

The Bulletin



Electric Railroaders' Association, Incorporated

Vol. 63, No. 2

February, 2020

The Bulletin

Published by the
Electric Railroaders'
Association, Inc.
P. O. Box 3323
Grand Central Station
New York, NY 10163

For general inquiries,
or *Bulletin* submissions,
contact us at
bulletin@erausa.org
or on our website at
erausa.org/contact

Editorial Staff:

Jeffrey Erlitz
Editor-in-Chief

Ronald Yee
*Tri-State News and
Commuter Rail Editor*

Alexander Ivanoff
*North American and
World News Editor*

David Ross
Production Manager

Copyright © 2019 ERA

This Month's Cover Photo:

R68s 2924+2916
(Westinghouse-Amrail,
1988) are approaching their
north terminal at Franklin Av
on 12/2/2017. Jeffrey Erlitz
photograph.

In This Issue:
**The Genesis of
Dashing Dan —
Events on the
Montauk
Division
...Page 2**

ALL R-179 CARS REMOVED FROM SERVICE (From *The New York Times*, January 8, 2020)

An entire fleet of New York City's newest subway cars was abruptly pulled out of service on Wednesday after two recent episodes raised concerns that doors could open while trains were moving, according to people involved in the transit system who were told about the defects.

The Metropolitan Transportation Authority, which runs the subway, did not provide details about the episodes that led it to sideline the 298 cars, but officials said that no riders had been injured.

Authority officials also declined to comment on whether the problems would have allowed doors to open while trains were in motion until an investigation is complete.

The removal of the cars, which were being used on trains on the **A**, **C**, **J**, and **Z** lines, is a significant setback in the authority's effort to modernize the subway system's antiquated infrastructure. It is also the largest such equipment removal in recent years.

The new cars were supposed to replace others that date to President Lyndon B. Johnson's administration and are some of the oldest train cars in operation in the world.

The new cars, known as R-179s, were bought as part of a problem-plagued, \$600 million contract between the authority and the Canadian manufacturing giant Bombardier that has raised questions about the MTA's oversight of its vendors.

Troubling signs emerged when the cars first started to roll after multiple delays.

Transit workers complained that the R-179's speedometer was hard to see, that the master controller used to drive the train was uncomfortable and that the space between cars was too narrow for some workers to maneuver in.

A more pressing concern for riders was that

the new cars broke down more often than some older ones that had been in service since the 1980s, according to authority data.

"As documented, the MTA has identified repeated issues with Bombardier's performance and finds this latest development unacceptable," Andy Byford, the President of the New York City Transit Authority, said in a statement on Wednesday. "We intend to hold the company fully accountable."

The authority has hired an outside firm to inspect the faulty cars and has replaced them for now with others in its roughly 6,700-car fleet. The move has resulted in trains running less frequently on the **J** and **Z** lines, officials said. It was unclear how long the inspections would take.

"There is nothing more terrifying than the idea of a door flying open when you're leaning against it," said Nick Sifuentes, the Executive Director of Tri-State Transportation Campaign, an advocacy group. "But from a safety perspective, it's good that this is being flagged now and can be rectified immediately."

A Bombardier spokeswoman said on Wednesday that the company's own investigation of the cars, which prompted the authority's action, showed that the doors had not been properly calibrated by a supplier, Nanjing Kangni Mechanical & Electrical of China.

She declined to elaborate.

"We are now inspecting all of the R-179 cars and, where necessary, making adjustments to ensure the safe and reliable performance of the doors for the entire fleet," she said.

Modernizing the subway-car fleet has been a priority since the system fell into crisis in

(Continued on page 2)

All R-179 Cars Removed from Service

(Continued from page 1)

2017 and Governor Andrew M. Cuomo, who controls the authority, declared a state of emergency.

The MTA's contract with Bombardier has been troubled with delays and design flaws since the first R-179s were delivered in 2016. Several cars were pulled from service last January because of software defects.

The extent of the problems was outlined in an audit by Scott M. Stringer, the City Comptroller, in December. The audit faulted Bombardier for performance issues and found that the Authority had not sufficiently held the company accountable.

The audit determined that missed deadlines combined with problems in the car's design had delayed the contract's completion by three years, costing the Authority \$35 million to keep old cars in service.

"Bombardier sold us lemons," Mr. Stringer said in a statement on Wednesday. "Straphangers need the MTA to manage these contracts from the beginning."

Because of the delays in delivering the cars, Bombardier agreed to give the Authority 18 extra cars at no

cost.

The Authority has started to increase pressure on contractors like Bombardier that fail to comply with contract terms, including adopting rules that would disqualify them from doing business with the agency for five years under certain conditions.

Transit advocates have welcomed the MTA's push to hold contractors more accountable, but many say that those regulations are too harsh.

By automatically disqualifying a contractor, even when a project is delayed or goes over budget for reasons beyond the contractor's control, the policy could make some companies reluctant to work with the Authority.

That could create hurdles for the MTA's effort to transform the subway because there is a relatively small pool of companies that can meet the vast system's needs.

It is "a blunt and ineffective tool to hold contractors accountable because it discourages them from bidding on projects in the first place," said Rachael Fauss, a senior research analyst at Reinvent Albany, a watchdog group. "As the MTA seeks to lower its costs, it needs to revise its regulations to create a fair debarment process that does not limit competition."



Karsten Moran photograph for *The New York Times*.

THE GENESIS OF “DASHING DAN,” PART SIX— ROUNDING OUT THE ‘TEENS ON THE LIRR

by George Chiasson

(Continued from December, 2019 issue)

EVENTS ON THE MONTAUK DIVISION

One lingering issue after the completion of Jamaica Station was the elimination of several related grade crossings. This was of particular concern on the “Lower” (Queens) side of the Montauk Division main line, where no less than six overpasses remained under construction after the new station opened. Finally, work concluded at Division (84th) and Central (85th) Avenues; Park Street (Hillside Avenue); a span doubling across Lefferts (Boulevard) and Jamaica Avenues; and Stewart (89th) Avenue by the Autumn of 1913, each constructed of steel and almost rapid transit-like in nature. In fact, the accompanying variance in elevation at the Stewart Avenue overpass had also forced closure of the flag stop called “Shops” (as in Morris Park) during May of that year, while new overpasses at Park Street and Jamaica Avenue finally eliminated two long-standing BRT trolley crossings. A short steel viaduct was also provided to raise the existing (1868) Richmond Hill station above street level between Park Street and Jamaica Avenue, and the Montauk Division main line was placed on an elevated fill from Park Street to Division Avenue where it entered Forest Park. Meanwhile, some 15 grade crossings remained in place west of the improvement area associated with the Jamaica Station project as far as Long Island City, including four more intersecting trolley lines (Greenpoint Avenue, Flushing Avenue, Fresh Pond Road, and Metropolitan Avenue). Two other early grade crossings had previously been eliminated in favor of (railroad) bridges at Collins Avenue (now 60th Street) and Grand Avenue in Maspeth, probably as part of double-tracking the former Southern RR of LI for the New York, Woodhaven & Rockaway start-up in 1880. As of September, 1913, when the Jamaica elevations were considered to be “complete,” stops on the Queens side of the Montauk Division main line (east of the Long Island City terminal) consisted of Penny Bridge, Haberman, Maspeth, Bushwick Junction (Fresh Pond), Ridgewood, Glendale, and Richmond Hill.

In a similar vein to the Atlantic Division, another course of change that affected the Montauk Division main line in Queens during this era was more to accommodate the New York Connecting Railroad, though it did also benefit the LIRR. To grant the new railroad a smooth and relatively level approach to the Hell Gate Bridge through the swamps and highlands of what in time became Middle Village, it was graded above the pre-existing network of streets and three intersecting Long Island Rail Road lines. These included the Montauk Division (ex-Southern, 1868), the Main Line (ex-New York & Jamaica, 1861) and the North Side Division (ex-New York & Flushing, 1854). With the Montauk Divi-

sion then still at grade where its intersection with the New York Connecting Railroad was anticipated, the opportunity arose to unite improvements for both the new and existing railway lines, as well as open a number of new thoroughfares in the “raw” (undeveloped) lands which then surrounded their rights-of-way. As things evolved, the Montauk Division was undercut to a new nominal grade all the way from Bushwick Junction to 68th Street (near the Ridgewood station), while the adjacent, revised street grid was partly raised so as to pass overhead and the New York Connecting Railroad ultimately elevated across Fresh Pond Junction before it entered a tunnel underneath the Lutheran Cemetery at Metropolitan Avenue. Between 1915 and 1918 a whole new series of Montauk Division underpasses resulted that were built to accommodate the expanded street grid including Andrews Avenue (new), Collins Avenue (later 60th Street, which had been an overpass), a duplex bridge at 60th Lane & Eliot Avenue (both new roads), and another joint span to consolidate and eliminate the existing (and very busy) grade crossings at Fresh Pond Road and Metropolitan Avenue, which included BRT trolley lines on each.

