excited to once again attend one of these events.



The new exhibit in the Transit Museum Gallery in Grand Central Terminal. MTA photo

Following Ms. Bencivenga’s remarks, Catherine Rinaldi, MNR president and LIRR interim president, spoke to the well-attended crowd. Two of MNR’s former presidents, Peter Stangl (MNR’s first, 1983–1991) and Joseph Giulietti (2014–2017), were also in attendance.

Metro-North at 40 traces the history of the second-busiest commuter rail in the United States all the way back to the early 19th century. The present-day lines that comprise Metro-North’s trackage are vestiges of some of the most important early American railroads, including the New York and Harlem Railroad, Hudson River Railroad, New York and New Haven Railroad, and Cornelius Vanderbilt’s New York Central and Hudson River Railroad. These rail routes spurred the development of suburban commuter towns that are today served by MNR.

Metro-North at 40 is on view through November at the

New York Transit Museum Gallery & Store at Grand Central Terminal and is open Monday through Friday, 10 AM to 7:30 PM; Saturday and Sunday, 10 AM to 6 PM; and is closed on major holidays and for special events.

[MTA PRESS RELEASE](#), July 3

Other U.S. Systems

ATLANTA

Streetcar East Extension

The Metropolitan Atlanta Rapid Transit Authority (MARTA) Board of Directors Planning and Capital Programs Committee selected the team led by architecture and engineering firm HDR to complete the final design for the Streetcar East Extension. HDR has extensive experience with streetcar projects, having provided engineering, architectural, environmental and construction work on streetcar projects in over 30 cities in North America.



Map showing the proposed route extending the Atlanta Streetcar to the Atlanta Beltline. City of Atlanta’s TIGER 7 grant application

The Streetcar East Extension will cost approximately \$230 million and is funded through the More MARTA Atlanta half-penny sales tax. Construction on the extension will get underway in 2025, with service scheduled to begin in 2028.

The MARTA Board recently finalized the alignment for the two-mile extension, which runs along Edgewood Avenue, Randolph Street, Auburn Avenue, and Irwin Street to the Atlanta Beltline, then turns north to Ponce City Market, with five stops along the route.

[MASS TRANSIT](#), June 23

AUSTIN, TEX.

Light Rail Implementation Plan Approved

The Austin Transit Partnership’s (ATP) first phase of Austin Light Rail Implementation Plan, running from 38th Street to Oltorf to Yellow Jacket with additional priority extensions,

has been approved by all three partners, including the Austin City Council and the Capital Metropolitan Transportation Authority (CapMetro) Board of Directors. The recommendation was initially one of five options revealed in March and was selected after planning data analysis, engineering evaluation and community dialogue came together to identify this plan as the path for light rail that serves the Austin community.

The ATP was created as the result of a 2020 election in which the voters approved Project Connect and the formation of an independent entity responsible for overseeing the program. Since its inception, it has been working closely with CapMetro and the city of Austin to create a plan for Austin's first light rail system that integrates well into the existing transit system while planning for the future.

An independent environmental impact study will be conducted, and ATP will continue to strategize with CapMetro, community leaders and the business community to ensure the project advances to enhance the mobility landscape for Austin and central Texas.

[MASS TRANSIT](#), June 8

BOSTON

Summer Tunnel Restoration Project

When the Summer Tunnel (through which Mass. Route 1A travels southbound) closes for needed rehabilitation this summer (July 5 through to August 31), the entire Blue Line in both directions will be free to riders. Gates will be open at all Blue Line stations from Wonderland to Bowdoin. An additional train will be added to the Blue Line in the midday period to help support more riders riding the line.

[MBTA PRESS RELEASE](#), June 9

Green Line B Branch Shutdown

The MBTA is planning a 12-day closure of the B Branch from Kenmore to Boston College Stations from Monday, July 17, through Friday, July 28. This closure will allow crews to complete track upgrades and additional work.



Full depth track replacement work will take place at Packard's Corner and from Harvard Avenue to Allston Street. MBTA

During this 12-day suspension in B Branch train service,

accessible shuttle buses will replace Green Line trains between Kenmore and Boston College. During this service change, crews will replace over 2,000 feet of track at Packard's Corner Station as well as from Harvard Avenue to Allston Street Stations.

To maximize efforts during this closure, crews will also replace duct banks, underground conduits that provide power to trains, and repaint pedestrian crossings, bike lanes, and platform edges along the B Branch.

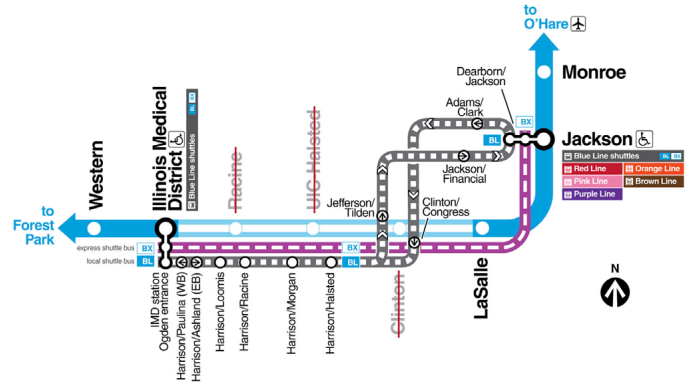
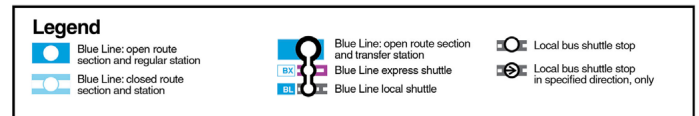
[MBTA PRESS RELEASE](#), June 22

CHICAGO

Blue Line Reconstruction Set

As part of ongoing efforts to provide better, more reliable and accessible services to all Chicago transit users, the Chicago Transit Authority announced the start of work associated with Forest Park Branch Rebuild—a multi-year, multi-phased investment program to reconstruct the entire Forest Park Branch of the Blue Line and make it 100% accessible to those who use mobility devices.

Phase 1a Service Map:



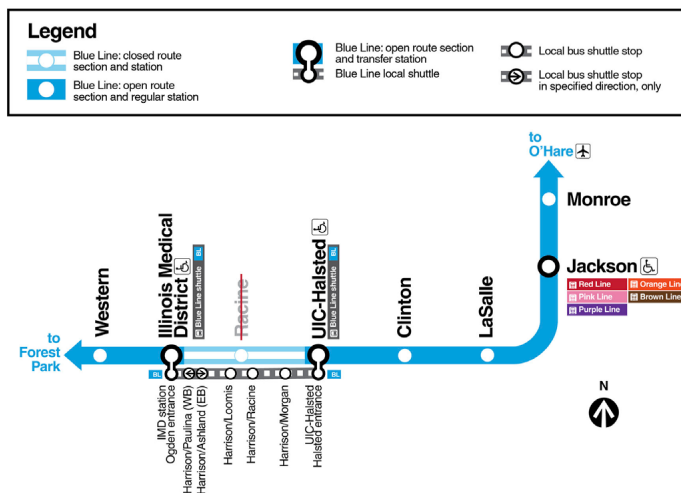
Work associated with Phase I of the Forest Park Branch Rebuild is scheduled to occur beginning Sunday, July 23 through Saturday, October 7. As part of this \$268 million project, crews will completely rebuild 15,000 feet or almost three miles of track between the LaSalle and Illinois Medical District (IMD) Stations; demolish and begin rebuilding the Racine Station to meet modern accessibility guidelines; and upgrade the traction power system for improved service reliability.

Opened in 1958, back when Dwight D. Eisenhower was president, the Forest Park Branch of the Blue Line has received some improvements, but after six decades of heavy use the tracks along the entire branch are beyond their useful life. This has resulted in nearly 80% of the branch being under slow zones, which cause service delays. Further, only four of the eleven stations (or 30%) along the branch are accessible to people who use wheelchairs or other mobility devices.

To reduce travel impacts to riders, project work will be performed in two parts:

- **Part A (July 23–late August):** Crews will rebuild the track between the UIC–Halsted and LaSalle Stations. During this time, Blue Line trains will operate in two segments: 1) between O’Hare and LaSalle, and 2) between Forest Park and IMD. The Clinton, UIC–Halsted and Racine Stations will be temporarily closed;
- **Part B (Late August–October 7):** Crews will rebuild the track between the IMD and UIC–Halsted Stations. During this time, Blue Line trains will operate in two segments: 1) between O’Hare and UIC–Halsted, and 2) between Forest Park and IMD. The Clinton, UIC–Halsted, and IMD Stations will be open for rider use.

