

"History" at *Grand Central* on History Channel.com

While Grand Central Terminal stands today as one of New York City's most famous landmarks, it was by no means the first railroad station in New York City. In fact, the current structure is neither the first to claim the name "Grand Central" or to occupy the present location at 42nd and Park. Yet, the story of Grand Central Terminal allows one to gaze back and observe much of the history of the City of New York, and to witness the growth and expansion of a vibrant metropolis reflected in an unrivaled monument of civic architecture.

The first rail line into New York City -- the New York and Harlem Railroad -- was formed in 1831 and began service to a terminus at Fourth Avenue and 23rd Street the following year. Over the next five years, the railroad constructed a station, offices, and stables along Fourth Avenue, 26th and 27th Streets; through subsequent expansion and reconstruction, the New York and Harlem Railroad Station would come to occupy the entire block bounded by Fourth and Madison Avenues and 26th and 27th Streets. (In 1871, P.T. Barnum purchased the New York and Harlem Railroad Station and converted it into Madison Square Garden--the first of several structures to bear that historic name.)

During the late 1840s, additional railroad service into New York--notably The New York and New Haven Railroad and The Hudson River Railroad--precipitated the advent of a variety of terminals, depots, freight houses, and passenger stations throughout the city. Horse-drawn extensions merged with steam-powered lines in a haphazard network of railways that was plagued by complaints about noise, pollution, traffic, and chronic accidents. By 1858, steam locomotives had been progressively banned from crowded areas and were no longer in service below 42nd Street, giving rise to the need for a new terminal.

Shipping magnate "Commodore" Cornelius Vanderbilt acquired the Hudson River Railroad in 1864. Soon after, Vanderbilt added the New York Central Railroad to his holdings and consolidated his position by creating a rail-link between Spuyten Duyvil and Mott Haven, allowing Hudson River trains to arrive at a common East Side terminal. In 1869, Vanderbilt purchased property between 42nd and 48th Streets, Lexington and Madison Avenue for the construction of a new train depot and rail yard. On this site would rise the first Grand Central.

Grand Central Depot, designed by architect John B. Snook, was built at a cost of \$6.4 million and opened in October 1871. Virtually obsolete at the time it opened, it served three distinct rail lines--the New York Central and Hudson River Railroad, New York and Harlem Railroad, and the New York, New Haven, and Hartford Railroad--each of which maintained its own waiting room, baggage facilities, and ticketing operation at the station. Subsequent renovations and enlargements culminated in the 1898 expansion of the depot under architect Bradford Lee Gilbert and further interior renovation in 1900 directed by Samuel Huckel, Jr.

Reborn as "Grand Central Station," the reconfigured depot's most prominent feature was undoubtedly its enormous train shed. Constructed of glass and steel, the 100-foot-wide by 650-foot-long structure rivaled the Eiffel Tower and Crystal Palace for primacy as the most dramatic engineering achievement of the nineteenth century. The updated station also featured a "classical" facade, a unified 16,000-square-foot waiting room, and distinctive ornamentation, including monumental cast-iron eagles with wingspans of thirteen feet. (In fact, one of these eagles was recently salvaged and will rise again above Grand Central Terminal's new entrance at 43rd and Lexington Avenue.)

All the while, the age of the steam locomotive was drawing to a close. Earlier efforts to increase safety and reduce congestion, including the Fourth Avenue Improvement Scheme which lowered tracks below grade from Grand Central Depot to 56th Street and created a tunnel from 56th Street to 96th Street, had proved insufficient. Noise and air pollution were chronic, and public concern about safety was on the rise. A catastrophic train collision on January 8, 1902, in the smoke-filled Park Avenue Tunnel, killed seventeen and injured thirty-eight, causing a public outcry and increasing demand for electric trains. One week later the New York Central and Hudson River Railroad announced plans to improve the Park Avenue Tunnel and expand Grand Central. By the end of the year, plans were in development-spearheaded by the New York Central's chief engineer William J. Wilgus-to demolish the existing station and create a new double-level terminal for electric trains.