This also opened sufficient space for creation of the massive Fresh Pond Yard, right in the middle of a settled, dense urban neighborhood, which was to be a vital cog in operations of the New York Connecting Railroad as it was the main point of traffic interchange between the New Haven and Long Island railroads. Finally, to avoid a messy grade-level encounter with the BRT’s “Lutheran Line” (originally the Lutheran Rail Road short line of 1881, it was integrated with the Myrtle Avenue “L” in 1906 and lives on as the  train of MTA New York City Transit in 2020), the Pennsylvania Railroad ultimately bore the cost during the summer of 1916 of elevating and relocating its Metropolitan Avenue terminus about 50 feet eastward in deference to the New York Connecting Railroad’s projected alignment. The PRR also placed the new railroad itself on a somewhat elaborate steel truss bridge across the Montauk Division (NYCRR span #35) while a revised track connection at Fresh Pond Junction (later identified as a part of “FN” Interlocking) wound around the new bridge’s southerly base at the original (now slightly depressed) grade level. Sometime during the reconstruction process in 1915, access to the passenger station at Bushwick Junction, which was restored to its original “Fresh Pond” name by 1919, was modified to conform with the Montauk Division’s new “cut” (more of an external depression), being attained by stairways and an overhead connecting bridge off the Metropolitan Avenue side of the large duplex overpass, which was also designed to convey the

(Continued on page 4)

The Genesis of Dashing Dan

(Continued from page 3)

Metropolitan Avenue and Flushing-Ridgewood trolley lines of the BRT over the Montauk Division.

EVENTS ON THE LIRR MAIN LINE

Aside from a long and obvious string of changes made to the Main Line in accordance with the new Jamaica Station, the second biggest transformation of the LIRR in the years surrounding World War I was a continued acclimation to Queens as it evolved into the now-familiar and spectacularly-diverse “Borough of Homes.” First to materialize, due to the long-delayed addition of the New York Connecting Railroad, was the final widening and replacement of the original right-of-way (as partially upgraded in 1907) from Remsen Lane (63rd Drive), which encompassed the extension of all 6 tracks originating at White Pot Junction as far west as Winfield Junction, including a new overpass constructed at Maurice (51st) Avenue. Work was started on this particular undertaking in March of 1912 and it was opened about a year later, by June of 1913, thus completing the 4- (and presentably) 6-Track Main Line overall but for the portion to be later replaced by the “Woodside-Winfield cut-off.” In light of the area’s emerging metropolitanization, two new local stations complete with high wooden platforms, passenger shelters, and electric lights were added in a somewhat speculative slant (albeit by “popular demand”). One called “Grand Avenue” was opened on July 1, 1913, actually being situated just west of its namesake street between Calamus and Kneeland Avenues in Elmhurst (on the railroad between Woodside and Forest Hills). This was within the brand new 6-track section built to accommodate the Glendale cut-off with track-level access gained through a head

house and connecting underpass, but as revealed through the one rare photo of it that survives in 2020, surrounding initial development was rather sparse. In contrast the other new local station, called “High Bridge” to differentiate it from the nearby Richmond Hill stop on the Montauk Division, was added on June 28, 1916 where the Main Line crossed over Jamaica Avenue. This well-established neighborhood locale was on the 4-track section completed in September, 1910 between the LIRR’s existing stops at Kew Gardens and Jamaica. Its unremarkable and unfamiliar name was altered to “Westbridge” in September, but its bigger identity crisis as a viable transportation alternative was apparently much harder to overcome, as in the long term neither of these locations was able to generate enough passenger traffic so as to become indispensable. Their relatively anemic use evidently did not improve much even after residential growth continued to materialize and commuting patterns emerged across Queens through the 1920s. Perhaps this was due to poor scheduling (Grand Avenue was served by both Main Line and Rockaway Beach Locals; the stop at Westbridge by Rockaway Loop Locals and Main Line trains to Long Beach and Hempstead). Maybe it occurred due to a lack of coordinated interchange with intersecting BRT trolley lines, specifically the hectic Flushing-Ridgewood and Jamaica routes, which respectively passed overhead at Grand Avenue and underneath on Jamaica Avenue. Whatever the case it may have been more symptomatic of Queens’ oft-awkward position as a point of convergence between its network of dependably thrifty, locally focused transit lines and its increasingly sophisticated, commuter-oriented, and comparatively costly railway system.

(Continued on page 5)

Around New York’s Transit System

(Continued from page 20)

November, 2019 month than in November, 2018. At the end of 2018, the 7 line was upgraded to modern Communication-Based Train Control signaling.

This systemwide analysis of running times was performed for the first time during the past year using new technology that enables officials to better track the locations of trains on the lettered lines, and the analysis of new data by NYCT personnel. Subdivision “A” trains have long been able to be tracked using a computerized train location system. Subdivision “B”, largely built by different builders up to a century or more ago, has long had far less data due to the lack of automatic, computerized recording of exact train locations at all times. Over the past two years, NYCT has been working to acquire better data about the movements of Subdivision “B” trains using various innovations, including wireless sensors and transmitters on tracks and trains. The technology is undergoing an ongoing refinement process for greater and greater accuracy. Even more precise information about train movements is expected with each

line that is newly outfitted with modern computer-based signaling systems – a major component of the current and next MTA Capital Plan.

For the first time since 2013, on-time performance (OTP) has registered above 80 percent for the sixth straight month. November’s weekday OTP was 81.8 percent, a 17 percent improvement from a year ago when it was 69.9 percent.

Weekday Major Incidents decreased 49.3 percent from November, 2018, dropping from 67 to 34 in November, 2019. Furthermore, weekday train delays decreased 42.5 percent from past November, from 51,964 to 29,863.

Positive numbers were also realized in NYCT’s other customer-focused metrics, including Service Delivered, Additional Platform Time, Additional Train Time, and Customer Journey Time Performance, as all metrics were better than one year ago and better than their average performance over the past 12 months. Highlights for November included:

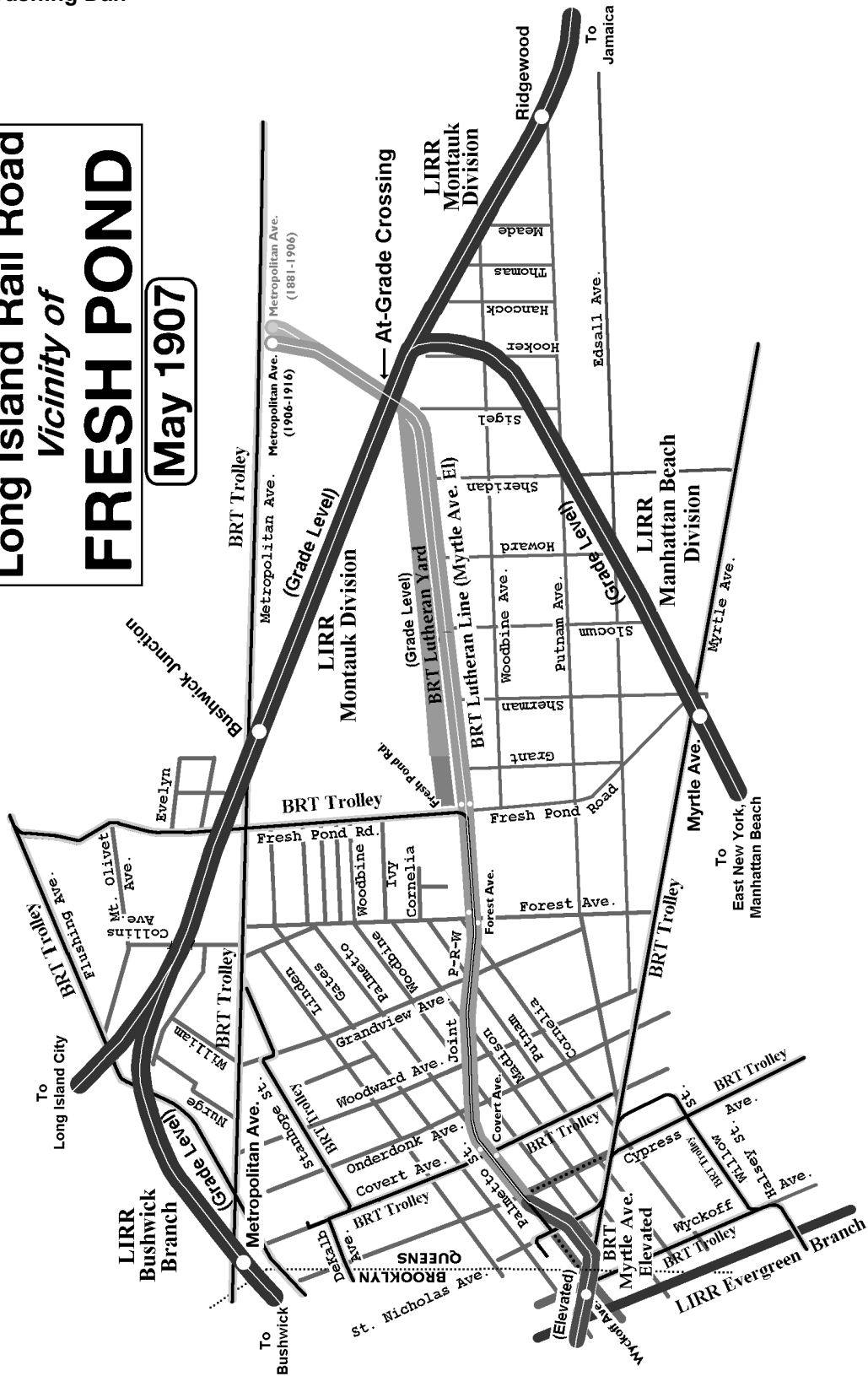
- Additional Platform Time, which measures the average added time customers wait for trains compared to the schedule: Time savings of 8 seconds, or a