Phase 1b Service Map:



Upon completion of track work in October, only the Racine-Loomis St. auxiliary entrance will re-open. The main entrance of the Racine Station will remain closed and is expected to re-open in late 2024, at which time the Loomis St. auxiliary entrance will close for reconstruction through 2025.

Following this extended line-cut, ongoing project work is expected in the area, additional details regarding service impacts will be announced soon.

Riders will be encouraged to use the nearby Green Line, which runs parallel to the Forest Park Branch and will have added train cars to accommodate the anticipated increase in ridership. Riders will also be encouraged to take the nearby Pink Line and CTA bus service in the corridor.

To incentivize use of these alternative service options, CTA will provide free rides on bus routes operating between the Pink and Green lines, as well as reduced fares at respective Pink and Green line rail stations.

CTA will also operate a local bus shuttle that will operate 24/7 for the duration of project. An express shuttle will also be provided during only Phase 1a and will operate between the IMD and Jackson Stations during the AM/PM rush periods on weekdays (peak travel directions only).

Phase I project work is funded by a mix of state and local resources, including Rebuild Illinois, TIF and CTA Bonds.

Additional funding is needed to advance future phases of the Forest Park Branch Rebuild, which in total is estimated to cost \$3 billion, including Phase I work.

[CTA PRESS RELEASE](#), June 28

HONOLULU

Rail System Opens

Honolulu’s mostly elevated autonomous rail system, Skyline, officially opened for service on June 30. The first phase of the project will transport riders along an 11-mile segment and serve nine stations between Kualaka’i (East Kapolei) Station and Hālawā (Aloha Stadium) Station.

A ceremony to mark the opening of the rail line included speeches from local, state and federal officials, transit stakeholders and residents who have been anticipating the start of service.

The smiles and joy of the project’s opening day were hard won. The project took years of planning, 12 years of construction, incurred delays, cost overruns and leadership turnover and the threat of losing federal funding before a project recovery plan was developed and approved.



Aerial view of the Kualakai-East Kapolei Station late last summer, on September 15, 2022. HART photo

To celebrate the opening of Skyline, all HART transit services did not charge fares through July 4. Riders will need a HOLO card to board transit.

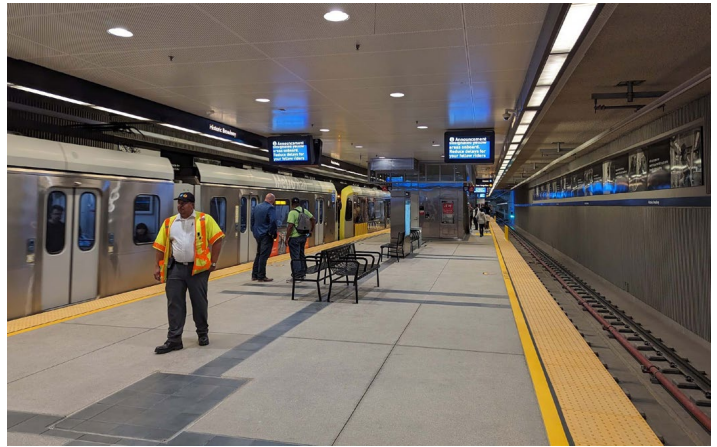
The Honolulu Authority for Rapid Transportation (HART) oversaw construction of the project and transferred control to the city and county of Honolulu on June 9. HART will continue working to build the next phases of the project, which includes the Airport Extension planned to open in 2025 that will connect Aloha Stadium with four additional stations to Middle Street-Kalihi Transit Center and the City Center Extension that will open in 2031 and add six stations to Civic Center.

[MASS TRANSIT](#), July 3

LOS ANGELES

Regional Connector Opens

The Los Angeles County Metropolitan Transportation Authority (Metro) celebrated the official opening of the Regional Connector transit project at the Japanese American National Museum (JANM). The opening ceremony, emceed by actor, Trustee, Chair Emeritus and JANM founding member, George Takei, featured several musical performances, and a special plaque unveiling in honor of Norman Y. Mineta, former U.S. Secretary of Transportation and Japanese American National Museum Board of Trustees Chair, which will be installed at the new Little Tokyo/Arts District Station. (Mr. Takei was once a board member of LA Metro's predecessor agency).



(Above) Historic Broadway Station and (below) Little Tokyo/Arts District Station, both on opening day. Sunny Zheng photos

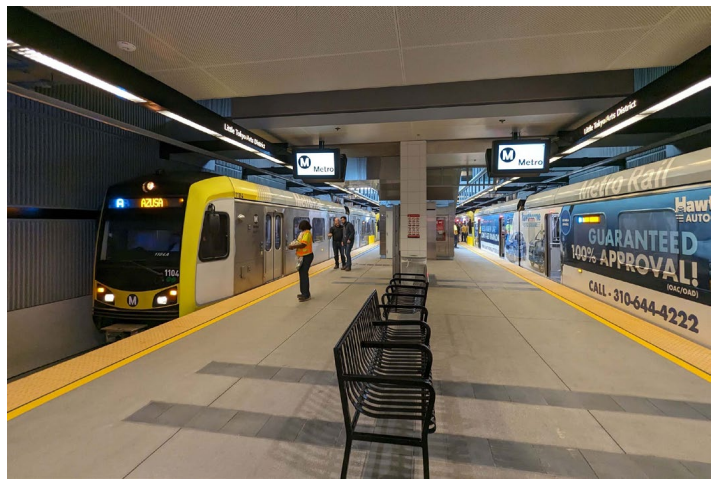


Grand Av Arts-Bunker Hill Station on opening day, June 16. Sunny Zheng photo

The Regional Connector transforms the way many riders will experience the Metro system. The 1.9 miles of new track laid allows light rail trains to travel between Union Station and the busy 7th Street/Metro Center Station in Downtown's Financial District. Prior to the Regional Connector, that was a journey only Metro's heavy rail lines could make. Bridging this gap allows Metro to merge the L (Gold) line with the A (Blue) and E (Expo) lines, creating two train lines where there were once three. With the opening of the Regional Connector, riders will have access to three new underground stations:

- **Little Tokyo/Arts District Station** where riders will have easy access to historically rich and vibrant neighborhoods and cultural institutions;
- **Historic Broadway Station** is located within two nationally registered districts: the Broadway Theater District, with 12 original theaters within seven blocks and Old Spring Street, known as the original Financial District of Downtown Los Angeles;
- **Grand Avenue Arts/Bunker Hill Station** connects riders to downtown's performing arts institutions, museums, fine dining experiences and more.

The three new underground stations include eight new



artworks commissioned through the agency's Metro Art program. All artists were selected through an open, competitive selection process following the recommendation of a panel of community-based arts professionals. Site-responsive artworks by Andrea Bowers, Audrey Chan, Mark Steven Greenfield, Ann Hamilton, Pearl C. Hsiung, Clare Rojas, Mungo Thomson, and Clarence Williams animate the plaza, concourse, and platform levels. In addition, a temporary exhibition of artworks by Ralph Gilbert and Samira Yamin is on view at the Grand Avenue Arts/Bunker Hill and Historic Broadway Stations as part of the Metro Art Lightbox Exhibition Program.

As with previous construction projects, the Regional Connector line was designed and built with the help of community input and local voices. In addition, this project benefited from Metro's Board-approved small business mitigation programs: the Business Interruption Fund and Eat Shop Play, which helped support small businesses in the areas along this project during construction. The Business Interruption Fund provided support for businesses around the Little Tokyo/Arts District and History Broadway Stations- \$3.3 million was awarded to 56 small "mom and pop" shops and the Eat Shop Play program provided free marketing assistance to 102 businesses along the Regional Connector line.

Metro contracted with Regional Connector Constructors (RCC), a joint venture between Skanska USA Civil West California District, Inc., and Traylor Brothers, Inc., to design and build the \$1.8 billion Regional Connector. Metro's contractor has been able to achieve one of the best safety records of all Metro construction projects, with more than 7.7 million hours worked without any lost time due to injury or incident. This is a testament to all the dedicated men and women working on this project, representing one of the best safety records in the construction field.

[LA METRO PRESS RELEASE](#), June 16

Foothill Gold Line Extension Progress

The Foothill Gold Line Construction Authority held a ceremony to celebrate the completion of major work for the new light-rail track system for the 9.1-mile, four-station Foothill Gold Line light-rail project from Glendora to Pomona. The celebration took place at the D Street railroad crossing in La Verne, Calif., just steps away from the University of La Verne campus and one of the four new light rail stations that will serve future riders. The event culminated in the installation of the 230,630th rail clip, officially completing major construction for the new light-rail tracks and permanently connecting the cities of Glendora, San Dimas, La Verne and Pomona via this new line. An engraved, commemorative boulder embedded in the sidewalk was also unveiled during the ceremony, recognizing the importance of the day to the corridor cities.

