

Transit Walk – Deep Dive: The IND 6th and 8th Avenue Lines

October 1, 2023

Tour Leader – Andrew Sparberg

Station Sequence Shown Below

1 42nd -Bryant Park

2 59th -Columbus Cir

3 103rd & Cent Pk W

4 145th & St. Nicholas Ave.

5 168th & Broadway

6 190th & Fort Washington Ave.

7 42nd – 8th Ave.



TRIP SUMMMARY

The 8th and 6th Avenue subways of the IND (the Independent Subway System) opened in Manhattan in 1932 and 1940, respectively. Running parallel to the earlier IRT West Side route which opened in 1904 as a part of the first subway line, the lines share some familiar IRT characteristics, like four-track routes with express service in the middle tracks. But the IND builders also learned from earlier subway design limitations, and set out to improve service with higher speeds, more modern and spacious stations, upgraded track junctions, and logical express station spacing.

The builders did their jobs very well. The entire route is still in daily use. The stations, tracks, and structures have been rebuilt and renewed over the years, but many original features from the 1930s are still very much visible.

The route we will traverse is about fifteen miles total round trip, and includes a unique mixture of various types of subway construction, including cut and cover, deep bore tunnels, and multi-level stations.

We will begin at 42nd Street-Bryant Park, and continue northward, with stops at 59th-Columbus Circle, 103rd, 145th, 168th, and 190th Streets. We will then return to Midtown Manhattan, at 42nd Street-8th Avenue, traversing the fast express route between 125th and 59th Streets made famous in the Billy Strayhorn-Duke Ellington song Take the A Train.

The next pages contain photos of stations where we will stop, beginning with 42nd Street-Bryant Park and continuing in sequence with the itinerary numbers shown on the page 1

Enjoy the trip!

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	Location	What to see	Train from here...
1	42 nd St.-Bryant Park	Connects to both 42 nd St. Shuttle (part of the original 1904 NYC subway) and #7 line. Three levels of tracks here	D uptown to 59 th St.-Columbus Circle <i>Dec. 15, 1940</i>
2	59 th Street-Columbus Circle	Middle platform between two express tracks.	Transfer to C uptown - to 103 rd St. <i>Sep. 10, 1932</i>
3	103 rd St.-Central Park West	Unusual two-level local station	C uptown - to 145 th St. <i>Sep. 10, 1932</i>
4	145 th St-St. Nicholas Ave.	Two level express station with seven tracks, where the Washington Heights and Grand Concourse branches split.	A or C uptown - to 168 th St. <i>Sep. 10, 1932 upper</i> <i>July 1, 1933 lower</i>
5	168th St. - Broadway	Key interchange between #1 (IRT) and A, C (IND) trains. IRT tunnel is deep underground and was built first.	A uptown to 190 th St. <i>Sep. 10, 1932 upper</i> <i>Mar. 16, 1906 lower (IRT)</i>
6	190 th St. – Fort Washington Ave.	Unique station with upper and lower access points, accessible by elevators and ramps, due to topography.	A downtown to 42 nd St. – 8 th Ave. <i>Sep. 10, 1932</i>
7	42 nd St. – 8 th Ave.	Has very wide, offset platforms – total length is 4 blocks. There was once a southbound lower-level platform but the IRT #7 line extension now cuts right through.	Final Stop <i>Sep. 10, 1932</i>