(Continued on page 9)

The Genesis of Dashing Dan
(Continued from page 4)

Long Island Rail Road
Vicinity of
FRESH POND

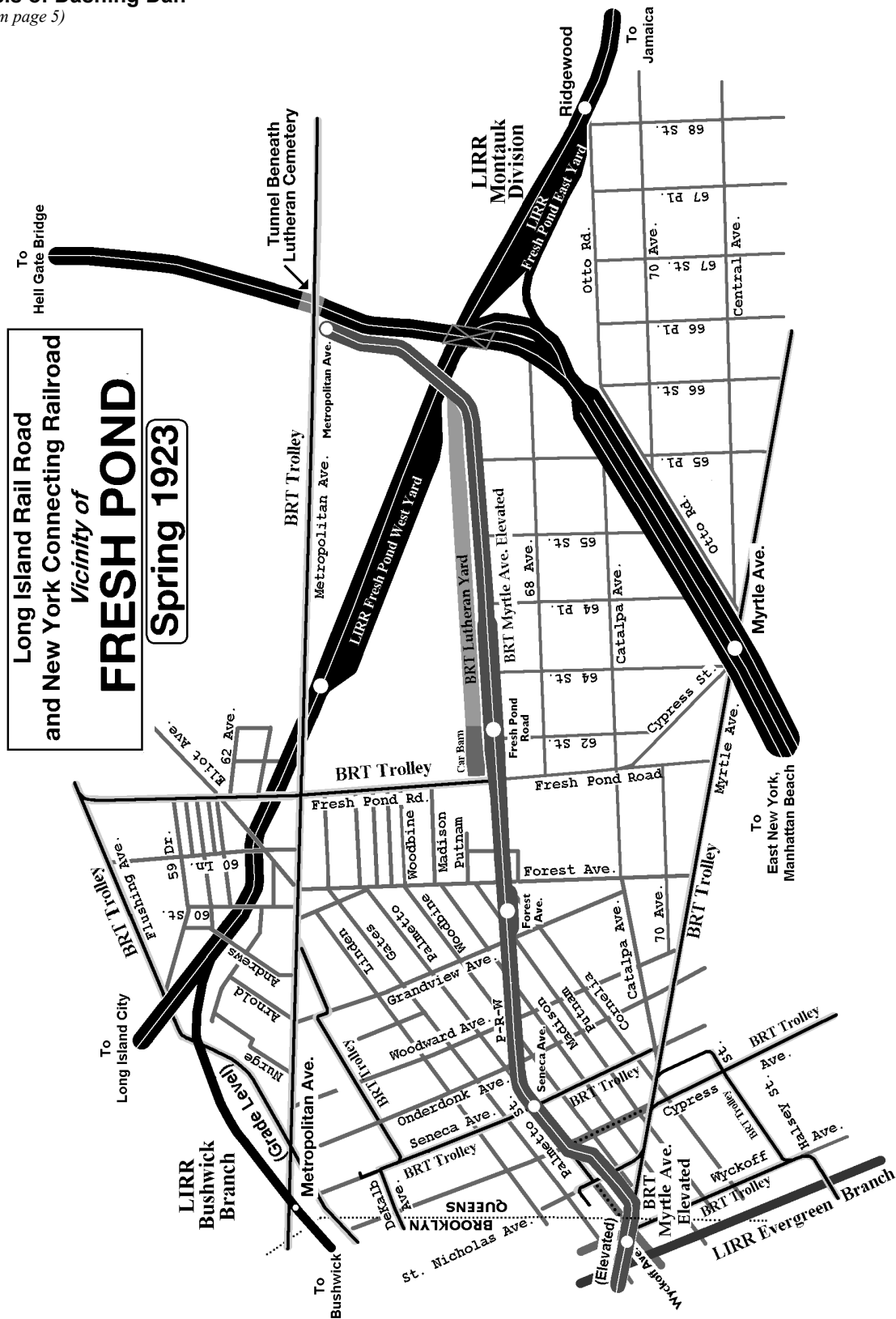
May 1907



(Continued on page 6)

The Genesis of Dashing Dan

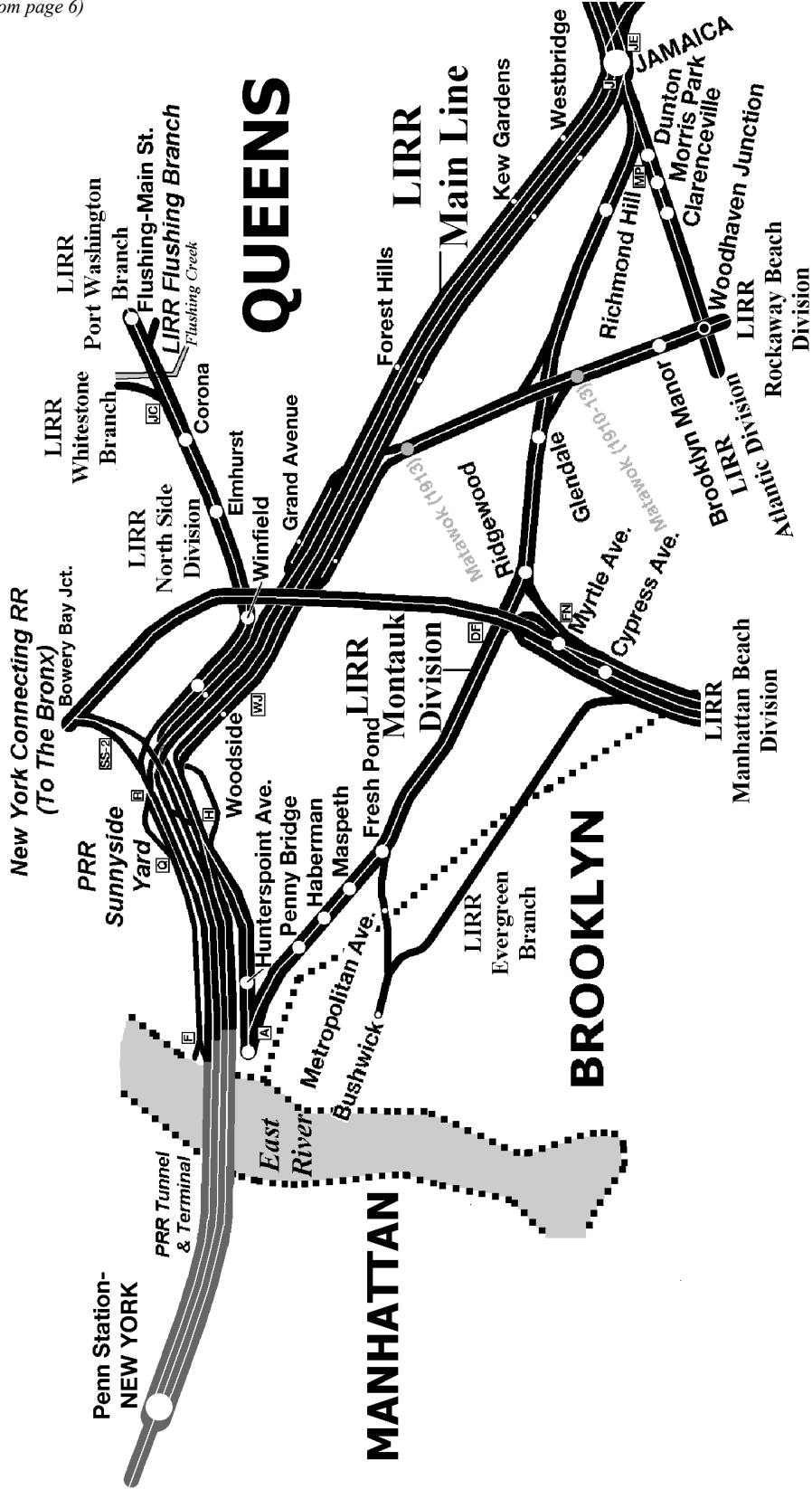
(Continued from page 5)



(Continued on page 7)

The Genesis of Dashing Dan

(Continued from page 6)



**Long Island Rail Road
MAIN LINE, (Lower) MONTAUK DIVISION
and Associated Lines**

1921

(To be continued)

LONG ISLAND RAIL ROAD'S QUEENS TOWER CLOSES

By Jeff Erlitz

(Photographs by the author)

As of 12:01 AM on Saturday, January 11, 2020, the Long Island Rail Road's Queens Tower, located just east of the Queens Village station, was no longer staffed. Its controls and indications were transferred to the Dispatcher's office in Jamaica, known as Jamaica Central Control. Queens had also controlled the entire Hempstead branch since November 21, 1993.