[MASS TRANSIT](#), June 26



Foothills Extension, looking west at E Street in La Verne on April 22, 2023. Alan Weeks photo

PHILADELPHIA

I-95 Bridge Collapse

After a bridge collapsed on Interstate 95 in North Philadelphia on June 11, SEPTA provided extra subway and commuter rail service on nearby routes. The bridge in question was over the Cottman Avenue exit ramp, a little north of the Tacony Station on the Northeast Corridor Line.

Market-Frankford trains operated every six minutes

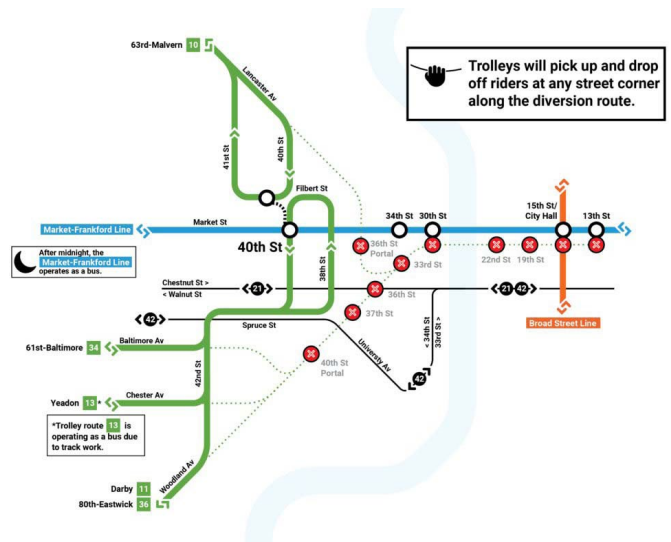
during peak hours. On Regional Rail, trains were lengthened on the Trenton, West Trenton and Fox Chase lines, also during peak hours.

On June 23 the temporary bridges that were quickly constructed were placed into service and normal traffic resumed on I-95.

[SEPTA PRESS RELEASE](#), June 14

2023 Trolley Tunnel Blitz

SEPTA crews will work around-the-clock tackling track and power maintenance work, station upgrades, and intensive cleaning as part of the 2023 Trolley Tunnel Blitz.



Map of SEPTA's trolley route diversions during tunnel shutdown. Trolley routes 10, 11, 13, 34 and 36 will be suspended between 13th St and 40th St Portal. SEPTA

Routes 10, 11, 13, 34, and 36 will not operate in the Center City tunnel from 10 PM on Friday, July 7 through 5 AM on Monday, July 24.

Trolley service will begin and end at 40th and Market Streets. Riders can board the Market-Frankford Line at 40th Street Station for travel to Center City. For travel from Center City to University City and Southwest Philadelphia, riders can board the Market-Frankford Line at 13th Street and then connect with trolley routes at 40th Street. In addition, buses will replace trolleys on Route 13 during the tunnel closure.

Work that will be completed includes:

- Demolish and rebuild the eastbound 22nd Street platform;
- Replace worn track curved rail at various locations;
- Clean out all pipes, drains, and vent wells;
- Replace four miles of overhead contact wire;
- Maintenance of entire tunnel signal system;
- Heavy cleaning and maintenance at all stations including graffiti removal, painting, and lighting.

This is the eleventh consecutive year SEPTA will have had the Trolley Tunnel Blitz, which is scheduled during the summer when ridership is traditionally lower to impact the fewest number of regular riders.

[SEPTA PRESS RELEASE](#), July 6

PORTLAND, ORE.

Red Line Service Temporarily Suspended

TriMet started a 126-day disruption to the MAX Red Line on June 18. No MAX trains are running between Gateway Transit Center and Portland International Airport for four months, the longest planned MAX disruption in TriMet's history.

Shuttle buses are running the duration of the disruption, through to October 21, to match normal weekday and weekend MAX Red Line schedules, arriving and departing about every 15 minutes. Red Line trains will continue running west of the Gateway Transit Center during the duration of the project.

This phase of the project is the most extensive yet for the A Better Red MAX Extension and Reliability Improvements Project. Crews will completely remodel the Portland International Airport MAX Station and build a two-thirds mile long second track near the airport, as well as perform nearly 20 other upgrade and maintenance projects in the closed section between the Gateway Transit Center and the airport, including repairs, inspections and equipment installations to graffiti removal, rail welding and replacement.

A multi-year project scheduled for completion next year and fully open to the public in fall 2024, A Better Red is now more than 65 percent completed.

[MASS TRANSIT](#), June 13

SAN FRANCISCO

Caltrain Begins Testing Electric Trains

Caltrain has begun testing its electric trains under their own power for the first time. Initial tests will be conducted between Santa Clara and College Park Stations on the Santa Clara Drill Track. Test runs will expand to the main track, between San Antonio and San Jose Diridon Stations this summer.



Caltrain's Stadler-built EMU testing at Palo Alto Station on August 13, 2022. San Mateo County Transit District photo

Caltrain's historic Electrification Project is the first undertaking in North America in a generation in which diesel

trains and their infrastructure components are transitioned to an electrified system. The project will improve the service by increasing the number of trains, modernizing service and adding new safety elements. The new trains will feature onboard displays with digital trip information, increased capacities, wi-fi and power outlets at every seat.

[MASS TRANSIT](#), June 7

150 Years of Cable Cars

The San Francisco Municipal Transportation Agency (SFMTA) and its nonprofit preservation partner, Market Street Railway, have joined together with a dozen organizations, including business and merchant groups and history and preservation nonprofits, to stage a slate of special events in the Summer and Fall of 2023 to celebrate the 150th anniversary of cable cars, San Francisco's iconic symbol.

The six-month-long celebration kicked off on June 13 at 11:00 AM at California/Drumm and Market Streets, when Mayor Breed, Board of Supervisors President Aaron Peskin and SFMTA Director of Transportation Jeffrey Tumlin joined civic, business and neighborhood leaders to ride the oldest surviving cable car, "Big 19," originally built for service on Market Street in 1883 and one of the largest cable cars ever built. The inaugural ride took them through the Financial District, Chinatown and over Nob Hill to Polk Gulch and Van Ness Avenue.

The cable car starring in the kickoff event is unique. In the 1880s, it was open-sided, and carried throngs of riders from the Ferry Building out Market and Haight streets to enjoy Golden Gate Park. After the 1906 earthquake and fire, "Big 19" moved to the Sacramento-Clay route, successor to Andrew Hallidie's original 1873 cable car line, and ran there from 1907 until 1942, when that line shut down. Restored by Muni crafts workers, "Big 19" inaugurated the celebration with a trip up California Street through Chinatown and over Nob Hill, just two blocks south of inventor Hallidie's Clay Street line.

Later in the summer, Muni hopes to have "Big 19" in regular service every Saturday on the California Street line through the fall as part of the celebration. Likewise, if work can be completed, Muni plans monthly operation of cable car 42 on its original Hyde Street trackage. Cable car 42 ran the O'Farrell, Jones & Hyde line until 1954, when the southern half of the line was abandoned and the tracks on Hyde were connected to part of a Powell Street line. Car 42 retains its original 1907 paint scheme and details. Decades after being sold as surplus to a cattle rancher in Santa Barbara County when the O'Farrell line closed, Market Street Railway brought it back to San Francisco and worked with Muni to restore it for service.

Other special events to celebrate 150 years of cable cars include the first-ever public tours of Muni's carpentry shop in the Dogpatch, where cable cars are built and rebuilt; a free phone app combining a ride on the California Street line with walking tours of historic spots along the line; and much more. All are detailed on [sfcablecars.org](https://www.sfcablecars.org).

The SFMTA already offers a great fare bargain with its \$13 all-day, all-Muni pass, available on the Muni Mobile

smartphone app, giving unlimited access to all Muni services, including all three cable car lines, the F-line historic streetcars on Market Street and the waterfront, plus all Muni Metro trains and all Muni buses. Additionally, to celebrate Muni's oldest surviving cable car line on California Street, Muni Mobile will offer a special \$5 all-day pass for just the California line starting on July 1 and lasting until year-end. The California line, with larger cable cars than the Powell line, has available capacity, making it easy for riders to hop on and hop off anywhere along the line for the entire day without paying an additional fare. It is hoped this special fare will bring more visitors to the businesses along the line.



