

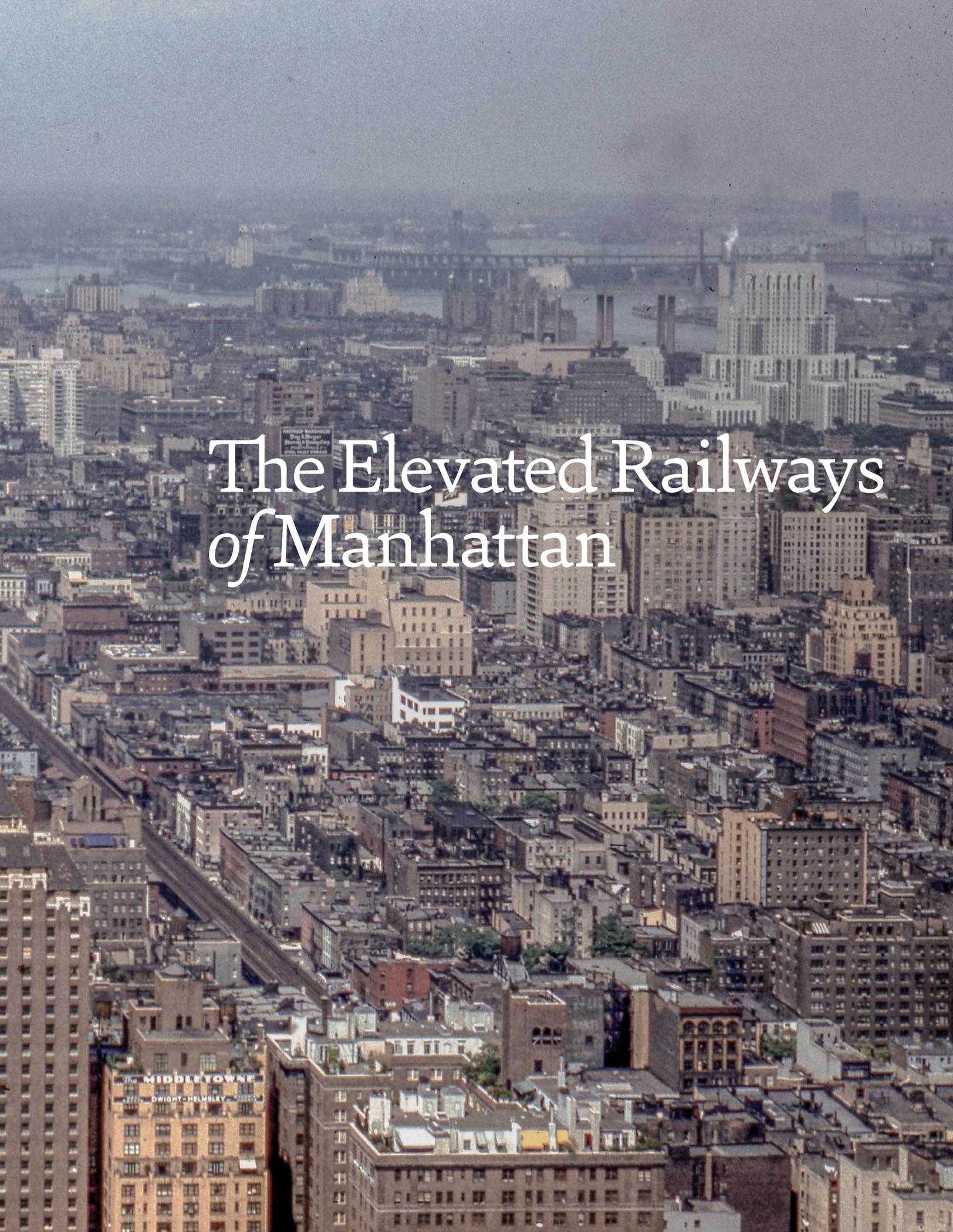
Eric R. Oszustowicz

# The Elevated Railways of Manhattan



Second Edition



An aerial photograph of Manhattan, New York, showing a dense urban landscape with numerous buildings of varying heights and colors. A prominent elevated railway track runs diagonally from the bottom left towards the center of the frame. In the background, a large bridge spans across a body of water, and the city continues into the distance under a hazy sky. The text 'The Elevated Railways of Manhattan' is overlaid in the center in a white, serif font.

# The Elevated Railways of Manhattan

MIDDLETOWNE  
DWIGHT-HELMSELY



**Eric R. Oszustowicz**

# The Elevated Railways of Manhattan

With the assistance of Joseph Brennan, Sandy Campbell, Edward Crew,  
Michael Glikin, Andrew Grahl, Alan Paul Kahn, Robert Kingman,  
Bernard Linder, Larry Linder, Jack May, Robert Montag, Arthur Murphy,  
John Pappas, David Ross and Bill Zucker

Second Edition



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The Electric Railroaders' Association, Inc. was founded on August 15, 1934  
by E.J. Quinby. The ERA is a non-profit educational organization consisting  
of people from all walks of life interested in the history and progress of  
electric railways.

For more information about the ERA, becoming a member or learning about  
its other publications and activities, visit us online at [www.erausa.org](http://www.erausa.org).

**Front cover:** *A 1945 view looking north to the Houston Street station on the Bowery section  
of the Third Avenue El. The picture is taken from a northbound evening rush hour express  
train. The local trains in the picture are composed of MUDC cars that were originally built as  
open gate cars but rebuilt with enclosed vestibules during 1923–1924 to Multiple-Unit Door  
Control configuration. The then 14-year-old Empire State Building can be seen in the  
background without its yet to be installed television antenna (see page 132).*

ERA COLLECTION

**Inside front cover:** *An overhead view in September 1955, probably from 44th Street  
looking north on Lexington Avenue which, at the time, was still a two-way street. The Third  
Avenue El, already out of service for four months, can be seen one block east of Lexington  
Avenue (see page 137).*

ANDREW GRAHL COLLECTION

**Frontispiece:** *Looking north from 34th Street and Third Avenue in the late 1940s or early  
1950s (see page 135).*

STEVE ZABEL COLLECTION

**Inside back cover:** *A southbound five-car train with two 1938 Steinway motors on either  
end with a Low-V trailer in the center is traveling on Webster Avenue while crossing  
Mosholu Parkway. These pre-World War II trains would be utilized on the final section of the  
Third Avenue El until 1969 upon being replaced by R12 subway cars. The El would close on  
April 29, 1973, thus ending the elevated era in New York City. Other elevated lines of course  
still remain, but the unrebuilt lines specifically built for wooden cars are gone.*

ERIC OSZUSTOWICZ COLLECTION

## Headlights

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Dedicated to the late Charles Akins