Built during the Main Line grade crossing elimination and four-tracking project from Hollis to Queens Village, it was put into service around March of 1924.

Originally named QU for its telegraph call letters, the tower had a 15-lever Union Switch & Signal Company Model 14 interlocking machine. Four levers controlled four upper-quadrant semaphore home signals mounted up on two signal bridges and six color-light dwarf signals. Six levers controlled ten electro-pneumatic switch machines and there were five spare levers. In those days, most of the train movements were for Queens Village local electric trains that relayed into and out of the Belmont Park spur. QU Tower was renamed Queens on April 23, 1937.

On October 17, 1957 the interlocking machine was increased from 15 to 35 levers. Whether this was done by installing a whole new machine or adding levers to the existing machine is not known for certain. This was done for a few reasons. On that date, a "controlled manual block" signal system was installed on the middle tracks, 1 and 2, between Queens Tower and Park Tower, two stations to the east in Floral Park. With this in place, trains could be run east on the westbound express track or west on the eastbound express track. In addition, three new single crossovers were added to the interlocking, increasing flexibility.

Two months later, on December 19, 1957, the tower two stations to the west at Hollis closed. This tower controlled the crossovers that provided a route from any of the four Main Line tracks into Holban Yard, mostly used by freight trains. Hollis controlled five single crossovers and a single switch for the lead track into Holban Yard. When it closed, all of the then-extant switches were removed and one new switch, at the east end of the Holban Yard lead track, well east of the Hollis station, was installed, connecting the yard lead with eastbound local Track 4. This one switch, the three home signals protecting it, and two additional signals governing moves on the Holban Yard Lead track, were added to Queens Tower's control. In addition, one traffic lever was added so that freights bound for Holban Yard from the east could operate west on eastbound local Track 4. Lastly,

one lever was added for two electrically-locked hand-operated switches on eastbound Track 4 at the Queens Village team yard, just west of the station, and the Anchor Fuel siding in Bellaire. These two freight sidings had trailing-point switches for the usual eastbound trains on that track but with westbound trains now able to operate on it, the electric locks added further signal protection.

On December 12-15, 1960, Park Tower in Floral Park closed in conjunction with the grade crossing elimination project in that village. This was the junction of the Main Line and Hempstead Branch. A new set of crossover switches were built west of the Bellerose station to essentially replace the interlocking that had been east of the Floral Park station for that junction. Eight levers were added to Queens Tower's Model 14 machine to handle the extra signals and switches.

On November 5, 1976, all those crossover switches west of Bellerose, which were only 16 years old, were reconfigured and replaced with a set of equilateral, relatively high-speed crossovers. These new crossovers enabled trains to operate at 60 miles per hour through the interlocking. For whatever reason, rather than reassign existing levers to control the new switches, an all-relay push-button control panel made by Quindar Electronics Incorporated was placed into service. This control panel was built with the provision to take over all of Queens Tower's functions, but I do not believe this ever happened.

On November 21, 1993, Garden Tower (actually a cabin rather than a full-sized tower) closed and its controls and indications were transferred to Queens. Garden controlled the end of double track on the Hempstead Branch east of the Garden City station. With that, all of the wayside automatic block signals on the Hempstead Branch between Floral Park and Garden City were removed from service with trains able to operate in either direction on either track. I do not know what type of control panel was installed in Queens Tower for this function.

Sometime around 2008, the venerable US&S Model 14 interlocking machine and the Quindar control panel were removed from service and replaced with computer consoles using Alstom's PTM Office Control System. Queens and the Hempstead Branch are now controlled from the Jamaica Central Control office using Railware, Incorporated's Dispatch X office control system.

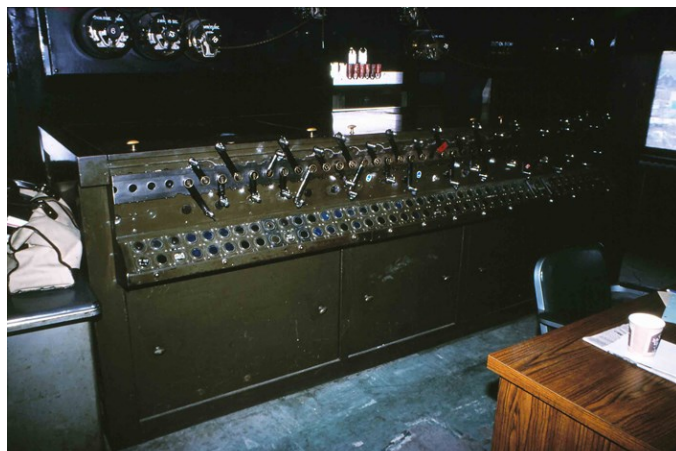
(Continued on page 9)

Long Island Rail Road's Queens Tower Closes

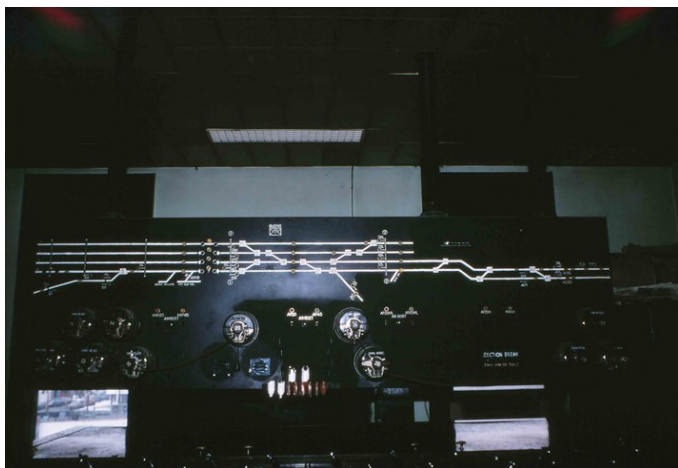
(Continued from page 8)



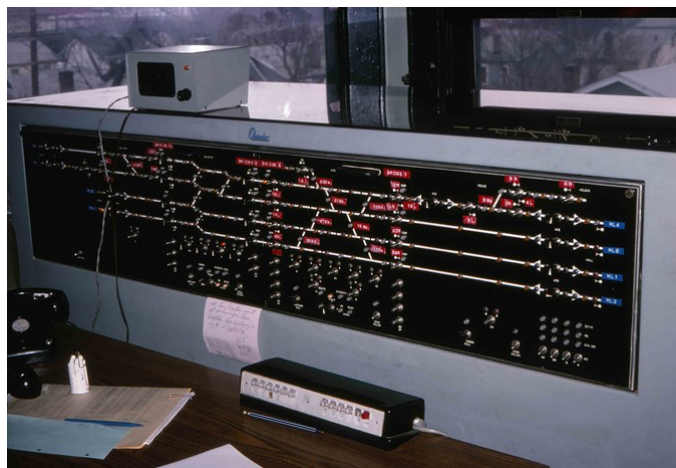
At 1:05 PM on January 9, 2020, the second-to-last day of "staffed" operation, M-7 7683 (Bombardier Transportation, 6/2006) is seen leading Huntington to Penn Station Train #1641 past the 96-year-old Queens Tower.



US&S 43-lever Model 14 interlocking machine in Queens Tower, March 1, 1978.



Indication panel (model board) of the Model 14 machine, March 1, 1978.



Quindar Electronics, Incorporated all-relay push-button control panel installed for the new "Bellerose" interlocking, March 1, 1978.

Around New York's Transit System

(Continued from page 4)

10.3 percent drop from last year

- Additional Train Time, which measures the average added time customers spend on a train compared to the schedule: Time savings of 21 seconds, or a drop of 27.3 percent from last year
- Customer Journey Time: More than 83 percent of customers completed their journeys within five minutes of the scheduled time, compared to 79.2 percent last year.

A contributing factor to the reduction in delays has been the significant progress made in reducing track debris fires, which are significantly down since NYCT started attacking this problem with new equipment in 2017. This has included clearing debris by using new

platform-based mobile vacs and vacuum trains that move around the system picking up trash. Year to date, track debris fires are down from 321 to 238, and they are down for the previous 12 months, from 377 to 258.

There are signs that the recent trend in improving performance is attracting customers back to the subway system, according to the MTA. October, 2019, the most recent month with confirmed data, had six days with more than 6,000,000 customers on the subway, the first time that has happened since December, 2016. October was the fifth consecutive month of year-over-year weekday ridership increases, which also occurred in eight of the past 10 months. October was also the third consecutive month of year-over-year weekend ridership increases, which also occurred in five of the past six months.

