

NEW YORK TRANSIT MUSEUM

Penn Station Train Talk at Plaza 33
September 22, 2024 2:00 pm ET
Hosted by the 34th Street Partnership

Upcoming program highlights:

October 10th, 6pm – New York Transit Museum
A Life in Transit: Raleigh D'Adamo in conversation with Peter B
Lloyd

October 17th, 11am – Offsite tour
Underground NYC Tour: Subway 101



For more programs:
nytransitmuseum.org/programs

Penn Station

114 Years of Changes 1910 – 2024

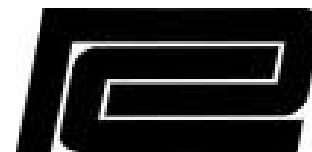
Speaker: Andrew Sparberg for New York Transit Museum and 34th St. Partnership



Original Penn Station in 1962, the year before demolition began.



Long Island Rail Road



Overview

The aim of this presentation is to briefly highlight Penn Station's many significant changes since it opened in 1910. The most obvious change was razing the original street level building between 1963 and 1968, allowing Madison Square Garden and an office structure to replace it. But Penn has seen many more changes in its 114-year history. Its transportation functions have changed, from predominantly long-distance to predominantly short-distance commuter, even though it is still the busiest Amtrak station in the US. Its motive power technology changed in the 1930s when the Pennsylvania Railroad (PRR) replaced the original 1910 direct current third rail system (between Penn and Newark) and installed alternating current electrification between NY and Washington DC to replace steam power. After NJ Transit took over the former PRR commuter train service, Penn Station was linked, in 1996 and 2002, to other New Jersey rail services that were not part of its original service patterns. It all makes for a fascinating and sometimes turbulent history that is continuing to evolve.

And most recently Moynihan Train Hall opened in 2021.

The cover page illustrates the heralds of the many railroads that have served Penn Station in its 114-year history. The three current railroads are on the right – defunct ones are along the bottom. The only one that has been there for the entire time under its original name is the MTA – Long Island Rail Road, which inaugurated service here in September 1910.

Why was Penn Station Built?

Between 1865 and 1900, the railroads in New York and New Jersey expanded as industry and population boomed after the Civil War. New York City needed adequate rail connections to the west to ensure the viability of its seaport, and to permit agricultural and manufactured products to reach it. Only one railroad, the New York Central, could enter Manhattan by land, coming from the north. The numerous railroads to the west, in New Jersey, lacked direct routes into Manhattan because the Hudson River stood in the way. The biggest New Jersey carrier was the Pennsylvania Railroad (PRR); others included the Central RR of New Jersey, Erie, Lackawanna, Baltimore and Ohio, and the West Shore. All needed ferries and barges to transport people and goods to and from Manhattan.

In the 1880s, the PRR unsuccessfully attempted to partner with other New Jersey railroads to jointly build a Hudson River bridge that would give all access to Manhattan. In 1899, a new PRR president, Alexander Cassatt, decided to go it alone, undertaking a vast tunnel, terminal, and bridge project that would link Newark with Manhattan, Long Island, and New England.

To allow construction of a large train yard in Queens, the PRR acquired the Long Island Rail Road (LIRR) in 1900 and integrated its operations into Penn Station, which opened in 1910. The Hell Gate Bridge, connecting Queens and The Bronx, debuted in 1917, permitting direct rail access between New Jersey and points south, and New England.

1885 - 1900

A remarkable trio of events between 1885 and 1900 set the stage for Penn Station to be constructed.

1. **Technology:** After about 1885 electricity was harnessed for industrial use, including transportation. Civil engineering advanced to permit the construction of large bridges and underwater tunnels.
2. **Politics:** In 1898 New York City expanded to become a megacity encompassing over 300 square miles of land, uniting the five boroughs under one government. The western portion of Long Island was included.
3. **Business:** In 1900 the Pennsylvania Railroad bought the Long Island Rail Road, allowing it to build Penn Station and the Hell Gate Bridge connecting Long Island with the mainland to the north.

