

New York City Transportation Infrastructure Proposal

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Presented to
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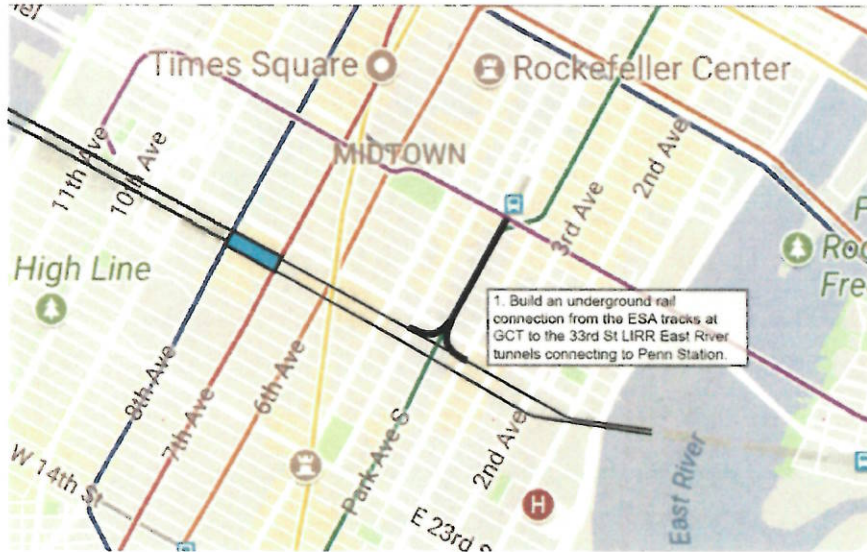
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1. Build an underground rail connection from Grand Central Terminal's new East Side Access tracks, from their current end at 37th Street, to connect to the east-west main rail line under 33rd Street from the east end of Penn Station to the East River rail tunnel. This will provide a direct rail connection between Penn Station and Grand Central Terminal.



Analysis:

- The Farley Post Office conversion should be analyzed to see whether any of these elements are included in the scope,
- There may be existing tunnels there that may be dormant, as is the case in other locations, which could be successfully leveraged to mitigate the costs of recommendation #1.

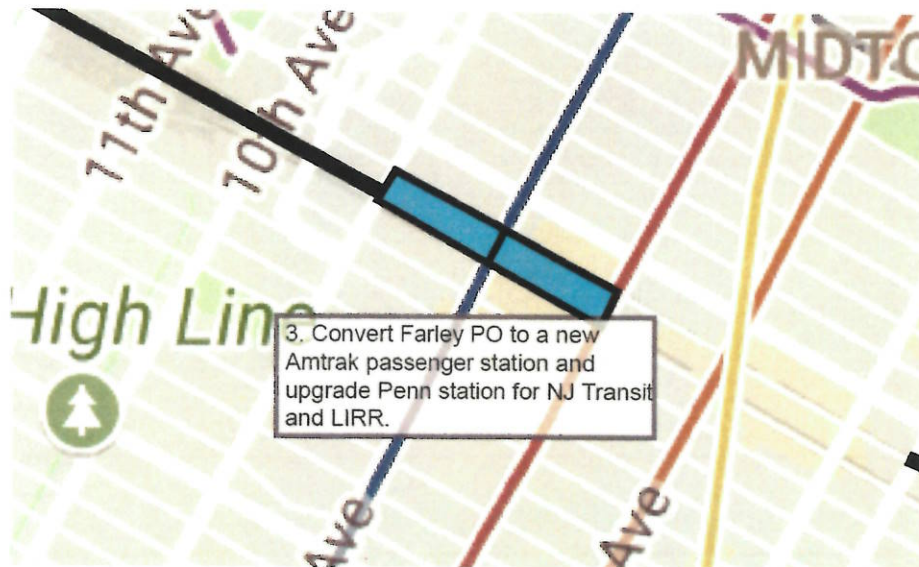
2. Connect the lines passing through the East River railroad tunnel to the western end of a re-opened Lower Montauk commuter line of the LIRR.



