

The Bulletin



Electric Railroaders' Association, Incorporated

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The Bulletin

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This Month's Cover Photo:

NYCTS Peter Witt 8251 (St. Louis Car, 1923) is seen on Atlantic Avenue at Nevins Street operating on the Fifth Avenue Line to Fort Hamilton on April 13, 1945.

Max H. Hubacher (1900-1989), photographer, New York Public Library collection.

**In This Issue:
San Diego
Trolley Turns
40 Years Old...
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SAN DIEGO TROLLEY TURNS 40 YEARS OLD

San Diego Trolley
40 Years
Est. 1981

Trolley Celebrates 40 Years!

The Trolley turns 40 this July! Since launching in 1981, the UC San Diego Blue Line has been one of the most successful light rail lines in the nation. Join us to celebrate the vital connection the Trolley provides to our region.

SAVE THE DATE
It's Time to Celebrate!
Saturday, July 31
10 a.m. to 1 p.m.
E Street Transit Center

- Throwback 80s hits
- Food
- Family activities
- And more!

sdmts.com/Trolley40

San Diego
1024

Santa Fe

Advertising poster for the celebration.

Michael Glikin photograph

A 40th birthday party — complete with local dignitaries, '80s music and of course a festive birthday cake — drew nearly 1,000 people to the E Street Transit Station in Chula Vista on Saturday morning, July 31.

The guest of honor: the San Diego Trolley.

The bright red light rail line, the star of the Metropolitan Transit System, first started rolling down the tracks on the 16-mile trip from downtown San Diego to San Ysidro at the Mexico border and back, 40 years ago.

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San Diego Trolley Turns 40 Years Old

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The newest (S700, Siemens Mobility, 2020) on the left and the oldest (U2, Düwag, 1980) on the right, at the E Street station in Chula Vista.

Michael Glikin photograph

It now serves 53 stations over more than 53 miles on the Blue, Orange and Green Lines and the weekend-only vintage Silver Line. The San Diego Trolley is considered the oldest second-generation light rail system and has spawned imitators in more than 20 cities, including San Jose, Portland and Buffalo.

Along the tracks at the E Street station on July 31, MTS allowed partygoers to hop on and off its first car — the newly refurbished 1001 — while dignitaries feted the light rail line that has stretched out to El Cajon and Santee, moved into Old Town, stopped at San Diego State University and is currently ready to extend to UC San

Diego and University Town Centre.



Regular service was single-tracked around the stationary displays at the E Street station in Chula Vista. S700 5026 leads a northbound Blue Line train to Downtown.

Michael Glikin photograph

Among those celebrating was Dario Ocano, a 57-year-old Chula Vista resident who uses a wheelchair. Ocano, a National City native, has been a regular trolley rider since 1981, and has depended on public transportation to get him around the county since 1978.

Ocano has used crutches and walkers to assist his movement since he contracted polio at eight years old. He said he remembers well the days when his access to the trolley was limited, with its high stairs for passengers to climb up.

Then, there was only one area for those in wheelchairs to enter the trolley — via ramp from one specific trolley car. And, he said, if there was already a person in the designated place for a wheelchair on the train, he

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THE BOARD OF DIRECTORS EXPRESSES ITS DEEPEST APPRECIATION FOR 3 MEMBER DONATIONS IN JULY, 2021

| AMOUNT | DONOR(S) |
|---------|-------------------|
| \$1,000 | Clive Foss |
| \$200 | Dale Rothenberger |
| \$70 | Burton Eisenberg |

ERA is a 501(c)(3) tax exempt corporation. Your donations are fully tax deductible and can be made either with your 2021 renewal, or by using our donation form on our website: www.erausa.org/donate. Your donation helps to maintain ERA's 87-year-long tradition of traction education and entertainment!

San Diego Trolley Turns 40 Years Old

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would have to wait 15 minutes for the next opportunity to embark.



Part of the celebratory displays at the E Street station in Chula Vista on July 31.

Michael Glikin photograph

“The trolley has meant a lot to me over 40 years,” Ocano said. “What I like about riding the trolley is you get to meet people, you get to go places, and it’s all handicapped accessible. It helps me get around town and go where I need to go, like my doctors’ appoint-

ments.”

The San Diego Trolley is on its fifth generation of light rail cars, and they have always been built by Sacramento-based Siemens Mobility Incorporated. The price of the first cars, which were sans computers, cost about \$825,000. Today’s tech-centered versions with all their bells and whistles — and low floors for easier access — cost nearly \$4 million apiece.

Robin Stimson, vice president for business development for Siemens, said trains will continue to become more sophisticated. Stimson said the company is currently building 47 new cars for the coming extension in San Diego.

In an interview on July 30, MTS Chief Operating Officer E. Wayne Terry, author of the trolley’s training programs and procedures, and who has been with the trolley since the start, waxed nostalgic about some of the original cars. More than 10 years ago, many found new life in the province of Mendoza in Argentina. Eighteen trolley cars are part of the Metrotranvía Mendoza light rail system in South America. More will be on their way in the future.

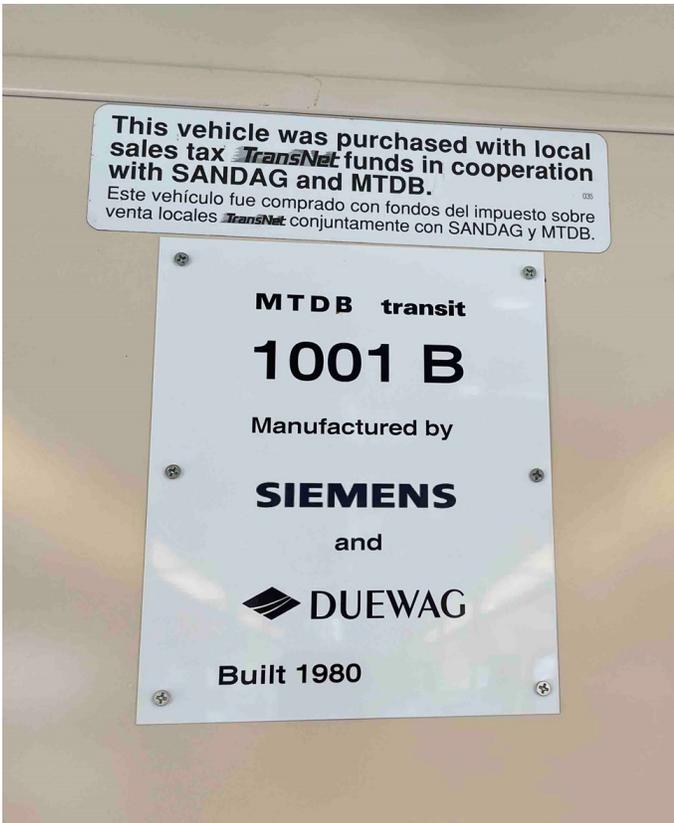
“It’s a testament to how we maintain our cars,” Terry said. “They have over 2 million miles on them. We thought we would have 25 years with them and then get rid of them, and there they are getting another 20.”

Alpine resident Jim Lundquist, one of the trolley’s original two drivers in 1981 — trained by Terry — recalled the lack of air conditioning and schedule snafus that were hallmarks of the early going. But he also said he developed friendships with many of his regular riders and reminisced about being part of many celebrations on the trolley over the years.

Chula Vista Mayor Mary Salas, one of the many public leaders who shared personal stories about the trolley, grew up near the tracks and recalled loud freight trains rattling her house. Her parents rejoiced at the far less raucous sounds made by the trolley. She said she still enjoys taking the trolley to baseball games at Petco Park, especially after a Padres victory.

San Diego Mayor Todd Gloria said he is “laser focused” on the future of transit in the San Diego region, and that it will be directly connected with the trolley. He recalled taking the No. 25 bus to get around as a youngster growing up in Clairemont. He said having the trolley now extending to his old neighborhood “will be transformational.”

Officials all touted the Trolley’s work as being instrumental in San Diego County’s economic growth, supporting the San Diego Convention Center — and its hosted events such as Comic-Con — cross-border connections, and its dependability getting people to and from major events such as the Super Bowl, Holiday Bowl, Padres games, concerts and other events across the region. (*San Diego Union-Tribune*, July 31)



Builder’s plate on original U2 1001.