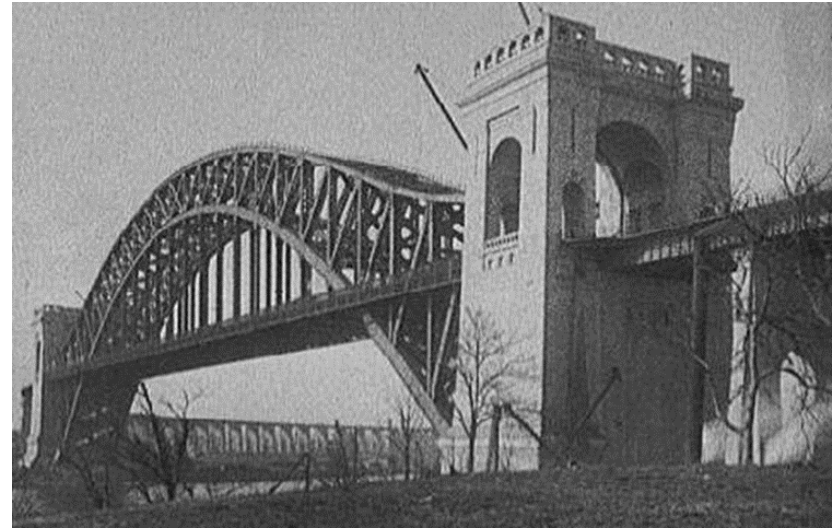
1910-1932

Penn Station, Hell Gate Bridge open Subways reach Penn

- 1910 Early large-scale use of electric power for mainline railroads. LIRR began electric operations in 1905 in advance of Penn Station service opening.
- 1910 PRR initially electrified between Penn Station and Newark.
- 1910 Six separate tunnels (4 East River, 2 Hudson River) one giant station (not terminal), one large storage yard at Sunnyside.
- 1910 Penn Station opens, in September for LIRR and November for PRR.
- 1917 Direct Boston-Washington train service over Hell Gate Bridge.
- 1917 and 1932 IRT and IND subways, respectively, open stations at Penn



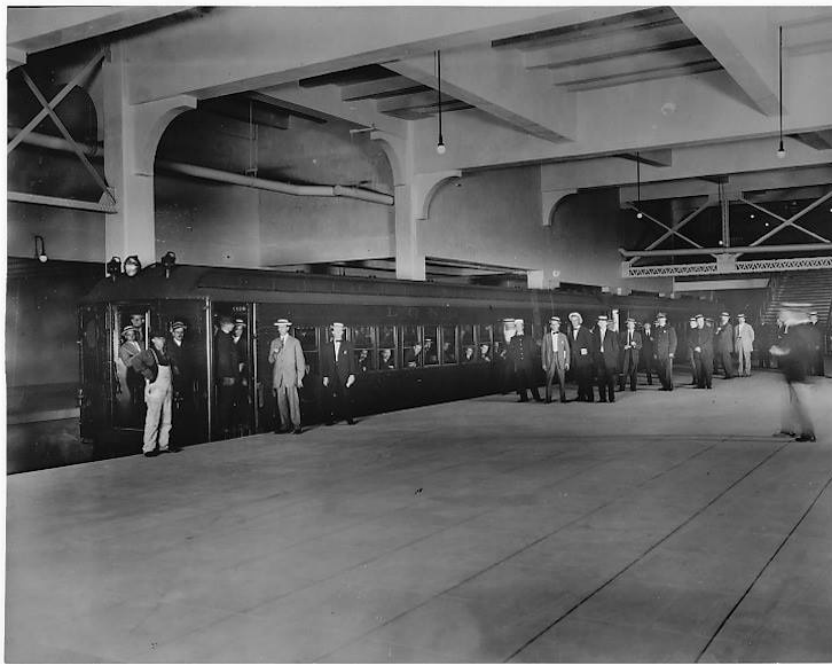
The original Penn Station when it opened, 1910.



The Hell Gate Bridge shortly before its 1917 opening.

September 8, 1910

**LIRR begins electric train service to
and from Penn Station**



Leaving Penn Station, to Long Beach



Passing Lynbrook

November 27, 1910

PRR begins electric train service between Manhattan Transfer (outside Newark) and Penn Station using DD-1 locomotives



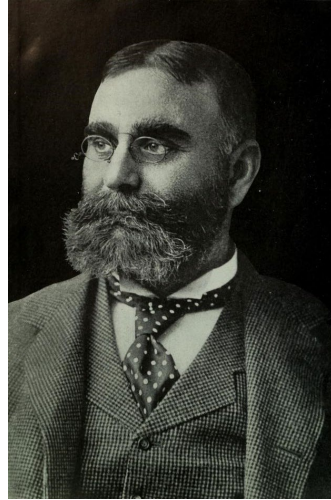
Left, Manhattan Transfer, just east of Newark, where PRR trains switched from steam to electric locomotives to enable access to Penn Station and its tunnels. Train is on the Hudson Tubes, now the PATH line, which also stopped there. Right, one of the DD-1 locomotives that pulled PRR trains between Manhattan Transfer and Penn Station between 1910 and 1937, when the station went out of service and was closed after PRR completely electrified its New York-Washington service.