Cable car 19 on Washington Street on August 14, 2019. SFMTA photo

On the actual 150th anniversary date, August 2, history reenactors portraying Andrew Hallidie, Emperor Norton, Domingo Ghirardelli, Lotta Crabtree and other notable San Franciscans from 150 years ago will gather at Hallidie Plaza at Powell and Market Streets at 10 AM to honor Hallidie's historic first run. A by-invitation luncheon will follow, honoring cable car heroes including Hallidie; Friedel Klussmann, who saved the cable cars in 1947; Senator Dianne Feinstein, who as Mayor personally led the rebuilding of the cable car system 40 years ago; Fannie Mae Barnes, the first woman to work as a "gripman" operating a cable car 25 years ago; and others.

The San Francisco Public Library has compiled a list of cable car books available at its various branches for interested readers. The Main Library's San Francisco History Center will mount an exhibit of historic cable car photos later this summer, in collaboration with the SFMTA Photo Archive. Market Street Railway's free San Francisco Railway Museum on Steuart Street across from the Ferry Building will debut a special exhibit on 150 Years of cable cars in mid-July.

[SFMTA PRESS RELEASE](#), June 9

WASHINGTON, D.C.

Metro Service Improvements

Beginning June 4, trains serving the Yellow Line will arrive

every eight minutes all day, open to close, an improvement on the previous late-night and weekend frequency of 12 minutes.

Beginning Monday, June 12, Red Line trains will operate every six minutes until 9:30 PM on weekdays, an improvement from every eight minutes during off-peak daytime hours. On weekends, Red Line trains will continue operating every eight minutes all day, and every 10 minutes after 9:30 PM seven days a week.

Beginning June 26, Blue and Silver line trains will operate every 12 minutes from opening until 9:30 PM, and every 15 minutes after 9:30 PM, seven days a week. Previously they had 15-minute weekday frequencies during off-peak hours.

On the Orange Line, trains will operate every 10 minutes from opening until 9:30 PM, and every 15 minutes after 9:30 PM, seven days a week, an improvement on the previous 12-minute weekday frequency during weekday peak hours and 15 minutes weekday frequencies during off-peak hours.

Simpler Metrorail fares are being introduced. Beginning June 26, Metrorail rides will have one distance-based fare on weekdays before 9:30 PM, eliminating peak fares during morning and evening rush periods. After 9:30 PM and on weekends, riders will still enjoy a \$2 flat fare per trip.

[WMATA PRESS RELEASE](#), June 9

International

BERGEN, NORWAY

Tram Line to Åsane Approved

Bergen city council has approved plans for the construction of a 12.7-kilometer (7.9-mile) extension of the Bybanen light rail network from Kaigaten in the city center north to Vågsbotn in Åsane.

Following the council decision on May 31, project promoter Bybanen Utbygging signed a Nkr1.1 billion contract for the CORAV consortium of COWI Norge, Ramboll and Asplan Viak to undertake design work for the line.

The planned route to Åsane forms the fifth phase of the Bybanen construction program.

The cost of the project is put at Nkr21 billion, including 14 stops and 5.7 kilometers (3.5 miles) of tunnel, as well as a 13-kilometer (8.1-mile) bicycle route and a three-kilometer (1.9-mile) extension of the Fløyfjells road tunnel.

Construction could start in 2024 for completion in 2032 at the earliest. Ridership is predicted at 60,000 passengers per day in 2040, with a journey time from the city center to Vågsbotn of about 25 minutes.

[METRO REPORT INTERNATIONAL](#), June 12

BUDAPEST, HUNGARY

Renovated Budapest M3 Line Opens to Passengers

Metro M3 Blue Line has been reopened to passengers

following a Forints 225 billion renovation project which began in November 2017. (The original section of line M3 opened December 31, 1976.)

The reopening of the city's longest line took place on May 22 and the 17.4-kilometer (10.8-mile) line is now expected to carry over 500,000 passengers per day. The renovation project has benefited from €453 million in European Union (EU) 2014–2020 cohesion program funding, making it one of the EU's biggest investments in Hungary and across Europe as a whole.

As part of the project all of the line's 20 stations have been refurbished and made fully accessible, with conventional lifts installed at the majority of the stations, as well as specially inclined elevators installed at Semmelweis Klinikák, Corvinnegyed, Kálvin tér, Ferenciek tere, Nyugati pályaudvar and Arany János utca Stations.



Refurbished train set on the M3 at Kőbánya-Kispest Station.
Florian Fevre photo via Wikipedia Commons

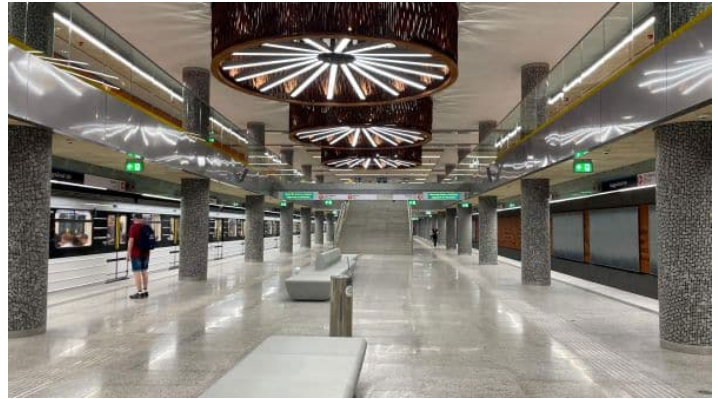
The refurbishment scheme has also seen the introduction of new 80 kph (50 mph) trains, relaying of track, installation of power cables “long enough to reach as far as Barcelona,” according to the project team, and renovation of around 32,000 square meters of floor paving, including installation of tactile paving for the benefit of the visually impaired.

Other work has included installation of LED lighting, 300 centrally controlled clocks, 180 visual signs and 2,060 loudspeakers. Safety features include new control, conductor, fire protection and ventilation systems and installation of around 340 emergency call points, 160 monitors and 500 internet protocol cameras ensuring CCTV coverage.

In his speech welcoming completion of the project the Budapest mayor thanked the government, the EU, the people involved in the project and the patience of the traveling public during the five and a half years of renovation work. The reconstruction of the metro line had posed a big challenge for the city, but he hoped that when people used the renewed, accessible metro, they would think it worth the wait.

The project could not have been completed without government support, he said, adding that here too I would like to urge the Hungarian government to settle its disputes with the European Union so that the funds can arrive in Hungary.

The reference relates to long-running tensions between the EU and Hungary's prime minister, Viktor Orbán, over his



A view of the renovated M3 Line Nagyvárud tér metro station.
Hungaria895 photo via Wikipedia Commons

government's delayed adoption of rule-of-law reforms, with Brussels withholding funding amounting to billions of euros until meaningful progress has been made.

The three-phase Line 3 renovation project started on November 6, 2017 with the closure of the northern section between Újpest-központ and Dózsa György út Stations, which was reopened to passengers on March 30, 2019. Renovation of the southern section between Népliget and Kőbánya-Kispest Stations took place from April 6, 2019 to October 22, 2020. In parallel, the reconstruction of the middle section between Lehel tér and Nagyvárud tér Stations started in March 2020 at Arany János utca and Ferenciek tere Stations.

[INTERNATIONAL RAILWAY JOURNAL](#), June 1

EDINBURGH, SCOTLAND

Tramway Extension to Newhaven Opens

The Newhaven extension of the Edinburgh tramway opened at midday on June 7, adding 4.69 kilometers (2.9 miles) and eight stops to the line. Trams run every seven to 10 minutes from 6 AM to midnight, seven days a week.

A piper accompanied the first tram into the Picardy Place stop, and Dance Base performed a specially choreographed “tram ballet.”

The earliest passengers were able to purchase “platinum” tram tickets from machines at Picardy Place and Newhaven stops, and Pulse of the Place youth samba band performed at Newhaven. A guard of honor from the High Constabulary of the Port of Leith welcomed the tram wearing full parade dress, including top hats, whistles and ceremonial batons.

The eastern extension was originally to have been built as the part of the first phase of the tram project, which was descope when the project ran late and over budget. Edinburgh city council approved the outline business case for the extension in 2017, and in March 2019 gave final approval of the award of two construction contracts.

Morrison Utility Services was awarded the Swept Path contract, covering the identification and relocation of underground services along the route from York Place to Newhaven.



The new terminal station at Newhaven in June. Google street view

A joint venture of Sacyr, Farrans and Neopul was awarded the Infrastructure & Systems contract, covering the main design and construction works, systems integration, testing and commissioning.

Siemens Mobility was awarded a £1.4 million contract to provide control system integration services.

Anturas Consulting was business case lead advisor, while Turner & Townsend was involved from the earliest stages, supporting the business case and providing day-to-day project and cost management services.

Construction began in November 2019 and was completed within a budget of £207.3 million, although work was suspended for 12 weeks during the pandemic.

