

The Bulletin



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The Bulletin

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This Month's Cover Photo:

Boston Elevated Railway
Main Line at Dudley Street
station, c. 1904.
Unknown photographer,
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In This Issue: The Genesis of Dashing Dan... Page 3

GARY GRAHL, 1935-2021 by Randy Glucksman

Member Gary Grahl (ERA #2823) passed away on February 5, 2021, after being hospitalized for several weeks. Gary was born in the Bronx on October 28, 1935 and attended some of the same schools that I did, Public School 28 and Junior High School 117. Despite our age difference, we had some of the same teachers. Gary graduated from DeWitt Clinton High School and the City College of



Gary Grahl at TTC Leslie Car House on a Toronto Transportation Society trip.

Andrew Grahl photograph

New York, where he earned his Bachelor and Master's degrees. Gary made his career as a New York City junior and intermediate school teacher and was very well thought of by his co-workers and students. I learned this by attending some of his field trips and speaking with other attendees.

Gary and I first met in the early Spring of 1965 when I appeared before a then-required ERA Interview Committee prior to being accepted as ERA member #3213. He was one member of this committee, which also included Roger Arcara, Allan Hannock and Hal Spielman, all men that I would later count as friends. After the interview when I returned home, I mentioned Gary's name to my parents who confirmed, "of course we know him and his family." My father had

owned a five-and-ten-cent store in the Mt. Hope section of the Bronx during the 1940s and 1950s where we and Gary's family lived. My Dad was a stamp collector and also sold stamps in his store. Gary was a customer and told me that he still had those stamps. On occasion he kidded that he knew my parents longer than I did. That was true. Gary enjoyed telling me interesting stories about my Dad and their conversa-

tions, which I did not know.

Gary had been a close friend since that time, later attending each other's family life cycle events, the joyous ones and also the sad ones. We were groomsmen at each other's weddings and spoke on the phone frequently. Of course, we also railfanned.

Many members do not know that Gary was also a vexillologist, a person who studies flags. In fact, along with his friend the late Whitney Smith, he co-founded the North American Vexillological Association, and designed flags for several countries. They also co-wrote several books about the history of flags.

For all the years that I knew Gary, he has been a member of a choir and an active

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Gary Grahl, 1935-2021

(Continued from page 1)

member of the Lutheran church that he attended. He was currently a member of the Bronx County Chorus and regularly attended church at the First Lutheran Church of Throggs Neck. He was also President of his co-op Board for more than 40 years.

When I first joined ERA, my interest was strictly New York City, but when Gary invited me to join him and some friends on a day trip to Philadelphia, I could not pass that up. And then there were trips to other places that increased my interest in transportation. He was a great teacher.

Being interested in buses when I joined the ERA in the 1960s was not popular, and some of our current members will remember the unpleasant sounds that were heard from some attendees when a bus slide or a bus passing a trolley was shown during a program. Nonetheless, in 1982 Gary and several friends started the Metropolitan New York Bus Association. This group organizes several bus trips each year during the Spring, Summer and Fall to visit local and regional bus properties. Very often there are opportunities to do some rail-fanning. Each summer there would be a multi-day trip,

to Cleveland, Pittsburgh, Toronto or Montreal (among other places), and these trips were well-attended. I always enjoyed the trips that I took with the group. Per Gary's plan, at the initial boarding attendees boarded the bus based in the order Gary received their checks to secure their "favorite" seat, which was theirs for the remainder of the trip.

True to his always being a teacher, on these trips Gary had a whistle and instructed the attendees that three toots meant "Get back on the bus!"

It goes without saying that Gary will be missed by the ERA, where he served as the Inspector of Elections for many years. His annual, excellent Super 8 movie programs were enjoyed by all.

However, more importantly, he will be greatly missed by his three children and their spouses: Gregory (Fran), Gloria (Chris), their daughter Julia (Gary's granddaughter), and of course someone we all know, Andrew, our Program Chair, and his wife Karen. Sadly, Valerie, Andrew's mom, passed away on January 26, 2010.

The family plans to have a memorial service for Gary at his beloved First Lutheran Church of Throggs Neck when the pandemic improves. All ERA members and friends will be welcome.

May he rest in eternal peace.



THE BOARD OF DIRECTORS EXPRESSES ITS DEEPEST APPRECIATION FOR 14 MEMBER DONATIONS IN JANUARY, 2021

AMOUNT	DONOR(S)		
\$100 and up	Robert Mahar	Jeffrey Mann	Rob Scaffardi
\$50 to \$99	Charles Edward Lewis	Frederick Tindall	
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THE GENESIS OF “DASHING DAN,” PART SIX— ROUNDING OUT THE ‘TEENS ON THE LIRR by George Chiasson (Continued from February, 2021 issue)

EVENTS ON THE HEMPSTEAD BRANCH

On the Hempstead Branch, a new depot was opened at the Fulton Street terminal in February, 1913 that replaced the original Central Railroad of Long Island building constructed in 1872. Another station called “Country Life Press” was then added on May 25 at Fifth (Chestnut) Street in Garden City, between Hempstead Crossing and the Fulton Street terminal, with the Chestnut Street crossing being moved under-grade as a prerequisite. This was contiguous to a large magazine and book production house that had been built next to the railroad by Frank Nelson Doubleday, founder of the renowned publishing empire which carried his name, in 1910. “Country Life” magazine was an aptly titled periodical (one of its many) which likely evoked the most desirable reflection of Garden City’s ideals. As such it carried the plant’s public name, though the actual stop was open to everyone and not just used by Doubleday employees. Located exactly at the convergence of the Hempstead Branch and the original New York Bay Extension (West Hempstead Branch) as relocated in 1907, it consisted of a brief, sheltered, curving platform on the east side of the tracks, at which trains serving either route could stop (albeit with a single door location). Without a doubt the Hempstead Branch was the far busier of the two lines serving Country Life Press with a high wooden platform being installed to improve dwell times on September 8, 1917.

Finally, out of operational desperation and despite the ongoing war with its corresponding shortages of capital, materials and manpower, a slight widening of the right-of-way progressed through Garden City during the summer of 1918 and double-tracking was completed on the remaining portion of the Hempstead Branch as far as

the 1912-doubled lead into Floral Park. This was laid using re-claimed rail and ties from the dormant Cedarhurst cutoff, with a second set of platforms consequently added at the Nassau Boulevard and Stewart Manor stations, along with the completion of a second track through newly modified but pre-existing platforms at Garden City. No more (it was hoped) would Hempstead Branch trains have to wait in and around Floral Park for meets to be executed (and thereby “plug up” the Main Line on occasion). Further, double-tracking of the length of the Hempstead Branch allowed cessation of the LIRR’s 42-year scheduling habit of routing one of three Hempstead trains via the Main Line and Mineola. Naturally, each of those continued to be steam-drawn after the 1908 initial Hempstead Branch electrification, being terminated at Long Island City then tracked along the “Montauk Division” (former Southern) as far as Jamaica, where they assumed the Main Line for the rest of the trip into Nassau County. The balance was provided by electric MU service originating at Penn Station and Flatbush Avenue for the decade between 1908 and 1918, with two of each three Hempstead trains thereby routed through Garden City. Thanks to the implementing of “full service” via the Hempstead Branch with the completion of double track on November 27, 1918 an unusual lock-out system was employed at the interlocking as controlled from HC Tower, which would allow only a Mineola-West Hempstead-Valley Stream or Floral Park-Garden City-Hempstead routing to be followed unless switch settings were made otherwise by hand, which from this date forward obviated the historic routing between Long Island City, Mineola and Hempstead that dated from 1839.

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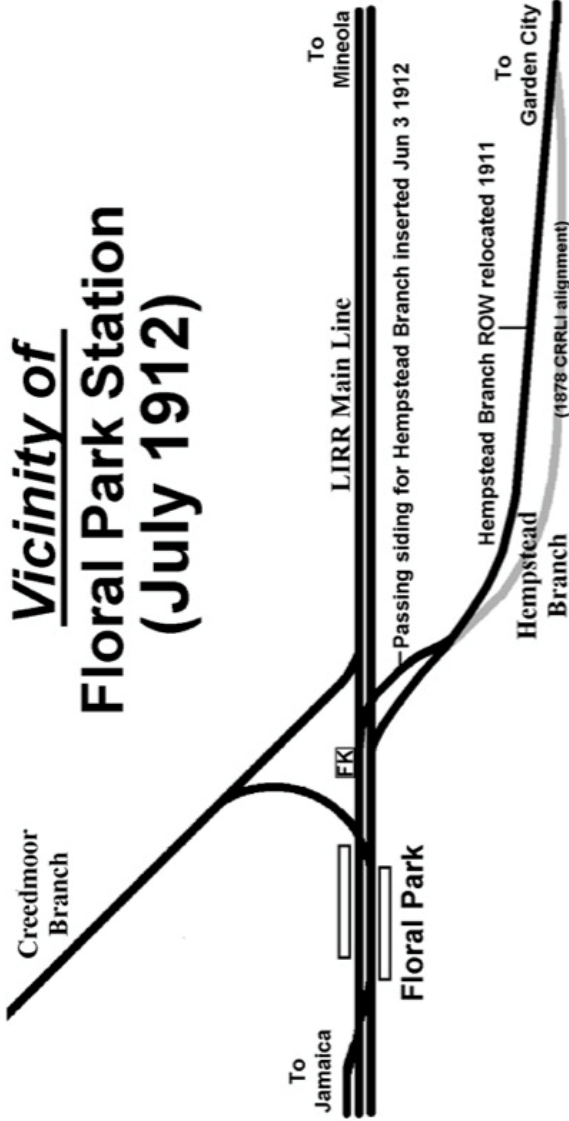
SUBDIVISION “B” CAR ASSIGNMENTS CARS REQUIRED FEBRUARY 14, 2021