Manhattan Transfer is also the title of a John DosPassos novel (1925), and the name of popular music group that began in the 1960s, but neither one has any direct connection to trains.

PRR Presidents when Penn Station and Hell Gate Bridge planned and opened



Alexander Cassatt
President
1899 - 1906



James McCrea
President
1907-1913



Samuel Rea
PRR Vice President
during construction.
President 1913 - 1925



Samuel Rea statue that was formerly outside the 7th Ave. entrance to Penn Station. It is currently in storage.

Penn Station – interior and exterior

top photos when new; bottom is early 1960s



1933-38 PRR electrifies its Northeast Corridor operations

- 1933-35 AC overhead electrification introduced between NY Penn Station and Philadelphia and Washington, replacing DC third rail operations and DD1 locomotive use between Penn Station and Newark (Manhattan Transfer).
- GG1 locomotives (below) introduced to pull trains
- 1938 AC electrification completed Philadelphia – Harrisburg, PA.



1941 – 1968

War, Competition, Demolition, Merger

- 1941-45 World War II puts tremendous demands on all US Railroads; Civilian travel heavily restricted.
- After 1945 - autos, trucks, interstate highway, airports all create new competition for traditional railroad markets.
- 1962 PRR unveils plans to demolish Penn Station building and build MSG and One Penn Plaza in its place (below). Track level will remain unchanged.
- 1966 LIRR becomes public sector railroad (NY State ownership)
- 1967 Aldene Plan implemented – Central RR of NJ trains rerouted to Newark to allow passengers to transfer to PRR trains bound for NY Penn Station.
- 1968 Pennsylvania and NY Central Railroads merge to form Penn Central
- 1968 New Madison Square Garden opens atop Penn Station and old station demolition completed.



Photo by Bob Koller, NY Daily News. 1966

1968- 1976

Bankruptcy, Amtrak, Conrail



Feb. 1968: Presidents Alfred Perlman (NYCRR, left) and Stuart Saunders (PRR, right) as Penn Central merger becomes official.

The New York Times

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NEW YORK, MONDAY, JUNE 22, 1970

**PENN CENTRAL IS GRANTED
AUTHORITY TO REORGANIZE
UNDER BANKRUPTCY LAWS**

June 1970: Penn Central files for bankruptcy.



May 1971: Amtrak is created to take over US intercity passenger train services.

January 1976: Amtrak takes ownership of Penn Central Northeast Corridor.

April 1976: Conrail takes over Penn Central and five other bankrupt US railroads.



New Services at Penn 1988 & 1996

THE NEW YORK TIMES, SUNDAY, JANUARY 17, 1988

L.I.R.R. Main Line to Enter Electric Age

By MICHAEL KORNFELD

BEGINNING tomorrow, riders on the main line of the Long Island Rail Road will get faster, smoother, quieter and more direct service to Manhattan with the opening of full electric train service from Ronkonkoma.

"The rationale behind electrifica-

ties of the railroad."

Electrification on the main line will provide those commuters with a direct link to Penn Station and cut traveling time by an average of 26 minutes during peak periods of the morning and evening rush, making the commute from Ronkonkoma to Manhattan 59 minutes on an express train. The fastest diesel train takes 93 minutes.

Before the inauguration of electric

Money from the Metropolitan Transportation Authority capital improvement program will be applied to track improvements, station and platform reconstruction and upgrading, and the moving of the Ronkonkoma train yard.

The L.I.R.R.'s electric fleet was enlarged a couple of years ago in anticipation of the electrification. In addition, new train stations with expanded parking were established in

the area's largest business organization.

Development has been moving eastward in recent years and Mr. Pally believes that electrification will attract people from both the North and South Shores, prompting more development around Islip, MacArthur Airport and farther east, possibly including a much-discussed transportation hub and office building complex in Ronkonkoma.



LIRR Ronkonkoma 1-18-1988

All Aboard for Train Right to Manhattan (No Hoboken)

By JOHN SULLIVAN

MILLBURN, N.J., June 10 — Train 6410 rumbled into the station and, as the waiting crowd surged across the platform, the assistant conductor, Lewis Apgar, swung down from the last car.