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San Diego Trolley Turns 40 Years Old

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ALL-TIME ROSTER OF SAN DIEGO METROPOLITAN TRANSIT SYSTEM

| NUMBER(S) | MODEL | BUILDER | DATE |
|-----------|-------|---------|---------|
| 1001-1013 | U2 | Düwag | 1980 |
| 1014-1024 | U2 | Düwag | 1982 |
| 1025 | U2 | Düwag | 1985 |
| 1026 | U2 | Düwag | 1986 |
| 1027-1029 | U2 | Düwag | 1985 |
| 1030 | U2 | Düwag | 1986 |
| 1031-1050 | U2 | Düwag | 1989 |
| 1051-1054 | U2 | Düwag | 1990 |
| 1055-1058 | U2 | Düwag | 1988 |
| 1059 | U2 | Düwag | 1990 |
| 1060 | U2 | Düwag | 1988 |
| 1061-1063 | U2 | Düwag | 1990 |
| 1064-1071 | U2 | Düwag | 1988 |
| 2001-2052 | SD100 | Siemens | 1995 |
| 3001-3011 | S70 | Siemens | 2004 |
| 4001-4003 | S70 | Siemens | 2011 |
| 4004-4039 | S70 | Siemens | 2012 |
| 4040-4059 | S70 | Siemens | 2013 |
| 4060-4065 | S70 | Siemens | 2014 |
| 5001 | S700 | Siemens | 2018 |
| 5002-5045 | S700 | Siemens | 2019-20 |

Rail News in Review

NEW YORK METROPOLITAN AREA

METROPOLITAN TRANSPORTATION AUTHORITY

The New York Transit Museum in Downtown Brooklyn finally reopened on Saturday, August 14. After over a year of closure, the Museum is thrilled to welcome old and new friends to explore its vintage train cars and exhibits.

The New York Transit Museum’s initial reopening hours will be Friday-Sunday, 11 AM-4 PM. Advanced tickets and mask wearing are required for admission, and new health and safety procedures are in place.

Museum members were able to enjoy early access with an exclusive Member Preview Day on Friday, August 13. Additional membership benefits include year-round free admission, a 10% discount on all New York Transit Museum Store purchases, and free or discounted tickets to programs in-person and online. (MTA press release, July 30)

MTA NEW YORK CITY TRANSIT

Service changes were announced on August 17 that affected **D** train travelers in southern Brooklyn as work continues to fortify and enhance the Coney Island Yard complex. The latest phase of the project will see new flood walls, flood gates, drainage and pump stations installed to help protect the system against future severe weather events. Once completed, these fortifica-

tions will allow Coney Island Yard to withstand storm surges like those seen during Superstorm Sandy.

For 15 weeks, starting September 18 and continuing through January 3, 2022, there will be no **D** train service between Bay 50th Street and Coney Island-Stillwell Avenue. Weekdays, **D** trains will run to Bay 50th Street every 10 minutes. Rush hours, additional **D** trains will run from/to Bay Parkway or 25th Avenue. Weekend **D** trains will run to Bay 50th Street every 12 minutes. Overnight, **D** trains will run approximately every 20 minutes.

Travel Alternatives:

- For service to/from Coney Island-Stillwell Avenue, transfer between **D** and **NQ** at Atlantic Avenue-Barclays Center, 36th Street or 62nd Street-New Utrecht Avenue or transfer between **D** and **F** at W. 4th Street
- Free shuttle bus between Bay 50th Street and Coney Island-Stillwell Avenue **FNQ**
- Free *MetroCard* transfers available with the following bus routes connecting to nearby subway lines:
 B64 between near Bay 50th Street **D** and Coney Island-Stillwell Avenue **FNQ**
 B1 between Bay Parkway and 25th Avenue

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Ⓓ and 86th Street Ⓐ and Avenue X Ⓕ
 B82 between Bay Parkway and Coney Island-
 Stillwell Avenue Ⓕ Ⓐ Ⓖ

- ADA-accessible stations: 62nd Street-New Utrecht Avenue Ⓓ Ⓐ, Bay Parkway Ⓓ and Coney Island Ⓕ Ⓐ Ⓖ
- Bay 50th Street is not ADA accessible

The Coney Island Yard complex is one of the largest rapid transit yards in North America, directly serving four main lines of track. It includes three train yards that can store up to 881 subway cars. The complex is also home to car wash, maintenance and repair facilities, as well as substations, signal towers and power and communications cables that support operations.

This fortification project is being managed by MTA Construction and Development and is part of the capital program. (MTA press release, August 17)

Acting MTA Chairman and CEO Janno Lieber announced on July 30 his intention to appoint Craig Cipriano as the next Interim President of New York City Transit. Additionally, current Interim President Sarah Feinberg has promoted Demetrius Crichlow to serve as Senior Vice President of NYCT's Department of Subways.

Cipriano, whose appointment took effect July 31, has been President of MTA Bus Company and Senior Vice President of NYCT's Department of Buses since 2019. Crichlow became Acting Executive Vice President of NYCT's subways division earlier this year and will start his new role effective immediately.

The announcement comes after Lieber's appointment, beginning July 31, by Governor Cuomo as the Authority's Acting Chair and CEO following the pending departure of Patrick Foye. Before ascending to the top job, Lieber served as Chief Development Officer and President of MTA Construction & Development since 2017. (MTA press release, July 30)

The outer bands and tropical moisture stemming from Hurricane Henri created flash flooding situations all around the tri-state region on the evening of Saturday, August 21 and into the early morning hours of Sunday, August 22. Ⓐ train service was operated as a local between Hoyt-Schermerhorn and Euclid Avenue due to flash flooding at Utica Avenue on the express tracks. Service on the Broadway IRT was reported suspended between 96th Street and 34th Street-Penn Station due to flooding at 79th Street and Broadway. Ⓒ trains were routed onto the east side Lexington Avenue line while the Ⓐ was suspended between 14th Street and 96th Street and Ⓒ trains suspended between 34th Street-Penn Station and their usual northern terminus at 148th Street. Service was restored overnight after the waters subsided and maintenance and response crews declared the tracks safe to operate over. (*New York Post*, August 21)

MTA LONG ISLAND RAIL ROAD



View north from Union Avenue of the new Westbury garage.
 Glen Sager/MTA photograph

MTA Acting Chairman and CEO Janno Lieber and Long Island Rail Road President Phil Eng opened a key component of the LIRR Expansion Project on August 9, a new 683-space garage located at the Westbury LIRR station. The garage is located at 325 Union Avenue, between Post Avenue and Linden Avenue, across the street from the Westbury LIRR station.

The garage has two elevators that are fully compliant with the Americans with Disabilities Act and includes 21 accessible spots. Complementing recent LIRR tech upgrades, the number of free spaces in the garage is displayed in real time via the LIRR Train Time app and on monitors mounted on the exterior of each entranceway.



A nice convenience is having the station departure board within the new Westbury garage. The station building can be seen in the distance, across Union Avenue.
 Glen Sager/MTA photograph

The LIRR-owned garage includes 376 Village of Westbury Resident Permit spaces. More information on permits can be found on the village website. Members of the public have access to 307 daily metered spaces. Rates start at \$6 for up to 20 hours on weekdays, and

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parking is free on weekends and holidays. The garage is open 24 hours a day, seven days a week and operated by Allpro Parking.

Renovations at the Westbury LIRR station, located across the street from the parking garage, are expected to be completed in the fall of 2022. These additional station improvements include:

- Platform replacement to accommodate a new third track
- Platform canopies and station building renovation
- New furnishings including benches, shelters and wayfinding
- CCTV security cameras to improve safety
- Extension of pedestrian tunnel and ADA ramps and elevators
- Free public Wi-Fi
- USB charging stations and digital information displays
- Bike racks and artwork
- Pocket park near Post Avenue

In 2017, the LIRR replaced the nearby Post Avenue Bridge to reduce trucks striking the bridge, resulting in train delays. The new bridge's height clearance now allows trucks of up to 14 feet to safely pass underneath, improving LIRR system infrastructure and service reliability. (MTA press release, August 9)

With the storm track of Hurricane Henri originally expected to pass over the south shore of Long Island somewhere between Westhampton and Montauk Point, the Long Island Rail Road suspended all service on the Montauk Branch east of Patchogue to Montauk and suspended the "Scoot" on the Main Line between Ronkonkoma and Greenport for Sunday, August 22. The last trains to operate on these two affected lines were: Eastbound: 12:10 PM from Jamaica, arriving at Montauk at 2:53 PM, 6:50 PM from Ronkonkoma, arriving at Greenport at 8:15 PM and the 7:41 PM from Jamaica, arriving at Speonk at 9:15 PM. Westbound: the 7:37 PM from Montauk, arriving at Jamaica at 10:26 PM, the 9:03 PM from Greenport, arriving at Ronkonkoma at 10:26 PM and the 11:57 PM from Speonk, arriving at Jamaica at 1:39 AM. Full normal weekday service resumed for the Monday morning peak period on August 23. (LIRR website, August 22)

MTA METRO-NORTH RAILROAD

Metro-North Railroad announced major service increases coming to the railroad just ahead of Labor Day, with service increasing to 82% of pre-pandemic levels and weekend service returning to full pre-pandemic levels. The service increases take effect beginning Sunday, August 29. Additionally, direct service between Grand Central Terminal and Wassaic and New Canaan resumes, as will ferry service on the Hudson Line. All these increases in service and service options come as Metro-North prepares for a post-Labor Day return to schools and offices.