The following is different from the assignments that appeared in the January, 2021 *Bulletin*:

LINE	AM RUSH	PM RUSH
Ⓞ	48 R-46, 72 R-179	48 R-46, 72 R-179

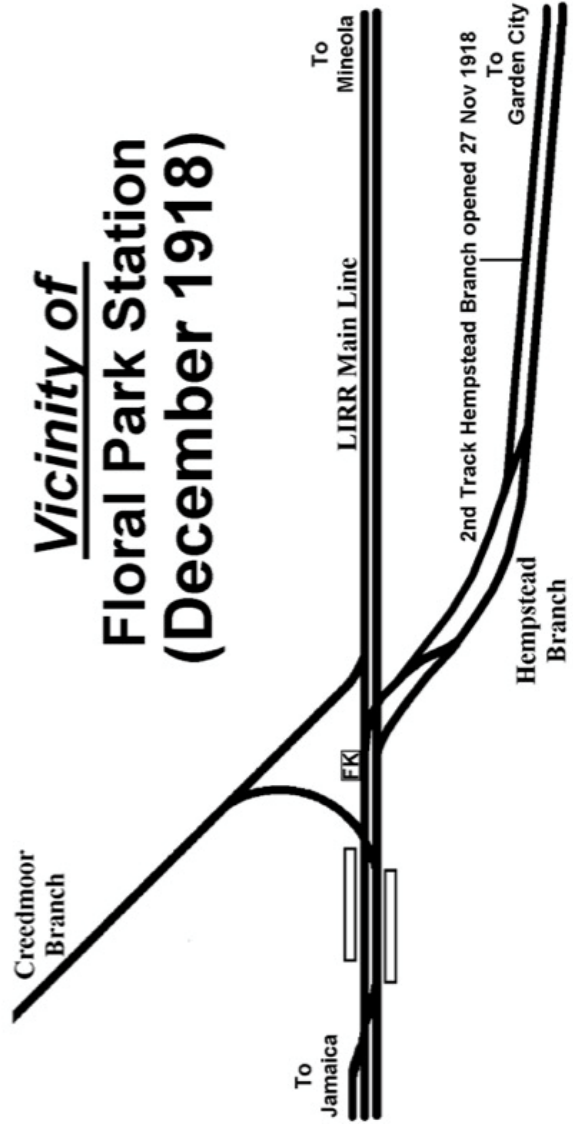
The Genesis of “Dashing Dan”
(Continued from page 3)

**Vicinity of
Floral Park Station
(July 1912)**



The Evolution of Floral Park

**Vicinity of
Floral Park Station
(December 1918)**

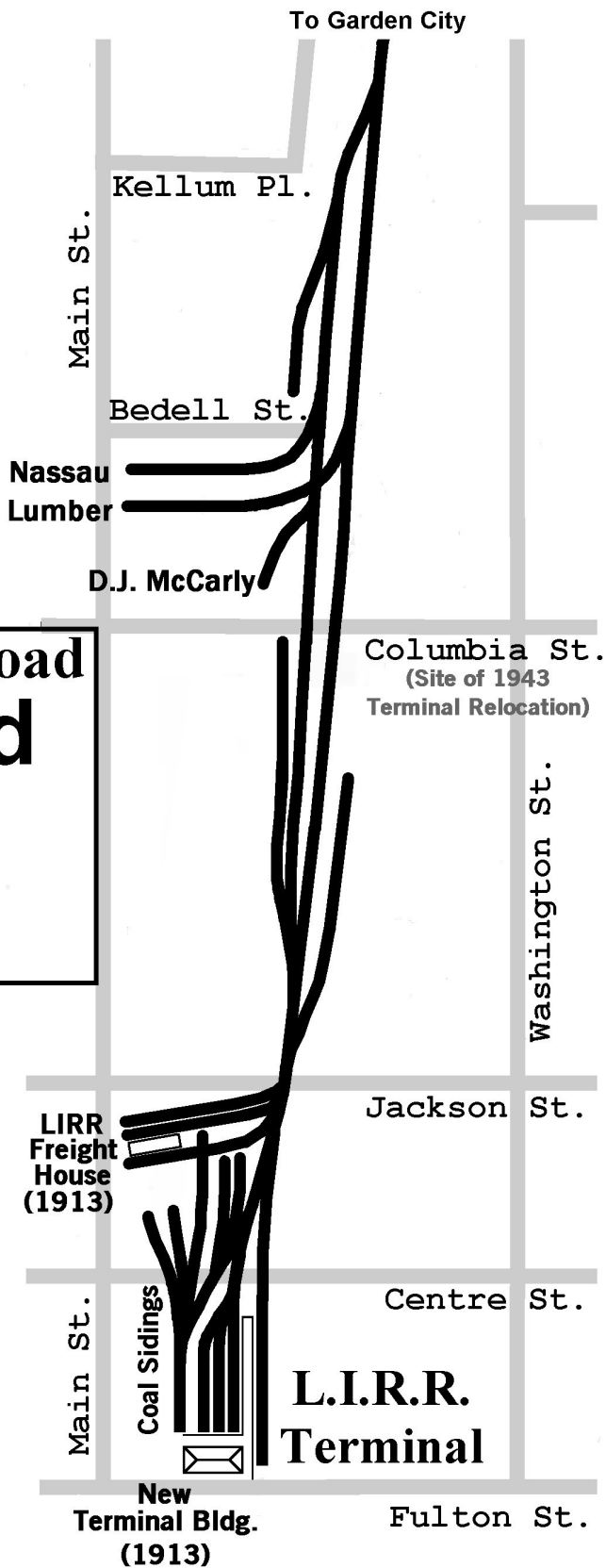


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The Genesis of "Dashing Dan"

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**Long Island Rail Road
Hempstead
Terminal
1921**



NEW YORK CITY SUBWAY CAR UPDATE

At the end of December, 2020, all 136 of the Phase I R-32s used at East New York between July and October remained as a “reserve” fleet at various Subdivision “B” locations around the system. In that interim the only minor change of status was the “official” retirement of 3522-3523, which had been held for potential work service conversion most of the year. That quantity is thus amended to 86 cars total. On December 10, newly configured R-46 link 6212-6063-6065-6064 was sighted in passenger service on the **A** for the first time, restoring that small part of the R-46 fleet lost as a result of the 14th Street accident on September 20, bringing that quantity up to its current maximum of 748 cars (352 at Pitkin and 396 at Coney Island). To better focus equipment use on the Coney Island lines in the first quarter of 2021, the former Jamaica group (9833-9922) and whatever other R-160s are able to be mustered daily tend to most commonly show up on the **N** and **W**, with use on the **C** constrained to occasional opportunities during weekday afternoons. There most of the service is now provided by R-46s being supplemented with R-68/68As, while the **G** is still anchored by R-68s and R-68As with some R-46s sprinkled in.

While we are (finally) at it, we should hereby note that the nine single unit R-68-1s (2916-2924) that are confined to the Franklin Avenue Shuttle **S** are now (and have been) celebrating their 30th anniversary there since last Spring. On that original date (June 11, 1990) they finally and ever since replaced the last 60-foot equipment (then four-car sets of Morrison-Knudsen-rebuilt, Phase II R-32s) to be used on the Franklin Avenue Shuttle after December 20, 1967, and before that the “old” 67-foot B-Types going back to near its origins starting in July, 1927. The shuttle service itself was established as a Dual Contracts-inspired remnant of the Fulton Street Elevated on August 1, 1920, and used wooden elevated open-gate (i.e. “BU”-Types) at first, until spelled by the then-new “C”-Type early unitized wooden cars which incorporated Multiple Unit Door Control starting on Valentine’s Day, 1925.

An accurate supposition from the last Update was the gradual discontinuance of Jamaica-assigned R-160s on the **A**, whereas this odd affair was quite obviously concluding by mid-November. Two such consists did manage to hang on through the Thanksgiving Holiday, before pruning to a lone survivor that Sunday. Afterward this loner became practically invisible among the (once again) common sea of R-46s and R-179s on the **A** overall. As best could be determined (while lacking any other notoriety), the last R-160 train used on the **A** was set up as Alstom R-160Bs 8832-8828 with 9717-9713 (north to south) on December 10, 2020. All such equipment (and there was likely one additional consist) was subsequently deadheaded back to Jamaica Yard by early the following week, thereby ending this tale with a total quantity of 885 various R-160s being operated on the **A** during the six months beginning on June 6.