(Continued on page 14)

Commuter and Transit Notes

No. 373

by Ronald Yee and Alexander Ivanoff

METROPOLITAN TRANSPORTATION AUTHORITY

The MTA issued a Request for Proposals (RFP) to build the necessary infrastructure to permit internet connectivity in the BMT Canarsie Line's 14th Street Tube under the East River, between 1 Av in Manhattan and Bedford Av in Brooklyn. The RFP was issued with a closing date of January 13, 2020 to enable the awardee to perform the installation work in conjunction with the 14th Street Tube rehabilitation project, minimizing service impacts on the riders. Transit Wireless already provides broadband internet connectivity and wireless service at all underground subway stations. A consortium of AT&T, Sprint, T-Mobile, and Verizon provides broadband connectivity for Metro-North Railroad in Grand Central Terminal and the entire length of the Park Avenue Tunnel. Boingo will provide the broadband connectivity in the Long Island Rail Road tunnels under Atlantic Avenue in Brooklyn and Queens and will also provide this for the tunnels from Sunnyside, Queens to the new LIRR terminal deep under Grand Central Terminal. When last checked, only Verizon and Sprint customers had wireless service in the Amtrak/LIRR East River tunnels from Sunnyside to Penn Station. (MTA, December 27, 2019)

MTA LONG ISLAND RAIL ROAD

The LIRR postponed a plan to eliminate the sale of cash fare sales on board its trains until 2021, when new forms of payment will become available. In preparation for the OMNY fare payment system becoming the primary means to pay fares, the elimination of cash fare ticket sales by train crews was intended to simplify the system and make the fare collection process more secure. However, for those riders who do not possess or have access to credit and/or debit cards to pay their fares aboard or prior to boarding the train, paying with cash is their only option. (NBC-4 News, December 17, 2019)

NJ TRANSIT

New Jersey Transit is upgrading its *RiverLINE* DLRVs (diesel light rail vehicles) with power plants from Cummins that adhere to current U.S. EPA (Environmental Protection Agency) Tier 4 emissions standards for non-road engines. The River LINE fleet consists of 20 Swiss-built Stadler Rail GTW (Gelenktriebwagen, or "articulated railcar") 2/6 DMUs (diesel multiple-units). The replacement engines are expected to reduce oxides of nitrogen (NOx) emissions by at least 57%, lower particulate matter (PM) by 90%, and result in fuel savings of 10% to 15%.

The Cummins QSX15 (Tier 4/Final Stage IV), 675-hp/2,050-foot-pound-torque engines will replace the current 15-year-old Tier 1 engines that, "in addition to being less efficient than their replacements, have reached the end of their useful life," NJ Transit said. "Maintenance costs and shop time continues to increase as many of

the necessary parts are no longer in production."

These engines use SCR (Selective Catalytic Reduction) and DPF (Diesel Particulate Filter) technology to achieve EPA Tier 4 compliance.

The retrofit includes upgraded railcar HVAC systems, installation of auxiliary power to reduce downtime, upgraded control and diagnostic features, and enhancement of the fire suppression system. NJ Transit said these upgrades "will expand the useful life of existing *RiverLINE* vehicles to 30 years."

Total project cost, from design to installation to revenue service, is approximately \$700,000. NJ Transit is targeting a Spring, 2022 completion, and added that "there will be no impact to service as the engines are installed on the fleet."

"NJ Transit service gets people out of cars and is one the best ways to limit state-wide greenhouse gas emissions," said NJ Transit President and CEO Kevin Corbett. "At the same time, these engines will help us reduce our carbon footprint and operating costs through better fuel efficiency." (*Railway Age*, January 14, 2020)



Railway Age photograph

OTHER TRANSIT SYSTEMS

BOSTON, MASSACHUSETTS

During May, 2020, the MBTA will close its antiquated Green Line terminus at Lechmere to prepare for the shift in tracks to connect with the new \$2.3 billion extension to Somerville and Medford. All Green Line trains will terminate at North Station until this portion of the project is completed in April, 2021. Shuttle buses will operate between Lechmere and North Station. The new Lechmere station will be on an elevated structure across the road from the current terminus, with stairs and elevators leading to a waiting area. Concrete columns for the new station have already been erected. (*Boston Globe*, December 24, 2019)

Following "critical feedback from riders, advocates and policymakers," the Massachusetts Bay Transportation Authority has announced a revised Fare Transformation program which it said would combine "meaningful im-

(Continued on page 11)

Commuter and Transit Notes

(Continued from page 10)

provements” to existing payment systems with a phased approach to the deployment of a new system “that better represents the needs of MBTA customers.”

Under the plan approved in December, the Authority will “reset” a fare collection PPP (public-private partnership) contract with Cubic Transportation Systems which had been announced in 2017. Completion of the roll-out is now planned for 2024 rather than 2022, providing more confidence in the delivery schedule, and the capital costs will be approximately \$159 million more than the \$192 million originally envisaged.

The MBTA, rather than the contractor, will now be responsible for the placement of vending machines, and to address the needs of low-income and infrequent riders, it will focus on sites which widen access rather than have highest demand.

The overall program aims to provide vending machines that dispense *CharlieCard* smart cards, offer all-door boarding on buses and surface stops along the Green Line, and integrate the entire commuter rail network into the *CharlieCard* system.

To facilitate the revised plan, the MBTA has awarded Scheidt & Bachmann a \$49 million contract for the upgrading and life-extension of the fare collection systems it supplied when the *CharlieCard* was introduced in 2006. This will include new vending machines, software and hardware upgrades, additional retail sales terminals, and new handheld readers. It also establishes a process for developing interoperability between Scheidt & Bachmann and Cubic devices. (*Railway Gazette International*, January 16, 2020)

HARTFORD, CONNECTICUT

More than one million riders have traveled on the Hartford Line since the commuter rail service opened in June, 2018, Governor Ned Lamont announced January 16.

Ridership on the commuter line between New Haven, Hartford, and Springfield has grown at a rate of 25 percent year-over-year, according to a press release from Lamont's office on January 16. The one millionth ride occurred in late November. The Hartford Line is expected to exceed 750,000 passenger trips during its second year, far more than the 666,960 originally forecast.

“Central and northern Connecticut should have had a commuter rail line for decades – quite frankly it's astounding that it wasn't until a year and a half ago that the region finally got one, and these numbers show that people want more options to travel by rail,” Lamont said in a statement.

The busiest month for the commuter line was last November, when 70,551 riders used the service, followed by 64,596 riders in December. Overall, the line has seen 1,075,559 passenger rides in the past nineteen months.

Lamont has proposed to expand the Hartford Line under his CT2030 plan, including adding a second line of

rail tracks north of Hartford to increase service frequency in the area, adding new stations in Enfield and Windsor Locks -- which would have a connection to Bradley International Airport -- and installing digital displays at each station to provide train time information.

“This new service is a huge win for the state,” said Connecticut Department of Transportation (CDOT) Commissioner Joseph Giulietti. “The Hartford Line helps both the Connecticut economy by creating jobs and spurring transit-oriented development, while at the same time reducing greenhouse gas emissions and traffic congestion on our highways.” (*Hartford Courant*, via *Mass Transit*, January 17, 2020)

MIAMI, FLORIDA

Miami-Dade has been presented with two choices for a transit line linking Miami with Miami Beach. A three-year study, “SMART Plan Review,” was conducted by Parsons. It did not identify a clear winner between an extension of the current MetroMover automated people mover and a totally new monorail line linking downtown Miami with South Beach as its future “Baylink” transit route. The study concludes that an extension of the fare-free MetroMover could attract up to 12,000 riders per day. Charging a fare could reduce the ridership to 9,200, the same as what a monorail with a fare could be expected to carry. Both MetroMover and monorail are expected to cost \$630-680 million to construct with the monorail costing \$7.2 million per year to operate vs \$10 million for an extended MetroMover.

There are concerns on how a new line would physically connect to the existing MetroMover trackways in the Government Center rail transit complex. The Parsons study recommends that if the people mover option is selected, the new line would connect to MetroMover at the existing Museum Park station or a new station constructed on the former Miami Herald property that Genting, a Malaysian gambling corporation, purchased for \$236 million in 2011. The proposed MetroMover line would have two stations in Miami Beach, one at Lenox Avenue and Fifth Street, and the other at Fifth and Washington Avenues. A further extension of MetroMover two miles north to Miami Beach's Design District, with trolley and bus routes linking the line to the convention center, is also among the Parsons recommendations.