"New York Penn Station," he

this morning along its Morris and Essex branch. The three-year, \$70 million project is the agency's most significant improvement since it assumed control of the state's commuter rails in 1983. The train line, which runs through suburban towns in Essex, Union, Somerset and Morris Counties, has been on-

to ride his bicycle, passed along a slogan devised with the enthusiastic help of several fellow commuters.

"This is a quantum leap in commuting," Mr. Klenert said. "This is a transportation transformation."

trains. New Jersey Transit has no immediate plans to add cars to the trains, she said, but she added that the agency would do so if ridership stayed high. The agency will operate nine trains to New York City on weekdays, and plans weekend service in September.

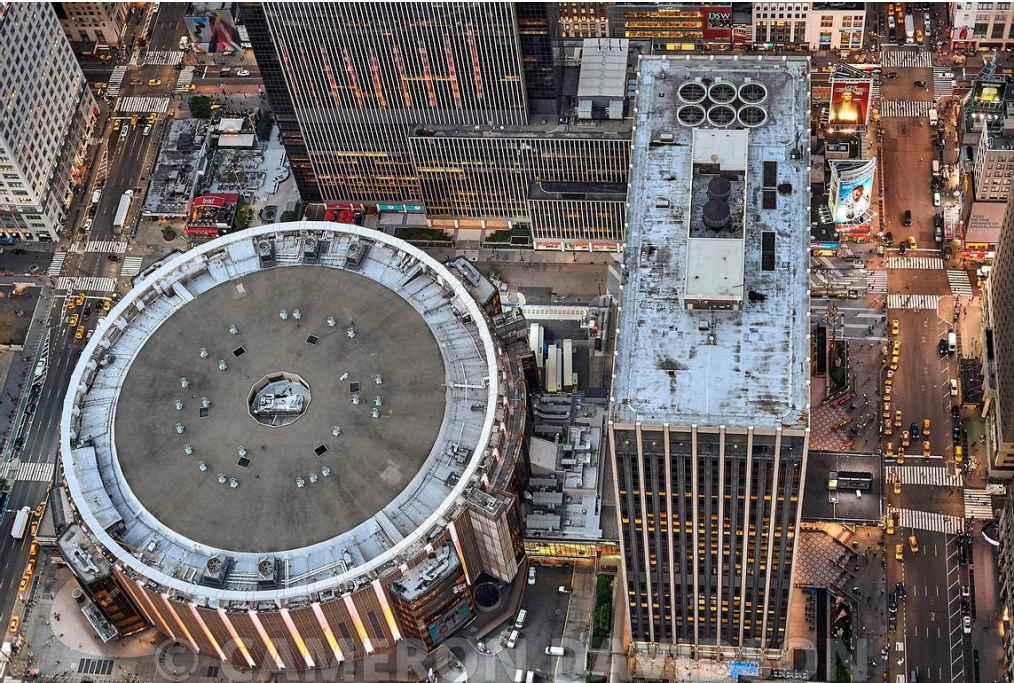
Despite the standing-room

NJT Midtown Direct 6-11-1996

1969 – 2023: Many Changes

- 1969: Penn Central RR begins Metroliner begins between Penn Station and Washington DC.
- **1970: Penn Central bankruptcy**
- 1970: LIRR electric service extended to Huntington
- **1976: Amtrak assumes ownership of NE Corridor**
- 1976: Conrail assumes ownership of former Penn Central RR
- **1983: NJ Transit takes over former Penn Central commuter services as Conrail is mandated to end its commuter train services.**
- **1987: LIRR West Side Yard Opens**
- 1988: LIRR electric service opens between Hicksville and Ronkonkoma.
- 1988: NJT electric service opens between South Amboy and Long Branch.
- **1995: Amtrak Empire Service moves to Penn; Central Control Building opens**
- 1996: NJT Midtown Direct begins (Penn Station to Dover and Gladstone).
- 1998: LIRR Dual-Mode trains begin (to/from diesel branches).
- **2000: Amtrak electrification opens between New Haven and Boston.**
- 2002: NJT Montclair-Boonton service begins, Penn Station – Montclair.
- **2021: Moynihan Train Hall opens**
- 2023: Gateway Tunnel work is funded and construction begins.

Contemporary Views



Madison Square Garden and
2 Penn Plaza.



LIRR dual-mode train arriving on Track
20.