[METRO REPORT INTERNATIONAL](#), June 7

EUROPE

Large Electric Locomotive Order

Alstom and Northrail AG have completed a framework contract for 50 multi-system Traxx Universal locomotives with a full-service maintenance package for up to 16 years. The investment was arranged and structured by Northrail for the Paris-based infrastructure investment company RIVE Private Investment (RIVE). Northrail will, on behalf of RIVE, act as asset manager and lessor of the locomotives.

The base order includes 15 multi-system locomotives and eight years of full-service maintenance. The maximum contract value amounts up to €370 million. Production will take place at the Alstom site in Kassel, Germany, and is scheduled to start in 2025.

All locomotives will be equipped with ATLAS, Alstom's onboard solution for the European Train Control System (ETCS). The Europe-wide standardized train control system for seamless cross-border traffic enables higher speeds and frequencies on the railways. It saves time and energy and thereby enables an even cleaner freight transport.

[ALSTOM PRESS RELEASE](#), June 29



At the Kassel site in Germany, a Traxx Universal multi-system locomotive equipped with Alstom's ATLAS ERTMS system.

Imke Koch/Alstom photo

FRANCE

New Hybrid EMUs Tested

The first hybrid electric-diesel-battery regional train underwent its first tests at the beginning of April on the Toulouse-Mazamet and Toulouse-Rodez lines (in the South of France). The aim was to observe how the hybrid train performs on real line profiles and in real conditions (according to the timetable of a commercial service). At the end of this test phase, on June 14, this innovative train was presented at the Occitanie Technicentre by the vice-president of the Occitanie Region with responsibility for Mobility and Transport Infrastructure, the regional director of SNCF Voyageurs Occitanie, and the director of the Régional Hybrid and Hydrogen Projects at Alstom. Commercial service will begin in a few months, as soon as the Etablissement Public de Sécurité Ferroviaire has issued the necessary authorizations for passenger transport.



Alstom hybrid EMU for France. Emmanuel Grimault photo

This electric-diesel-battery regional train is the first hybridization project for a Régional train in France. (The Régional train is part of the Coradia Polyvalent range of regional trains developed and assembled by CAF at its Reichshoffen site (formerly owned by Alstom). More than 300 Régional trains currently operate in France. The

trainset involved in the hybridization project is a so-called “dual-mode” trainset (electric and diesel). It was launched in 2018 by the SNCF Group and Alstom, with the mobilization and financial participation of four French Regions (Occitanie, Grand Est, Nouvelle-Aquitaine, and Centre-Val de Loire), and the provision by the Occitanie Region of a trainset from its liO fleet. The objectives are to reduce energy consumption and cut greenhouse gas emissions, thanks to a solution that allows the existing fleet to be modified without having to modify the existing infrastructure.

Along with the battery-powered train and the hydrogen train, the hybrid train is one of the three decarbonization technologies that the SNCF Group is developing with its partners Alstom, CAF, and the French Regions for passenger transport on non-electrified (or partially electrified) regional lines.

[ALSTOM PRESS RELEASE](#), June 14

HAIFA, ISRAEL

Haifa–Nazareth Light Rail Plans

Four consortia have been invited to submit best and final offers for the concession to build and operate the Nofit interurban light rail line between Haifa and Nazareth.

They are:

- Shapir (Israel) and CAF (Spain);
- Alstom (France), Electra and Minrav (Israel);
- Comsa (Spain), Den Buses and Denya Cebus (Israel);
- Shikun u Binui and Egged (Israel).

The concession will cover the financing, design and construction of the railway systems and rolling stock for the line and 25 years of operation. The civil works contracts were awarded in 2020 through a separate procurement process.



Map of the Haifa Nazareth light rail route. Railway Gazette International

The 41-kilometer (25.5-mile) line will have 20 stops, a depot and a control center, and at least 30 trainsets with a maximum speed of 100 kph (62 mph).

Opening is planned for around 2028. Services will run every four to 15 minutes, with ridership estimated at 100,000

passengers per day.

The line would serve a growing population, with the number of residents predicted to increase by 40 percent in the Nazareth area by 2040, and by 70 percent in Shefar'am and Kiryat-Ata. Local employment is expected to grow by 60 percent.

[METRO REPORT INTERNATIONAL](#), June 15

KÖLN, GERMANY

Funding Agreed for S-Bahn Expansion

The German federal government and German Rail (DB) have signed a €200 million financial agreement to fund the reconstruction of the existing electrified line between Köln and Mönchengladbach, adding new stations in Köln, Pulheim and Grevenbroich to allow the expansion of the existing S-Bahn route S6, replacing existing regional services.

New tracks will be added in some sections, and the signaling will be modernized.

Services will operate with 20-minute headways between Essen and Grevenbroich via Köln, with an hourly service extending from Grevenbroich to Rheydt and Mönchengladbach.



DB Class 423 #299 at Köln Hbf on March 2, 2020. Keith Fender photo

The funding is being made available from federal funds released by the Coal Regions Investment Act, which aims to support areas which will suffer economically from the planned cessation of brown coal strip mining. The area around Grevenbroich served by the line has several major coal-fired power stations and open cast mines which are all due to close within the next decade.

Regional transport authorities go.Rheinland and Rhine-Ruhr Transport Association (VRR) financed a feasibility study for the S6 expansion to accelerate the release of federal funding.

The S6 expansion is in addition to the planned electrification and rebuilding of the nearby Horrem-Bedburg line to allow S-Bahn services to replace diesel services. Initial planning processes have been completed, and the project is awaiting approval from the Federal Railway Authority (EBA). It will also be financed via the Coal Regions Investment Act.

[INTERNATIONAL RAILWAY JOURNAL](#), June 16

MILANO, ITALY

More New Trams Ordered

Stadler has signed a framework agreement to supply Milano transport operator ATM with up to 50 Tramlink trams of two types. The agreement announced on June 22 covers up to 25 three-section, 25-meter-long (82 foot) medium-capacity trams and up to 25 five-section 35-meter-long (115 foot) high-capacity trams.



Rendering of Milano's new Tramlink car. Stadler

There is a firm order for an initial 14 of the high-capacity variant, financed by the National Recovery & Resilience Plan, with delivery required by June 30, 2026.

The high-capacity trams will be bidirectional, with low-floors, two areas for wheelchair users and four doors per side. The medium-capacity trams would be similar to 60 vehicles which Stadler is currently supplying under a 2020 framework agreement for up to 80; the first of these is currently on test in Milano.

The trucks will be designed for smooth and low-noise running on sharp curves. Stadler says particular attention has been paid to the safety of passengers, drivers and pedestrians, with the cabs designed to maximize visibility, cameras covering blind spots and an anti-collision device able to intervene if it detects a potential collision.

The manufacturer will provide a five-year warranty. [METRO REPORT INTERNATIONAL](#), June 22

M4 Blue Line Metro Extension to Open on July 4

The Dateo to San Babila section of Milano's underground M4 Blue Line is due to open on July 4, connecting Linate Airport to San Babila Station in Milan city center and cutting the journey time from 33 minutes to 12 minutes.

The first 5.3-kilometer (3.3-mile) Dateo-Linate Airport section opened on November, 26 2022. When completed in the second half of 2024, the full 15-kilometer (9.3-mile) Blue Line will run from Linate to San Cristoforo with 21 stations, providing a 30-minute journey time.

The Blue Line is being delivered by the M4 consortium, held by Milan City Council, Webuild, Partecipazione Italia, Hitachi Rail STS, ATM, Sirti, Hitachi Rail, and MerMec.

Trains will operate at three-minute headways during peak

periods, with a maximum speed of 80 kph (50 mph). Each train will have capacity for up to 500 passengers, and the line will carry an estimated 24,000 people per hour per direction.

In addition to the interchange with Linate Airport, the line will have two interchange stations with the existing metro network: with the Red Line at San Babila and with the Green Line at Sant'Ambrogio. The Blue Line will connect to the suburban rail network at Forlanini FS, Dateo and San Cristoforo Stations. A short pedestrian connection from Sforza Policlinico Station will also provide a connection with the Yellow Line at Missori Station.

The project involves building two single-track tunnels, one for each direction, 21 stations, 30 buildings and a workshop depot.

Webuild is responsible for construction using tunnel boring machines (TBMs).

Hitachi Rail is delivering 47 autonomous trains, the signaling system, telecommunication technologies and digital pricing and access control systems.

The trains will draw on Hitachi Rail's autonomous technology already used in Milan, Copenhagen, Riyadh and Honolulu. The trains will be equipped with a real-time video system connected to the Central Operations Center (PCO).

Hitachi Rail has also supplied the ATC signaling system, based on CBTC driverless technology that enables a high degree of flexibility, allowing the number of trains on the line to easily vary, responding to passenger needs.