Metro-North began a gradual increase from the Essential Service plan that was in place during the height of the pandemic in June, 2020, by adding trains on June 15, 2020 and June 22, 2020, that brought service up to 63% of pre-pandemic levels. On April 12, the railroad restored weekend service between Wassaic and South-east on the upper Harlem Line.

Weekend ridership at large has recovered faster than weekday ridership on Metro-North. In the spring, weekend ridership grew to around 60-70% of pre-pandemic levels as the Hudson Valley, New York City and Connecticut regions reopened and people utilized the traditionally known commuter railroad for leisure travel. Ridership on the weekend remains around 50% of pre-pandemic levels and with the fall season coming up, Metro-North is providing additional service to traverse the region and meet the increase in ridership demand.

On June 21, Metro-North enhanced its peak service, adding 24 trains during the peak periods on its three lines east of the Hudson River, which brought overall service to two thirds of pre-pandemic levels. The August 29 service increase builds upon that by adding 102 more trains to the schedule: 25 on the Hudson Line, 37 on the Harlem Line and 40 on the New Haven Line.

Direct Service Between New York City and Wassaic and New Canaan

Direct service between Grand Central Terminal and both Wassaic and New Canaan returns as both the Upper Harlem Line and the New Canaan Branch return to near full service levels. There are two direct, one-seat rides in each direction between Grand Central and Wassaic, while four morning peak trains from New Canaan to Grand Central and three afternoon peak trains from Grand Central to New Canaan are restored. These "one-seat rides" will allow Dutchess County and New Canaan residents once again to enjoy easier access to New York City without needing to transfer at Southeast or Stamford to a main-line train.

Hudson Ferries Resume

Also returning in time for Labor Day is ferry service on the Hudson Line. Last month it was announced that the Haverstraw-Ossining and Newburgh-Beacon ferry services will resume on Monday, August 30. Ferries will connect with morning and afternoon peak trains.

Waterbury Branch

Substitute busing on the Waterbury Branch will remain in effect while Metro-North and Connecticut Department of Transportation (CTDOT) complete extensive renovations and upgrades on the line. Work is expected to be completed by late September.

Labor Day Service

On Friday, September 3, Metro-North will complement its new, expanded weekday schedule with additional early, getaway trains. Details on the additional trains will be available closer to Labor Day weekend.

On Labor Day, Monday, September 6, Metro-North will operate a new, expanded Sunday train schedule. (MTA press release, August 15)

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View of the new Third Avenue bridge over Metro-North's New Haven Line in Mount Vernon.
MTA photograph

Acting MTA Chairman and CEO Janno Lieber and Metro-North Railroad President Catherine Rinaldi opened the newly rebuilt Third Avenue Bridge at a ceremony in downtown Mount Vernon on August 10. The bridge is the fourth that the MTA has opened in downtown Mount Vernon in three years and the second in just three months. This announcement effectively completes — in less than 16 months — the replacement of the previous 121-year-old bridge that was demolished beginning in April, 2020.

Demolition of the original bridge was announced in April, 2020 with expected completion of July, 2021. The project was funded by the 2015-2019 Capital Program and approved by the MTA Board in December, 2019. Project components include:

- Replacement of nearly 120-year-old steel girders with a new 12 steel stringer system
- Rehabilitation of stone abutments
- Installation of micro pile foundation and tieback system
- Installation of MTA Arts & Design sculptural artwork integrated with the fencing
- New benches and planters on the pedestrian plaza and sidewalk
- Rebuilding of northeast stairs to adjacent parking lot
- Installation of new Con Edison gas and electrical

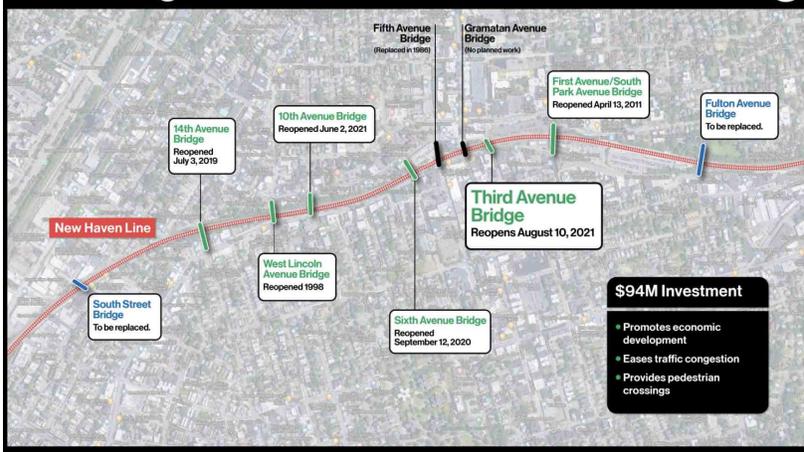
- lines
- Newly paved roadway on Fiske Place and 1st Avenue
- Installation of new traffic signals and street lights on intersection

The MTA issued a design-build contract to expedite the project. Design-build contracts call for a single contractor to be responsible for both designing and building an entire project in order to ensure that coordination is seamless, and that work is completed in the shortest possible time.

MTA Arts and Design worked with artist Damien Davis to create artwork for the Third Avenue Bridge. *Empirical Evidence* references ancient and contemporary cultures through non-linear abstracted and stylized symbols that — like an urban landscape — constitute a whole, made up of distinctive parts. Davis' artwork goes across 11 panels along the bridge's east façade. The artwork with interwoven shapes and symbols forms a visual lexicon that not only connect with the culture and the greater diaspora the city represents, but also acts as a bridge for dialogue and inclusiveness.

The Third Avenue Bridge is the latest of four bridges that span Metro North's New Haven line in downtown Mount Vernon that the MTA has replaced in four years.

MTA Bridge Renewal in Mt. Vernon



The 14th Avenue Bridge re-opened on July 3, 2019, the Sixth Avenue Bridge re-opened on September 12, 2020, and the 10th Avenue Bridge re-opened on June 2, 2021. The MTA replaced the Park Avenue/First Avenue Bridge in 2011.

Metro-North will seek design-build proposals for the replacement of the South Street and Fulton Avenue bridges.

(MTA press release, August 10)

Hurricane Henri caused Metro-North Railroad management to decide to shut down the entire New Haven Line, including its three branches to New Canaan, Danbury and Waterbury on Sunday, August 22. The last New Haven Line trains were #6502, which departed Grand Central Terminal at 1:47 AM to New Haven and #6304, which departed Grand Central Terminal at 1:53 AM to Stamford. Train #6573 was the last train out of New Haven at 11:35 PM Saturday night and #6399 was the last train departing from Stamford at 12:58 AM early Sunday morning, August 22. The last train out of New Haven departed Saturday night at 11:35 PM. Also shut down for Sunday, August 22, was the Harlem Line's Wassaic-Southeast portion of the line and the Hudson

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and Harlem Line services operated on a two-hour headway all day. Hudson Line trains departed Grand Central Terminal at :19 after every even-numbered hour and Harlem Line trains departed Grand Central Terminal at :41 after the even-numbered hour although that was changed to :23 after the even-numbered hour for late Sunday evening. Inbound services were slotted for Grand Central Terminal arrivals at :04 after the odd-numbered hour for Harlem Line trains from Southeast and :12 after the odd-numbered hour for Hudson Line trains. All Harlem and Hudson Line services were operated as all-stops locals using a seven-car push-pull train powered by P32AC-DM dual mode locomotives. End-to-end trip times were nearly two and a half hours owing to the slower acceleration rates of the diesel-powered trains. Normal service was restored for the Monday, August 23 morning peak period on all three lines. (Metro-North website, August 22)

OTHER SYSTEMS**BOSTON, MASSACHUSETTS**

MBTA Type 7 LRV 3705 was heavily damaged on its "B" end in a collision between two, two-car Green Line LRVs on the B branch on Commonwealth Avenue and Harry Agganis Way near the Boston University Arena around 6 PM on Friday evening, July 30 that sent 25 people (including all 4 Operators) to the hospital with non-life-threatening injuries. No cause has been determined while the Operator, a seven-year veteran, in charge of the train that rammed the train ahead of it has been placed on administrative leave. The car 3705 rammed into was Type 8 3894, which did not appear to suffer much in the way of outwardly obvious damage except for some minor denting of the anticlimber. Even the windshield appeared undamaged. A more thorough mechanical inspection will determine if there was any damage to the couplers, underframe and carbody of 3894. The MBTA typically operates its two-car Green Line LRV trains with a Type 7 and Type 8 LRV pair to provide low level platform ADA accessibility, thus, a Type 8 LRV may have been impacted. (WWLP Radio and *Boston Globe*, July 30)

BALTIMORE, MARYLAND

Six years after Governor Larry Hogan killed the Red Line project, Maryland's United States Senators want to do more than eulogize the light rail project that they believe could have been a game changer for Baltimore's economic fortunes.