The plan was expensive. The railroad needed to invest in electrifying its rails, and carve deep into Manhattan's bedrock (workers would ultimately excavate 2.8 million cubic yards of earth and rock). The solution to the projected \$80 million project budget (roughly \$2 billion in today's terms) came from Wilgus as well. Without steam engines, there was no longer a need for an open rail yard. Wilgus proposed that the area from 45th to 49th Streets be paved over and that real estate developers be allowed to erect buildings over the concealed tracks. In exchange for this privilege, developers would pay a premium to the New York Central Railroad for "air rights." Construction in the years immediately after the completion of Grand Central Terminal would include apartment buildings like the Marguery, the Park Lane, and the Montana, and hotels including the Barclay, the Chatham, the Ambassador, the Roosevelt, and finally the Waldorf-Astoria, completed in 1931. (For many years, hydraulic tanks in the basement of Grand Central Terminal supplied power to these buildings.)

In 1903, a select group of architects were invited to submit designs for the new Grand Central Terminal in a competition. Among them were McKim, Mead, and White-architects of New York's Pennsylvania Station (1910) and the adjacent Columbian Exposition in Chicago and architects of Washington D.C.'s Union Station (1907). The winning submission, however, was from the St. Paul firm of Reed and Stem. Reed and Stem had done other work for the New York Central, and Reed's sister was married to William Wilgus, who by that time was the New York Central's vice president in charge of construction.

In spite of these connections, Reed and Stem could not have been ready for the end run that was about to occur. Subsequent to the competition, New York architects Warren and Wetmore presented the selection committee with their own proposal for the terminal. Warren-a cousin of New York Central Chairman William Vanderbilt-succeeded in his "appeal." In February 1904, Warren and Wetmore and Reed and Stem entered an agreement to act as The Associated Architects of Grand Central Terminal. The next six years would be spent reconciling, amending, and revising the plans for the new Grand Central.

Construction would last ten years. Excavation was an enormous undertaking as the grade of the rail yard was lowered to an average depth of thirty feet below street level. Yet, in spite of the upheaval, rail service continued uninterrupted. Initially, trains continued to use the old Grand Central, which was eventually razed in 1910. A temporary station in the Grand Central Palace at Lexington Avenue and 43rd Street was used until 1912.

Grand Central Terminal officially opened to great fanfare at 12:01 a.m. on Sunday, February 2, 1913, and more than 150,000 people visited the new terminal on its opening day. Although construction was not yet entirely complete, Grand Central Terminal had arrived and New York City would never be the same again.

With Grand Central acting as an anchor, development around the terminal took off. Between 1913 and 1917, the Biltmore Hotel, the Yale Club, and two office buildings were constructed on railroad property across Vanderbilt Avenue. During the 1920s, as hotels and apartment buildings began to rise on the "air rights" tracts of Park Avenue, skyscrapers simultaneously sprang up along East 42nd Street. Warehouses gave way to the fifty-six-story Chanin Building, the fifty-four-story Lincoln Building, and the seventy-seven-story Chrysler Building. On Lexington Avenue, the Hotel Commodore opened in 1919, and the Eastern Offices Building-better known as the Graybar Building-was completed in 1927, each with a passageway connection to Grand Central's Main Concourse.

As the neighborhood prospered, so did Grand Central. Grand Central Terminal, at various times, housed an art gallery, an art school, a newsreel movie theater, a rail history museum, and innumerable temporary exhibitions. All the while, it remained the busiest train station in the country, with a bustling Suburban Concourse on the lower level and famous long-distance trains like the Fast Mail, the Water-Level Limited, the Wolverine, and the Twentieth Century Limited departing from its Main Concourse. In 1947, over 65 million people-the equivalent of 40 percent of the population of the United States-traveled the rails via Grand Central Terminal.