On the very same day, just as that story was finished, yet another started when 90 other R-160s were exchanged from Jamaica (**EFR**) to Coney Island for use on the **N**, **C** and **W** lines. Involved were Kawasaki (Option 2)-built, Alstom-equipped R-160Bs 9833-9922, which had been stationed at Jamaica since their delivery in 2009-10, in trade for all of Coney Island’s remaining “Siemens” R-160Bs (8913-8917, 9008-9012 and 9023-9120), which as well had been at their original assignment as far back as 2009. Two objectives associated with this transfer were, first, to allow the remaining Siemens cars to be finally equipped for Queens CBTC operation, and second, to complete the long-planned relocation of that 260-car (somewhat oddball) sub-class, which had been interrupted by the unexpected, overall COVID-19 fleet impacts on NYC Subways last March. Furthermore, by mid-December there were widely-reportedly reliability issues cropping up with the decades-old R-46s as they had become a bulwark on the Coney Island routes, which brought about the daily habit of scrounging additional Jamaica-assigned R-160 trains for the **N**, **C** and **W**, when and from where they could be found. This strategy helped to fill out operating requirements so as to surmount any resultant fleet shortages.

All 96 East New York-assigned R-179s (3050-3145) had been re-accepted by the end of November, 2020, with (almost) all exhibiting themselves virtually as daily regulars on **J** and **Z** service. The lone exception was link 3122-3125, which appeared inconsistently until January 22, 2021, since time it has been pointedly observed in the long parade of R-179s. In addition, the general array of four-car units on the **J** and **Z** as of February 1, 2021 were almost all R-160A-1s (potentially bearing two types of unused CBTC), plus a small number of R-143s. Since CBTC was instituted on the Queens IND in late 2019, the R-160A-1s have been commonly divided into two noticeable sub-groups; those from 8377 to 8608 (29 trains) being mainly operated on the **M**, where Queens-type CBTC is required, while cars 8609-8652 and 9943-9974 (9½ trains) have usually been marshalled on the **J** and **Z** and not seen on the **M**. Of course, the fleet balance of cars 8313-8376 are configured for the **L**, complete with the Canarsie variant of CBTC. On the **C**, R-179s 3150-3153 and 3206-3213 were finally revived on November 20, 2020 with all again fully accepted for service by December 22 but for one stubborn exception. The lone outlier turned out to be 3174-3177, which had been restored to a state of trust as of January 22, 2021. **A**-assigned R-179s 3010-3014 were in Re-Test as of November 21, 2020 lastly followed by 3288-3292 on December 10 to again bring life to all 318 delivered cars. The final (hopeful) re-acceptance of all 130 such five-car units on the **A** was consummated as of December 21.

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New York City Subway Car Update*(Continued from page 6)*

Perhaps most prominent of COVID-19's toll elsewhere around the subway system was the announced suspension of MTA Capital Construction activities for a foreseeable time as of January 22, 2021. This will prominently short-circuit the advancement of system CBTC installation beyond that which is almost completed: the IND Queens Line inward of Union Turnpike-Kew Gardens to 50th Street & Eighth Avenue and to 47-50th Streets/Rockefeller Center on the IND Sixth Avenue Line, on the Eighth Avenue Line from 59th Street-Columbus Circle to High Street as well as on the Culver Line **F** from Ditmas Avenue to Coney Island. Ergo, going by the boards for time being is any further installation of associated equipment beyond the ongoing 1,285 R-160s to be ultimately allocated to Jamaica (**E F R**), along with R-160A-1s 8377-8652 and 9943-9974.

To the *Bulletin's* December, 2020 update can be added the current scarcity of readily identifiable capital resources with which the MTA will easily be able to execute any or all of its planned options for the R-211 contract beyond the basic order as described. Should they all be delivered as five-car units (and there is a possibility that a portion might arrive as four-car units for East New York), the 440-car R-211A portion will permit the assignment of forty-four (44) ten-car trains to the Pitkin facility, for exclusive use on the **A**, though no further CBTC installation will be included as associated with their arrival. In strictly terms of fleet utilization, these same 44 trains for the **A** will (coincidentally, conveniently) be able to directly replace the current existing (and equivalent) 352 R-46s that are in daily use on the **A** and **C**. It can be readily predicted that R-46s set to depart the **C** will likely be replaced by a selection of 10-car trains that are comprised from the 130 five-car R-179 sets now plying the **A**, thereby to support the 92 four-car R-179s that have been assigned to the **C**

since their delivery. If and when this comes to reality, it will create one of the strangest fleet quirks in the system's long and storied history, while left behind for another time will be the 396 R-46s presently used on the **G N O W**. These and other features which had been keyed through the MTA's 2020-24 Capital Program can be reinvigorated if (and when) the necessary underlying funds that have recently been committed to other, more pressing (read operational) needs are restored. In the meantime, a seemingly interminable financial quagmire continues to grip the region and state, having become a hallmark of the COVID-19 era during the past year.

On the Subdivision "A" side, the MTA's bleak capital outlook has a far more diminished direct impact in terms of ongoing construction, but its "demise" seems to have brought to a stop any action going forward (in this interim) on the planned replacement of NYCT's aging R-62 and R-62A fleets. The projected delivery of its forecasted, large-scale contract R-262, are aspired to include the long-awaited "Gangway" design on a fleet-wide basis, if they are satisfactory from an engineering standpoint, given the historically tight curvatures on certain portions of Subdivision "A." That car configuration is to be introduced through the two prototype R-211T trains when they arrive in a couple of years or so. More in tune with the present Subdivision "A" (as we still know it) a new, minor fleet shift was observed by mid-December, 2020, when R-142s 7126-7130 were re-assigned from the **4** to the **5**, while 6716-6720 were shuffled over to the **2** in trade. Finally, after their predicted overhaul ex-Corona single unit cars 1906 and 1907 were both seen as they moved to Livonia Yard on January 29 for future use on the 42nd Street Shuttle **S** (which has actually been closed for most of this winter season for construction). Noted within, virtually all passenger seats had been removed from both cars, as has become common of the surviving Shuttle-assigned single-unit "middle cars" as part of its long-term restoration and modernization.

Rail News in Review

NEW YORK METROPOLITAN AREA**METROPOLITAN TRANSPORTATION AUTHORITY**

MTA officials have suspended the bulk of the agency's \$51 billion capital construction plan because of ongoing financial issues. Subway ridership is still down 70% from pre-pandemic levels, which has led to a steep drop in fares for the MTA. Current construction projects will continue, but future ones are now put on hold until more capital can be raised.

Among the projects that now need funding are installing more escalators at stations, upgrading subway signal systems and putting more electric buses on the road. MTA Chairman Pat Foye told NY1 the MTA will need to rely on help from Washington to move these

projects forward.

The MTA said closing the subway overnight hasn't saved the agency money. Governor Cuomo ordered the closures last May so trains could be cleaned and police could remove the homeless from the system. (Spectrum News/NY1, January 27)

All New York area outdoor rail services were briefly suspended on Monday, February 1 due to the snow-storm that dumped several inches on the region. All service resumed by the following morning.

MTA NEW YORK CITY TRANSIT

MTA Construction & Development announced it is seeking qualified design-build teams to bring accessibil-

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Rail News in Review

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ity to a complex of three interconnected stations on 14th Street in Manhattan: 6 Avenue **L**, 14 Street **F M** and 14 Street **1 2 3**. The teams will install elevators and make other improvements to ensure full vertical accessibility in accordance with the Americans with Disabilities Act.

Work at each station will generally include the design and construction of the following:

- Three to four new elevators per station
- Structural and excavation work to accommodate new elevator installations
- Electrical power upgrades, when necessary
- Station communications systems upgrades, when necessary
- Relocation of existing public and transit utilities
- Replacement, relocation and/or addition of staircases from street to mezzanines and mezzanines to platforms
- Reconstruction of entire platform edges and/or reconstruction of ADA boarding areas

Additional work may be necessary based on existing conditions at the stations, including:

- Platform reconstruction
- Architectural finishes replacement
- Structural steel and concrete repairs
- Waterproofing
- Lighting and communication systems replacement/upgrade

In addition, this project requires a separate long-term elevator maintenance contract to provide for long-term reliable maintenance of the new elevators, including repairs of certain issues resulting from installation and manufacture.

State of good repair work will also be performed at the 8 Avenue **L** and 14 Street **A C E** complex, and along the entire Manhattan segment of the **L** Line.