Analysis:

- If recommendation #2 is more feasible as an above-ground connection, there will be “eminent domain” issues to consider (possibly suggesting a subterranean connection to the western end of the Lower Montauk line as more feasible), since some of the needed above-ground space may already be committed to housing or other projects.
- There may be existing tunnels there that may be dormant, as is the case in other locations, which could be successfully leveraged to mitigate costs.

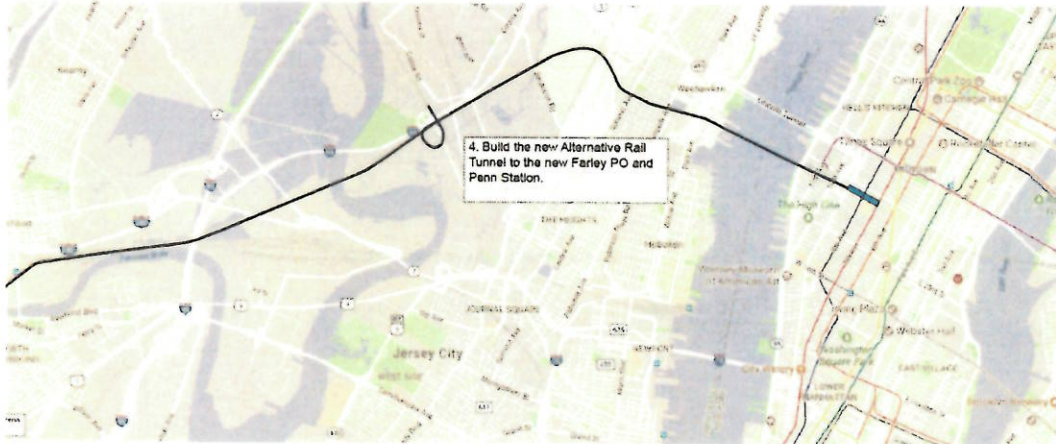
3. Complete the conversion of the Farley Post Office to the west of Penn Station to make it the Amtrak rail passenger terminal, while Penn Station will continue to serve as a commuter rail station for NJ Transit and the LIRR.



Analysis:

- Verify whether this is the current plan for these buildings. The original East Side Access business case was based on (per time & motion studies) allowing LIRR passengers to disembark at GCT and save them the return trip (after heading west to Penn).
- Penn will still be the termination of the LIRR runs, and the MTA / LIRR will surely keep & further develop Atlantic Terminal as another important hub

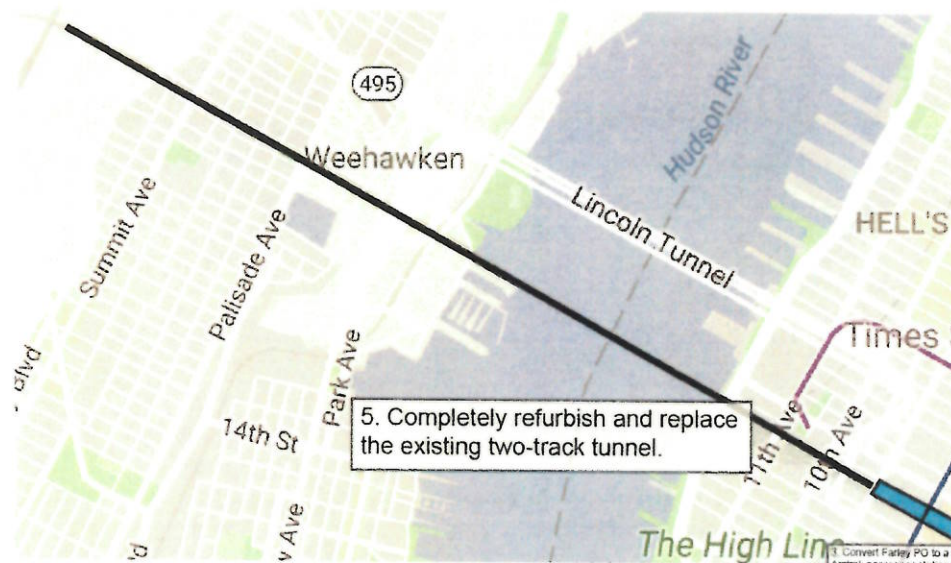
4. Build the new Alternative Rail Tunnel (ART) from New Jersey as proposed in the Gateway Project, to provide four-track rail tunnel access from Newark Penn Station to Manhattan Penn Station.