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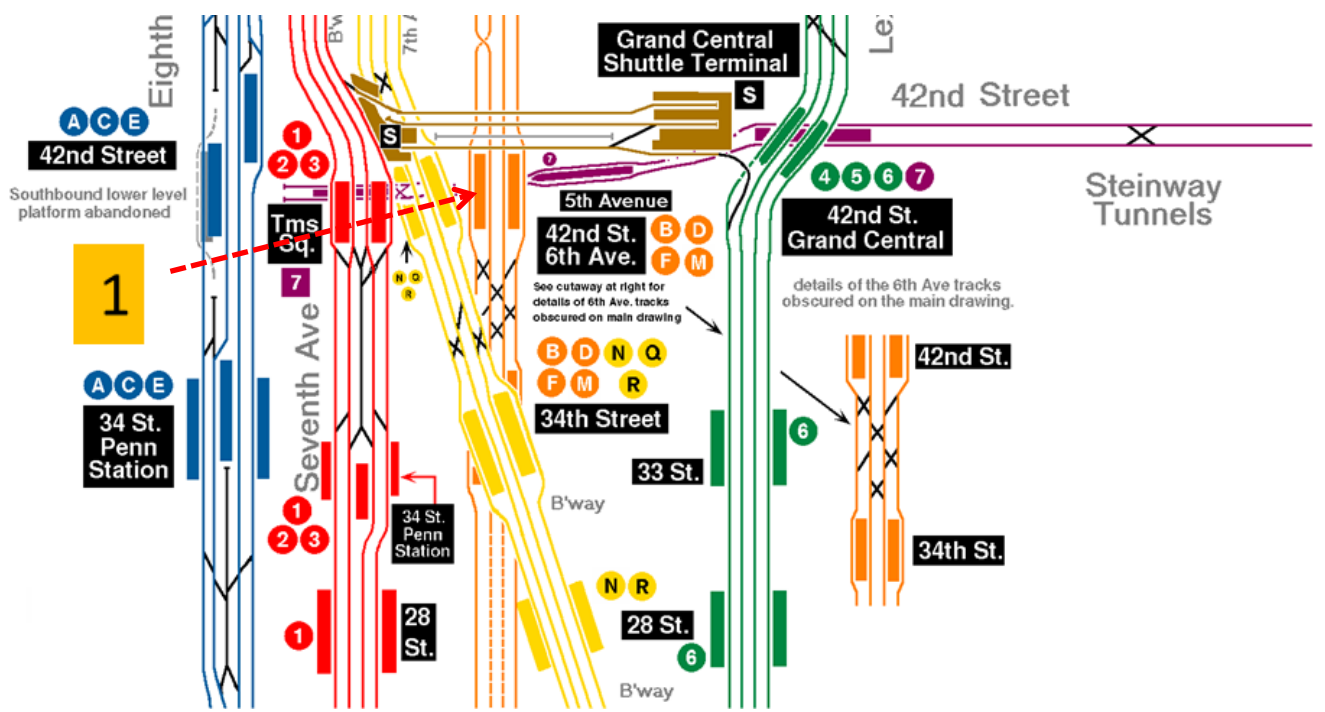
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We will begin at 42nd St-Bryant Park (B, D, F, M trains), at booth N503 at 42nd St. and 6th Ave. You will note the large mezzanine extending south to 40th Street. Such mezzanines were featured in most IND stations. The mezzanine extends all the way to the 34th Street Station, north end, outside of the fare control. It was closed to public use in the 1980s after some serious crimes were committed there. It's now used for storage.

Here the subway builders faced the challenge of two crosstown subway tunnels already there – the 42nd St. Shuttle Line (built 1904 as part of the original Contract 1 subway) under its namesake street, and the IRT #7 line (built 1927) in a deeper tunnel between 42nd and 41st Sts. Because this station opened in 1940, it had to be threaded under the Shuttle and above the #7 Line. The 42nd St. Shuttle is right below street level and splits the IND mezzanines in two. Adjacent to Booth N503 is a passageway (opened 1971) to the #7 Line. We will board an uptown D train and travel north to 103rd St., changing at 59th Street for an A train, because this particular weekend C trains are not operating and A trains are providing all local service along 8th Ave.

The diagram below illustrates the complexity of subway construction below 6th Avenue and 42nd Street. It and other similar diagrams on pages 6 and 9 are from www.nycsubway.org.