They want to try to revive it.

In the most preliminary of steps in a long shot bid, Democratic Senators Ben Cardin and Chris Van Hollen said that they have secured language in a massive infrastructure package that would allow the project to be revisited as part of billions of dollars in capital investment grants.

The Red Line is not mentioned by name in the 2,702-page bill. Rather, the Senators' language specifies that such previously vetted projects be placed at the front of

the line for funding consideration, assuming state and local leaders endorse them.

The language is contained in a \$1.2 trillion bill pending in the Senate to fund roads, transit systems, bridges, waterways, broadband improvements and other infrastructure.

Hogan has continued to defend the cancellation and said through a spokesman Monday that "politics" was driving the Senators' latest efforts.

Hogan, a Republican, is in his second term and is prevented from running again by term limits. That leaves a wide-open race to succeed him, and the possibility that the Red Line could become a campaign issue.

Mayor Brandon Scott, a Democrat, welcomed Van Hollen's and Cardin's effort to resurrect a project whose cancellation drew federal complaints and an Obama administration investigation into whether it violated the Civil Rights Act of 1964. The Trump administration closed the review without issuing any public findings.

Scott "considered Gov. Hogan's cancellation of the Red Line mass transit project a regrettable missed opportunity for Baltimore," Scott spokesman Calvin Harris said Monday.

The effort to revive the Red Line "aligns with the Scott administration's commitment to strengthening transportation infrastructure, creating jobs and building a more equitable Baltimore," Harris said.

Resurrecting the Red Line would face steep odds given its cost and the task of assembling a plan agreeable to local, state and federal officials. It had a \$2.9 billion price tag in 2015.

Democrats said then that the proposed east-west line would have spurred economic development by creating connections to and from some of the city's most isolated, neglected neighborhoods.

Hogan, in canceling the project and returning \$900 million in federal funding, called the Red Line a boondoggle and balked at its proposed \$1 billion construction of a tunnel under downtown Baltimore, Harbor East and Fells Point.

The Red Line's cancellation has never seemed far from many elected Democrats' thoughts.

Testifying before a Senate committee in February, Hogan was asked by Sen. Jeff Merkley, an Oregon Democrat, about the reasons for the cancellation.

Hogan said the state Department of Transportation recommended against the Red Line, "but we did move forward on the Purple Line, which goes through Prince George's County."

Hogan said the Purple Line will make 16 stops in minority communities and tie into the Washington Metro system. The project, being built under a public-private partnership, has been delayed in a series of disputes with a contractor and is not close to being finished.

(*Baltimore Sun*, August 3)

WASHINGTON, D.C. AREA

Washington Metropolitan Area Transit Authority (WMATA) reports a safer, more reliable system as it reaches the halfway point of its six-year capital program

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and marks three years since the National Capital Region agreed to provide the authority with a dependable funding stream to address capital needs.

The “Progress Report to Stakeholders” includes opening statements from WMATA Board of Directors Chair Paul Smedberg and General Manager and CEO Paul Wiedefeld in which Wiedefeld writes “Metro struggled to provide basic levels of service following a prolonged period of underinvestment in the system.”

Following the passage of legislation in 2018 by Maryland, Virginia and the District of Columbia Council to provide WMATA with \$500 million in annual funding to aid the transit authority in executing its strategic plan “Keep Metro Safe, Reliable and Affordable,” at the three-year mark, WMATA reports:

- A 50 percent reduction in emergency track repairs since FY2018 through WMATA’s preventative maintenance program
- A near 80 percent reduction in incidents resulting from insulator fires between FY2018 and FY2021 (from 39 to five)
- The three years of cable meggering work also produced the first fiscal year (FY2021) with zero recorded traction power cable fires
- All 48 underground stations have received major lighting upgrades, making them up to 10 times brighter while reducing energy consumption by about 60 percent
- Cellular coverage is available in all tunnels and stations, as well as free Wi-Fi in all 91 stations
- The Platform Improvement Project has rebuilt 17 of 20 outdoor station platforms scheduled for critical repairs, improving safety and accessibility while adding customer experience improvements such as new passenger information displays
- Work to increase the system’s water pumping capacity results in 6.75 million gallons of water removed from the system every four days, which is enough to fill the Lincoln Memorial Reflecting Pool; and
- 95 percent of the system’s escalators and 97 percent of its elevators are available for customer use every day on average

Metro’s report notes that customers should expect more work ahead in parts of the system that still need attention, including: new fare gates in rail stations and new fare boxes on buses through the Fare System Modernization program; rehabilitation of the steel-lined tunnel and bridge on the Yellow Line between the Pentagon and L’Enfant Plaza stations, starting in 2022; and implementation of projects where pilots are successful, including tunnel waterproofing and tunnel ventilation improvements. (*Mass Transit*, August 9)

Beginning September 5, the Washington Metropolitan Area Transit Authority (WMATA) plans to add more trains and buses, offer lower prices and extend Metro-rail’s operating hours on weekends.

On Metrorail, more trains will run during off-peak hours with average wait times ranging between two and seven minutes. Trains will also run longer, closing later overnight on weekends and opening earlier on Sundays.

WMATA also will offer up to a 50% discount on select unlimited passes between September 16 and October 15.

Discounts will include lower rail fares on weekends. Weekend fares on Metrorail will cost \$2 for a one-way trip instead of the current distance-based fare.

In addition, WMATA will operate more trains, and not just during the rush hour. Riders can expect to wait no more than three to six minutes for a train on weekdays at any station served by multiple lines and on the Red Line until 9:30 PM. (*Progressive Railroading*, August 18)

MINNEAPOLIS, MINNESOTA



The first rail for the Southwest LRT project was installed near the future downtown Hopkins station. The project will extend the METRO Green Line from Minneapolis to Eden Prairie.

Mass Transit photograph

Contractors installed the first rail of the Southwest Light Rail Transit (LRT) Project that will extend Metro Transit’s Green Line 14.5 miles between downtown Minneapolis to St. Louis Park, Hopkins, Minnetonka and Eden Prairie.

The rail was installed August 11 near the future Downtown Hopkins station, one of 16 new stations being constructed along the extension.

Employment within half a mile of the line’s stations is expected to grow to 80,900 by 2035 and by 18 percent – 145,300 – in downtown Minneapolis by the same year. The Metropolitan Council estimates the population within half a mile of the stations will grow by 56 percent by 2035 and the population of downtown Minneapolis is expected to grow by 117 percent.

The \$2 billion project, which broke ground in December, 2018, is more than 50 percent complete with 11 of the 16 stations under construction or nearly complete. The project secured a \$928.8 million Full Funding Grant Agreement with the Federal Transit Administration through the Capital Investment Grants Program in September, 2020. The rest of the funding is a mix of state and local funding with Hennepin County contributing

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more than \$591 million to the project.

The project timeline on Metropolitan Council's website still targets the start of passenger service for 2023. However, earlier this year, Metropolitan Council and Hennepin County said the project could be delayed due to unforeseen conditions experienced during the 2020 construction season.

Southwest LRT is the largest public infrastructure project in Minnesota's history and its light-rail, freight and regional trail components contribute to its complexity. The project is expected to be transformational to the community with Metropolitan Council reporting there has already been more than \$1.5 billion of investment within a half-mile of the line. (*Mass Transit*, August 16)

SAN FRANCISCO, CALIFORNIA

The San Francisco Municipal Transportation Agency (SFMTA) launched another COVID-19 Muni service change August 14, which added several connector routes and bridge service gaps in hill neighborhoods.

A total of 18 routes were restored, expanded or modified, including the M/Ocean View Metro rail.

These service changes continue to support the city's economic recovery by ensuring that 98 percent of San Franciscans have access to Muni transit service within two to three blocks of their home or work. The next Muni service change is anticipated for winter when the Muni service plan is expected to begin to normalize post-pandemic.

Service hours will be extended from approximately 5 AM to midnight daily on select routes. All other routes will generally have service hours of 5 AM to 10 PM daily, but may vary between weekdays and weekends. Owl network service hours will change to approximately midnight to 5 AM daily except on the L Owl. The L Owl to Fisherman's Wharf will begin at 10 PM and end at 5 AM daily.