Analysis:

- Politically, the proposed ART are the very first victory the NJ / NY collaboration needs to achieve.
- The two tunnels from 1889 (Secaucus) must be supplemented, and passenger service must be able to rely on viable NJ-NY rail tunnels.

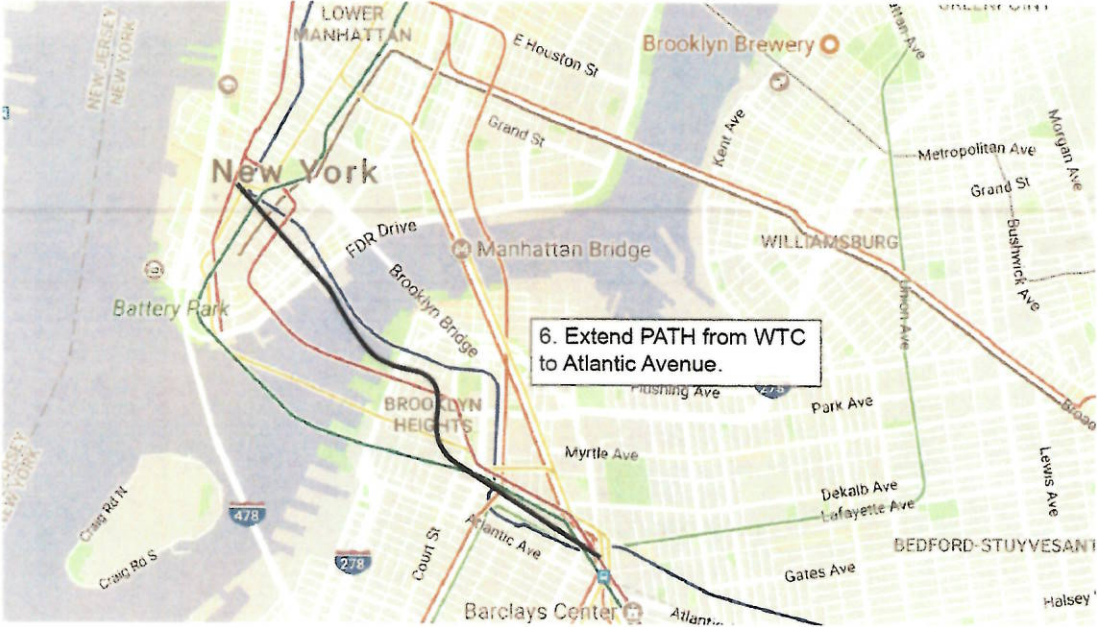
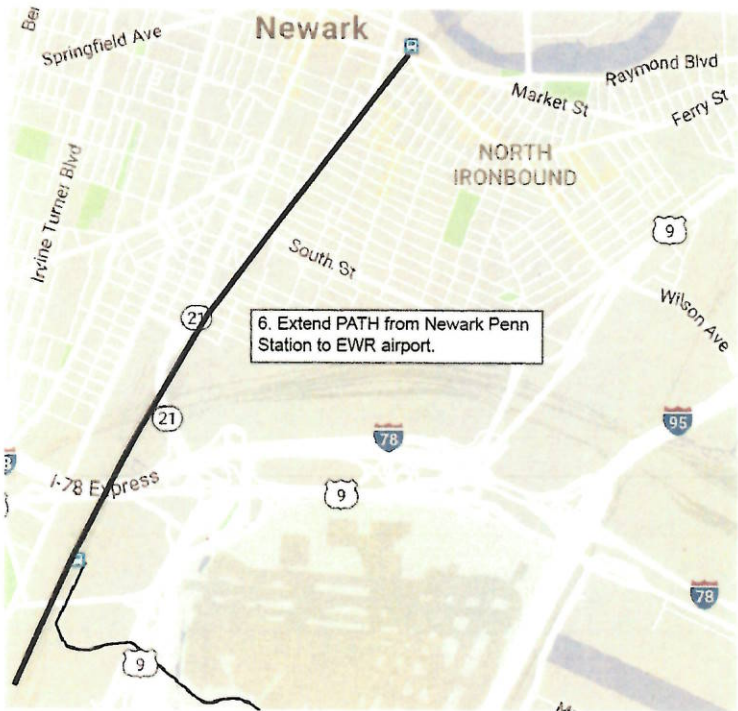
5. Then completely refurbish and replace the existing two-track Hudson River rail tunnel from Secaucus in New Jersey to Penn Station.