[INTERNATIONAL RAILWAY JOURNAL](#), June 30

MONTEVIDEO, URUGUAY

Light Rail Proposal to Be Developed

The government has authorized the further development of a private sector proposal for a 35-kilometer (21.7-mile) light rail line serving the urban area along the coast between central Montevideo and El Pinar to the east.

The line would start in the capital's historic center and run along 18 de Julio, Italia and Giannattasio avenues through Ciudad de la Costa to El Pinar, halving the current public transport journey time.

There would be 33 stops, with park-and-ride facilities at Parque Batlle and Avenida Italia y Barradas. There would be depot and storage facilities in Aguada and El Pinar.

An initial proposal for the line was submitted to the government at the end of 2022 by the 3 Eses consortium of Stadler Rail Valencia, Stilder and Saceem. On June 5 the government gave its backing to the development of a more detailed feasibility study at the consortium's own expense.

It is envisaged that the line could be developed through a 25- to 30-year design, build and operate contract which would be awarded through a competitive tender. The cost is estimated at US\$500 million, which would be financed through a public-private partnership agreement.

[METRO REPORT INTERNATIONAL](#), June 22

NÜRNBERG, GERMANY

Tramway Depot Expanded

Nürnberg transport operator VAG has completed a €25 million project to increase capacity at its Heinrich-Alfes-Straße tram depot to support an expansion of its fleet.

Three buildings have been erected; one has space for 15 trams on five tracks including three with inspection pits and six work stations, while a warehouse offers space for 400 pallets and has space for up to 18 trucks.

The buildings have green roofs, and rainwater collection. Some trees have been relocated to make way for the expansion, and others have been replaced with new planting elsewhere.

[METRO REPORT INTERNATIONAL](#), June 6

PARIS, FRANCE

T10 Tramway Opens

Celebrations on June 24 marked the opening of Paris tram Line T10, which runs 6.8 kilometers (4.2 miles) from Jardin Parisien in Clamart to La-Croix-de-Berny in Antony. There are 13 stops, including connections to RER Line B and TVM buses at La-Croix-de-Berny and to tram T6 at Hôpital-Béclère.

Ridership is predicted at 25,000 passengers per day. There is a tram every 6 minutes in the peaks. The maximum speed is 50 kph (31 mph), and the end-to-end journey time is 21 minutes.



Paris' newest tram line, T10. Jérémie Anne photo

Construction of T10 cost €351 million, funded by the Ile-de-France region, Hauts-de-Seine département and the national government. IDF Mobilités funded a €35 million order for 13 Alstom Citadis 405 Lumière trams which was placed in May 2021 as a follow-on to an order for 22 similar trams supplied for T9. Built at Alstom's La Rochelle plant, the trams are 45 meters (148 feet) long and 2,650 mm (eight feet eight inches) wide with 72 seats including nine priority seats and a total capacity of 314 passengers.

The trams are accentuated by signature lighting that runs throughout the vehicle, with a line of red lights when the doors close, a line of green light when they open and

a continuous line of white light when the tram is moving. The trams have 45 percent glass surfaces, 100 percent LED lighting, eight passenger information screens, CCTV, HVAC and USB points.

The depot and control center at Chatenay-Malabry has six maintenance and seven storage tracks.

IDF Mobilités awarded RATP an eight-year contract to operate the line which runs from 2021 and is worth €6.4 million per year. RATP Cap Ile-de-France has created a dedicated subsidiary, RATP Cap Bièvres, to operate T10 and local bus routes, with a staff of 70 including 40 drivers.

Magnetic tickets are not accepted on T10.

An extension of T10 from Jardin Parisien to the center of Clamart and the railway station is planned.

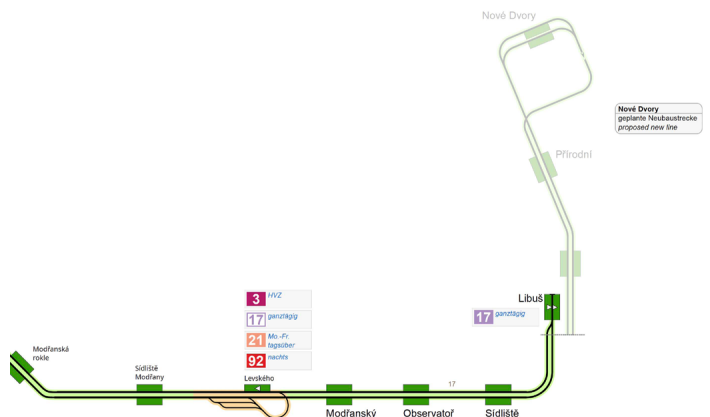
IDF Mobilités is to study options for a ground-level route with five stops, or its preferred option of an underground route with three stops, with a view to securing funding to enable the extension to open in 2032.

[METRO REPORT INTERNATIONAL](#), June 26

PRAHA, CZECH REPUBLIC

Tramway Extension

Praha transport operator DPP opened its latest tramway extension on May 27, 1.8 kilometers (1.1 miles) from Sídliště Modřany, along ul Generála Šišky and Novodvorská to a temporary terminus at the Pavlíkova stop in Libuš. It is served by alternate trams on Route 17, which is operated with double-ended modernized KT8 vehicles.



Track diagram of the four-stop extension for Route 17 in Praha. It is planned to be extended three more stops to a metro interchange.

Jarosław Janiak & Christian Stade via WWW.GLEISPLANWEB.DE

Construction was undertaken by a consortium of Ohla ŽS and Strabag Rail under a KC304 million contract signed in December 2021. Work began in April 2022, with EU sources covering 85% of the cost. The line is to be further extended to Nové Dvory in 2026, providing an interchange with the future terminus of metro Line D.

[METRO REPORT INTERNATIONAL](#), June 2



Single-truck motor 2210 (Ringhoffer, 1930), from the museum collection, and KT8D5 9048 (ČKD-Tatra, 1990) were on hand during the opening day festivities near the Libuš terminal. DPP photo



An artist impression of the CRL train. LTA

SINGAPORE

CRRC to Supply Cross Island Line Fleet

Singapore's Land Transport Authority (LTA) has awarded a consortium of CRRC Qingdao Sifang and Singapore CRRC Sifang Railway Vehicles Service a contract to supply 44 six-car trains for the Cross Island Line (CRL).

The contract, valued at S\$589 million, includes an option for up to 11 additional trains as well as an option for long-term maintenance. The new fleet of fully automated CRL trains will be wholly designed and manufactured by CRRC Sifang in Qingdao, China. The trains are expected to be delivered progressively from 2027, in time for start of CRL Phase 1 operation in 2030.

The CRL is Singapore's eighth Mass Rapid Transit line, and will serve existing and future developments in the eastern, northeastern and western corridors, linking major hubs such as Jurong Lake District, Punggol Digital District and the Changi region. Nearly half of the CRL stations will provide interchange with other lines, making it easier for passengers to travel across the network.

Similar to the new fleet supplied for the Thomson-East Coast Line, each car on the new train will have five doors on each side, as well as 1.6 meter (five foot three inch)-wide gangways between the cars compared with 1.4 meters (four foot seven inch) on other lines to improve accessibility.

The new trains will be powered by a 1.5kV dc overhead conductor rail system, which will increase energy efficiency compared to the 750V dc third rail system used to date on the Singapore system.

To enhance operation and maintenance, the trains will feature condition monitoring and diagnostic systems. Some trains will also be equipped with an automated track inspection system to monitor the condition of the track and

conductor rail in real time.

CRRC Sifang has previously supplied trains for Singapore's North-South, East-West and Thomson-East Coast lines, as part of a consortium formed with Kawasaki Railcar Manufacturing. [INTERNATIONAL RAILWAY JOURNAL](#), June 14

SPAIN

Design of New EMUs Unveiled

The Spanish Minister of Transport, Mobility and Urban Agenda and the President of Renfe (Spanish National Railway) visited Alstom's industrial site in Catalonia, where the future design of the 201 Coradia Stream high-capacity trains that Alstom will supply to Renfe were revealed.



The future design of the 201 Coradia Stream high-capacity trains for Spain. Alstom rendering

The new trains, with six cars each (four low-floor cars and two double-deck cars), will have capacity for more than 900 passengers. The 12 doors on each side, evenly distributed along the train, improve station dwell time by speeding up passenger flow and the transport capacity of suburban networks. In addition, the future trains, fully accessible for people with reduced mobility, will have spaces for wheelchairs, and multi-functional spaces for bicycles, suitcases, baby strollers and more.