# Table of Contents

|                  |     |   |
|------------------|-----|---|
| <b>CHAPTER 1</b> | 16  | The Steam Years (1871–1903)                                     |
|                  | 16  | The Early Years   |
|                  | 18  | Why Ninth Avenue?   |
|                  | 20  | The Addition of the Second, Third and Sixth Avenue Lines        |
|                  | 26  | Into The Bronx and Experiments in Electrification               |
| <b>CHAPTER 2</b> | 28  | Electrification of the Elevated Lines and IRT Operation         |
| <b>CHAPTER 3</b> | 32  | The Manhattan Elevated Improvement Project and Services in 1915 |
|                  | 32  | Improving the Elevated Lines                                    |
|                  | 34  | The Area Near Cooper Union                                      |
|                  | 42  | Services in 1915 and the Introduction of the Composites         |
| <b>CHAPTER 4</b> | 44  | The Final Elevated Expansions in The Bronx and Queens           |
|                  | 44  | The Bergen Cutoff   |
|                  | 46  | Services in Queens  |
|                  | 49  | The Final Major Bronx Expansion                                 |
|                  | 52  | The 1920s   |
|                  | 56  | 1928 Rulebook Excerpts  |
| <b>CHAPTER 5</b> | 58  | The End of the Manhattan Elevated (1930–1955)                   |
|                  | 59  | The 34th Street Branch  |
|                  | 60  | 1937 Interborough Transit Company Route Map                     |
|                  | 62  | The Sixth Avenue Line in Pictures                               |
|                  | 69  | Northbound on the Ninth Avenue El from South Ferry              |
|                  | 105 | 1941–1942 and the End of the Second Avenue El                   |
|                  | 108 | The Second Avenue El in Manhattan                               |
|                  | 122 | The South Ferry and City Hall Branches in Pictures              |
|                  | 128 | Northbound on Third Avenue-Canal Street to 219th Street         |

|                   |     |  |
|-------------------|-----|--|
| <b>CHAPTER 6</b>  | 174 | The Last Remnants <i>of</i> the Elevated Lines         |
|                   | 174 | The Polo Grounds Area                                  |
|                   | 177 | The Final Years of the Third Avenue El in The Bronx    |
|                   | 180 | Pieces of History and Effects of the Abandonments      |
| <b>CHAPTER 7</b>  | 182 | The Stelter Photographs                                |
| <b>CHAPTER 8</b>  | 202 | The Tracks <i>of</i> New York, Number 3                |
|                   | 218 | The Track Diagrams of the Yards                        |
| <b>CHAPTER 9</b>  | 222 | A Closer Look: The Elevated System on November 1, 1937 |
|                   | 222 | A Chart of Services                                    |
|                   | 228 | Frequent, Dependable IRT Service                       |
|                   | 229 | Car Assignments  |
|                   | 231 | Train Configurations                                   |
|                   | 231 | Motors and Trailers                                    |
|                   | 232 | Marker Lights  |
|                   | 235 | Speed Restrictions at Curves on the IRT                |
|                   | 236 | Signals on the IRT                                     |
| <b>CHAPTER 10</b> | 244 | The Rosters  |
|                   | 244 | Roster Explanations                                    |
|                   | 246 | Surviving Passenger Equipment                          |
|                   | 248 | The Car Builders                                       |
|                   | 318 | The “Q” Cars   |
|                   | 319 | Further Information Regarding the “Q” Cars             |
|                   | 336 | The Steam Engine Roster                                |
|                   | 336 | The Steam Locomotive Manufacturers                     |
|                   | 364 | Selected Steam Engine Specifications                   |
|                   | 365 | Work Equipment of the IRT Elevated Lines               |

## CHAPTER 1

# The Steam Years (1871–1903)

There are those today that endlessly complain about mass transit in New York City, but in the 1860s it could take over one hour to get from the Battery to Madison Square by horse car. This was moderately faster than a brisk walking pace. Operating horse cars was a booming business, but hundreds of horses traversing the streets caused obvious problems to various human sensibilities and footwear. A solution was needed.

## The Early Years

The streets were already crowded and no one wanted a full-scale steam railroad running down their street either. With crowded streets, accidents involving steam engines would have been frequent and travel would have occurred at a slow pace. In fact, steam-hauled freight trains were already traversing the streets of the West Side and did so until the construction of the High Line. The accidents were horrific and not uncommon despite having riders on horseback trotting in front to clear the way. The only solution at the time would be to build an elevated railroad since electric powered transit that could run underground was still years away from being viable. London had a system beginning in 1863, but theirs was a steam railroad that ran through a combination of tunnels and open cuts in the central part of the city. The granite of Manhattan made a London type system exorbitantly expensive to build. The idea for an elevated railroad existed since 1825, but it wasn't until Charles Harvey and his backers were able to convince a special State Senate committee in 1866 that their elevated cable railway would be viable. In 1867, the New York State Legislature passed a bill allowing Harvey to build a half mile long elevated structure on Greenwich Street from Battery Place to Cortlandt Street.

Preliminary work began on July 1, 1867 on the first ¼-mile stretch from Battery Place to Morris Street. On October 10, 1867, the first column was erected and then on December 7, 1867, Charles Harvey demonstrated the line by riding a handcar while holding a rope or wire rope attached to the cable. After this event, the directors of the West Side and Yonkers Patent Railway Co. (who were the financial backers of the project) authorized the completion of the line to Cortlandt Street.

A test trip on the completed elevated cable railway was made in a passenger car by the Board of Railroad Commissioners on July 3, 1868. The car had been on the structure since May of that year. The ¾-inch cable pulling car was made by Roebling, the same company that later produced the cables for the Brooklyn Bridge and built the bridge itself. The stationary steam engine propelling the cable was

housed in a vault under the street at 107 Greenwich Street. The cable had travelers attached at intervals which projected up. The car would grab one of the travelers and be pulled along the rails. The grip system like that used on the San Francisco cable car system had not yet been invented. The railway company office was located at 48 Cortlandt Street. Track gauge was 4' 10½" and the rails, if they could be called that, were strips of metal laid on a sound-absorbing material laid directly on the stringers of the structure.

Regular operation began on June 11, 1870 and by this time the line had been extended to the southern terminus of the Hudson River Railroad at Ninth Avenue and 30th Street. The line followed the eastern curb line of Greenwich Street and the western curb line of Ninth Avenue. There were four new cable operating sections at this time. The sections were as follows: Battery Place to Franklin Street, Franklin Street to Houston Street, Houston Street to Little West 12th Street and Little West 12th Street to 29th Street with new stationary steam engines located at Cortlandt Street, Franklin Street, Bank Street and 22nd Street respectively. The original steam engine at 107 Greenwich was removed from service.