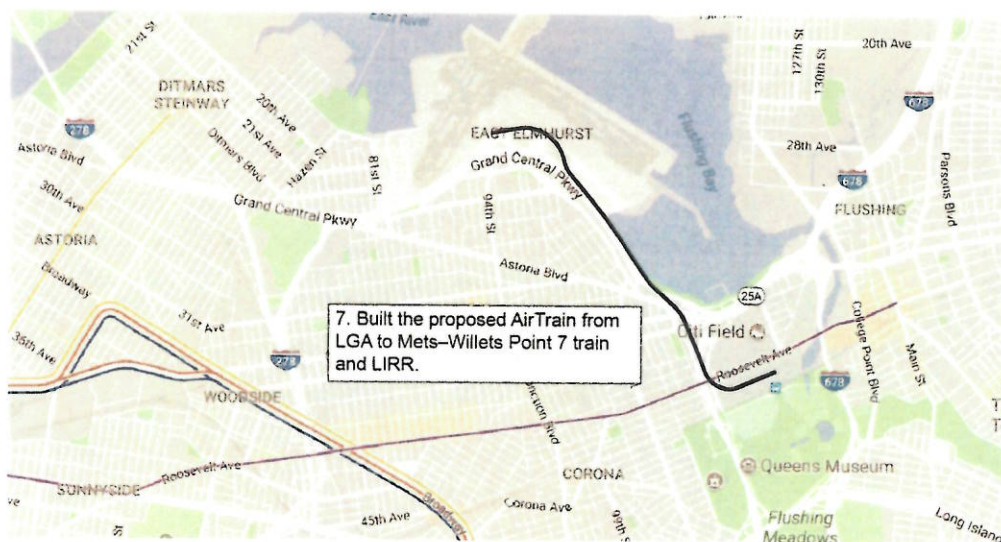
Analysis:

- The 2 tunnels from 1889 (Secaucus) can be refurbished as proposed. By doing so, the following issues and benefits are realized:
 - Eminent domain issues for new surface real estate (still a challenge for the ART expansion, but negotiable),
 - Successful / acceptable hydrology adjacent to the existing tunnels; 128 years of service to date,
 - Developing the ART in tandem will assure the ridership that greater throughput is built into the plans' results.

6. Connect the existing PATH commuter rail transit line from Newark Penn Station to the Newark Airport on the west, to the southern PATH line to the World Trade Center in lower Manhattan, and then east to the Atlantic Terminal subway station / LIRR, so that a rail connection is possible between Newark and JFK airports.