These design-build contracts will be awarded to the companies whose proposals offer the best value to the MTA based on an evaluation of qualitative factors as well as cost and schedule. (MTA press release, February 16)

Subway service was partially restored overnight effective Monday, February 22, by two hours, moving to a 2 AM-4 AM closure daily. The changes will lengthen the subway's operations by two hours while enabling cleaning forces to continue the most aggressive deep cleaning and disinfecting regimen in its history.

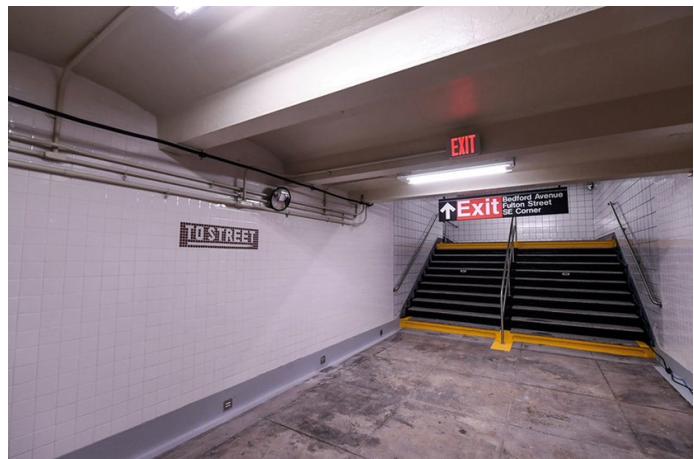
A survey by Hofstra University published last month found three out of four riders felt safer riding the subway as a result of COVID cleaning. The results were in line with an MTA survey conducted in the Fall of 2020 with a similar finding: 76 percent of 20,000 customers agreed that cleaning and disinfecting made them feel safe when using transit.

Subway service was suspended between 1 AM and 5 AM daily on May 6, 2020, at the same time that overnight bus service was significantly enhanced. Overnight

bus service was increased by 76 percent by adding 1,168 overnight bus trips, bringing 344 buses into service on top of the 235 that had been operating during these hours — an approximately 150 percent increase in the operational fleet. Service was enhanced on 61 bus lines, including 11 interborough express routes with additional stops (five routes in the Bronx and three each in Brooklyn and Queens), and 13 new routes that normally do not offer overnight service (17 in Brooklyn, 13 in Queens and 10 each in the Bronx and Manhattan). Thirty-seven routes added overnight service.

A study of ridership in April, 2020 showed that approximately 1,802 customers were using the subway between the hours of 1-2 AM, 1,386 customers between 2-3 AM, 2,129 between the hours of 3-4 AM, and 5,692 between 4-5 AM. The reopening from 1-2 AM and 4-5 AM will provide service for the vast majority of those seeking service during overnight hours. (MTA press release, February 15)

The Bedford Avenue entrances to the Nostrand Avenue **A C** subway station (IND Fulton Street Line) in Brooklyn were reopened, three decades after the entrances were closed. The entrances provide a quicker path to trains for pedestrians coming from west of the station, facilitate the station's connection to northbound B44 Select Bus Service and local bus service on Bedford Avenue, reduce crowding as trains depart from the station, and provide a free in-station transfer between the northbound and southbound platforms. The entrances, at the northeast and southeast corners of Bedford Avenue and Fulton Street, are more than 1,000 feet, or nearly a quarter mile, to the west of the entrances at the corner of Fulton Street and Nostrand Avenue.



View towards the reopened street stair from the mezzanine to the southeast corner of Fulton Street and Bedford Avenue. There had been metal doors covering the stairs here at street level. All photos taken February 4.

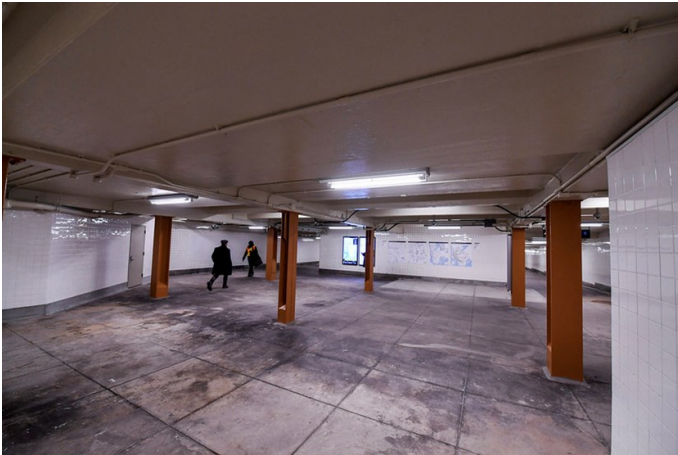
Marc Hermann/MTA photograph

Inside the station, workers scraped and repainted surfaces, repaired and replaced tile, rehabilitated stairways and installed new LED lighting, OMNY-enabled turnstiles and security features such as Help Point inter-

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Rail News in Review

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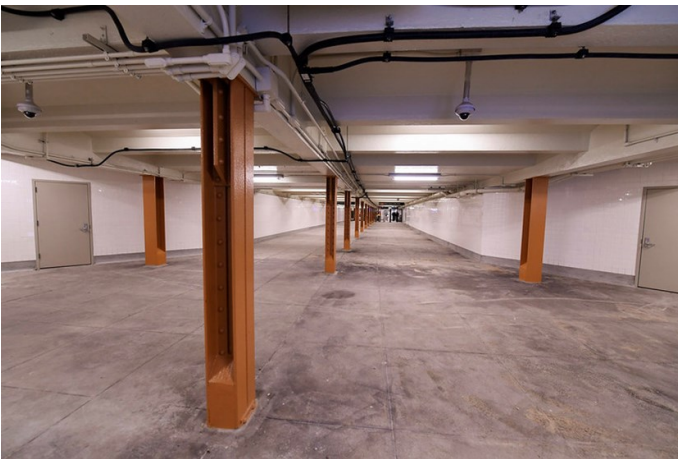
Looking east from the reopened fare control area (N115) at the open mezzanine.

Marc Hermann/MTA photograph



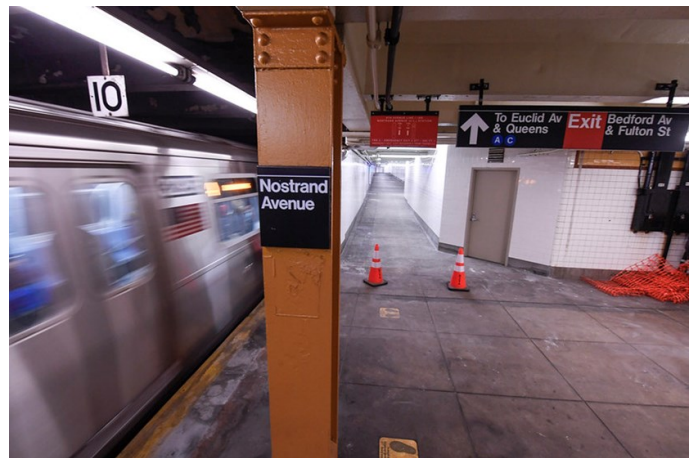
Looking east down the passageway to the Manhattan-bound platform from the mezzanine.

Marc Hermann/MTA photograph



Looking west from the east end of the mezzanine. New rooms have been built on either side of the mezzanine.

Marc Hermann/MTA photograph



Looking west from the Manhattan-bound (northbound) platform towards the reopened passageway to the mezzanine. To the right is the still-closed fare control area for the Arlington Place entrance. Not seen in this image is the still-closed underpass between the platforms for this fare control area.

Marc Hermann/MTA photograph



Looking north up Bedford Avenue from the reopened street stair on the northeast corner of Fulton and Bedford. The B44 bus stop is now, once again, conveniently located right near this entrance.

Marc Hermann/MTA photograph

coms and cameras. On the sidewalk level, workers installed sidewalk entrances in accordance with current New York City Transit design standards. The tunnels also provide shelter from storms, snow and rain.

The Bedford Avenue entrances were closed more than 30 years ago in consultation with police amid concerns about how to effectively ensure public safety in the sprawling station at the time.

The project cost approximately \$2 million. Of that total, approximately \$1 million came from MTA New York City Transit, \$750,000 was provided by former Assembly Member Tremaine Wright and \$250,000 was provided by former Senator Velmanette Montgomery.

All work was performed by New York City Transit staff. (MTA press release, February 4)

MTA LONG ISLAND RAIL ROAD

A correction: In last month's *Bulletin* we stated that the schedule change from January 25 might have been the first time that Huntington trains were making station

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Rail News in Review

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stops at Queens Village and Hollis. One of our members alerted us to the fact that, at least in 1996, one weekday westbound and three weekend westbound Huntington trains stopped at those two local Queens stations.

The railroad placed the new Nassau 1 Interlocking into service over the weekend of February 27-28, a delay of one week from the originally scheduled weekend of February 20-21. This new interlocking is actually a relocation of an existing one and was done as part of the Main Line Third Track project.