Technically, the new vehicles will be equipped with

state-of-the-art equipment to improve reliability and punctuality. In addition, technology implemented will allow for thousands of data per second to be collected from the entire fleet. This real-time information ensures more efficient operational decision-making.

The first three units are currently being manufactured and the validation and certification process will begin in 2024. Once this is over, series production of the remaining 198 units will begin, with the aim of delivering between three and four trains to Renfe each month.

This order is the biggest ever in Spain. The contract for manufacturing these 201 Coradia Stream high-capacity trains amounts to €1.8 billion, including supply of spare parts and maintenance for 56 of the trains for 15 years.

[ALSTOM PRESS RELEASE](#), June 15

UPPSALA, SWEDEN

Tramway Construction Contract Awarded

The city of Uppsala has awarded a contract to supervise the construction of its future tramway to consultancy Systra and subcontractors Bjerking, Treeline, White, Rundquist, Lindahl and Consoden.

The contract announced in May runs from 2023 to 2031 and is worth SKr145 million.

The planned 17 route-kilometer (10.6-mile) double-track tramway would link Uppsala Central Station and a planned new station at Bergsbrunna on two routes via Gottsunda and Ultuna, with 22 stops serving destinations including the Swedish University of Agricultural Sciences, the biomedical center, science park and university hospital.

Construction is expected to start in 2025, with opening planned for 2029.

The city's population is forecast to grow from 230,000 to 320,000 by 2050, and the local authority has set a target of 75 percent of all journeys being made by foot, bicycle or public transport. Tram ridership is estimated at 80,000 passengers per day by 2050.



Impression of tramway in Uppsala. Metro Report International

Planning for the tramway has been underway since 2018, and in 2020 Systra was appointed to advise on routing, stops, technology choices, depots and vehicles.

The council gave the go-ahead for the project in November 2021. The cost of the infrastructure was estimated at SKr6.1 billion, which would be 50 percent funded by the national government, with the trams and depot costing a further SKr2.1 billion. These would be funded by the Uppsala region.

Systra said this is its first large-scale tram project in Sweden, although it had previously been involved in projects in Stockholm, Göteborg and Lund. It will draw on its experience of tramway development in Aarhus and Odense in Denmark, and further afield in countries including France, Italy, Morocco, Algeria, the USA, Australia, Mauritius and Brazil.

[METRO REPORTS INTERNATIONAL](#), June 16

WIEN, AUSTRIA

First Type X Metro Train Enters Service

Wien public transport operator Wiener Linien began operation with the first third-generation Type X metro trains manufactured by Siemens Mobility on line U3 on June 16.

The train's inaugural run was accompanied by Wien's city councilor and numerous project participants from Wiener Linien and Siemens Mobility.

Wiener Linien awarded Siemens a contract in September 2017 to supply 34 six-car trains and maintain them for 24 years. The agreement includes an option for 11 additional trains. Siemens and Wiener Linien unveiled the new train at the outside track area at InnoTrans 2022.

The new train will operate on the U3 between Monday and Friday, with more trains due to be introduced over the summer. Siemens is expected to deliver 10 trains by the end of the year and will then deliver another three per year.

Due to open in 2026, the U5 line between Karlsplatz and Frankhplatz will operate with the Type X trains in fully automatic mode, becoming Wien's first fully automated metro line. To prepare for this change, the stations from Karlsplatz to City Hall will be equipped with platform screen doors and the U5 Frankhplatz Station will be rebuilt.

The trains feature a digital "passenger information plus" system tailored to meet the specific requirements of Wien's public transport system. Continually updated information is displayed to passengers on screens above all doors inside the cars. Screens above doors that open at the next station show the direction of the station's exits, other lines for transfers, and the departure times for those lines.

Screens above doors that remain closed at the station display a digital network map with the train's current location, the direction of travel, the next stop, and important transfer options. Additional information, such as planned operating restrictions in the metro system or out-of-service station elevators, can also be displayed on both sides of the door.

The trains are also the first to use a new airless braking system, whereby the brakes are controlled by an electronic



Wiener Linien Type X 3711 (Siemens, 2022) on display at the InnoTrans exposition in Berlin last September 21. Jeff Ertlitz photo

signal sent from the brake control unit to the intelligent actuator, the brake caliper. Siemens says the actuator ensures excellent braking performance, especially in poor operating conditions. Eliminating the usual compressed air components under the carriage reduces the weight and installation space, and the new system cuts the time until a vehicle is ready for operation from 12 minutes to four.

The new Type X car has an open-plan interior with spacious entry areas that speed up boarding and exiting. Each train has capacity for 928 passengers, 46 more than in the Type V cars it is replacing. There is additional space for passengers with carriages or luggage. The seats are made of high-quality plywood and are arranged in a combination of standard transverse rows with additional seating along the sides as well as folding seats. Blue seats indicate priority seating and are designated for passengers with reduced mobility.



Cutting the ribbon before the first run of the new Type X metro train set at Stadion Station on line U2. Siemens photo

The start of passenger operation also marks the start of the maintenance contract between Wiener Linien and Siemens Mobility. Wiener Linien staff will use digital servicing based on Railigent X to enable predictive maintenance in cooperation with Siemens Mobility.

INTERNATIONAL RAILWAY JOURNAL, June 19

ZAGREB, CROATIA

New Trams Ordered

The mayor of Zagreb has signed an agreement for Končar KEV to supply 20 trams to city transport operator ZET, saying he hoped they would be the first of 40 to 60 new vehicles.

The €37.8 million contract signed on June 16 is financed by the EU-backed National Recovery & Resilience Plan for 2021-26. The first tram is to be delivered within 24 months, and the last by December 15, 2025.

They will be an improved version of two TMK2300 trams which local manufacturer Končar delivered to ZET in 2009 and 2010. It also supplied 142 TMK2200 trams in 2005-10.

The new vehicles will be 20.8 meters (68 feet) long with four double leaf doors. They will have a capacity of 115 passengers, including 27 seated, with air-conditioning, USB ports, CCTV and wheelchair ramps at the doors.

Speaking at the signing ceremony, the ZET's president said the modernization of the city's public transport is being undertaken in three phases, covering the infrastructure, the fleet and a transition to alternative propulsion systems.

He also announced plans for the construction of two new tram routes along Heinzelova and Sarajevska avenues.

METRO REPORT INTERNATIONAL, June 20



Impression of Zagreb's new trams. Končar

Book Review

By Paul Grether

The Metroliners: Trains that Changed the Course of American Railroading

by Bruce Goldberg and David C. Warner

Published in 2016 by White River Productions

Hardcover, 124 pages, color and black and white.

Includes an Epilogue, text of the Original 1966 Pennsylvania Railroad Press Release

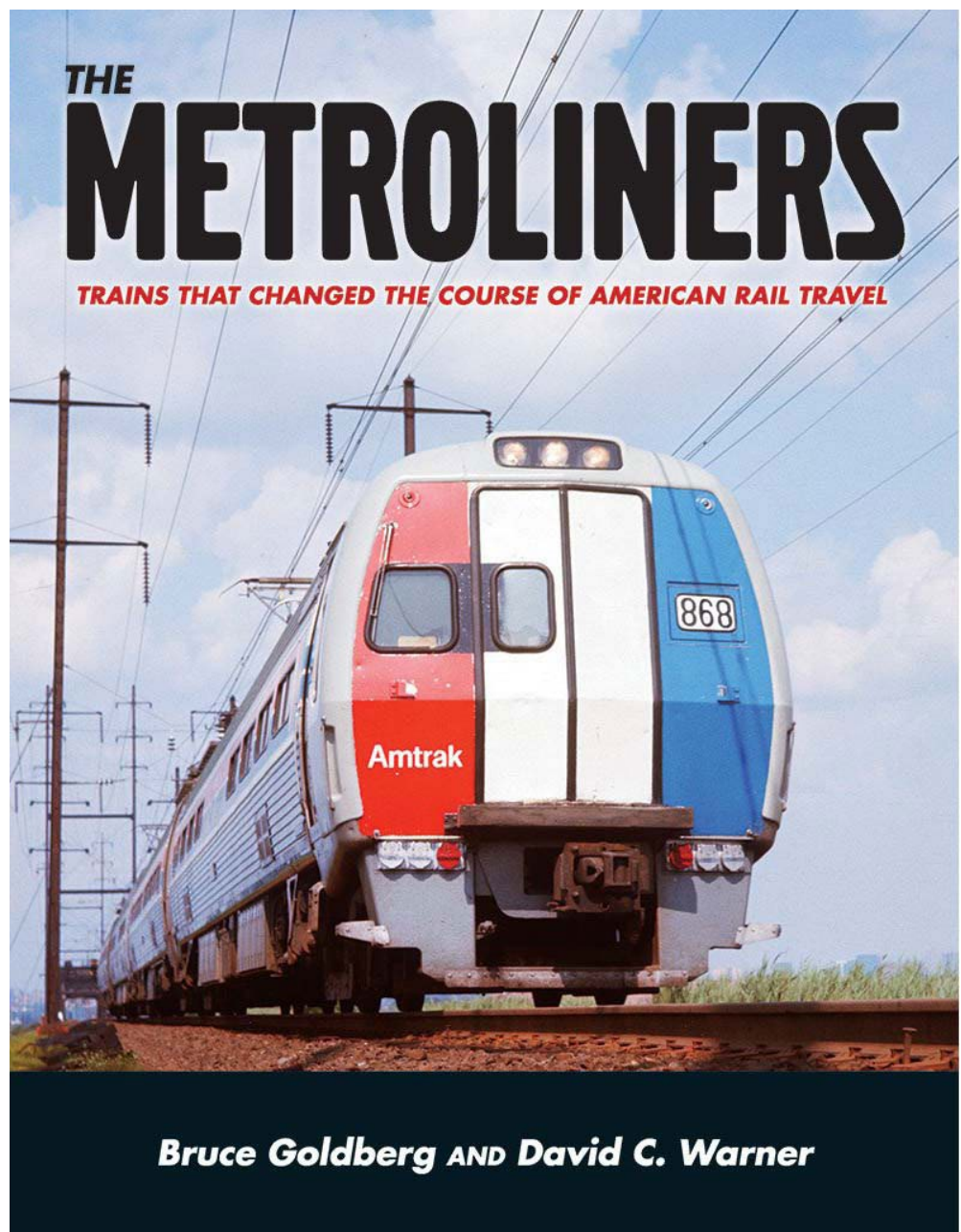
Chronology [1965-2006], Equipment Roster, Equipment Notes, Index and References. \$59.95