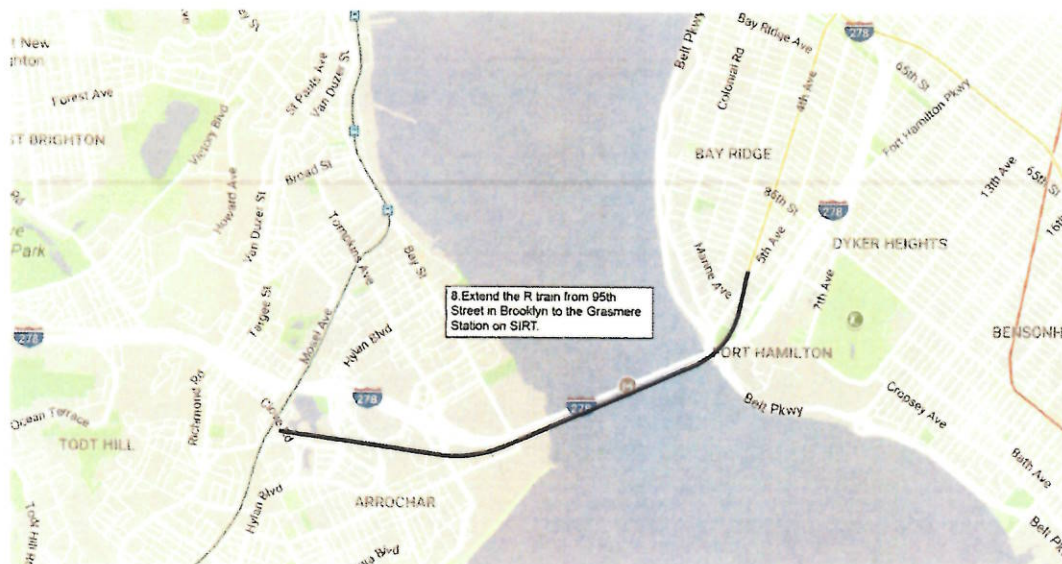
7. As suggested by New York Governor Andrew Cuomo, build a rail connection (AirTrain) from LaGuardia Airport to the Mets-Willets Point Subway Station, potentially extending the connection all the way to the JFK AirTrain at Jamaica Station, providing a direct link between these two airports.



Analysis:

- This is a political win for Governor Cuomo and for Mayor De Blasio; a great rallying point on which they will be united.

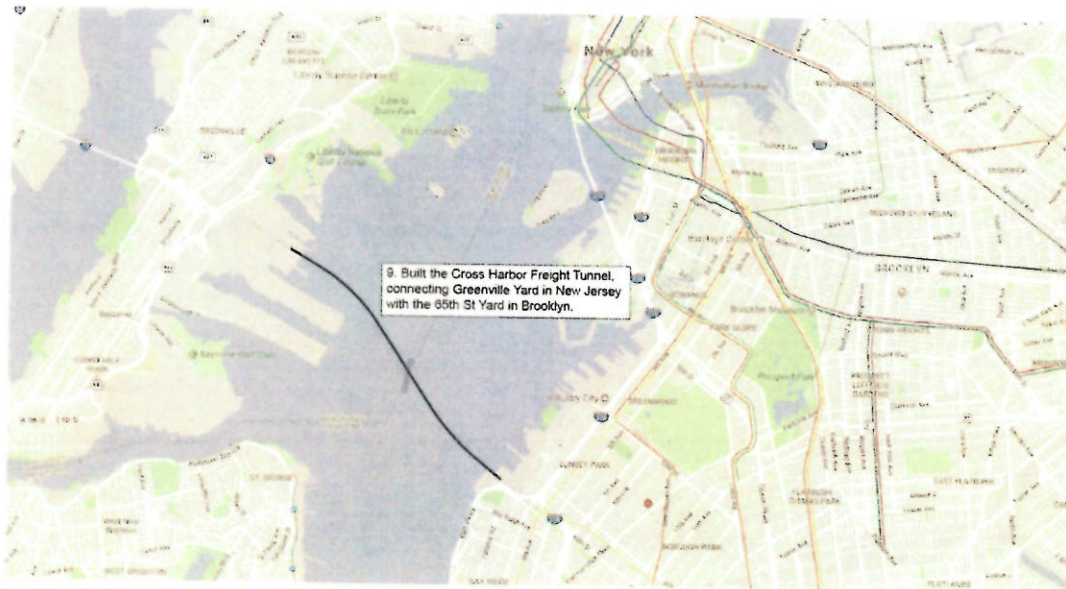
8. Build the subway connector from Brooklyn’s Bay Ridge 95th Street station, under the Verrazano Narrows, to connect with the existing Staten Island Rapid Transit (SIRT) rail link to Grasmere station on Staten Island.