The Parsons study recommended against a light rail option operating in the median, or alongside, the MacArthur Causeway, concluding that it would cost more than either the people mover or the monorail. Genting plans to build a casino and resort on the Miami Beach waterfront. They proposed the monorail option as the Parsons study was already underway. Bids are due on March 17, in a contest held by Genting and partners for a confidential proposal to use about \$240 million in tax dollars to build a for-profit monorail running between South Beach and its parcel of land on the Miami waterfront. Genting would contribute \$150 million toward the overall cost of the project and Miami-Dade would pay the monorail group operator a yet-to-be determined annual fee to operate the system. An extension of that

(Continued on page 12)

Commuter and Transit Notes

(Continued from page 11)

monorail from Miami Beach to downtown Miami could be a boon to their casino-resort, hence the added option pushed onto SMART Plan Review. (Editor's Note by Ron Yee: This resembles an episode from the popular cartoon "The Simpsons," where their city was sold a monorail by a crafty consultant-scam artist. Miami-Dade needs to exercise extreme caution in the eventual selection of a mode of transit for the BayLink transit route.) (*Miami Herald*, December 24, 2019)

St. Louis, Missouri

The St. Louis Metro is changing the paint scheme on its LRVs and buses. Three MetroLink LRVs featuring the new colors entered service in December, 2019. MetroBus also placed into service 26 new 30-foot Gillig buses that sport the new color scheme. The original red, white, and blue paint scheme will remain on the current car fleet for the immediate future as the new colors will be only be applied to new LRVs and buses that replace the oldest vehicles of the existing car fleet. This new look is also being applied to maps, schedules, and bus stop signs. (*Mass Transit Magazine*, December 17, 2019)

Los Angeles, California

California commuter operator Metrolink has held a ceremony to mark the \$32 million rebuilding of the Van Nuys station in Los Angeles under a two-year project which is nearing completion.

The station is on Metrolink's Ventura Line, a Union Pacific route which is also served by Amtrak passenger services. During the rebuilding trains called at a temporary platform.

The station has been rebuilt from a side platform to an island configuration with longer platforms.

"The newly reconstructed Van Nuys station allows both tracks to be used simultaneously, increasing capacity, and provides safe access to the platform from a newly built pedestrian underpass, keeping trains and passengers separated," explained Metrolink Board Chair Brian Humphrey on January 16.

The State of California provided a grant of \$31.1 million and the Los Angeles County Metropolitan Transportation Authority \$1 million.

The styling of the station is inspired by a General Motors car factory which once operated nearby, including the "Chevelle Green" color scheme.

"It's appropriate to look back to the industries that helped the Valley grow and prosper in the past," said Los Angeles City Councilmember and Metrolink Board member Paul Krekorian. "Looking forward, our future is linked to Metrolink service and the light rail line that is planned to connect here. This modernized station represents an alternative to driving to help reduce traffic congestion and air pollution." (*Railway Gazette International*, January 17, 2020)



Railway Gazette International photograph

San Francisco, California

The award of a \$798 million contract for Hitachi Rail STS USA (formerly Ansaldo STS USA, originally Union Switch & Signal Company) to roll out Communication-Based Train Control on the San Francisco Bay Area's BART metro network was approved by the operator's Board on January 9, along with projects to improve passenger connectivity and deploy security staff.

Replacing the existing fixed block signaling over the next 11 years is expected to significantly increase capacity.

"This will be a pivotal project in BART's history," said General Manager Bob Powers. "We will now be able to eliminate aged and obsolete equipment. Modernizing our train control system will help us to support future ridership in the busiest sections."

CBTC is one of the "big four" elements of the \$3.5 billion Transbay Corridor Core Capacity Project, which also includes 306 more Fleet of the Future cars, a maintenance facility, and new substations.

Funding is coming from a variety of local, state, and federal sources, including bonds approved by voters in 2016 and the Federal Transit Administration's capital investment grant program.

The work will boost overall capacity by 45%, said Carl Holmes, BART's Assistant General Manager for Planning, Development & Construction. "This is critical because our trains are already crowded, and we anticipate the average number of riders who travel transbay per hour during the commute will jump to 30,000 by 2030."

In addition to the main contract, Hitachi Rail has been awarded contracts worth \$82 million to supply CBTC for the Silicon Valley Extension, funded by Santa Clara Valley Transportation Authority.

BART is to work with wireless infrastructure firm Mobilite to improve mobile phone connectivity and provide seamless wi-fi at stations within four years and on the Fleet of the Future trains within five years. This will also pave the way for mobile ticketing and personalized information services. Bluetooth technology will support indoor navigation at stations.

(Continued on page 13)

Commuter and Transit Notes

(Continued from page 12)

Through a multi-agency project, connectivity will also be provided in the Muni light rail network's Sunset, Twin Peaks, and Central Tunnels within two years, and fiber optic cable will be installed on BART and SFMTA rights-of-way to generate additional revenue.

"This digital railway project opens up the potential for BART to offer world-class digital communication to our riders and to modernize our business practices," said BART's Chief Information Officer Ravi Misra.

The pilot six-month ambassador program to start in February will increase the presence of uniformed personnel on trains to address passenger concerns about safety and security. The ten ambassadors will be recruited from the BART Police Department's Community Service Officers, who will receive additional de-escalation and anti-bias training. (*Metro Report International*, January 10, 2020)



Metro Report International photograph

LONDON, ENGLAND

Bombardier Transportation is to continue to maintain the London Overground Class 710 Aventra electric multiple-unit fleet until July, 2035, under an agreement with Transport for London which has moved the break point in the manufacturer's servicing contract from July, 2025 to July, 2035.

Bombardier said the change agreed in December, 2019 is worth approximately £185 million.

Maintenance of the fleet of 54 Aventra EMUs will continue to take place at Bombardier's Willesden Depot in North London.

After delays to delivery, the first Class 710s entered passenger service in May, 2019. The units are now in daily service on the Gospel Oak-Barking and Watford-London Euston routes, with operation on West Anglia inner-suburban routes from London Liverpool Street expected to follow soon. (*Rail Business UK*, January 17, 2020)



Metro Report International photograph

DARMSTADT, GERMANY



Metro Report International photograph

Stadler has won the first order for its next generation of trams, with a €62 million deal to supply 14 vehicles to Darmstadt operator HEAG Mobilo.

The trams will feature a driver assistance system with traffic sign recognition, a new design of trucks to optimize the use of space and improve maintainability, and an air conditioning system which will use CO₂ as the refrigerant to offer better environmental performance than conventional refrigerants.

The low-floor vehicles will provide unrestricted access to all seats from every door, with the large windows giving passengers clear views and, together with the high ceilings, a feeling of spaciousness.

Designated Type ST15, the five-section unidirectional trams for Darmstadt will be 43 meters long with 103 seats and a total capacity of 284 passengers. Entry into service is planned from mid-2022 to October, 2024; ten trams will replace a similar number of 30-year-old ST12 high-floor vehicles, and the other four will expand the fleet. The contract includes options for up to 30 more vehicles.

"It makes us proud to have placed our new and highly innovative tram model in Darmstadt within such a short time," said Christoph Klaes, Stadler's Head of LRV Sales, when the order was announced on January 6.

Stadler will present details of its new tram concept at

(Continued on page 14)

Commuter and Transit Notes

(Continued from page 13)

the InnoTrans 2020 trade fair in Berlin during September. Unfortunately, and for the first time, InnoTrans will no longer be open to the general public. (*Metro Report International*, January 6, 2020)

NYON, SWITZERLAND

Chemin de Fer Nyon-Saint-Cergue-Morez (NStCM) has awarded Stadler a contract to supply six two-car electric multiple-units. Deliveries are scheduled between late 2021 and early 2022.

The 1,500v DC EMUs will be similar to four Abe4/8 units which Stadler supplied to the 27-kilometer-long meter-gauge line in 2015.

They will have 91 seats including nine in first class, air conditioning and a passenger information system, and will meet the requirements of current Swiss accessibility legislation. (*Railway Gazette International*, January 10, 2020)



Railway Gazette International photograph

Brno, Czech Republic

Jihomoravský has become the first regional authority to order its own rolling stock, placing a contract for Ško-

da Transportation to supply 37 RegioPanter low-floor 160 km/h electric multiple-units between Spring, 2021 and the end of 2022.

Škoda Transportation was the only bidder to remain in the tendering process after a lower-priced bid from Stadler was excluded.

The KC6.65 billion contract signed on December 20, 2019 covers the supply and 30 years of maintenance of 31 four-car units with 333 seats and six two-car units with 146 seats. The EU's Cohesion Fund is meeting 85% of the cost, with the remainder coming from EIB loans.

The EMUs will be used on Brno suburban routes S2 (Krenovice-Brno-Blansko-Březová nad Svitavou) and S3 (Níhov-Tišnov-Brno-Vranovice/Židlochovice-Břeclav). The region is to call tenders this year for a contract to operate the PSO-supported services once the current 10-year deal with national incumbent ČD (Czech National Railways) ends on January 1, 2023.