Originally placed into service on May 9, 1996 (along with three other “parts” of Nassau Interlocking), Nassau 1, consisting of a pair of single #26 crossovers (good for 60 mph diverging), was located between the New Hyde Park and Merillon Avenue stations in the communities of North New Hyde Park, Garden City Park and Garden City. The new location for this interlocking is between the Merillon Avenue and Mineola stations, just west of the Herricks Road undergrade bridge and under one mile east of its former location.

Since this is part of the Third Track project, this new interlocking will ultimately have four single #24 crossovers also good for a maximum diverging speed of 60 mph. For now, though, two of the crossovers are only partially installed as the new, third track has not yet been installed in this vicinity.



The view looking east at the middle of the new Nassau 1 Interlocking on July 11, 2020. You can see that the two crossovers to what will be the new eastbound local track (future Track 2, to the right) are only partially installed.

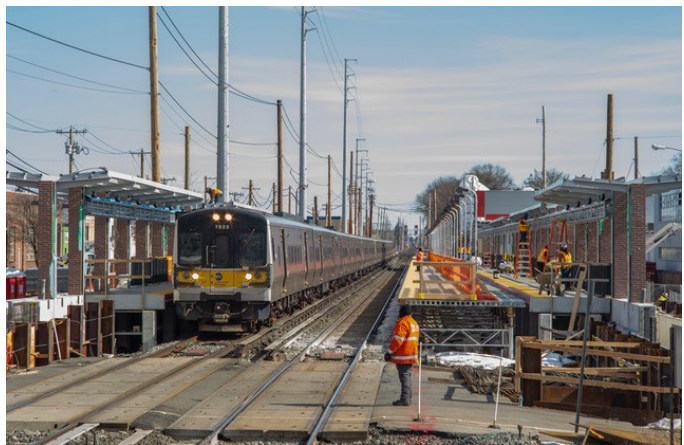
Jeff Erlitz photograph

Over this same weekend, all of the new intermediate signal locations between Floral Park and Mineola were placed into service. There are no actual wayside signals here and have not been since the 1970s. The signal locations are those where speed changes on each train’s automatic speed control/cab signal indicator take place. You can think of them as “virtual” signal locations.

Also on this weekend, with all of the new signal cut-ins, the Main Line tracks were renumbered between

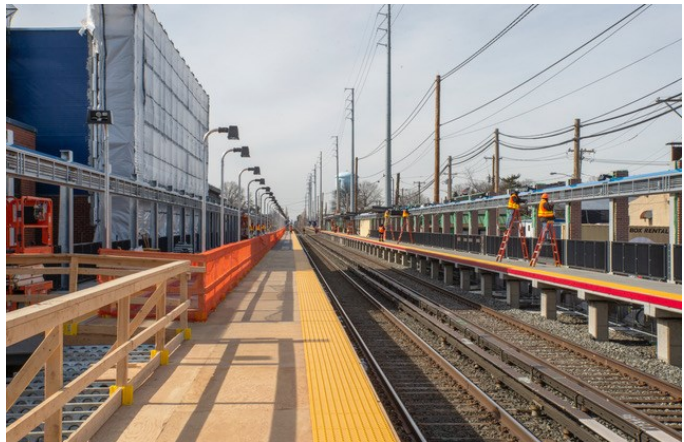
Queens Interlocking in Queens Village and Divide 1 Interlocking, west of the Hicksville station. Existing westbound Track 1 was renumbered Track 3 and existing eastbound Track 2 (future center express track) was renumbered Track 1. The future third track will be Track 2. (Editor’s contribution, February 19)

Station work has also been progressing on the Main Line Third Track project. As was done at the Merillon Avenue and Carle Place stations, a short stretch of new third track was laid adjacent to the new permanent eastbound platform at New Hyde Park. A new temporary platform was then erected over the new track. Unlike the existing six-car temporary platforms west of the old S. 12th Street crossing, this platform is ten cars long. Though essentially complete, this new temporary platform will probably not go into service until sometime in March.



In this view east from the existing temporary platforms at New Hyde Park we see M-7 7023 (Bombardier Transportation, 1/2003) leading train “Extra 7023 West” from Ronkonkoma Yard to the Hillside Support Facility on February 17, 2021. In the foreground are the remnants of the S. 12th Street grade crossing, which closed last October.

Jeff Erlitz photograph



View west on the nearly-completed temporary eastbound platform at New Hyde Park on February 17, 2021. This platform was constructed on top of the new third track.

Jeff Erlitz photograph

Only one week after the LIRR issued new timetables

(Continued on page 11)

Rail News in Review*(Continued from page 10)*

effective January 25, they reissued all branches effective February 1. However, the only changes were the additional station stops added to the following trains on the Port Washington, Hempstead, Babylon and Far Rockaway Branches:

- #305 added Woodside
- #427 added Bayside
- #723 added Jamaica
- #1017 added Rockville Centre
- #2864 added Locust Manor, Laurelton and Rosedale

On Wednesday, February 10 the Long Island Rail Road (LIRR) started making an additional stop on all Port Washington Branch trains to help transport people to and from New York City's COVID-19 vaccination site at Citi Field. The additional stop at Mets-Willets Point will be made indefinitely around the clock for as long as the vaccination site remains open.

Direct service will be available from Penn Station, Woodside and all stations on the Port Washington Branch. The ride from Penn is just 19 minutes. Customers from other LIRR branches must transfer at Woodside for Port Washington Branch trains to and from Mets-Willets Point. Port Washington Branch trains operate approximately every 30 minutes during the day, and less frequently at night.

The Citi Field vaccination site is focused on Queens residents with special appointments being offered for TLC licensed drivers and food service workers from all over the five boroughs. (MTA press release, February 9)

MTA METRO-NORTH RAILROAD

Metro-North Railroad will receive a \$19.7 million federal grant to provide critical safety improvements to nine grade crossings on the Harlem Line. The grant was part of \$40 million provided by the U.S. Department of Transportation and Federal Highway Administration in January.

The financial assistance will improve safety at nine crossings along the Harlem Line in Westchester, Dutchess and Putnam Counties by upgrading or replacing existing at-grade crossing warning systems and reconstructing the railroad crossings structures and approaches that are currently in place. The MTA and Metro-North will work in tandem with the New York State Department of Transportation to implement the work.

The full list of locations that are set to receive the upgrades appear below:

- Virginia Road in North White Plains
- Ellen Avenue in Brewster
- Corbin Road in Pawling
- Appalachian Trail in Pawling
- Old Pawling Road in Pawling
- Wheeler Road in Wingdale
- Dover Furnace Road in Dover
- Mill Street in Dover Plains
- Dover Plains Station pedestrian crossing in Dover Plains

This work follows an October, 2020 grant from the Federal Railroad Administration that awarded the New York State Department of Transportation, the MTA and Metro-North \$2.5 million to upgrade the railroad crossing at Hudson Avenue in Peekskill on the Hudson Line. In 2020 Metro-North replaced six grade crossing pads and installed delineators at 30 crossings. (MTA press release, January 26)

NJ TRANSIT

NJ Transit introduced a pilot ticketing option called FLEXPASS, which allows for more flexible travel options that better accommodate passengers' evolving commuting patterns due to the ongoing COVID-19 pandemic.

FLEXPASS will consist of 20 one-way tickets between one customer-selected origin and one destination and will be sold at a 20% discount off the one-way fare. FLEXPASS tickets will be available for purchase on bus, rail and light rail, and will only be offered for purchase via the NJ Transit Mobile App during the pilot.

A FLEXPASS can be purchased at any time of the month and FLEXPASS sales are non-refundable. Customers may only buy and own one FLEXPASS per mode at a time.

FLEXPASS Notes

- Customers may only purchase another FLEXPASS when all 20 tickets associated with their current FLEXPASS have been used
- All tickets associated with a FLEXPASS expire 30 calendar days, from when the FLEXPASS is purchased. Expiration of FLEXPASS tickets may not be paused or frozen
- Tickets associated with a FLEXPASS will look exactly like a current one-way ticket and will not have any marks indicating it is associated with a FLEXPASS
- If a customer activates one of their 20 FLEXPASS tickets by mistake, they should contact customer service as soon as possible
- A rail FLEXPASS does not provide complimentary bus or light rail trips like a Monthly or Weekly Pass
- Upon purchasing a FLEXPASS in the NJ Transit Mobile App, 20 one-way tickets will be deposited into a customer's MyTix account and can be activated for use like any standard one-way ticket
- Tickets with expiration dates will show up in the "My Tickets" area of the app. Each ticket will show up individually, with the associated expiration date, in the "Active/Non-Active" section, while the total number of tickets (along with expiration dates) will appear under the "All Tickets" section. Users will have numerous ways to see their expiration dates and select the proper ticket prior to activation
- Access to FLEXPASS requires customers to update to latest version of the mobile app (both iOS and Android)
- Access to FLEXPASS requires a MyTix account
(NJ Transit Customer Notice)

NJ Governor Phil Murphy announced a \$250 million

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Rail News in Review*(Continued from page 11)*

renovation to the 27-year-old Walter J. Rand Transportation Center in Camden. Currently serving PATCO's Lindenwold Line as well as NJ Transit's River Line and 26 NJ Transit bus routes, the rebuilt center will provide improved intermodal transfers and also be designed to accommodate a future light rail route as well as private bus lines, parking and charging stations for electric vehicles. A request for proposal and initial design process is expected to take around nine months. (NJ.com, February 18)

OTHER SYSTEMS**PHILADELPHIA, PENNSYLVANIA**

SEPTA will be issuing new timetables effective March 7 and 8, 2021. Of noteworthy development is the restoration of regional rail train service to the Chestnut Hill West Line, which had been suspended for a number of years. These schedule revisions also detail a number of changes to weekday midday service on the Media/Elwyn Line and hourly service on the Paoli/Thorndale Line during the weekday midday periods. Other SEPTA Regional lines will have some minor schedule changes. (SEPTA press release, February 18)

WASHINGTON, D.C. AREA

Washington Metro is looking to borrow \$360 million through bond sales to put a pulse into its capital project program, including work on bridges and other infrastructure. The sale of bonds will be backed by annual dedicated funding Maryland, Virginia and D.C. approved in 2018. Metro currently has a \$5 billion project backlog.