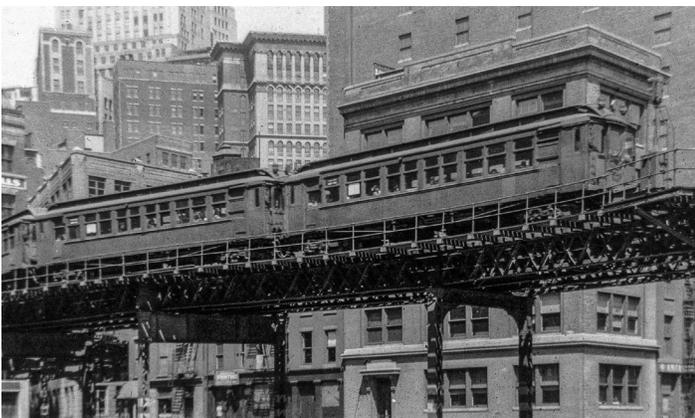
The line was plagued by malfunctions such as cable breaks. When this occurred, the coach carrying passengers would be stranded on the structure. During these spectacles, teams of horses at street level would pull the stranded car through the use of ropes to the closest terminal. The line would then need to be closed for extended periods while repairs were made. During these periods, cash flow was zero that made the financial viability of the line untenable. The cable operation closed for good on November 14, 1870. Charles Harvey and many of the original investors eventually lost all of their investment.

Since borrowed money was used to build the line, the bondholders were now in control. These creditors bought the line for \$960.00 at auction and decided to discontinue cable operation in favor of operations using coaches pulled by steam dummies. Steam dummies were



BERNARD LINDER COLLECTION

*A typical Manhattan Railway steam train turning south onto Front Street from Coenties Slip in 1894. Front Street no longer exists south of this point due to the construction of two office towers. The third and fourth cars are above Water Street. A few of the buildings across from the last two cars still exist today, 120 years later. The train has just left the Hanover Square station that is out of sight around the S turn and is two blocks away from entering the South Ferry station. The elevated line at this point would be electrified for third rail operation during the 1901–1902 period. In 1950, the elevated was abandoned south of Chatham Square and this portion was demolished. Until 1902–1903, hundreds of steam trains like the one above travelled every day on four different elevated lines in Manhattan as far north as 155th Street.*



STEVE ZABEL COLLECTION



ERIC OSZUSTOWICZ PHOTO

## THEN & NOW

On the left is Coenties Slip about 50 years later than the previous photograph showing a South Ferry bound train of MUDC cars. The name “Coenties” was derived from the name of a Dutchman who owned property in the area apparently in the days when New York was known as New Amsterdam. The photographer is standing on Water Street looking to the northwest. On the right is Coenties Slip on July 31, 2011. Compared to the previous view, the building on the corner remains relatively unchanged although the next three buildings have been modernized.

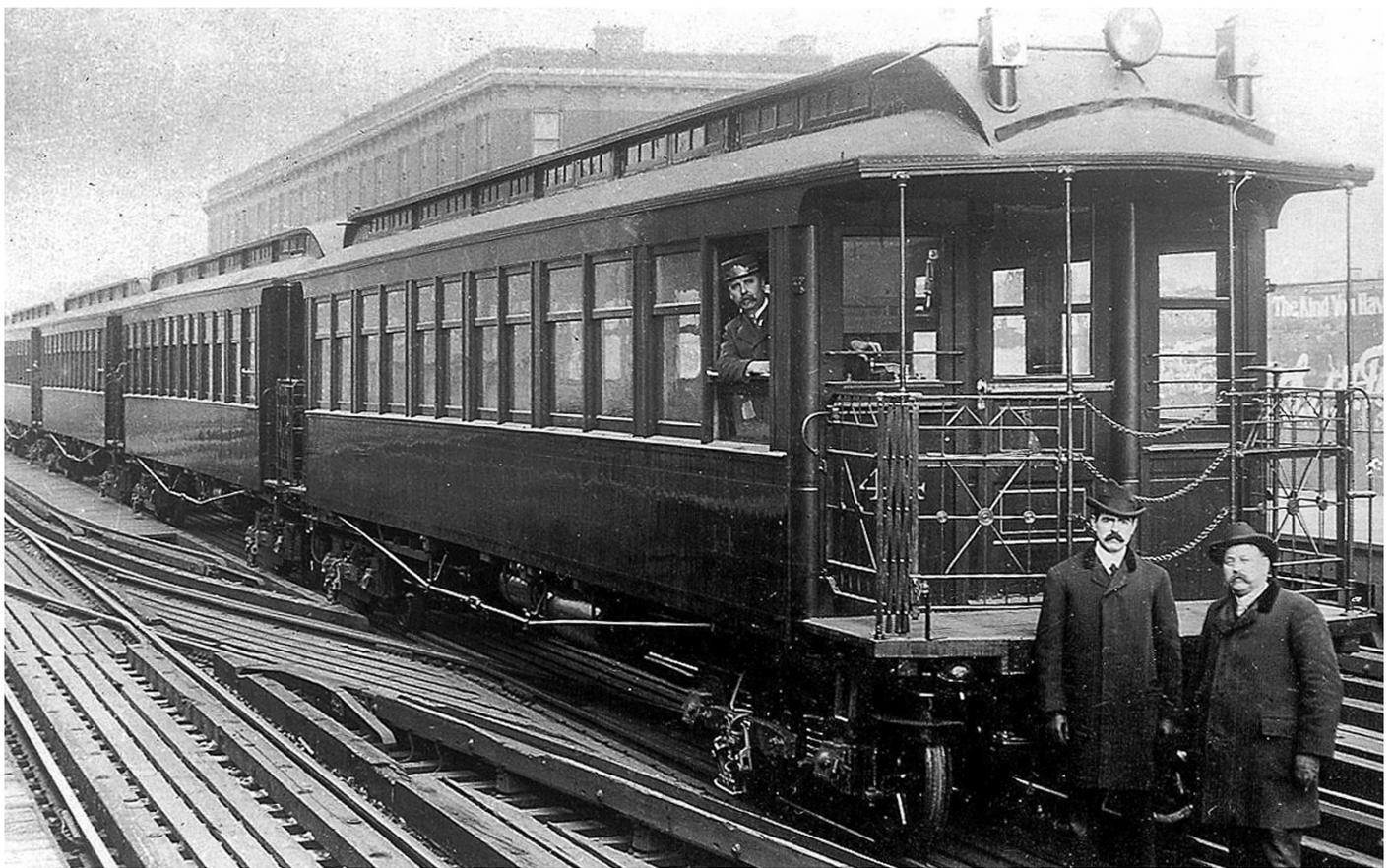
## CHAPTER 2

# Electrification of the Elevated Lines and IRT Operation

On November 21, 1900, testing took place of a Multiple-Unit electric train on the Second Avenue line between 65th and 92nd Streets. This train used the Sprague system of MU operation. One motor at each end was used with four trailers between them. The tests were successful and the railway managers decided to invest \$5,000,000 in electrifying the entire system.