It is anticipated that the major domestic players including ČD, RegioJet, LEO Express, Arriva, and GWTR will participate in the tender. (*Railway Gazette International*, January 16, 2020)

ISRAEL

On Saturday evening, December 21, 2019, Israeli Railways, Limited operated the inaugural run of its Tel Aviv-Jerusalem high-speed express line with a VIP-only train that departed Jerusalem's Yitzak Navon station at 9:56 PM and arrived 34 minutes later in Tel Aviv's Haganah station at 10:30 PM. Regular passenger services commenced the next day with two trains per hour with an intermediate stop at Tel Aviv's Ben Gurion Airport. The 57-kilometer (35.4-mile) route is served by multi-level push-pull trains powered by electric locomotives at a maximum speed of 160 kph (100 mph). It has taken 18 years from the start of construction to the line's opening. A planned route that bypasses the airport could reduce travel times between the two cities to a mere 30 minutes. (Israeli Railways, *Time Out* Magazine, December 17, 2019)

Around New York's Transit System

(Continued from page 9)

In terms of customer satisfaction, NYCT's Customers Count survey saw a 13.1 percentage point improvement in satisfaction for the third quarter of 2019 compared to the same period last year, with the greatest improvements in waiting time, travel time, and unexpected delays.

ABOUT THE SUBWAY ACTION PLAN

The Subway Action Plan launched at the direction of New York Governor Andrew Cuomo in July, 2017, and was funded by the Governor, the Legislature, and the city. With the goal of stabilizing and improving the 115-year-old subway system, the plan's extraordinary measures have been critical to recent performance improvements. Since the Subway Action Plan launched,

MTA workers and contractors have:

- Cleared more than 80,000 street grates to prevent ingress of litter and leaves that build up on the tracks, causing fires and clogging drains
- Sealed more than 7,900 leaks to prevent water ingress that causes power and signal problems, deterioration of track and other equipment resulting in unplanned service changes, delays, and track fires
- Installed 54 miles of Continuous Welded Rail across the system, replacing jointed rail, which is more prone to rail defects that delay trains
- Repaired more than 27,000 minor track defects that if not repaired can cause delays
- Performed more than 180 miles of track rail grinding to improve ride quality and reduce defects
- Completed more than 1,500 priority maintenance

(Continued on page 19)

FIRST PHOTOS OF R-211 CARS

(Photographs from the MTA's Flickr Website)



First R-211 car, 4256, presumably at Kawasaki's Lincoln, Nebraska plant.



A view of the open gangway that will be between cars without operating cabs.

SOUTHWEST UNITED STATES

by Jack May

(Continued from January, 2020 issue)
(Photographs by the author)

WEDNESDAY, APRIL 12

After being disappointed because of the planned delays on the Gold line, and then taking my time photographing at Union Station, I finally decided to head out to Santa Monica on the Expo Line. I still had the whole afternoon ahead of me.

As mentioned before, the first part of the Expo Line, from the Metro Center subway stop to Culver City, was opened in 2012 (actually in two separate pieces). I rode and photographed it a year later, so that section was no longer new to me. After emerging from the subway portal and stopping at the Pico station, Expo trains continue along Flower Street past where the Blue Line turns off onto Washington Boulevard. After running along the side of the thoroughfare near the eastern edge of the University of Southern California campus, the line traverses a curving underpass to avoid conflicts with some major streets as it reaches its Exposition Boulevard east-west alignment. Running between the USC campus and Exposition Park (which hosts several museums and the Los Angeles Coliseum), the line basically follows the route of the long-abandoned Pacific Electric Santa Monica Air Line, the only major difference being its first section, which runs along Flower Street instead of with the original PE line to Long Beach and San Pedro as far as Amoco Junction, where it turned off. The Expo Line follows Exposition Boulevard, grade separated here and there from a number of busy streets on overpasses, and now continues past its previous elevated terminal in Culver City. When Exposition Boulevard peters out, in the area around the Palms station, the line enters a cut and inscribes a northwesterly arc before resuming its westward trek along Exposition. This is the most scenic portion of the line, in a neighborhood that is home to many millennials who no doubt provide a good amount of patronage.

I should mention that except for its inner portion, Exposition Boulevard is not a major thoroughfare, nor is it continuous, so the light rail route, which is pretty much a straight line except for the aforementioned brief section west of Palms, also runs along streets named Jefferson Boulevard and National Boulevard, which occupy parts of the Exposition Boulevard alignment. Its right-of-way finally cuts across some scrub land and the line's last mile, as it approaches the Santa Monica terminal, is in the center of Colorado Avenue. The maintenance facility is south of the tracks between the Bundy and Bergamot stations, near the western end of the line.

The final section of the line, from Culver City to Santa Monica, opened on May 20, 2016, a little less than a year before this trip. Santa Monica, with a population just short of 100,000, was originally a beachfront resort city, and remains a tourist destination. As such it is a

major traffic generator for the line. The station is just a quarter of a mile from the Santa Monica Pier (which juts out into the Pacific Ocean) and is across the street from Santa Monica Place, a large open-air shopping mall that partly separates the terminal from the shoreline. Light rail service operates every 6 minutes during peaks and every 12 minutes between the rush hours, and on Saturdays and Sundays. Trains take 47 minutes to cover the 18-mile, 19-station line from end to end.

Expo's ridership is currently close to 60,000* on weekdays (**all ridership numbers in this article refer to average weekday totals for the year 2017*), which makes it the second busiest on the light rail system (only the Blue Line is higher, with about 72,000). Thus I don't think I would be wrong in characterizing it as very popular, which is a sharp contrast to the Pacific Electric Santa Monica Air Line interurban route — that it eventually duplicated over virtually the same alignment. Although it was relatively direct, the Air Line was not the interurban system's busiest route to Santa Monica, perhaps because of its single track and poor service. The other Pacific Electric routes to Santa Monica were the Venice Short Line (abandoned 1950), which was the most popular, and the Santa Monica extension of lines that ran to Beverly Hills, which reached the ocean via Sawtelle (West Los Angeles). The Sawtelle Line bit the dust in 1940. The Venice Short Line, which primarily ran on private right-of-way along Venice Boulevard, reached that thoroughfare from Downtown L.A. via Hill Street. It crossed the Air Line at virtually the same location as today's Expo Line Culver City station, and attained the coast about 2½ miles south of Santa Monica, before turning northwest through Ocean Park to get to the pier. PE's fleet of PCC cars briefly served the Venice Short Line. The other route, through Beverly Hills and Sawtelle, followed the Venice Short Line until Vineyard, where it turned to the northwest. Another way cars got to Beverly Hills was via Hollywood, but that route may have even been slower, either due to being roundabout or because of traffic congestion (access to Santa Monica on the final segment through Sawtelle also was subject to street congestion). As a result, there was no really fast way to get from downtown Los Angeles to Santa Monica, and passenger traffic was not concentrated on any of the routes. (In addition, passengers could reach Santa Monica via the Los Angeles Railway P/Pico streetcar line with a transfer to a local City of Santa Monica bus at Rimpau loop — at least after 1928.)

The Air Line lost its passenger service in 1953, but dieselized freight operations lasted for at least two more decades, which in hindsight was amazingly serendipitous, as it allowed the right-of-way to be preserved for

(Continued on page 17)

Southwest United States

(Continued from page 16)

the Expo Line, the Southern Pacific finally selling it in 1991. Between 1931 and 1953 only one round-trip was operated on the line each day, a so-called franchise run, inbound to L.A. in the morning and out in the afternoon.

Thus one could say that light rail has brought about an incredible gain in patronage, as the number of passengers that rode the line daily in the 1940s/early '50s was about 50, and now there are 60,000.

Our first series of photos cover the Santa Monica end of the line.



I certainly agree with this sentiment, posted on the south side of the Santa Monica terminal.



Two scenes inside the Santa Monica terminal, whose entry is controlled by fare turnstiles. Based on the signage shown, you may think there are four platforms, but there are only three — no Platform 2. Upon entering the terminal the operator turns off the destination signs or sets them to display "Not in Service" until the unit is ready for boarding. The left photo features a pair of Kinkisharyo P3010 trains (2014), while the right one shows a Nippon Sharyo P865 (1990) painted in Metro's new color scheme.

(Continued on page 18)

Southwest United States*(Continued from page 17)*

Colorado Avenue at 6th Street, where an outbound Kinkisharyo train has just taken the crossover that will allow it to terminate at Downtown Santa Monica's south platform. Note how the tracks are separated from motor traffic by slightly raised concrete curbing — this is the closest the line gets to traditional street running. The lit "Train" warning adds to the signs prohibiting turns. The overhead looks like it could do the job even if it were a bit less prominent.

Some artistic views along the Expo Line?