In September, once testing is complete, scheduled cable car service will return on all three lines—the Powell-Hyde, the Powell-Mason and the California — from 7:30 AM until 10 PM. (*Mass Transit*, August 4)

By 2050, San Francisco's Muni Metro system could expand to Fisherman's Wharf and connect the city's west side neighborhoods along a key north-south corridor — if the city musters the political will and secures the billions of dollars it would cost to build up its rail network.

The potential expansion of San Francisco's flagship light rail system is just one part of the city's ongoing big-picture efforts to create a transportation blueprint for a city that has grown in the past decade and expects to keep growing in the coming decades.

Staff proposals discussed by the San Francisco Municipal Transportation Agency's Board of Directors envision expanding the still-in-the-works Central Subway project — which will take T/Third Street riders to Chinatown — to Fisherman's Wharf. SFMTA staff also are proposing the creation of a new Muni Metro line that

would run east-west along Geary Boulevard from downtown to the Richmond District and north-south along 19th Avenue through the Sunset District, according to an agency rendering.

But many uncertainties remain before the city commits to these proposals. There's no funding secured yet for these proposed expansions, and previous major projects have taken years of planning and design before actual construction began.

Some board members also pondered whether the pandemic will lead to long-term disruptions in how people use public transit in the city and questioned whether any future rail expansions should first include southeast neighborhoods with limited transit options.

The discussion of San Francisco's Transportation 2050 plan also highlighted the heavy financial lifts facing the city's already cash-strapped transportation agency. SFMTA estimates it will need \$31 billion in the next 20 years to fund its capital needs. Any major transit expansion projects will also have to compete with a backlog of deferred maintenance needs that have grown larger in recent years as the agency steered capital funds to sustain transit service.

Expanding and improving Muni accounts for one-third of the \$31 billion cost estimate. Potential revenue sources could include increasing the city's parking tax.

Agency officials said Tuesday they're proposing these Muni rail expansions, still many years away from even becoming a potential reality, because they cover major corridors and neighborhoods where less-expensive bus service won't be able to meet a projected growing demand. The 38/Geary bus lines, for example, are among the city's most trafficked routes, with a pre-pandemic weekday ridership of more than 55,000 passengers. The Geary lines have been among the core lines SFMTA preserved throughout the pandemic because of their high ridership.

City leaders are still in the process of crafting a transportation strategic plan, dubbed Transportation 2050, which will guide the city's transportation priorities in the coming decades.

The city's transportation planning efforts also include a downtown congestion pricing study meant to account for the projected rise in traffic congestion as the Bay Area grows in population. These pillars are all connected. City officials have acknowledged, for example, that the success of a congestion pricing program hinges on better public transit options.

Muni Metro's latest expansion, the Central Subway project, is scheduled to open for passenger service in spring 2022, according to SFMTA. Originally scheduled to open in 2019, the Central Subway will be completed more than two years late because of setbacks.

The city's leaders discussed long-term transit goals as Muni faces an uncertain recovery from the pandemic.

The SFMTA restored more transit service August 14, but Jeffrey Tumlin, the agency's director, has said the city can't bring back Muni to pre-COVID levels without a stable new source of revenue. Though the agency has

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received more than \$1 billion in federal pandemic relief funds, the agency risks insolvency if it restores transit service too quickly, he said.

This fall, the agency's Board of Directors will consider options for the next wave of service restorations early next year — a decision that has created contentious debate among city leaders and transit riders over Muni's near-term future. The options include bringing back some lines as they were before the pandemic, eliminating some lines in favor of boosting service on others, or a hybrid of the two. (*San Francisco Chronicle*, August 19)



LRV2 1460 (Breda Costruzioni Ferroviarie, 1998) is operating on the J line to Balboa Park. It has just come off the private right of way at Church Street & 22nd Street, four blocks south of Mission Delores Park, on April 28, 2010.

Jeff Erlitz photograph

LOS ANGELES, CALIFORNIA

The Foothill Gold Line Construction Authority has announced the substantial completion of design work for the \$1.5 billion, 9.3-mile four-stop extension of the Los Angeles light rail network from Glendora to Pomona.

The design-build contract was awarded to the Kiewit-Parsons Joint Venture in October, 2019, and the first year focused on progressing design work far enough for major construction to begin in July, 2020.

As of August this year the project is 36% complete, with full completion planned for 2025.

The Glendora–Pomona project is currently running six months ahead of the contractual substantial completion deadline of January, 2025.

The design-build contract includes an option for KPJV to complete the next 3.1 miles from Pomona to Montclair if additional funding can be secured by early October, with completion envisaged in early 2026. (*Metro Report International*, August 16)

The first of the HR4000 metro cars which CRRC Changchun is building for Los Angeles have been unveiled at the manufacturer's Springfield plant in Massachusetts.

Los Angeles County MTA and CRRC Changchun

signed a framework agreement in April, 2017 for the supply of metro cars, comprising a \$178 million firm order for 64 cars and five options for a total of 218 additional cars which would take the overall value to \$647 million.

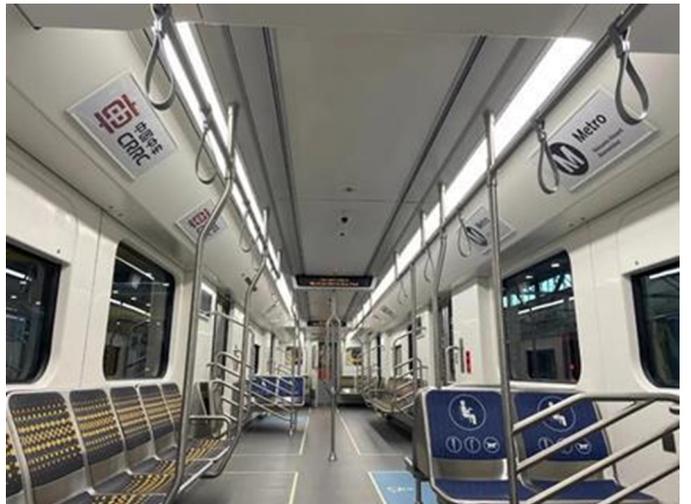
The initial order includes 30 cars to replace older vehicles on the Red and Purple lines, and 34 for the first phase of the Purple Line extension from Wilshire/Western to La Cienega, which is scheduled to open in 2023.

The car bodies are being manufactured at Changchun in China, with final assembly in Springfield to meet federal Buy America requirements. (*Metro Report International*, July 28)



The first Los Angeles CRRC cars at the plant in Springfield, Massachusetts.

CRRC photograph



Interior view of new CRRC car at the plant in Springfield, Massachusetts.

CRRC photograph

MONTRÉAL, QUEBEC, CANADA

The Réseau express métropolitain (REM) invited the public aboard an REM car for the first time, which was set up at Place Extasia in Quartier DIX30 from August

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26-29, near the future light metro system's Du Quartier station in Brossard, Quebec.

Throughout the weekend, activities were held on site and representatives and experts were on hand to answer questions. Five years after the project's announcement and three years after the start of construction work, this was an opportunity for future users to get their first look at an REM car.

The public was encouraged to enter a contest on the REM's Facebook page to be among the first users to board the car. The 15 winners and their guests enjoyed an exclusive tour of the car with team members, held in the early evening of August 26. They learned the details about the design process for the car, which will criss-cross Greater Montréal in the coming years. The contest ended on August 22 at 11:59 PM. Winners were chosen at random from among all registered entrants.

The car was accessible at any time on Thursday from 6 PM to 9 PM, Friday from 11 AM to 9 PM, Saturday from 11 AM to 8 PM and Sunday from 11 AM to 5 PM.

A range of activities were planned over the weekend, including a music-filled lineup (on Friday night, Saturday night and Sunday morning) and thematic activities. Saturday was under the theme of the family while Sunday was under the theme of the Sunday brunch.

To get on board the REM, participants followed a route filled with information about the commissioning of this new network, Québec's largest public transit project in 50 years. Measures were also taken to adhere to the public health guidelines in effect.

Two informative activities were also available:

- History and behind-the-scenes look at the development of the Réseau express métropolitain: Held on August 28 from 8 PM to 9 PM, presented the origins and major steps that led to the REM project. This was an opportunity to discuss the challenges of building such a system, as well as the impressive strides made in the last few years. Participation in this activity was on a first-come, first serve basis.
- Breakdown of the REM's design: Held on August 29 from 10 AM to 11 AM, presented how the REM's identity was created at the very start of the project. During this look back in time, participants got a better understanding of how the REM's image came about. The graphic elements were explained, as well as the choices behind the car's aesthetics. Participation in this activity was on a first-come, first-served basis.