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*(Left) A December 1901 view of a train used to test the Sprague system for Multiple-Unit electrification. Car 703 was built as steam-hauled coach in 1880, but was converted to electric operation in 1900 for the tests mentioned above on the Second Avenue elevated. Car 703 was placed in storage in the 1930s and scrapped in 1946.*

*(Above) In December 1901, the first group of new, electrified, elevated cars was delivered by American Car and Foundry for Second Avenue service. At top we see brand new car number 44 with management standing on the tracks. Car number 44 would be scrapped in 1949.*

On May 1, 1901, contracts were awarded to General Electric to electrify the existing rolling stock and structures. Westinghouse was awarded the contract to build a powerhouse and generating system at 74th Street and the East River (this structure still stands today). The final cost was \$18,000,000. By 1903, steam engines would no longer pull passenger trains along the elevated railways of Manhattan and The Bronx.

On July 1, 1901, the Suburban line was extended to Pelham Avenue (now known as Fordham Road) with an intermediate at 183rd Street. The 180th Street station would be added years later. A new yard was opened at 179th Street which complimented the previous yard at 133rd Street near Willis Avenue.

The first regularly scheduled electrified train began service on the Second Avenue line on December 30, 1901. By March 11, 1902, only certain rush hour trains would require steam engines on this line. On September 9, 1902, the last steam engine pulled passenger train

operated on Second Avenue.

On March 24, 1902, the first electric train operated on the Third Avenue line and the last steam engine operated there on August 15 of the same year.

The Bronx Park spur was opened on May 21, 1902. There was a small yard located beneath this branch. To reach this yard, cars were placed on a hydraulic elevator.

On October 1, 1902, the first electric train operated on the Sixth Avenue line although only between Rector Street and 58th Street. Electric service was extended to 155th Street on November 2, 1902 and the last steam locomotive operated on Sixth Avenue on April 4, 1903.

Finally, on February 18, 1903, electric service came to the Ninth Avenue line. The last steam locomotive to pull a passenger train on the Manhattan elevated system was number 135. It operated to 66th

## CHAPTER 3

# The Manhattan Elevated Improvement Project and Services in 1915

By 1913, the elevated and subway lines were carrying 1,500,000 passengers daily. Expansion of capacity was imperative. On March 19th of that year, the Public Service Commission authorized the “Manhattan Elevated Improvement” to begin. The contract for the reconstruction was signed on February 13, 1914 and work started on March 25 at Chatham Square.

## Improving the Elevated Lines

By the time work was completed in 1916, 15 miles of new single track were built and nine miles of old track replaced with 46 stations having been built or rebuilt. 2000 workers were hired for an average of 19 months of employment.

Part of the improvement was the addition of a center express track on existing two track structures. To create stations where both local and express trains could stop where there was no room for two island platforms, the express platform was placed on a higher second deck. A train arriving at these stations would climb a grade to the second deck and descend another grade upon leaving. This operation had an added beneficial effect by slowing the train down by gravity upon entering the station and providing additional acceleration upon departure also due to gravity. This

helped reduce wear on the brake shoes on approach and reduced power needs for departures from these new express stations. These new center tracks were put into service on January 17, 1916 on the Second, Third and Ninth Avenue lines. All of this work was done during the regular operation of trains and it should be noted that, at least according to historians, no trains were delayed during this extensive construction project. The Sixth Avenue line remained a two-track line north of Cortlandt Street. A third track was available north of 53rd Street to turn and store trains and also at the Eighth Avenue station along 53rd Street.

The Second Avenue line had double-deck express stations added at 14th and 86th Street and a three-track island platform express station added at 42nd Street. *(continued on page 37)*

*(Top right) The photographer is standing on the north end of the southbound local platform at 14th Street and First Avenue on January 13th, 1915. This view was taken shortly after the addition of the express track, which created a “hump” station. This type of reconstruction eliminated the need to add two island platforms that would have made the el structure much wider.*

*(Bottom right) Second Avenue and 126th Street looking north on July 6th, 1915 during addition of two tracks to the upper level of the new bridge across the Harlem River.*



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## CHAPTER 4

# The Final Elevated Expansions in The Bronx and Queens

On July 1, 1917, the Bergen Avenue-West Farms Connection (Bergen Cutoff) opened. Its creation was intended to eliminate delays caused by trains using the at-grade Westchester Avenue cutoff connection north of 149th Street and Third Avenue.

## The Bergen Cutoff

The Bergen Cutoff followed the original franchised route of the Suburban Rapid Transit Co. along a private right-of-way. The northern portion of this route literally operated directly above the two tracks of today's 2 and 5 lines as they left the portal north of the underground Third Avenue station. The lower portions of the steel pillars that supported the Bergen cutoff are still in place today and are embedded in

the retaining walls of the subway portal approach. These steel pillars can easily be seen if you look out the side windows of a 2 or 5 train as it ascends from or descends into the subway between the Third and Jackson Avenue stations. Remains of the connecting ramp can be seen just south of the former junction. The Westchester Cutoff connected at grade with the Bergen Cutoff again directly over the subway tracks on



ERA COLLECTION

*This view is looking north from a train leaving the 143rd Street station in The Bronx that served both Second and Third Avenue trains. The train is "lined up" to turn left onto the Third Avenue El. The next station will be 149th Street. The Bergen Cutoff turns off to the right. See the signaling section to interpret the semaphore signals. Also, see the next photograph to see what is around the corner on the Bergen Cutoff.*



ERA COLLECTION

*Just around the bend in the previous photograph on the Bergen Cutoff. A southbound train of Composites running with no passengers on a sunny afternoon is approaching. The Composites were too heavy to travel with passengers on the local tracks in Manhattan, so they would run with passengers in express service southbound in the morning and northbound in the afternoons. The next picture shows the view just around the curve in the distance.*



ERIC OSZUSTOWICZ COLLECTION



ERIC OSZUSTOWICZ PHOTO

## THEN & NOW

On the left is a view from a northbound train on the Bergen Cutoff. The Third Avenue and 149th Street station is in the distance. The tracks curve to the right to merge with today's 2 and 5 lines. On the right is a view at Willis Avenue and 146th Street on August 6, 2011 looking north. Many of the structures remain today, notably the building with the water tower in the distance. The white angular building on the right still stands where Bergen Avenue goes off at an angle. The County Trust ad has since been covered by paint.