Did you know that the Metroliner equipment is the last of the Amtrak Heritage Fleet still in service? Did you know that Amtrak operated Metroliner services in California? Did you know that Amtrak Metroliners drove an airline out of business whose owner/CEO would later become the U.S. president? What is now arguably the flagship corridor service of the Amtrak system in the Northeast Corridor has had a tumultuous history.

This volume is not purely technical, although the technology of the early investments in infrastructure and equipment, its successes and issues, are well documented. The context within which the Metroliner service was created, and the beginning of public investment in long distance passenger rail, is the real story. The Japanese Bullet Train “Shinkansen” services launched between Tokyo and Osaka in 1964 began to demonstrate the effects of disinvestment in the U.S. passenger rail system as other countries developed services that left what was once the world leader in rail technology behind. The impact of the creation of Penn Central and Amtrak are described at length.

Covered are the political and technological challenges during the development of the early Northeast Corridor Demonstration Project, the launch of the service, operations under Penn Central and Amtrak, airline competition, the transition from Metroliner to Acela and the future. The text is supported by extensive, well captioned photographs and illustrations. The quality of the photographic reproductions, the readability of the text and the

expert research conducted by the authors make this book of interest to those curious about Amtrak, Northeast Corridor, high-speed rail or intercity transportation.



Travels with Jack May

Britain and the Baltics — Part XVII

By Jack May (Photographs by the author)

Tuesday, August 22

The first tour day that Karl-Heinz and I would attend would be a busy one, with both a morning and afternoon charter. We had to get up early to join the group, which numbered 60, to board a scheduled route 15 articulated trolleybus, which would take us to Riga carhouse No. 3 at 8:15 AM. The hotel's buffet breakfast room would open at 6:30, but we didn't want to get up that early and be the first down, so we arrived in the very crowded space at about 7:30. We would breakfast here for five mornings and were quite happy with the victuals and their presentation. I said hello to the German tourleaders and the others I knew on the trip, and was given the official 56-page booklet, which contained all the pertinent information for the next eight days, including schedules, route maps and rolling stock rosters, as well as a list of all the participants. It was beautifully prepared, but only in the German language. But since I was rooming with Karl-Heinz I wouldn't have any problems. Besides, Lars Richler, who I first met two months earlier on Thomas Fischer's Ukraine tour, and Rolf Hafke, the President of the VDVA, spoke good English.

Each member of the group was given a 24-hour ticket and the trackless trolley dropped us at the carhouse at about 8:50 in drizzling weather. Some of the quintessential features of electric traction tours conducted by German groups are long visits to carbarns, especially in eastern Europe where large numbers of unusual work cars can be found, and while I took a few photos in the rain, I boarded one of our three units as soon as I could.



This was the lineup of cars that greeted us when we entered Carhouse 3. From left to right: Tatra T6 PCC 35302 (used for the charter), Replica car 1901 (also used for the charter) and Tatra T3 PCC 30144.

We left at 9:30, exactly on the advertised. At various photostops I transferred among our trams, which included No. 1901, a replica car fashioned to look like one of the



(Above and below) Two scenes of work equipment from further back in the carhouse. No. 88021 is a partly cut-off T3 PCC whose rear was converted for spraying and No. 88006 is a snow sweeper. The lower view shows a further assortment of sweepers with a train of T3s at left.



system's original units at the time of its opening in 1901. It operates in a special tourist service on weekends, which is apparently quite popular. On our last day in Riga, Friday, August 25, I came upon it carrying a wedding party. A pair of Tatra T6 PCC cars, led by No. 35032, was also included in our procession. These were constructed for Riga from 1988 to 1990 (Riga's T3s were built between 1976 and 1987). No. 88032, a Tatra T3 PCC converted into a double-ended training car with relatively few seats, was the last member of our touring party. All had poles, but the 88032 was also equipped with a pantograph for its role in teaching new operators the essentials.

The rolling stock numbering system should be explained. The two carhouses are No. 3 (on route 7) and No. 5 (on route 1). All passenger trams have a "3" or "5" as the first numeral of their five-digit car number. The numbers assigned to all work equipment begins with "8."

Here are some close-up equipment views of the cars:



(Above and below) Four-wheeler 1901, emblazoned with tourism slogans in various languages, is a replica, usually used on a fixed route tourist service on Saturdays and Sundays. Built in 1982 by the tramway and Riga carbuilder RVR on an old RVR carbody, it has a great deal of pep and is relatively silent.



Tatra-built T6 35032, at the point of a two-car train, is in beautiful condition for a 27-year-old vehicle that sees use every day. Riga's roster includes 48 of these angular-looking PCCs.

After heading through the city center we traversed the northeastern end of route 5, which in part hugs the Daugava

River and ends at Milgravis (with a short section of bi-directional single track leading up to the loop). After returning to downtown we followed route 11 to its terminal, Mezaparks (see <https://www.urbanrail.net/eu/lv/riga/riga.htm> for a map with updated route numbers). Both routes are interesting with lots of prw, plus there is some "gutter running," with the tracks located on either side of roadways next to their respective curbs. We had plenty of photo stops in all kinds of light. Gradually the rain let up and the dark sky began to lighten, with the sun finally coming out when we were on the final leg of the fantrip, inbound on route 11.



(Above and below) Training car 88032. This beautifully running Tatra T3 PCC was built in 1982 and converted into a training car in 2011. I suspect its conversion into a double-ended unit involved replacing its rear end with the front of another T3. And a pantograph was added to supplement its trolley pole. The upper view shows its formerly blind side with its pole up, while the lower photo shows it operating with a pantograph.



It was about noon upon our return to the city center, but rather than having lunch during the 90 minutes before the start of the afternoon charter from Carhouse 5, Julien, Karl-Heinz and I completed some essential work. First we stopped off at the railway station and purchased tickets for the next day (Wednesday) to Daugavpils. Almost all of the group would be traveling to that city by charter bus, but we prefer rail. The fare was very low and once we accomplished

that we saw we had enough time to make a round trip on route 2, one of Riga's lightest routes, but an interesting one nevertheless. By that time clouds had rolled in again, and the

rest of the day was a mixture of clouds and sun. This is the result of working during your lunch hour. The story of our day continues in Part XVIII.



Our three cars lined up at one of our first photo stops: Training car 88032, replica 1901 and T6 PCC 35032.



Route 2 is equipped with Tatra T3 cars running as single units, as it has a light amount of traffic and thus relatively poor headways (half hourly at best). After looping with other lines near the market downtown, it crosses the Daugava River and operates on its east side. Of special interest is that its outermost stop is not a true terminal. After stopping for passengers, the cars immediately round a loop and head back 5

stops to Zasalauka Station (shown here, with a layout that also allows short turns), where their layover is taken (and where we had time to take photos, the operator kindly indicating she wasn't leaving for four more minutes). There is also no opportunity for cars to lay over at the line's inner end in the city center.