After its visit to Quartier DIX30, the REM car will then be exhibited at the Exporail in Saint-Constant until spring, 2022. (*Mass Transit*, August 19)

EDMONTON, ALBERTA, CANADA

The government of Canada will fund up to C\$394.24 million (US\$313.30 million) toward the first phase of Edmonton's Capital Line South Extension. The light-rail project will add 2.8 miles of double track south of the Capital Line's existing terminus of Century Park and is

part of the city of Edmonton's Transportation Master Plan to expand light-rail service northwest, northeast, east, southeast, south and west of the city center by 2040.

The federal government funding commitment comes slightly more than a month after Edmonton City Council approved its municipal contribution to the project of C\$333 million (US\$264.64 million); the government of Alberta is providing C\$300 million (US\$238.41 million) to the project. The Capital Line South Extension will be built in two phases with Phase 1 bringing the line south from Century Park to Ellerslie Road and Phase 2 extending the line further from Ellerslie Road to Allard/Desrochers.

The first phase of the light-rail extension includes two stations at Twin Brooks and Ellerslie, an underpass at the 23rd Avenue crossing and a new bridge across Anthony Henday Drive. The project also includes an operations, maintenance and storage facility, the purchase of 24 high-floor light-rail vehicles, as well as the expansion and integration with the Heritage Valley Park and Ride Facility.

When the line opens, it is expected to serve up to 9,600 people per hour per direction during peak five-minute service and will run every 10-15 minutes during off-peak periods, with service integrated with the cities' other transit services. The extension also aims to create more than 9,500 jobs, reduce greenhouse gas emissions by more than 269,000 metric tons by 2050 and will see 11.9 million fewer vehicle kilometers travelled in its opening year of operation. (*Mass Transit*, July 28)



Canada's Minister of Infrastructure and Communities Catherine McKenna with Edmonton Mayor Don Iveson at an event announcing the federal government will provide up to C\$394.24 million to Phase 1 of the Capital Line South Extension.

Mass Transit photograph

TAMPERE, FINLAND

Full commercial services on the first phase of the Tampereen Ratikka light rail line in Tampere began running on August 9, following celebratory events the previous day.

The start of revenue operation follows a period of test running which saw pre-booked passengers able to travel from May 10.

The city government emphasized that the tramway

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was not only a transport project but included significant investment in urban development that would make Tampere a more attractive place to live and work. The opportunity had also been taken to undertake utility renewals.

Tampere is the most populous inland city in the Nordic countries, with around 235,000 inhabitants. This figure is forecast to reach 280,000 by 2040, while the population of the wider urban area is expected to increase from 353,000 to 460,000.

The city said the tramway was an investment in “a cleaner and smoother everyday life,” improving air quality and increase comfort. The trams are powered by green energy, and each vehicle has the capacity of three buses, reducing congestion in the city center.

Anticipating that the tramway would

make the everyday life of residents, commuters and visitors easier, it formed part of the city’s plans to address climate change by increasing the market share of sustainable transport. This wider program includes the development of commuter services, cycling, an hourly inter-city train to Helsinki and “smoothing” of car flows.

The first phase of the Y-shaped tram network comprises a 7.1-mile route between Pynnikintori and Hervantajärvi, with a 2.9-mile branch from Sammonaukio to Tampere University Hospital and Kaupin Kampus, serving a total of 23 stops.

A second stage would see the line extended westwards from Pynnikintori to Lentävänniemi, adding another nine stops and taking the network to 15 route-miles.

The standard-gauge tramway has been built by a consortium of YIT Suomi, NRC Group Finland (which acquired VR Track), AFRY (formerly Pöyry) and Sweco. The city gave the formal go-ahead in November, 2016, and construction beginning in March, 2017.

Implementation was managed through the Tampereen Raitiotie alliance between the construction consortium and the city government.

As the project evolved, the inclusion of parallel urban

development works increased the overall budget from an initial estimate of €219 million to around €250 million for the tramway and €50 million for other works.

However, the city said the final cost had come in €34 million under the revised budget. It believed that combining the works made financial sense and would minimize disruption in the longer term.

Arcelor Mittal supplied the rails, and Vossloh provided an HSG-city grinding machine. Teleste and JC Decaux were awarded a contract to supply 90 double-sided TFT LCD passenger information displays for the stops and maintain them for seven years.

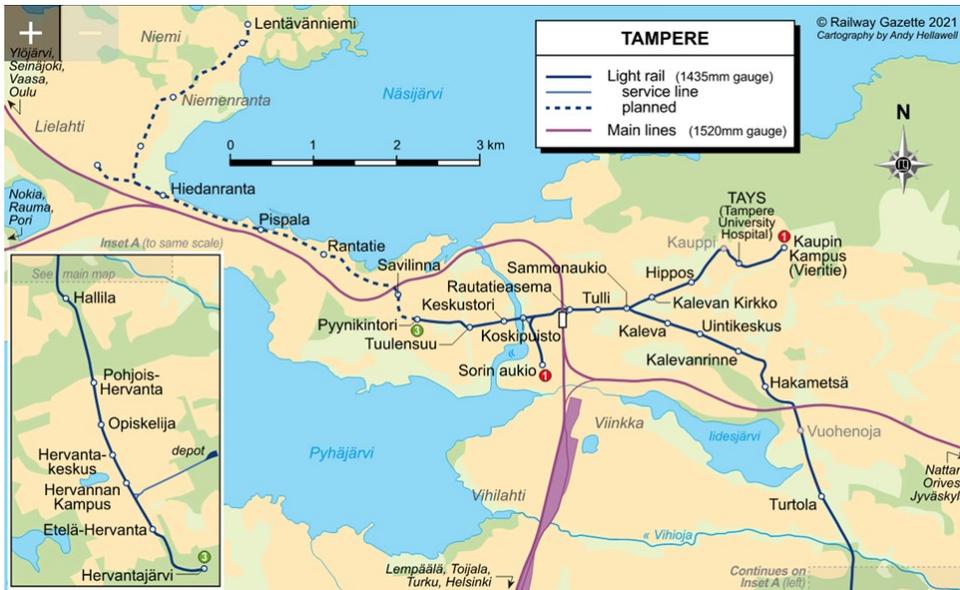
Škoda Transtech has delivered 19 trams under a €104

million contract which includes 10 years of maintenance and options for up to 46 more vehicles.

Etteplan supported the production of technical documentation.

The ForCity Smart Artic X34 cars are three-section bidirectional 100% low-floor vehicles, 122 feet long and 8.7 feet wide. They can carry up to 264 pas-

sengers, with 64 fixed and 40 tip-up seats and space for six wheelchairs and six bicycles. With all wheels powered, the cars have a maximum speed of 50 miles per hour.



Map of new Tampere light rail system. Railway Gazette map



Škoda Transtech ForCity Smart Artic X34 cars in Tampere. Metro Report International photograph

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Features for operation in Nordic conditions include double glazing and heated floors for the winter. The air-conditioning is designed to maintain an interior temperature of 70°F while the outdoor temperature varies between -31°F and 95°F. The red-and-black livery was selected through a public vote.

National railway VR Group won the contract to operate the tramway, which is valued at around €7million/year over 10 years. (*Metro Report International*, August 9)

VORALSBERG, AUSTRIA



An ÖBB Desiro Mainline (4744 504 built by Siemens Mobility in around 2015) is seen operating a trip on the S40 route in the Vienna suburb of Klosterneuburg-Kierling on May 11, 2019. Jeff Erlitz photograph



One of the Bombardier Talent (Cityjet) EMUs that ÖBB is not pleased with, 4024 103, is shown on an S45 assignment at Vienna's Heiligenstadt station on May 14, 2019. Jeff Erlitz photograph

Austrian Federal Railways (ÖBB) will introduce 21 Siemens Mobility Desiro EMUs from the end of 2022.

The EMUs will be built at Siemens' Vienna factory and have been ordered following persistent delays with the delivery of EMUs ordered from Bombardier (now Alstom), with the order formally cancelled earlier this year, despite the trains being built.

A tender for new trains was launched in January 2021, with a shortened delivery time seen as crucial in the selection of the winning bidder.

Initially the 21 Desiro ML EMUs will be used on local services around Vorarlberg. (*Editor's Note by Jeff Erlitz: The capital of Vorarlberg state is Bregenz, which sits on Lake Constance.*)

Until the EMUs are delivered, refurbished CityJet Talent 1 trains will continue to be used on the majority of these services. Extra seating capacity will be created, and, from the start of September, an additional five Talent 1 trains will be available to provide sufficient capacity for students returning to school. (*International Railway Journal*, August 18)

BERLIN, GERMANY

Construction of the 1.2-mile five-stop extension of Berlin tram line M10 westwards from Hauptbahnhof to Turmstraße U-Bahn station (U9) in the city's Moabit district was officially launched with a groundbreaking ceremony on August 11.