## CHAPTER 5

# The End of the Manhattan Elevated

## (1930–1955)

On July 14, 1930, the 34th Street Branch of the Third Avenue line was abandoned. Following is a series of photographs of this branch.



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## The 34th Street Branch

*At left, a view of the 34th Street Branch from the Third Avenue/34th Street station. The Second Avenue/34th Street station can be seen in the distance. Above, another view of the 34th Street Branch looking east. Service on this shuttle, which served the 34th Street Ferry on the East River, ceased operation on July 14, 1930. The line had two tracks, which allowed two trains to operate independently on separate tracks. Passengers could also use it as method to transfer to the Second Avenue line since there was a station at Second Avenue. Only the northerly track directly connected to the main line (see the Tracks of New York section for further track details). Today, dedicated ferry buses shuttle passengers across 34th Street.*

## CHAPTER 6

# The Last Remnants of the Elevated Lines

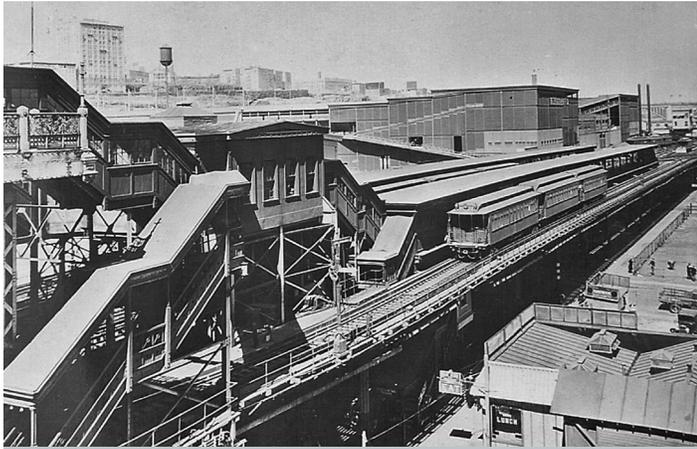
The last section of the Ninth Avenue El at 155th Street survived due to the existence of the Polo Grounds and the New York Central's Putnam Division. Once the New York Giants baseball team moved to San Francisco and the Putnam Division ceased passenger operations, even this section would be abandoned. The line ran as a shuttle between 155th Street/8th Avenue and 167th Street/River Avenue on today's number 4 subway line. Nearby is the 155th Street IND station served today by the B and D lines. This subway station has an unusual number of stairways (many of which are closed) due to the fact that this station once also served the Polo Grounds.

## The Polo Grounds Area



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*On the platform at 155th Street and Eighth Avenue (Frederick Douglass Boulevard) looking north. The Polo Grounds is on the left and the bridge over the Harlem River is on the right. Once over the river and into The Bronx, the line travels east to River Avenue where it joins today's number 4 subway line. At this point in time, steel IRT subway trains operated as a shuttle from this station to 167th Street and River Avenue.*



BERNARD LINDER COLLECTION



ERIC OSZUSTOWICZ PHOTO

## THEN & NOW

On the left, we see the 155th Street and Eighth Avenue station, but prior to the June 1940 abandonment south of this station. Take note of the stairways down to both Eighth Avenue and also up to the 155th Street viaduct, upon which the photographer is standing. In the distance, one can see the leads to the massive 159th Street Yard and the Polo Grounds. On the right, we see an August 6, 2011 view from the 155th Street viaduct. Virtually everything from the circa 1940 view is gone except for the Highbridge Aqueduct in the distance.



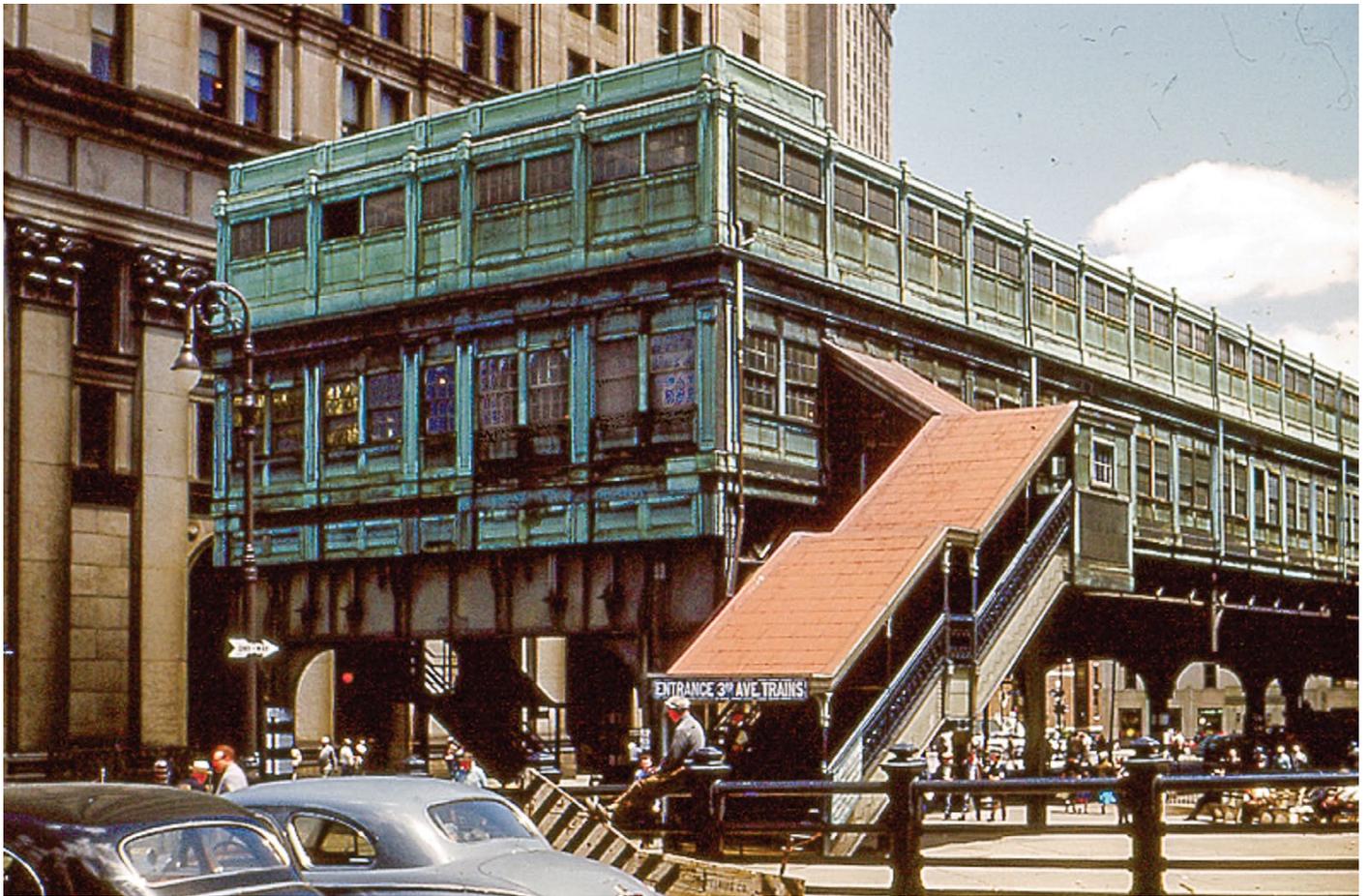
ERIC OSZUSTOWICZ COLLECTION

*A view from the front of a Manhattan bound Polo Grounds Shuttle after crossing the Harlem River. The 155th Street and Eighth Avenue station is around the curve. To the left of the Polo Grounds is the 155th Street viaduct. At this point, the shuttle has been reduced to a single track. Take note of the rusted track on the right.*