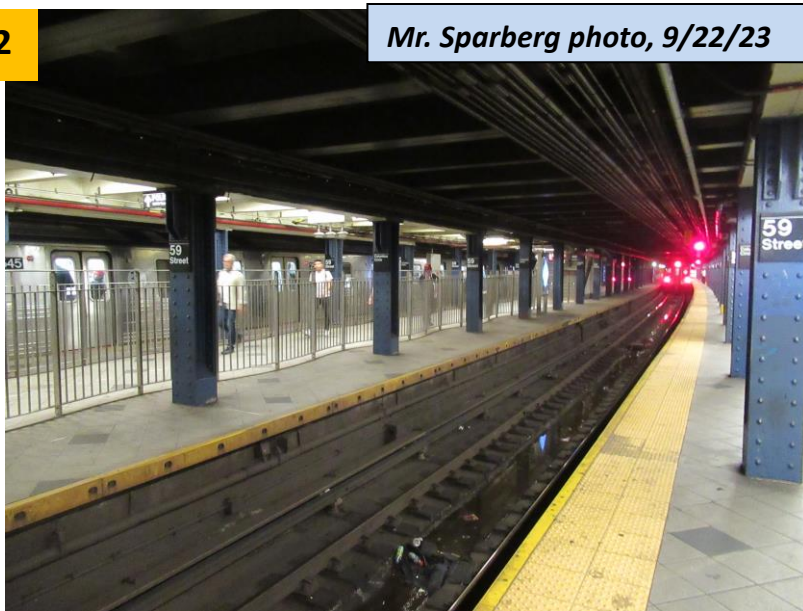
Numbers 1 through 7 in the squares correspond to the station sequence numbers on page 1.



59th Street/Columbus Circle was built with a third platform between the two express tracks in anticipation of heavy passenger use. At one time express trains opened doors on both sides. This practice is no longer followed, but the middle platform serves as a free transfer passage between the downtown #1 and the A, B, C, and D trains. From here to 207th St. we are traversing part of the first IND subway segment, opened in September 1932, including New York's longest underground express run, 3¼ miles, between 59th and 125th Streets. The reason will be explained during the tour. If you listen to the famous song "Take the A Train" (written by Billy Strayhorn and famously performed by Duke Ellington), you can imagine this fast run. B and C trains serve the local stops. Below photo shows the center platform at 59th Street.

2

Mr. Sparberg photo, 9/22/23



Under Central Park West the five stations between 72nd St. and 103rd Streets inclusive are in an unusual two-level tunnel with uptown trains on the upper level, and the express trains against the east wall on both levels. The design was used because street stairways are only needed on the west side of Central Park West, where all buildings are located, eliminating the need for a mezzanine level over four tracks. This design also combines the fare controls with the uptown platforms. One downside to the two-level design is that the noise level on the local platforms is very high whenever an express train passes through.

At 103rd Street the tracks begin their return to a conventional layout at 110th Street and begin to rearrange themselves. We will get off at 103rd Street to see how the uptown express tracks drop from the upper to the lower level in order for the line to resume its conventional layout at 110th Street. That's why 103rd Street Station is like no other New York station.

The next page has a track diagram and photos that illustrate the unique area at the 103rd and 110th Street Stations in more detail. Below this complicated track work, the #2 and #3 train between 96th and 110th Streets runs in a deep tunnel below 104th Street, which opened in 1904 as part of the first IRT subway. There is no #2/#3 station here; just the tunnel itself.

3

Track diagram, left, shows the B and C train stops at 103rd, 110th, and 116th Streets. The photos show the 103rd St. Station, uptown platform, where we will get off the train and then continue. Top photo is looking downtown. Bottom photo shows a Bronx-bound D express train doing a “deep dive” so that it can emerge on the east side of the tunnel at 110th Street. (Mr. Sparberg photos, 8/1/2023)



After 103rd Street the uptown local tracks remain on the top level but must realign to the east side of Central Park West. The arrow on the diagram above shows how this happens. The uptown express track must dive under the uptown local. The uptown local moves all the way to the right and at 110th resumes its normal layout on the right. At 110th Street you can see the uptown express ascending back to the single lever tunnel in the middle of the station. The two downtown tracks, south of 110th Street, simply drop to the lower level and remain there to a point north of 59th Street.