The €33 million project is being funded by the Berlin Sustainable Development Program, with co-financing from the European Regional Development Fund and the Land of Berlin.

Opening is anticipated for the first half of 2023, with future ridership estimated at around 10,000 passengers/day. (*Metro Report International*, August 17)

(Editor's Note by Jeff Erlitz: This extension is actually four-and-one-half stops as one stop, Lesser-Ury-Weg, is currently used only in the outbound direction on a uni-directional loop that the M5, M8 and M10 all use. The four completely new stops will be Alt-Moabit, Rathenower Straße, Lübecker Straße and Turmstraße.)



Two pre-series class 483/484 S-Bahn trains. Stadler photograph

The first ten new class 483/484 S-Bahn trains for Berlin built by a consortium of Stadler Pankow and Siemens have completed their testing on the S47 line.

The trains are all pre-series sets and have been running tests in everyday operation carrying passengers between Spindlersfeld and Hermannstrasse since January 1. The trains recorded more than 99% availability during the seven-month test period.

The ten pre-series trains will now enter regular service. Production series trains are being built with the

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first due to enter traffic on the S46 line from July 1 next year.

S-Bahn Berlin has an initial 106 trains on order comprising 85 four-car class 484 and 21 two-car class 483 sets, all of which are due in traffic by the end of 2023. They will be used on lines S8, S46 and S41/42 as well as S47.

Bodysells are fabricated at Stadler's plant in Szolnok, Hungary and moved by road for final assembly in Stadler's Berlin factories. Siemens is supplying traction equipment and bogies, which are derived from a design used on Oslo Metro MX3000 trains.

S-Bahn Berlin signed framework contract for the supply of up to 1380 vehicles in December, 2015. (*International Railway Journal*, August 19)

FRANKFURT, GERMANY

DB Networks has begun the formal planning and consultation process for the proposed new cross-city mainline tunnel beneath Frankfurt am Main.

The double-track tunnel will include a four-platform underground station 35 meters below the existing Frankfurt Main Station and is seen as an essential component of the infrastructure required for the planned regular interval national timetable, although it will not be completed in time for the planned 2030 Deutschland Takt launch date.

The 4.3-to-6.2-mile tunnel will increase the capacity of Frankfurt Main Station from 1,250 to 1,500 trains daily. Up to 12 trains per hour in each direction will use the new tunnel, mostly ICE high speed services although new Hessen Express regional services linking Wiesbaden with cities east of Frankfurt are also planned.

The planning work is based on a 2019 feasibility study undertaken for the German federal government. Initial geological investigation has shown the tunnel is feasible within the €3.6 billion budget.

Three overall route options with 194 variations were considered, but both the northern and central options have been discounted as they would pass under multiple high-rise buildings in Frankfurt city center. The southerly route avoiding much of the city center and running in part under the river Main is preferred alt-

hough some details are yet to be established and several permutations are being considered as part of the public consultation process.

The southerly route also offers better connections at the eastern end to both existing routes to Hanau, which are already used by ICE services to northern, eastern and southern Germany and Austria. At the western end, the new tunnel will begin east of the existing Frankfurt Main Station with a new double track bridge over the Main built alongside the existing pair of double-track bridges at Frankfurt Niederräd.

The planning process is expected to take several years with construction unlikely to begin until the early 2030s. A 10-year construction program means the new tunnel will not open until the early 2040s. DB has created a dedicated website for the project. (*International Railway Journal*, July 6)

PORTUGAL

AN €819 million tender for 117 EMUs, described as the largest fleet purchase in the history of Comboios de Portugal (CP, Portugal Trains), has been launched by the Portuguese government.

The tender calls for the supply of 62 EMUs that will be used on urban services and 55 EMUs for regional services. Of the 62 urban EMUs, 34 are

for the Cascais Line in Lisboa (Lisbon) where they will replace 29 existing trains; 16 EMUs will strengthen the remaining Sintra, Azambuja and Sado Lisbon Metropolitan Area lines; and 12 EMUs will be added to Porto's urban fleet.

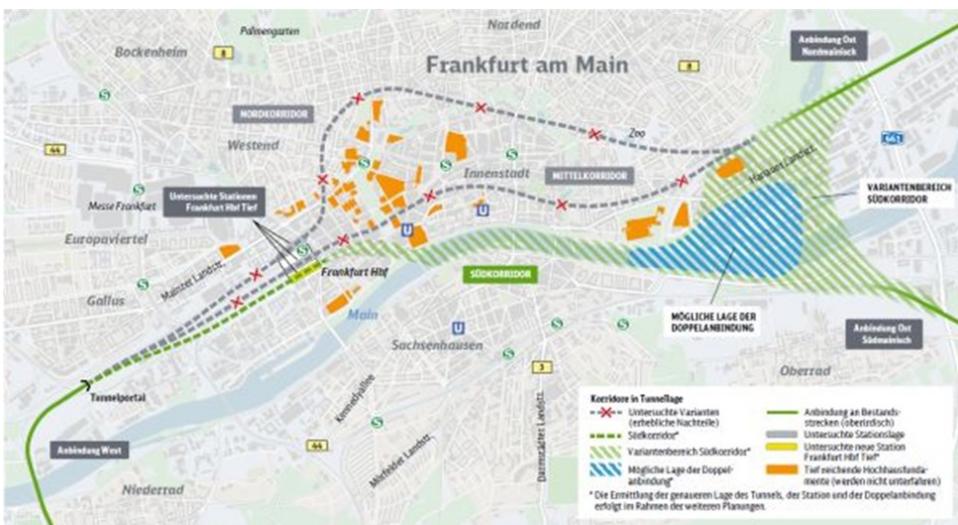
Stadler has already been awarded a €158 million contract to supply 10 EMUs and 12 bi-mode trains for regional services in October, 2020, but financing for this order has not yet been scheduled.

The Portuguese government plans for the new trains to replace obsolete vehicles, meet current demand and respond to the expected rise in passenger numbers in the coming years.

Portugal's minister of infrastructure and housing, Pedro Nuno Santos, said local manufacturers will contribute a considerable percentage of manufacturing of the trains.

At the same time as the new train tender, Portugal's Council of Ministers also approved the creation of a Rail

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The potential route of the tunnel in central Frankfurt. DB map

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Competencies Center that will be located in Guifões, Matosinhos, near the CP workshops. Funding will come from CP, Infrastructure manager IP, Lisbon Metro, Porto Metro, the University of Porto Foundation and the Rail Platform, which is formed of dozens of companies from the rail industry private sector).

The center will conduct research, innovation and training in rail as well as bringing together public enterprises, academia and private companies. (*International Railway Journal*, July 28)

LUGANO, SWITZERLAND

Plans for a 1.4-mile cut-off tunnel which would provide meter-gauge operator Ferrovie Luganesi with a more direct route into Lugano were approved by the Federal Council on August 11.

Construction of the tunnel along with a 1.2-mile surface branch to Manno are key elements of a program to develop a tram-train network to improve connections between Lugano and the surrounding area by 2035. The overall cost is put at SFr500 million, with the federal government to contribute SFr270 million.

The tunnel would start at new platforms underneath Lugano main line station and run to Bioggio Molinazzo, where Ferrovie Luganesi services would join the existing Line S60 to Ponte Tresa on the Italian border or turn north onto the branch to Manno.

The existing railway alignment approaching Lugano via a circuitous route would be abandoned.

Meanwhile, on August 7 Ferrovie Luganesi put into passenger service the first of nine Tramlink tram-trains which are being supplied by Stadler. Four have now been delivered, with three ready for service, and all nine are expected to be in traffic by November.

The tram-train livery includes the “smile” which forms a distinctive feature of the front ends of the operator’s current fleet of Be4/12 trainsets dating from 1978. (*Metro Report International*, August 17)

PRAHA (PRAGUE), CZECH REPUBLIC

Construction of Praha metro Line D is expected to get underway next year, following the award of the civil works contract for the most challenging section of the 6.6-mile route.

Once completed, Line D will run from Náměstí Míru to Depo Písnice, serving eight intermediate stations at Náměstí bratří Synků, Pankrác, Olbrachtova, Nádraží Krč, Nemocnice Krč, Nové Dvory, Libuš and Písnice. Interchange with the existing Line C will be provided at Pankrác.

The line is being designed for fully automatic operation and will be worked by a fleet of 17 four-car driverless trainsets. Total cost of the project is currently estimated at KC97.8 billion. The project is to be funded from the city’s own resources, along with a mix of commercial loans and funding from the European Investment Bank, although the city council is hoping to negotiate a contribution from the national budget.