## CHAPTER 7

# The Stelter Photographs

The following chapter is a selection of 20 rare, full-color images from *By the El, Third Avenue and Its El at Mid-Century*, by Lawrence Stelter. They were photographed by the author's father, Lothar Stelter, an accomplished amateur photographer, starting in the summer of 1951 through the end of 1955. The transparency films he used were Kodachrome, Ektachrome and Ansochrome in both 35mm and 120 formats.



LOTHAR STELTER PHOTO

A cable placer for the New York Telephone Company, Lothar Stelter commuted by El from his home in the Bronx to job sites in Manhattan. Before work, after work, and even during lunch, he spent all of his spare time recording lively scenes up and down Third Avenue. Often the superintendants of the buildings where he was assigned allowed him to photograph views from the roofs.

Years later Lawrence collected his fathers' slides and wrote a history of the Third Avenue El with personal recollections of the line to

accompany them. First published in 1995 by H&M Productions, the author self-published a revised and enhanced second edition of *By the El* in 2007 under the "Stelterfoto, LLC" imprint. In 2010, Mr. Stelter made a second printing and it is still available.

We sincerely thank Mr. Stelter for allowing us to reprint so many images from this book along with their original captions. The photographs are shown in geographic order from south to north.



LOTHAR STELTER PHOTO

*(Left) While not technically on Third Avenue proper, the City Hall terminal of the El marks what most people consider to be the beginning since the El is the chain that ties the neighborhood “pearls” that were strung along side it together. This imposing copper-clad structure is the City Hall terminal. Only the lower level is still in service. The Municipal Building towers on the left. Let’s slip past those vintage automobiles in the foreground, scamper up the stairs and take a ride uptown.*

*(Above) Looking south from Cooper Union, we see an uptown local train taking the bend from The Bowery onto Third Avenue. A flock of pigeons feast away at Cooper Square in the right foreground. Houston Street station is in the distance and the center track ramp to the express platforms at 9th Street is on the far left.*

## CHAPTER 8

# The Tracks of New York, Number 3

In 1977, Jack May and Alan Paul Kahn produced *The Tracks of New York, Number 3*, an outstanding publication for the ERA that was comprised of track diagrams of the IRT elevated railroads as of 1920 in Manhattan, the Bronx and Queens. Also included were many historic photographs of the elevated lines.

Mr. May has graciously allowed us to republish as much of this work as possible. The track diagrams were successfully scanned and appear on the following pages. The original photographs were no longer available, so it was not possible to republish the pictures and the informative narration that was included.

Mr. May and Mr. Kahn chose the trackage of 1920 for an important reason as explained by their own words from the publication:

“A mood of optimism pervaded the Manhattan el system in 1920, the year of these track maps. The improvements to the system, specified in the dual contracts of 1913, had been completed, allowing for both increased service and faster running times. With patronage on the upswing, the future looked bright. The roster consisted of 2,213 passenger cars (1,492 motors and 721 trailers) and 60 work cars. Additionally, two of the old steam locomotives were still available for work train service.

“The el system’s route network was at its zenith during the period just after 1920. IRT el trains operated over almost 58 route miles, with some 42 miles assigned to the “Manhattan Division,” and the remainder being extended over IRT subway lines. Patronage peaked in 1921 with a total of 374,293,051 passengers carried. Although route mileage

would be increased slightly with the extension of the Corona line to Willets Point Boulevard in 1927, the original system began to contract in 1923, with the abandonment of the 42nd Street spur on December 6.”

The above is just a small portion of the informative text. Original copies of *The Tracks of New York* publications are now valuable collector’s items.

The first page that follows the cover shows a map of IRT elevated lines as of 1920 in Manhattan, the Bronx and Queens and indicates the type of train service on those lines: wooden elevated trains only, steel subway trains only and both (shared trackage).

The next page lists the various services that ran on the elevated lines. These were not official IRT route designations, known as such to the public. The route numbers were assigned by the authors to ease the explanation of the complicated operating patterns at the time.

The third page contains the key showing the geographic boundaries and numbering system of the individual track map drawings and the fourth page is the legend explaining the symbols on each map.

In addition to the track diagrams of the elevated lines themselves, detailed track maps of the many yards and shops are included.



**THE TRACKS  
OF  
NEW YORK**

**Number 3**

**MANHATTAN  
AND BRONX  
ELEVATED  
RAILROADS**

**-1920-**

**by Alan Paul Kahn  
and Jack May**

*Cover of the original 1977 publication.*

## CHAPTER 9

# A Closer Look: The Elevated System on November 1, 1937

Robert Montag miraculously unearthed an original official IRT document from November 1, 1937 containing the detailed status of every IRT elevated and subway car in existence as of that date. This is very significant because it would be 13 months before the first of the major elevated line abandonments. So until December 1938, the main lines of the Manhattan Elevated system were basically intact with the exception of a few abandoned branch lines.

## A Chart of Services

Bernard Linder was gracious enough to provide a complete summary of elevated services in Manhattan and The Bronx for November 1, 1937. The following tables show these services line by line.

Note the rush hour services on Saturday mornings. Until the 1950s, many people worked six days per week. Saturday was usually a partial work day, so there was only a rush hour in the morning since the times that workers returned home were generally evenly dispersed throughout the day.

Also take note that since the elevated lines were three tracks (other than along Sixth Avenue with two); the express services were

southbound in the morning rush hour and northbound in the evening rush hours.

Services were also very complex and intensive. For example, a Second Avenue line train leaving northbound from Chatham Square from one of two separate platforms in the evening rush hour could be destined for one of six different destinations in two boroughs and could be a local or an express train. At the same station, one could also board a Third Avenue line train from one of two platforms traveling to four different destinations either as a local, express or combination of local and express.