Below the ABCD train tunnel, the #2 and #3 train tunnel runs below 104th Street, on its way between the 96th and 110th Street Stations. This route is part of the original 1904 subway. There is no station on the #2 / #3 line here; it is below the B and C trains, as indicated by the arrow on the track diagram.

The next two pages show construction photos between 96th and 125th St. Stations.

Below, Central Park West looking north from 102nd St., July 1925, above the 103rd St. Station site. Below, a two-level tunnel will be built. Construction began earlier in 1925 at 121st St. and 8th Ave, Note the streetcar tracks, with conduit between the running rails. This route is now the M10 bus.

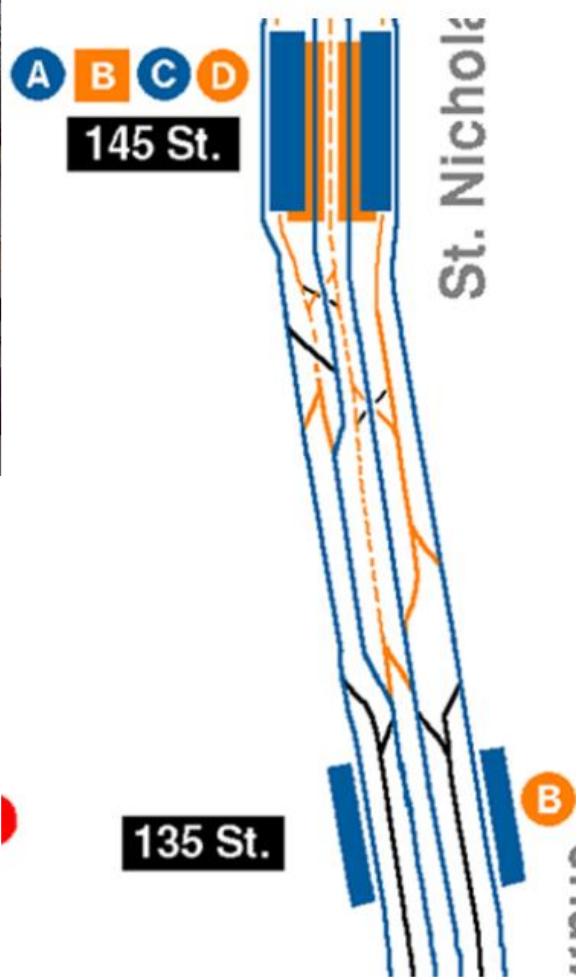


Above, construction proceeds below Central Park West looking north from 108th St., December 1925. Here the four tracks will realign onto one level, from 110th St. Station northward. IRT 9th Ave. elevated is in background.

Below, a car clearance template is working in the tunnel between 96th and 103rd Streets, 1928.



Above, intersection 121st St., 8th Ave., & St. Nicholas Ave. in April 1925 about a month after construction began. 9th Ave. elevated is above, running atop 8th Ave. at this point. The elevated closed in June 1940 and was promptly razed. New subway will curve left at the intersection and jog left about 45 degrees. 125th St. Station is 4 blocks north and is below St. Nicholas Ave.



North of 125th, extending to 145th Street. is an unusual six track layout, including the 135th Street Station, the only station in NYC that has six tracks passing through on one level between two local platforms (Hoyt-Schermerhorn station in Brooklyn has six tracks but has three island platforms). Between 135th and 145 is nicknamed "Homeball Alley" due to the large number of switches and home signals, because the Washington Heights and Concourse branches diverge and converge here. Home signals control entrances to switches; "Ball" is subway slang for signal.

We will remain on our train until 145th St. At right is the track diagram in this area. A home signal controls train movement through switches; that's the origin of the term "Homeball Alley."