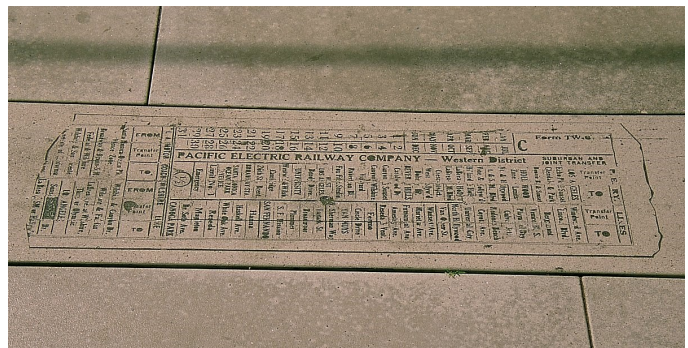
A title photo for the Los Angeles Metro system, showing "Metro," "Los Angeles" along with a Pacific Electric emblem embedded in the concrete platform at Bundy station. Just like traditional interurbans, the destination signs of the Kinkisharyo cars display "Santa Monica" and "Los Angeles," rather than major street intersections.



A 3-car train of Nippon Sharyo P865s, in an older color scheme, turns off private right-of-way onto the center of Colorado Avenue just prior to its 17th Street stop. The intersection is protected by normal traffic signals.



Above and below: Close up views of Expo Line platform decorations that pay homage to the predecessor Pacific Electric Railway.



(Continued on page 19)

Southwest United States

(Continued from page 18)

Working our way eastward we see two views on either side of the Palms station.



A westbound train of P3010s from the center platform at the Bundy station. The building at left hosts a Bed, Bath & Beyond store with a parking deck on top. A bicycle path separates the right-of-way from Exposition Boulevard.



A westbound train is shown leaving the elevated Culver City station, formerly the terminal of the Expo Line. The photo was taken from a parking lot serving a CVS drug store that fronts on Venice Boulevard, basically where the Pacific Electric Santa Monica Air Line and Venice Short Line once crossed.

(Continued next issue)

Around New York's Transit System

(Continued from page 14)

and repair tasks to improve reliability of signal and switch equipment

- Rebuilt and modernized more than 430 signal stops to be moisture-proof and avoid service interruption
- Repaired door control units on over 1,000 cars in the oldest fleets to improve the reliability of this critical component that causes 40 percent of car breakdowns.
- Completed a deep cleaning initiative of more than 100 subway stations
- Enhanced 217 stations via a focused cleaning and repair campaign led by group station managers

The Save Safe Seconds Campaign was launched in 2018 as part of MTA NYCT President Andy Byford's Fast Forward Plan directive to improve subway service, particularly by focusing on the root causes of delays. Personnel have been engaged to help come up with ways to immediately improve subway performance and reduce delays, simply and affordably (or even at no cost) through better operating and service practices. The campaign has led to the intelligent and focused management of day-to-day train operations, including the repair of faulty speed-regulating signals, increase of speed limits, and new instructions to Train Operators, in such a manner that allows for the safe increase of train speeds and, in turn, safely making subway trips take less time for customers. The campaign is led by NYCT's Department of Subways Senior Vice President Sally Librera, in a partnership with NYCT's labor partners, with the efforts of thousands train crew members and other front-line NYCT employees.

Eighth Avenue Line CBTC Contract Awarded

After several months of delay, the MTA awarded con-

tract S-48006 to L.K. Comstock & Company. Under this \$245.8 million contract, Comstock will install Siemens Mobility's Communications-Based Train Control system and undertake other equipment enhancements on the IND Eighth Avenue subway corridor.

The contract announced on January 13 covers the local and express tracks between 59th St/Columbus Circle in Manhattan and High Street in Brooklyn, which are used by the **A**, **C** and **E** services. The corridor includes some of the busiest station complexes on the network, including Columbus Circle, the Port Authority Bus Terminal, Penn Station, and W. 4th Street.

The CBTC will interface with that being installed on sections of the **E** under the Queens Boulevard signal modernization project and will mean the entirety of Line **E** will be using CBTC.

This is expected to increase capacity, performance and reliability, and will also enable the provision of real-time train arrival information.

The contract covers the interlockings at 30th and 42nd Streets, power supplies, zone controllers, cables, fire suppression, HVAC, lighting, and equipment housings. The project will be New York City Transit's first to use axle counters instead of track circuits, which is expected to reduce delays and maintenance costs.

The contract has been placed under the MTA's new approach of "bundling" work with the aim of minimizing disruption to services. "The new MTA is customer-centric and delivering projects better, faster and cheaper", said Janno Lieber, head of the Construction & Development Department which the MTA has formed to handle capital projects. "We are bundling projects in order to minimize impacts on customers and this project will be our biggest effort yet."

Around New York's Transit System

R-42s RETIRED (TEMPORARILY)

The R-42 class subway cars made their supposedly (see page 1) final passenger runs on Monday, December 30, 2019, departing Broad St at 10:12 AM on the consist's second trip of the morning. The final consist was: N-4798-9/4817-6/4830-1/4825-4-S. Upon arrival at Jamaica Ctr-Parsons-Archer at 11:08 AM, the train was taken out of service and deadheaded to East New York Yard and the R-42 class was officially retired. According to SubChat sources, two eight-car trains have been re-assigned to work train service at 207th Street Yard (4800-1/4812-3/4820-1/4834-5), eight cars assigned to Coney Island Yard (4794-5/4802-3/4808-9/4838-9), and four cars laid up to Pitkin Yard (4826-9). Except for the 16 cars designated for work service, it is assumed that the balance of the former 50-car fleet of R-42s will be designated for scrapping via 207th Street Yard. *(Editor's Note by Ron Yee: It is also rumored that upon complete acceptance of the 318-car R-179 order, the 222 remaining R-32 cars will also be retired, possibly as early as April.)*

ASTORIA BOULEVARD STATION REOPENS

On the evening of Wednesday, December 18, 2019, the Astoria Blvd **NW** station on the BMT Astoria Line was reopened after a nine-month closure for reconstruction, several weeks earlier than originally scheduled. However, while the station was opened, it is only functional as a basic station. Many of its eventual amenities, such as four new elevators to permit full compliance with Americans with Disabilities Act (ADA) requirements, will be installed by construction crews still working to complete the full renovation and rebuilding project by Fall, 2020. The reconstruction project has already brought new LED lighting, platforms and canopies, four new mezzanine-to-platform stairways, and a new mezzanine raised in height to provide greater vertical clearance for trucks passing on the street below. Hopefully, this will reduce the number of impact strikes of the kind that resulted in structural damage to the elevated structure over the past few decades. The station's column foundations at street level have also been strengthened. Artwork has been installed on the mezzanine and stairways. Construction crews will continue working to add four new elevators (two street to mezzanine, two mezzanine to platform) and other accessibility features, new benches, finished platform stair enclosures, digital information signage, and two street-to-mezzanine stairways; all while the station is in use.

SUBWAY PERFORMANCE IMPROVES

Per *Mass Transit Magazine* (December 17, 2019), new subway statistics show continued performance improvements thanks to the sustained success of the Subway Action Plan and the Save Safe Seconds campaign, according to an announcement from MTA New York City Transit.

The MTA says running times were faster on every line in November, 2019 compared to a year ago, meaning

trains are getting through the system more quickly, shaving minutes off many trips. The running times metric uses new technology to better track the locations of trains in large parts of the subway system.

"This new metric we're talking about today, running times, is yet another meaningful way to quantify what the 50,000 employees of New York City Transit have been working so hard to achieve: months of sustained improvement in service," said MTA NYCT President Andy Byford. "We have much more work to do to deliver the service that New Yorkers need and deserve; the consistency that we have achieved shows the Subway Action Plan and the Save Safe Seconds campaign laying a strong foundation for the major improvements we expect from upgrades that are part of the next MTA Capital Plan."

Sally Librera, MTA NYCT Senior Vice President for Subways, added, "I am hugely encouraged by the consistent and sustained improvements we are seeing across all subway performance metrics, reflecting significantly improved service for our customers. By improving our ability to measure service in different ways, we are now able to better pinpoint areas for improvement, as well as identify gains being made, such as the improving run times through the system meaning customers are getting where they need to go faster."

Overall subway performance continued its steady improvement. In November, 2019, with preliminary data for the month and for the average of the past 12 months showing every weekday metric better than it was in November, 2018.

"The data doesn't lie. Subway service is demonstrably better, more customers are taking the subways and the service continues to improve each month thanks to the hard work of our employees and smarter operations," said MTA Chairman and CEO Patrick J. Foye. "I am proud of everyone at New York City Transit for their dedication and laser focus in improvements that have yielded these results that prove our subway service has truly turned around."

Compared to 2018 and 2017, trains are taking less time to go from terminal to terminal on every line of the subway system today, shaving minutes off many trips. Overall, Subdivision "A" trains (the numbered lines) are running close to 4 percent, or about two-and-a-half minutes, faster than last year, and close to 6 percent, or about three-and-a-half minutes, faster than in 2017. On Subdivision "B" (lettered lines), trains are running about 2 percent, or about one-and-a-half minutes, faster than 2018, and close to 3 percent, or about two minutes, faster than in 2017.

The biggest improvement on any line in 2019 is on the **7** and **7** Express, whose running times were, respectively 9.2 percent (three-and-a-half minutes) and 10.5 percent (more than four-and-a-half minutes) faster. In

(Continued on page 4)