## Elevated Services in Manhattan & The Bronx on November 1, 1937

| TERMINAL  | TERMINAL                       | LOCAL/EXP | TIMES OPERATED              |
|---|--------------------------------|-----------|-----------------------------|
| <b>SECOND AVENUE LINE WEEKDAY SERVICE (NO MIDNIGHT SERVICE)</b>                         |                                |           |                             |
| 129TH STREET  | SOUTH FERRY                    | LOCAL     | RUSH & MIDDAY               |
| FREEMAN STREET OR BRONX PARK (3AV) OR FORDHAM RD OR TREMONT AV                          | CITY HALL                      | EXPRESS   | AM RUSH-SB PM RUSH-NB       |
| BRONX PARK (3AV) OR TREMONT AV OR 149TH STREET  | CITY HALL                      | LOCAL     | AM RUSH-NB PM RUSH-SB       |
| 129TH STREET  | SOUTH FERRY OR CITY HALL       | LOCAL     | EVENING                     |
| WILLETS POINT   | SOUTH FERRY                    | NOTE A    | RUSH HOURS                  |
| WILLETS POINT   | CITY HALL                      | NOTE A    | MIDDAY                      |
| WILLETS POINT   | 57TH STREET                    | LOCAL     | EVENING                     |
| ASTORIA   | SOUTH FERRY                    | LOCAL     | RUSH HOURS                  |
| ASTORIA   | CITY HALL                      | LOCAL     | MIDDAY                      |
| ASTORIA   | 57TH STREET                    | LOCAL     | EVENING                     |
| NOTE A-TRAINS OPERATED EXPRESS SOUTH OF 57TH ST, SOUTHBOUND UNTIL NOON, THEN NORTHBOUND |                                |           |                             |
| <b>SECOND AVENUE LINE SATURDAY SERVICE (NO MIDNIGHT SERVICE)</b>                        |                                |           |                             |
| 129TH STREET  | SOUTH FERRY                    | LOCAL     | AM RUSH, MORNING, AFTERNOON |
| FREEMAN STREET OR BRONX PK (3AV) OR ?TREMONT AV?(UNCONFIRMED)                           | CITY HALL                      | EXPRESS   | AM RUSH - SOUTHBOUND        |
| CITY HALL   | BRONX PARK (3AV) OR TREMONT AV | LOCAL     | AM RUSH - NORTHBOUND        |
| CITY HALL   | FREEMAN STREET                 | EXPRESS   | NOON RUSH - NORTHBOUND      |
| 129TH STREET  | CITY HALL OR SOUTH FERRY       | LOCAL     | EVENING                     |
| WILLETS POINT   | SOUTH FERRY                    | NOTE A    | AM RUSH                     |
| WILLETS POINT   | CITY HALL                      | NOTE A    | LATE MORNING & AFTERNOON    |
| WILLETS POINT   | 57TH STREET                    | LOCAL     | EVENING                     |
| ASTORIA   | SOUTH FERRY                    | LOCAL     | AM RUSH                     |
| ASTORIA   | CITY HALL                      | LOCAL     | LATE MORNING & AFTERNOON    |
| ASTORIA   | 57TH STREET                    | LOCAL     | EVENING                     |
| NOTE A-TRAINS OPERATED EXPRESS SOUTH OF 57TH ST,SOUTHBOUND UNTIL NOON, THEN NORTHBOUND  |                                |           |                             |
| <b>SECOND AVENUE LINE SUNDAY SERVICE-(NO MIDNIGHT SERVICE)</b>                          |                                |           |                             |
| 129TH STREET  | CITY HALL OR SOUTH FERRY       | LOCAL     | ALL TRAINS                  |
| WILLETS POINT   | 57TH STREET                    | LOCAL     | ALL TRAINS                  |
| ASTORIA   | 57TH STREET                    | LOCAL     | ALL TRAINS                  |

## CHAPTER 10

# The Rosters

## Roster Explanations

A number of rosters follow. The first and largest roster includes a complete list of the IRT's wooden elevated electric passenger fleet of 1812 cars. The information in this roster is very condensed in order to reduce the number of pages. The first column states the car number. The second column states the car builder. The third column states the date the car was built or delivered to railroad property. Take note that 5/85 signifies May 1885, *not* May 1985.

**All dates shown within the rosters refer to the period from the late 19th to the mid-20th centuries.** The fourth column shows the status of the car as of November 1, 1937.

### Status Key

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ACTIVE = Car is in passenger service.

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INACTIVE = Car is not in passenger service, but still on IRT property and that the car is wrecked, burnt or in need of major repairs

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PERMSTOR = Car is in "permanent" storage with no intention of car ever being restored to passenger service.

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SCRAPPED = Car was scrapped before November 1, 1937.

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STRIPPED = Car is stripped of motors, electrical equipment and air brake apparatus. This designation only appears on the Composite roster.

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TEMPSTOR = Car is in "temporary" storage but may return to passenger service in the future.

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The fifth column shows the location of the car if it is not in passenger service, but still on IRT property.

### Location Key

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CORONA = Corona Yard

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U/S BX.PK. = Under structure at Bronx Park

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WEBS.MID. = Webster Avenue middle track on the Third Avenue El (Between Fordham Road and 210th Street)

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98TH N03 = 98th Street Shop/Number 3 shed (Third Avenue El)

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128TH YD = 128th Street Yard

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129TH SHL = 129th Street/Third Avenue shuttle track.

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129TH CON = 129th Street Construction Shop

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133RD YD = 133rd Street Yard

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159TH YD = 159th Street Yard (Ninth Avenue El)

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179TH YD = 179th Street Yard (Third Avenue El)

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239TH YD = 239th Street Yard (White Plains Road Line)

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If the fifth column is blank, this signifies that the car is either active or had been scrapped before November 1, 1937.

The sixth column states the date that car was sold or scrapped. This is date that the car was removed from railroad property or destroyed. The seventh column gives other details about the car. If the car was sold, to whom the car was sold may be in this column. If the car was not sold and scrapped instead, this column will state "SCRAPPED." Other specialized information such as information regarding collisions or fires which would have caused the car to be retired prematurely is shown in this column.

Numerous cars were delivered to various military related locations during World War II. For security purposes, the exact location has not been disclosed due to the fact that some of these locations are still active, but the cars are long gone. These cars were mainly used to shuttle factory workers to and from their place of employment from central locations. Although some of these locations were privately owned, their primary purpose was to produce wartime materials. Cars delivered specifically to a U.S. Army or Navy location are noted as such. Cars shipped to other less descript plants are listed as being shipped to the U.S. Military. Most of these cars were scrapped shortly after WWII, but two still survive at a railroad museum in California (see list of surviving cars).