The goal is to rehabilitate and modernize the rail system, and the Metro Board financing committee voted on the bond-selling maneuver on February 11. The request then moved to the full Board.

This is the second time in eight months Metro is looking to sell bonds to pay for infrastructure needs. The pandemic has destroyed Metro's ridership, and the agency is looking to lose \$550 million in revenue in Fiscal Year 2020. Money from the federal stimulus bill passed last April, which totaled \$767 million, is expected to run out early this year. Metro has proposed a budget for Fiscal Year 2022 that includes massive layoffs, closing 19 stations and eliminating weekend service.

Metro's capital budget does not appear to be in dire straits, yet, thanks to dedicated funding from Maryland, Virginia and D.C. The money allows Metro to sell bonds. Back in June, 2020, \$545 million worth of bonds were sold to help pay for infrastructure projects.

Meanwhile, officials are asking Congress to supply more money for Metro capital projects. One request is for Metro to receive up to \$200 million annually, which would be spread out over a decade, while another one asks for \$2 billion over a 10-year period. (*Railway Track & Structures*, February 11)

ATLANTA, GEORGIA

The Metropolitan Atlanta Rapid Transit Authority

(MARTA) is investing approximately \$225 million in State of Good Repair work on its heavy rail lines that will enhance the safety of the rail system, reduce train delays, and improve the customer experience. MARTA's Track Replacement Project replaced heavy rail between the Lindbergh Center, Buckhead and Lenox stations beginning Tuesday, February 16 at 9 PM and concluding Monday, February 22 at 4 AM. All rail service between the Lindbergh Center, Buckhead and Lenox Stations was suspended during this time.

The Track Replacement Project is a multi-year effort that involves replacing track and switches throughout the rail system. The February work on the Red and Gold Lines includes a rail crossover (Canterbury Junction) that touches both main track lines that prevents normal single-tracking operations. As a result, free bus shuttles will replace trains between the Lindbergh Center, Buckhead and Lenox stations and run continuously from 9 PM on Tuesday, February 16, until the end of service on Sunday, February 21. MARTA Station Agents and Transit Ambassadors were to be at these rail stations to assist, and signs guiding customers between the bus shuttles and trains were to be prominently displayed. Customers needed to allot an extra 30 minutes for travel through the work zone. Rail service north of Buckhead and Lenox, and south of Lindbergh, and service on the Blue and Green Lines (east/west) operated normally.

MARTACONnect, a one-year pilot program with Uber, was also available to customers during the project. MARTA provided a link to a \$10 Uber voucher that customers could download to their Uber app and use twice daily to travel to or from Lindbergh Center, Buckhead and Lenox rail stations. The customer was responsible for any amount over \$10 per trip and did not receive a credit for any trip less than \$10. Details on how and when to download the voucher were to be provided as the project date neared.

The Track Replacement Project is part of MARTA's ongoing commitment to enhancing customer safety and experience. Also underway is a systemwide Station Rehabilitation Program that includes aesthetic and amenity upgrades, the Elevator and Escalator Restoration Program, the implementation of an improved audio-visual customer communication system (AVIS), and the largest capital project in MARTA's history, the purchase of new railcars. (*Railway Track & Structures*, January 26)

CHICAGO, ILLINOIS

Four 100+-year-old stations on the CTA Red Line will be fully reconstructed with work starting Spring, 2021. The Lawrence, Argyle, Berwyn and Bryn Mawr stations will be fully rebuilt into larger facilities fully compliant with the Americans with Disabilities Act (ADA) in terms of accessibility. New, wider platforms, elevators and escalators are some of the improvements featured in the new facilities while new tracks, viaducts, embankments and overpasses (prefabricated spans to be lifted into place when support structure work is completed) will be

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built to permit the expansion of these four stations. When work commences in Spring 2021, the Lawrence and Berwyn stations will be closed and temporary stations opened to replace the original stations at Bryn Mawr and Argyle. Northbound Red and Purple Line tracks will be the first to be rebuilt/replaced as Stage A works with completion in late 2022. Stage B will replace the southbound tracks 2022-24. All four stations are expected to reopen by the end of 2024. This is just a part of the \$2.1 billion Red and Purple Line Modernization Project (RPM) spanning a 9.6 mile section of the Red and Purple Lines between Linden and Belmont. (Chicago Transit Authority press release, January 28)

HOUSTON, TEXAS

The entire Houston Metrorail system was shut down starting Monday, February 15 by inclement weather. Initially, it was expected that service would resume on February 16 after the snow/ice storm ended and the cold snap eased off. All other mass transit modes operated by Houston Metro were also suspended for the duration of the forecasted abnormal weather patterns. However, the entire region was subjected to a second severe snow and ice event just two days later as well as unrelenting record-setting extreme cold. In addition to ice-laden trees, the service suspension was also the result of a shortage of electrical power in the local power grid to supply traction power to the light rail system. Limited rail service combined with bus shuttle services were resumed on Friday, February 19, 2021 (Houston Metro press releases, February 12 and 18)

SAN FRANCISCO, CALIFORNIA

Bay Area Rapid Transit (BART) is targeting stretches of trackway in the system that are in the greatest need of replacement and prioritizing work on those sections. This critical work will replace nearly 50-year-old track infrastructure. Many of these aging track components have been in operation since the beginning of BART service in 1972 and have outlived their design lives. Funding for the track replacement work is coming from voter-approved Measure RR. Support for the new rail car storage facility is supported in part by a \$1.17 billion grant from the Federal Transit Administration. The storage facility is part of the Transbay Corridor Core Capacity Program, which will dramatically increase the number of trains BART can run through the Transbay Tube.

Part of the project will involve the construction of a retaining wall. The equipment used for this part of the project installs the piles for the wall by vibrating the piles into the ground. This has the potential to create significant noise at the work site.

Once complete, expect a decrease in the noise level from trains. BART passengers should experience a smoother, safer and more reliable ride. The new rail car facility will bolster BART's service to San Jose as well as help to ensure BART is maximizing the number of Fleet of the Future trains in operation.

The project will require a series of weekend track

shutdowns between South Hayward and Union City. On those weekends, free buses instead of trains will carry passengers between those stations. Fourteen weekends have been scheduled for track shutdowns in South Hayward in 2021. There will be no train service between South Hayward and Union City on the following weekends: May 1-2, May 15-16, May 29-31 (Memorial Day weekend), June 5-6, June 19-20, July 3-4 (Independence Day weekend), July 17-18, July 31-August 1, August 14-15, September 4-6 (Labor Day weekend), September 18-19, October 2-3, October 16-17 and October 30-31. On all these weekends free buses will replace trains and riders should plan to add 20-25 minutes to their trips. Additional shutdown weekends are expected spring through fall in 2022 but specific dates have not yet been selected. (***Railway Track & Structures***, February 1)

SFMTA plans to resume MUNI Metro operations into and through downtown in May, 2021. Suspended initially due to COVID-19 in March, 2020, a restoration of service was attempted in August, 2020 that lasted just three days before being suspended due to catenary and eventually track issues within the Twin Peaks Tunnel. More details on just what the restored services may look like have yet to be specifically identified but initial indications are that the T/Third Street and N/Judah Lines will lead the way back into the MUNI Metro. (***San Francisco Chronicle***, February 12)

LOS ANGELES, CALIFORNIA

Los Angeles Metro has now entered the final planning phase for a \$1 billion light rail line extension from Redondo Beach to Torrance.

The agency was to hold a pair of virtual meetings before March so it could hear any concerns from the public.

Titled the South Bay's largest regional transit project in history, the extension of the C Line, also known as the Green Line, will be a 4.5-mile rail link that will connect the area to the southern California transit network.