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D Train is on lower (Bronx) level on downtown track at 145th St. Notice how wide the uptown platform is. (Mr. Sparberg photo, 8/1/2023)

145th Street Station, above, has seven tracks on two levels. Washington Heights trains (A and C) use the 4-track upper level, while Bronx trains to and from the Grand Concourse (B and D) use the 3 track lower level. The station and the area immediately south are a good example of the many flying junctions built on the IND subway. This station was built on two levels in order to speed service, separating the Washington Heights and Grand Concourse services.

The uptown platform on the lower level is exceptionally wide, because the station footprint is four tracks wide to match the upper level.

We will board an uptown A train on the upper platform and continue to 190th Street., stopping at 168th Street, the north end of local C service and an important transfer point to the #1 IRT train. Photo below shows an A train stopping at 168th and illustrating how express trains use what would be the local track at most express stations.

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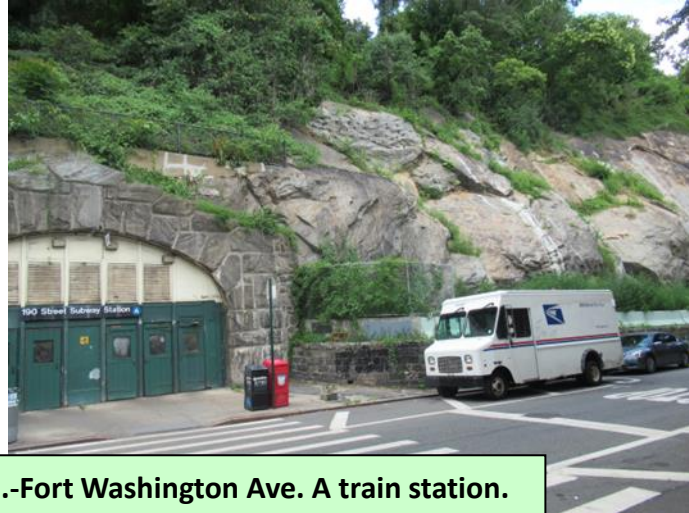


R46 A Train consist is shown stopping at 168th St. "scraping the wall." (nycsubway.org photo, 11/15/2016).

168th Street has an unusual history, because the A and C station was built in 1932, 26 years after the #1 station, which is about 150 feet below the street level and built in 1906. The IND station is a cut-and-cover station close to the street surface, so the challenge here was to build the station above the older #1 line. While 168th on the A and C appears to be a typical four track, two platform express station with a mezzanine above the platforms, in reality the normal local and express pattern is reversed – the express “scrapes the wall” and the local trains turn around using the middle tracks and a small underground yard area just to the north.

We continue north on the A train to the 190th Street Station, which is situated inside a steep hill and has entrances both above and below. Once there you will understand more. Photos below are at 190th St.

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Various views of the 190th St.-Fort Washington Ave. A train station. Rock behind the Post Office truck is Manhattan Schist, a particularly hard substance. (Mr. Sparberg photos, 8/1/2023)



From 190th, we will reverse direction and travel without making additional stops until we reach 42nd St. – 8th Ave., the conclusion of our Deep Dive trip.

42nd - 8th Ave. is an express station with four tracks and two island platforms, but it also has many unique features. It is part of the overall Times Square/42nd Street complex and is thus heavily used. The original IND builders designed the platforms extra wide for that very reason, which is why they are offset from north to south; the southbound platform extends between 40th and 42nd Sts. and the northbound between 42nd and 44th Sts., with a slight overlap in the middle. There is a full mezzanine above the entire platform length that allows transfer to the rest of the Times Square complex and to the Port Authority Bus Terminal. There is also an abandoned lower level with one track and one side platform on the downtown side, that was used in the 1960s and 1970s for rush hour downtown E trains and also to begin special services to the Rockaways and Aqueduct Race Track. A number of scenes from the 1990 film *Ghost*, starring Patrick Swayze and Demi Moore, were filmed on the lower level platform. It has since been closed permanently to allow the #7 line extension to pass below the IND tunnel.

Photos below show the mezzanine level (left) with its shops, and the uptown platform (right), showing its width.

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Mr. Sparberg photos, 9/22/23

