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Press Release

November 10, 2010

[Bridges & Tunnels](#)

IMMEDIATE

Queens Midtown Tunnel Turns 70 Years Old November 15th

It took 20 years of lobbying and planning and four years of hard work but on Nov. 15th, 1940, the Queens Midtown Tunnel, linking Manhattan and Long Island City, Queens, opened to the public. At the time it was the largest, non-federal public works project in the nation.

"From its inception, the Queens Midtown Tunnel was a key link in the metropolitan region's transportation network, providing a vital conduit for businesses, daily commuters and families exploring the cultural riches that exist from Manhattan to Queens and Long Island," said MTA Bridges and Tunnels President Jim Ferrara.

To commemorate the tunnel's 70th birthday, MTA Bridges and Tunnels has a collection of historic photographs from the construction of the tunnel on display in the lobby of its lower Manhattan offices at 2 Broadway through the end of the month.

Inspired by the new Holland Tunnel on Manhattan's west side, civic and business groups began lobbying in the early 1920s for an East River tunnel to help handle a steady increase in traffic at its already clogged East River bridges. The city's Board of Estimate approved \$2 million to design and construct an East River tunnel but plans were put on hold when the stock market crash occurred in 1929.

In 1935, with the promise of \$58 million in Public Works Administration loans made available under President Franklin D. Roosevelt's New Deal programs, then Mayor Fiorello LaGuardia created the Queens Midtown Tunnel Authority, telling the new agency's three-members, "You are starting from scratch with no appropriation and nothing but an idea and a law."

A year later the Queens Midtown Tunnel Authority became the New York City Tunnel Authority, which merged again in 1946 with the Robert Moses-led Triborough Bridge Authority to become the Triborough Bridge and Tunnel Authority. Today, the agency retains Triborough Bridge and Tunnel Authority as its legal name but is known as MTA Bridges and Tunnels.

Ground-breaking for the Midtown Tunnel took place Oct. 2, 1936 with the push of a ceremonial button by President Franklin Delano Roosevelt. Over the next three years, the tunnel's two tubes were excavated using dynamite, drills and four circular cutting shields, about 31-feet in diameter, which were lowered into shafts at each end of the tunnel and hydraulically shoved through the riverbed until they met in the middle.

With each shove, construction workers known as sandhogs were right behind the shields assembling the 32-inch wide cast iron rings that line the tunnel. The sandhogs were paid \$11.50 a day. Once a ring was completed, 28 jacks on the back of the shield shoved the new rings using 5,000 pounds of pressure per square inch. The work was particularly difficult on the Manhattan side where the rock was made of schist, limestone, gneiss and dolomite. Work proceeded at a rate of about 18 feet per week for each shield.

In addition to having to stop and dynamite their way through the hard rock, every bit of excavated material had to be removed via the construction shafts at either end. To compare the work, the Lincoln Tunnel was driven at 45-feet a day, in part because the material was porous enough and could be pushed to the side instead of removed.

On Nov. 8th, 1939, Mayor LaGuardia pulled a switch to blast the last six feet of rock between the Manhattan and Queens shields in both tubes. A year and one week later, opening ceremonies were held on the Manhattan toll plaza, attended by President Roosevelt, who was the first person to drive through the new tunnel. Other attendees included Mayor LaGuardia, Sen. Robert Wagner, and the tunnel's Chief Engineer Ole Singstad, a well-known tunnel builder who finished building the Holland Tunnel after the death of its original engineer.

All totaled it took 54 million hours of labor to finish the tunnel, which cost 25 cents to cross when it first opened. It was also among one of the most photographed projects. Commercial photographers took more than 4,600 photographs documenting each aspect of its progress. Today these photographs are housed in the MTA Bridges and Tunnels Special Archive.

In its first full year of operation, 4.4 million vehicles used the tunnel, while in 2009 that figure was 27.7 million.

Seventy-years later, the tunnel appears much the same as it did when it opened in 1940, with the exception of the original brick roadway, which was replaced with asphalt in 1995, and the addition of E-ZPass technology. The last major rehabilitation project, a \$126 million project completed in 2001, replaced original 1930s materials and resulted in brighter lighting, new ceilings, new tiles along the walls and an entirely new traffic control system, including electronic message signs, and traffic control lights and signals.

MTA Bridges and Tunnels' facilities, which connect the five boroughs of New York City, are the Robert F. Kennedy, Throgs Neck, Bronx-Whitestone,

Henry Hudson, Verrazano–Narrows, Cross Bay Veterans Memorial and Marine Parkway–Gil Hodges Bridges, and the Queens Midtown and Brooklyn–Battery Tunnels.

Queens Midtown Tunnel By the Numbers

- The south tube to Queens is 6,272 feet while the north tube to Manhattan is 6,414 feet
- There are a total of 178 employees at the Queens Midtown Tunnel. This figure includes 112 Bridge and Tunnel Officers, 18 Sergeants and Lieutenants, 37 Maintenance workers, 4 Engineers, 6 Managers and 1 administrative worker.
- The tunnel's two ventilation buildings bring 3 million cubic feet of fresh air into the tunnels each minute, and provide a complete air change every 90 seconds.



Photo1: Sandhogs tighten a bolt in a tunnel–lining ring. Six cylindrical jacks on the back of a shield are visible behind the men. Photographer: Michael Bobco for Somach Photo Service. Feb. 26, 1939. Courtesy of MTA Bridges and Tunnels Special Archive



Photo 2: Groundbreaking ceremonies with throng of flag–waving well–wishers along Borden Avenue in Astoria, Queens. Oct. 2, 1936. Courtesy of MTA Bridges and Tunnels Special Archive



Photo 3: South tunnel bottom drift, west of Queens construction shaft. Oct. 26, 1937. Rappaport Studios. Courtesy of MTA Bridges and Tunnels Special Archive



Photo 4: An unidentified woman standing at the Queens Midtown Tunnel sign at the corner of Park Avenue and East 36th Street. Photographer unknown. 1940. Courtesy of MTA Bridges and Tunnels Special Archive