However, the Lawndale community is not on board, which has forced officials to consider removing the line from the neighborhood altogether. Two route options are on the east and west side of Lawndale, but Metro was persuaded to eliminate a station at Manhattan Beach Boulevard and Inglewood Avenue. The Lawndale opposition also means the extension may not use an old railroad right-of-way adjacent to Redondo Beach's new \$11.5 million transit center. If that is the case a station will be built elsewhere.

If the extension has to be built on the east side of Lawndale, a 0.6-mile elevated section along the I-405 freeway will need to be constructed. However, residents say that option will disturb neighborhoods between 162nd and 166th Streets and Hawthorne Boulevard, which is the city's main business district.

The goal is to have the project complete by the 2028 Los Angeles Summer Olympics, but for that to happen construction will have to be accelerated, and some on the South Bay Cities Council of Governments say the

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project must receive more voter-approved funding. A \$32.5 million environmental analysis is expected to be submitted by March, 2022. **(Railway Track & Structures, February 18)**



Map of C Line extension to Torrance.
Map courtesy of Los Angeles MTA

The East San Fernando Valley Light Rail Transit Project is eligible for federal funding. Construction is expected to start in 2022, and L.A. Metro Board members say the financial assistance will help move the project to completion. The line should be open in time for the Los Angeles 2028 Olympics.

The Federal Transit Administration certified that the \$1.3 billion project meets guidelines for environmental analysis.

The project will connect the Van Nuys “G” (Orange) Line station with the Sylmar/San Fernando Metrolink station. There will be a total of 14 stops on the light-rail line, and it will take 31 minutes to ride the total length of the route. Metro believes there will be over 30,000 daily riders by 2040. **(Railway Track & Structures, February 2)**



Map of San Fernando Valley alignment.
Map courtesy of Los Angeles County MTA

TORONTO, ONTARIO, CANADA

An HDR-Gannett Fleming led team has been selected as the program consultant on the Toronto Transit Commission’s Subway Capacity Enhancement Program for Line 2. The team will provide advisory, planning and engineering services on the capacity enhancement of TTC’s Line 2 subway in Toronto.

Line 2 Bloor-Danforth, from Kipling to Kennedy, is one of the busiest transit lines in Canada. Prior to the COVID-19 pandemic, it served more than 550,000 customers per weekday, with rush hour ridership reaching over 23,000 passengers per hour. It’s expected that over the coming two decades demand will continue to grow during rush hour to more than 31,000 passengers per hour by 2041.

The capacity enhancement program will address this increasing demand by providing safe, reliable and efficient service for riders and maintaining quality on the transit system throughout Toronto. Beginning with an assessment of current conditions and needs, the program is also expected to include design of facility and station upgrades, infrastructure repairs and upgrades, fleet enhancements and more.

HDR and Gannett Fleming have a longstanding rela-
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VIENNA-BRATISLAVA-UKRAINE

by Jack May
(Continued from February, 2021 issue)
(Photographs by the author, except where noted)

Wednesday, June 14 (continued)

After completing our refreshments adjacent to the Messe Prater station of the U2, where Klaus treated me to a delicious ice cream concoction (while he had his favorite coffee and pastry), we continued on the U2 to Schottentor, and then went our separate ways. The complex at Schottentor is a tram enthusiast's paradise, serving a total of 10 streetcar lines. Three of them traverse the Ring (1, 71 and D), while the others terminate in an underground mall at its side, with the 43 and 44 looping on the surface and the 37, 38, 40, 41 and 42 one story below. It is a busy place indeed and I took some photos in the vicinity.

I then rode a 43 car out to the elevated Alser Strasse station of the U6, a perfect location for photos.

I continued my sojourn by riding a train of low-floor LRVs on the U6 northward and back across the Danube to Floridsdorf, a major transit hub that serves the S-bahn as well as tram routes 25, 26 and 31. After a photo I transferred to the 26, which allowed me to ride the

upper end of the line, covering the part I had missed earlier in the day. I accomplished that, first riding out to the Strebersdorf terminal in the north and then back to Kagraner Platz, where Klaus and I started our visit to this side of the Danube quite a few hours ago. I then transferred back to the U1 and rode to Sudtiroler Platz and walked to the hotel. I took very few photos of the upper part of the 26, which is almost all street running, as the shadows had gotten a bit long by that time.

Clare and I walked toward the Keplerplatz stop of the U1 on the wide pedestrianized Favoritenstraße, and found an Italian restaurant with outdoor seating for dinner. Clare had an excellent day as well, and we retired after walking off our desserts.

Based on the weather forecast of clouds, wind and drizzle for Friday, I took my planned day-trip to the tramway in Bratislava, Slovakia on the next day, Thursday. So to keep all of Vienna together, Friday and Saturday will be the subject of next month's report, and I will save Thursday in Bratislava for the following month.



A 7-section ULF Type B1 (Siemens, 2011) operating counter-clockwise on Route 2 pauses at the Stadiongasse stop on Doktor-Karl-Renner-Ring, just past a group of Japanese tourists protecting themselves from the sun while a tour guide tells them about the Burgtheater, which they are facing from their position in front of Austria's Parliament building.

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Vienna-Bratislava-Ukraine

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Two scenes showing Route 43 cars on Universitätsstraße shortly after picking up passengers at the Schottentor terminal. The left photo of E1 4855 (SGP, 1976) with trailer also shows a turnoff to allow Route 43 or 44 cars that may be out of sequence to circle back to the loop. The right view, of long ULF Type B1 799 (Siemens, 2017), is a little further northwest along the line, at Rooseveltplatz alongside Votivpark and illustrates the use of paved side-of-the-street private right-of-way protected by hedges.



A Type B1 operating on the 43 route to Neuwaldegg is seen approaching the Alser Straße stop from the elevated U6 station of the same name.

Southbound Type E1 car 4733 (SGP, 1971) on Route 26 has just passed under the viaduct that carries the OBB's S-bahn at Floridsdorf. On my first visit to Vienna in 1960, this was the station where Richard Solomon and I transferred to the former Third Avenue Railway cars that had begun operating here some 10 years earlier. (See <http://www.austrianinformation.org/fall-2015/the-americans-in-vienna> for an excellent report on how these cars were obtained and utilized.)

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tionship with TTC, working with the agency on both Line 1 and Line 2 feasibility analysis studies to improve the capacity needs of the transit system. (***Railway Track & Structures***, February 2)

HAMILTON, ONTARIO, CANADA

A couple of years ago the province of Ontario was ready to dig into a fully funded, 8.7-mile light-rail line that would run between McMaster and Eastgate Square. However, the Doug Ford government blocked construction from happening.

Now Ontario wants the federal government to pay up

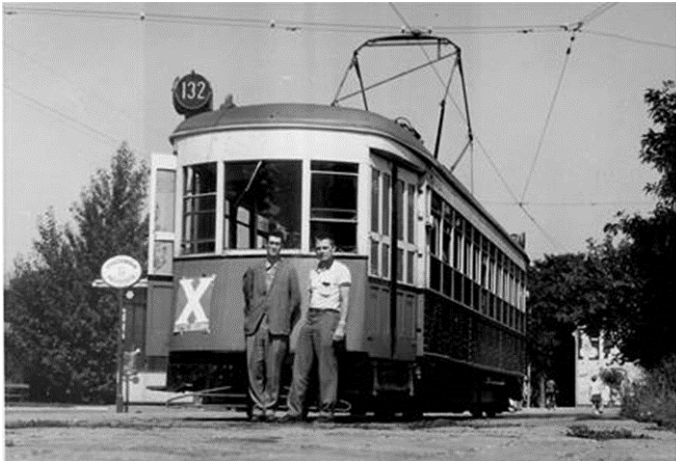
to \$1.5 billion for a 5.6-mile route that would likely run from McMaster University to Gage Avenue. The Hamilton LRT project is one of Ontario's five priority projects that have been submitted to the federal Liberal government for transit funding. However, if the funding gap cannot be filled with federal dollars, officials will be looking at a bus rapid transit solution.

A recent Metrolinx study revealed it could cost as much as \$2.5 billion to build the shorter Hamilton line. The city council, however, is not being asked to approve the decision to use federal money. The council remains divided over light rail and will have the opportunity to discuss the shortened line in the future.

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Vienna-Bratislava-Ukraine

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Richard and I rode to Strebersdorf, now the upper terminal of Route 26, ironically where I rode today. The motorman stood by in amusement as we affixed the authentic-looking dashboard plate sign for the X-167th Street Crosstown line to the former Third Avenue Railway car. The late Ronald Schliessman fabricated the canvas for us and the motorman kindly took this photo. The 167th Street Crosstown was "our line," operating only a short walk from "our" apartments in the beautiful Bronx.



Type B 671 (Siemens, 2003), operating westbound on Route 26, pauses at a traffic light prior to reaching the far-side stop at Kagranerplatz, where the line exchanges passengers with the U1.

(Continued next issue)

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Federal Infrastructure Minister Catherine McKenna likes the idea of the Hamilton line, but nobody knows for sure how much federal funding will be available.