Map of Line D.
DPP website

The business case for the initial section was formally approved by Praha municipality on June 7, allowing city transport authority Dopravní podnik hlavního města Prahy (DPP) to start awarding construction contracts. This first phase covers the route between the Line C

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Pankrác station on Line D.
DPP rendition

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interchange at Pankrác and Nové Dvory, together with the intermediate stations at Olbrachtova, Nádraží Krč and Nemocnice Krč. Construction is expected to take around 7½ years, at a total cost of KC52.1 billion, including the rolling stock, automation and signaling.

On June 29 DPP signed a KC13.8 billion contract with an international consortium of Subterra, Hochtief CZ, Strabag, Hochtief Infrastructure and Ed. Züblin covering civil works on the ¾-mile section between Pankrác and Olbrachtova, where the line will run around 108 feet below ground level. The longest subsection between two stations on the route is expected to be the hardest to build, as a result of difficult geological conditions in the Pankrác area and the complexity of the interchange below Line C. This section is expected to be built using the new Austrian Tunnelling Method, although the necessary permits have not yet been granted. According to the city's Deputy Mayor for Transport and Chairman of the DPP Supervisory Board Adam Scheinherr, a one-year delay in the procurement process has inflated the projected cost by between KC2 billion and KC4 billion.

Tenders have been called for the next section between Olbrachtova and Nové Dvory, and DPP is hoping to announce the winning bidder by the end of this year. Construction is provisionally scheduled to begin in April 2023 for completion within six years. The remaining Nové Dvory-Depo Písnice and Pankrác-Náměstí Míru sections are expected to take four and six years respectively. (*Metro Report International*, July 26)

PLZEŇ, CZECH REPUBLIC



Škoda ForCity Smart Artic X34 (40T) car in Plzeň. *Metro Report International* photograph

Škoda Transportation has delivered the first of two ForCity Smart X34 (40T) trams ordered by Plzeň operator PMDP, and test running is planned to get underway in August.

In September, 2018 Škoda Transportation was the sole bidder for a contract to supply trams to Plzeň, with a firm order for two and options for up to 20 more.

The design was unveiled in October, 2019 and the first

vehicles were scheduled to be ready in a year, but delivery has taken longer than expected. (*Metro Report International*, August 2)

JERUSALEM, ISRAEL



Extension of the Red Line has begun. *International Railway Journal* photograph

Track laying has begun on two extensions of Jerusalem's Red light rail line, which will add 3.3 miles and 11 new stops, the first stage of a project to extend the light rail network by 16.8 miles with more than 50 stops.

The expansion involves extending the 8.4-mile Red Line 1.3 miles north to Neve Ya'akov with four new stations, and 2 miles south to Hadassah Ein Kerem Medical Centre, one of the largest hospitals in the Middle East, with five stations. Two branches will also be built to the university campuses at Mount Scopus and Givat Ram, which will later form part of the Green Line. Construction is due to be completed by the end of 2022 with both extensions due to open in the middle of 2023.

The new tracks were installed on Hentke Street in the presence of Jerusalem Mayor Moshe Leon. The Red Line, the first light rail line in Israel, opened in 2011 and now carries around 140,000 passengers a day.

The project is managed by an inter-ministerial tender committee led by the Senior Deputy to the Accountant General at the Ministry of Finance, Yuval Raz, jointly with the ministries of Finance, Transportation, Jerusalem and Inbal and in collaboration with the Transportation Master Plan team, which serves as the professional body responsible for promoting the project.

An agreement to extend the Red Line at each end and build a section of the Green Line was reached by the Israeli government and CityPass, the concessionaire for the Jerusalem light rail network, in August, 2017. However, the TransJerusalem J-Net consortium of CAF and Shapir commenced a 15-year concession to operate and expand the Jerusalem light rail network in April, 2021, replacing the CityPass consortium.

Construction of the 14-mile Green Line is currently underway, while procurement for the 12.4-mile Blue Line has also begun. (*Metro Report International*, August 13)

VIENNA-BRATISLAVA-UKRAINE

by Jack May
(Continued from August, 2021 issue)
(Photographs by the author)

Tuesday, June 20

After having completed breakfast by 8 AM bright and early the following morning, we boarded our chartered bus for the short distance to the main carhouse and workshops of the Vinnytsia tramway system. I had been to this pleasant city of some 375,000 souls in 2008, when operations over its meter-gauge tramway were mainly provided by Tatra KT4s. At the time some second-hand cars from Zurich had already arrived and the older Swiss units were starting to be mixed in with the PCCs. I looked forward to touring the system again, starting with our chartered pair of historic vehicles.

In the decade since that visit, many more cars from Zurich were added, and they gradually began to dominate the roster, and now provided virtually all regular service on the six-line, 12½-mile long system. Also dur-

ing that period, about a mile of additional track had been laid linking the ends of two lines, thereby permitting the operation of various full and partial loop services. And now there is a major initiative, called the VinWay program, to rebuild and renovate older rolling stock.

My report on our visit to Vinnytsia is divided into two parts, the first covering the time we spent at the carhouse and on the fantrip, and the second (next month) recording normal public operation.

Our group was given the run of the carhouse area and were able to see some equipment undergoing modernization. We also noted that a few of the "VinWay" cars were being operated in regular service; they are shown in part 2.



Red and cream were the "official colors" of streetcars in the days of the Soviet Union. Vinnytsia's work cars remain in that livery, as shown by these views of Sweeper SU-1 and Tower Car EP-2, the latter fabricated from a Tatra T3 PCC.



Tatra-built PCC 143 from 1979 has been retained in good working order and can be chartered. Sister car 135 (1977) was converted into the Tower Car shown above. It should be pointed out that narrower, meter-gauge T3 PCCs exported from Czechoslovakia to the Soviet Union were officially classified as T4 cars (as were narrower cars of any gauge, such as those built for East Germany and other Eastern European countries), but they were and remain the functional equivalent of wider T3s. In my opinion this equipment constitutes a very important portion of the story of PCC cars (over 15,000 were built), and I wish one of the standard-gauge units would be imported by an American trolley museum. We do have PCCs from The Hague and Brussels in the U. S., why not an example of the much more pervasive Tatra T3?

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A lineup of three modern cars. A Tatra KT4 is sandwiched between two ex-Zurich "Mirage" articulated cars. When Vinnytsia imported the Swiss cars and found they were perfectly suitable for their tram operations they adopted the Zurich color scheme for all their vehicles, including trolleybuses, to match these cars. 219 was built in 1988, just before the communist regime fell, while 299 and 305 were constructed in 1966 and 1967, respectively. A handful of KT4s are still operable for the public in Vinnytsia, but I did not see any on the streets.



This mural, near the entrance of the carhouse, which shows a progression of car types, must have been painted recently, as it features one of the VinWay cars at the far right. Shown are car 1 and car 100, both used for our fantrip, followed by a KT4, a Swiss Mirage car and a VinWay streamlined unit.

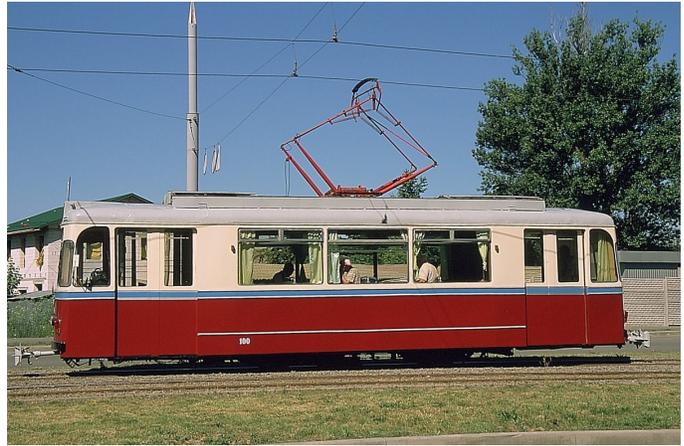


This inoperable replica was built in 2003 and reposes in front of the carhouse's administrative building, greeting visitors. It was constructed in the style of one of the city's original MAN-built trams of 1912, the year tramway service in the city was inaugurated. A mini museum depicting the history of Vinnytsia's trams is inside the car.

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Our fantrip cars were small four-wheelers built by Gotha in East Germany in 1958. A large number of these T57 cars pulled trailers (B57s) through the streets of Vinnytsia until the centralized production of trams was moved to Czechoslovakia in the early 1970s — making way for the introduction of T3 PCCs (quite an improvement). Car 1, shown at left, had its original body extensively modified, and its number, obviously, was repeated on the replica car shown previously.



Our two fantrip cars, posed together at one of our photo stops.

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