Upon the merging of the various companies that operated the elevated lines, some renumbering of the passenger cars took place.

### Summary of the Renumbering

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Metropolitan Elevated Railway Car #'s 1 through 187 were renumbered to Manhattan Railway Co. # 501 through 687 respectively.

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Suburban Rapid Transit Co. Car numbers 1 through 26 were renumbered to Manhattan Railway Co. number 1095 through 1120 respectively.

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A single car built by American Car and Foundry was built in January of 1902 for the Manhattan Railway Co. and was numbered 142. Shortly after delivery, this car was renumbered 1219 and was sold on September 21, 1918. Another car numbered 142 was delivered in January 1903 as part of a large order.

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With regard to the roster of cars numbered 1 through 1812, the following cars were converted in 1902 and 1903 from steam engine hauled coaches to self-propelled electric motors or the trailers that operated with the motor cars: 1–39, 293–702, 704, 705 and 707–1120. Cars 243–292 were converted in 1907. Cars 703 and 706 were the

prototype cars converted for electric operation and were electrified circa 1900. The first car 11 was destroyed on April 17, 1905 in a collision and was replaced by a newly built electrified car 11 in 1907. Cars 40–242 and 1121–1812 were delivered new after electrification and were equipped for electric operation as built.

As of November 1, 1937, there were 1,457 motorized elevated cars on IRT property, of which there were 987 Gate/MUDC motor cars and 470 Composite cars. There were also 701 Gate/MUDC trailers for a grand total of 2,158 cars. Of the above cars, only 1,491 were in service. There were also nine motorized service cars and two trailers used as service cars. The passenger cars out of service were classified in the following sub-groups:

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56 trailers were in permanent storage (all Gate/MUDC cars).

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299 motors and 195 trailers were in temporary storage (121 Composites, remainder Gate/MUDC).

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47 motors were stripped of motors, brakes and controls (all Composite cars).

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42 motors and 28 trailers were inactive due to wrecks, fires, etc. (23 Composites, remainder Gate/MUDC).

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A grand total of 388 motors and 279 trailers were in storage for a total of 667. (191 Composites, remainder Gate/MUDC).

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IRT records show that 2,315 wooden/Composite electrified cars were purchased (or converted to electric operation) by the IRT that operated in elevated line service. This includes 1,814 wooden elevated cars and 501 Composite cars. Car 11 was destroyed and replaced by a new car with the same number. Car 142 was renumbered 1219 with a new car 142 delivered. There is an issue regarding car 242. According to the IRT records of November 1, 1937, the original electric car 242 was destroyed and replaced in 1907 with a new car of the same number. The ERA roster of 1955 does not account for this. Although the roster shows cars numbered as high as 1812, there were actually 1,814 electrified cars built (this includes cars converted to electric operation). The IRT records show 501 Composites being purchased due to the addition of car 3341 into the passenger roster.

Of the 2,315 electrified cars mentioned above, 97 motors (this includes 31 Composites) and 57 trailers were destroyed prior to November 1, 1937. In storage were 667 cars and three cars had been converted to work cars (cars 501, 502 and 824). Taking into account the two replacement cars, this left 1,491 cars available for passenger service.

A separate list after the main roster will list all the cars that were converted to Multiple Unit Door Control (MUDC) operation. The date of the conversion is included. Upon conversion to MUDC operation, the open gated ends were converted to closed ends with vestibules. The conversion date is the date the rebuilt car actually left the shop.

A listing of the “Q” cars received from the BMT is also included. Since these cars were eventually returned to the BMT, the final disposition of these cars will be included in a future publication regarding the BMT.

The next roster is a list of the 222 Composite cars which by November 1, 1937 had been either scrapped or placed in storage. Any Composite car not shown on this list was in operation in the express services of the Second and Third Avenue lines. Of the 501 Composite cars purchased, 279 were still in service on November 1, 1937.

Following is the builder and delivery information for these cars:

| Car#      | Type         | Builder    | Year      |
|-----------|--------------|------------|-----------|
| 2000–2059 | Hi-V Trailer | Jewett     | 1903      |
| 2060–2119 | Hi-V Trailer | St. Louis  | 1903      |
| 2120–2159 | Hi-V Trailer | Wason      | 1903      |
| 3000–3039 | Hi-V Motor   | Jewett     | 1903      |
| 3040–3139 | Hi-V Motor   | Stephenson | 1903–1904 |
| 3140–3279 | Hi-V Motor   | St. Louis  | 1903–1904 |
| 3280–3339 | Hi-V Motor   | Wason      | 1903–1904 |

Of the above cars, 477 were converted to Low-Voltage Motors upon their transfer to the elevated lines in 1916. See text for further information.

Following this roster is a list of the wooden elevated passenger cars (steam hauled coaches) that were deemed not acceptable for conversion to electrified cars during 1902 and 1903. Most of these cars were sold mainly to other railroads throughout North America. New electrified cars of the same numbers (40–242) were delivered from 1901–1903 with one car in 1907.

Following this is the extensive steam engine roster. The first column is the final number the engine carried. The second column is the class designation assigned to it by the Manhattan Railway Company. The third column is the builder. The fourth column shown as “date” is the builder’s date. The fifth column states the original owner. The abbreviations are as follows:

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NYE = New York Elevated Railroad

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MAN = Manhattan Railway Company

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MET = Metropolitan Elevated Railway

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SUB = Suburban Rapid Transit Company

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The sixth column states the date that the engine was removed from railroad property or scrapped. The last column states the final status of the engine such as it being sold or scrapped. Many engines were upgraded through rebuilding. The completion date of this rebuilding will be shown in this column. Some engines had their numbers changed and this information is also in the last column. Most of these engines were removed from service when the electrification of the Manhattan elevated lines took place from 1902 to 1903.

The last roster is a list of work equipment for the IRT elevated lines as of November 1, 1937.

**Eric R. Oszustowicz**

# The Elevated Railways of Manhattan

Many New Yorkers rushing through the streets of Manhattan today are completely oblivious to the fact that at one time there was an extensive elevated railway system that traversed most of the island from the Battery through Midtown, Harlem and on into The Bronx and later into Queens. Certain narrow downtown streets, such as Pearl Street, were shrouded in darkness by the elevated structure, even on the sunniest of days.

But without these elevated railways, it would not have been possible for New York City to develop as fast as it did. Development would have been delayed about 25 years until the first subways opened since there was no other way to move the massive crowds through the City. Partially due to the constant expansion of the underground subway lines and to a great extent real estate interests, the elevated lines that ran into southern Manhattan were all torn down from 1938 to 1955.

Although New York has its own unique and extreme dynamism and is one of the great cities of the world, one could only wonder what New York would be like today if one or more of the elevated lines were still standing.

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