Ontario also is looking at a proposal from union LIUNA, which would use hundreds of millions of dollars from its pension arm to fund a private endeavor. (*Railway Track & Structures*, February 9)

BELGIUM



SNCB (Belgian National Railway) class AM80 EMU.
Stratoswift photograph

Belgian National Railways (SNCB) has completed the installation of ETCS (European Train Control System) equipment on a fleet of 106 AM80 three-car EMUs, a process which began in March, 2016.

The retrofitted trains, which originally entered service between 1980 and 1983, are equipped with both ETCS Level 2, Baseline 3 and the TBL1+ national train protection system.

The trains are operating services on the Belgian network and will also be used in future to operate cross-border services to Maastricht, Netherlands, following the approval of the upgraded vehicles by Dutch rail authorities.

The upgrades cost approximately €21.5 million and were supported through a €10.8 million grant awarded by the European Union (EU) in 2015 through its Connecting Europe Facility (CEF).

SNCB say that following the upgrades, 62.8% of its fleet is now equipped with operational ETCS systems.

The upgrades are part of SNCB and Infrabel's ETCS Masterplan, which aims to equip ETCS on all major Belgian routes by the end of 2022.

The program also includes the €10.5 million retrofit of 42 class HLE 13 locomotives with ETCS Level 1 and Level 2 Baseline 3, for use on both the national network and for cross-border services to France and Luxembourg, which is supported by a CEF grant worth €5.3 million awarded in 2016.

SNCB was also awarded a €2.4 million CEF grant to support a pilot project to upgrade ETCS systems to Level 2 Baseline 3 on four locomotives in November, 2020. (*International Railway Journal*, February 8)

PARIS MÉTRO LINE 14 — PORTE DE CLICHY STATION OPENS

by Subutay Musluoglu

Photos by Gilbert Lafargue

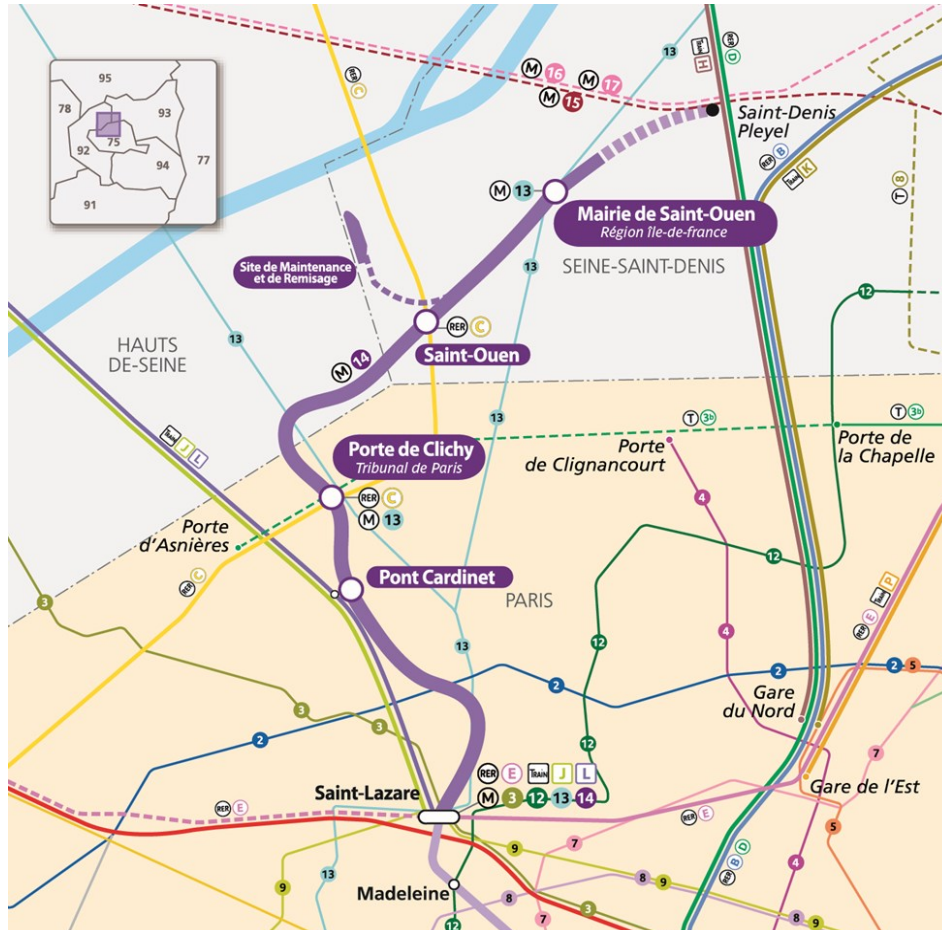
As we reported in the January, 2021 *Bulletin*, when the Paris Métro opened a 3.6-mile extension to Line 14 on December 14, 2020, one station was not quite ready to make its debut. Extending northward from the previous terminal at Saint-Lazare, the new extension has intermediate stations at Pont Cardinet, Porte de Clichy, Saint-Ouen and a new north terminal at Mairie de Saint-Ouen. After overcoming some earlier construction challenges, the Porte de Clichy station eventually opened on January 28, 2021.

Porte de Clichy is a major transfer hub, with connections to Métro Line 13's northwest branch, RER Line C and Tram Line T3b. The station is located in an area that is undergoing redevelopment, with a newly completed major judiciary court complex as its centerpiece. Once the global coronavirus pandemic eases and Métro

ridership returns to normal levels, the new station's utility will be realized as it provides a faster direct route to central Paris, offering relief to adjacent Line 13, long one of the most congested lines in the Paris network.

Notably, the new Line 14 platforms at Porte de Clichy are 85 feet below street level, making it the second deepest station on the Paris Métro, after Abbesses on Line 12 (118 feet). Sharing a common design theme with the extension's other three new stations, Porte de Clichy's architectural finishes include a base material of exposed concrete, with stainless steel cladding in select locations; white porcelain stoneware tiling on the walls and floors in the waiting areas (platforms, ticket hall); black tiling in the circulation areas; and brushed stainless steel and glass for secondary fittings (landing

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A map of the Paris Metro's Line 14 northern extension, with emphasis shown on the four new stations. Adjacent metro, RER and tram lines are shown as thinner lines. The "Site de Maintenance et de Remisage" is the dedicated maintenance shop and storage yard for Line 14's rolling stock, shown branching off just north of the Saint-Ouen station. An additional extension to Saint Denis Pleyel is shown as a dashed line, as it is currently under construction and planned to open in 2022, eventually becoming a major hub with transfers to Lines 15, 16 and 17 of the Grand Paris Express network of orbital metro lines.

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Paris Métro Line 14's Porte de Clichy Station opens

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A view of the original Line 13 entrance in the right foreground and in the left background, the new Line 14 primary entrance headhouse at the Porte de Clichy station, taken on the station's opening day, January 28, 2021. The new Tribunal de Paris court complex rises in the distance. The potential for future adjacent development, and as an overbuild, are clearly apparent.



A head-on view of the new primary entrance headhouse at the Porte de Clichy station on January 28, 2021.



Just down the road, the secondary entrance is distinguished by this arch, a modern homage to the Art Nouveau style Métro station entrances designed by Hector Guimard between 1900 and 1913, of which 86 survive today as protected French national historic monuments. An Alstom Citadis Class 402 tram is seen operating the Line T3b service.



The depth of the Porte de Clichy station is clearly apparent in this view of the escalator shaft between the lower and upper mezzanines.

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doors, guardrails, elevator shafts, etc.).

In 2022, Line 14 will be extended north again with a short 0.9-mile extension beyond Mairie de Saint-Ouen to Saint-Denis Pleyel, which will be a major hub of the Grand Paris Express network of new orbital metro lines, providing interchange to future Lines 15, 16 and 17, which are all currently under construction. Line 14 is also being extended by 8.6 miles at its southern end, from Olympiades to Orly Airport. It will open in two

phases, first to Villejuif Institut Gustave-Roussy in 2023 and then on to Orly the following year. Upon completion of these extensions, Line 14 will become the north-south backbone of the Paris Métro, becoming its longest line with a total length of 18.4 miles.

Author's note: A special thanks to Gilbert Lafargue for sharing his excellent photographs, and to Julian Pepinster for his continued patience, support, and willingness to answer questions regarding all things Paris.

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Paris Métro Line 14's Porte de Clichy Station opens

(Continued from page 19)



The northbound platform at Porte de Clichy on opening day, January 28, 2021. An MP89CA trainset is visible past the platform edge screen door on the southbound track.



A view of the glass-enclosed elevator shaft between the upper mezzanine and the entrance adjacent to the Tribunal de Paris court complex. Notice the striking similarity to the elevator shaft at the 72 Street station on New York's Second Avenue Line.



A view looking up at the Tribunal de Paris court complex on January 28, 2021.



Looking back down the same entrance from the square of the Tribunal de Paris court complex on January 28, 2021.