Analysis:

- A very logical construct; this addresses a long-standing feeling of disenfranchisement from Staten Island residents,
- Going under the Narrows needs to be evaluated from an engineering and hydrology-expertise perspective, but barring any unforeseen conditions, this would unite Staten Island to the other New York boroughs in a very logical way.

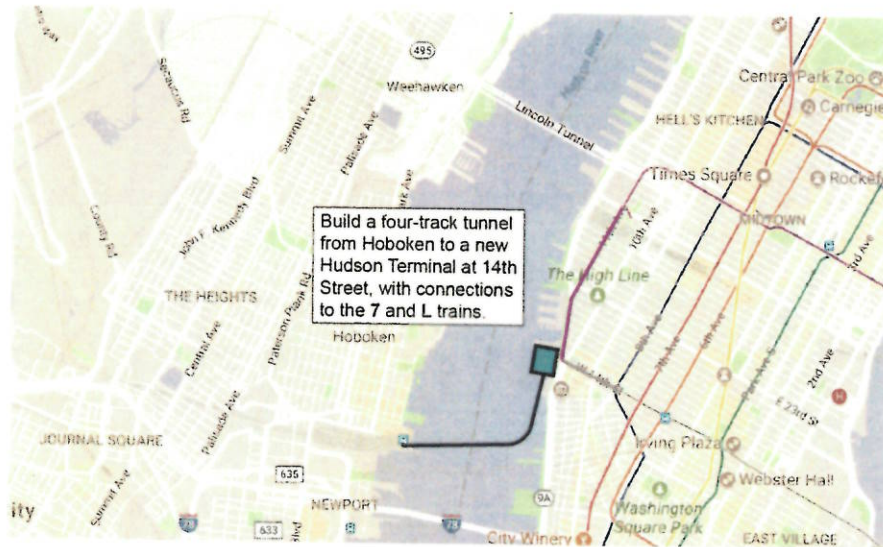
9. Construct a new freight railroad tunnel under the Lower New York Harbor, between the Greenville Yard in Bayonne, New Jersey, and the Fort Hamilton freight rail spur along the Bay Ridge railroad line through Brooklyn, to connect with the LIRR to transport trucks and other freight to intermodal terminals in Brooklyn or Queens.



Analysis

- CSX, American President Lines (APL) and the other 3PL firms in the Northeast can be approached to put up funding, with an appropriate ROA for them as well as to the economy of the area. It is a great political 'win' for the freight firms to be seen by the public as aiding the passenger network – their collaboration is ensured!
- There is also synergy in the fact that other passenger-based construction (within this 12-point plan) would already have "opened up" the area with regards to permits, labor availability, the boost to unionized trades, etc.

10. Build a four-track tunnel from Hoboken to a new Hudson Terminal at 14th Street, with connections to expanded 7 and L trains.



Analysis

- This is an excellent, proactive way to anticipate and reduce midtown (34th St., 42nd St.) traffic, as well as reduce Wall St. / WTC passenger congestion.
- It would also optimize the investment already made in the #7 and L lines, and give them more of a business case to expand as their user base grows.
- This fully leverages the already-existing four rail lines heading to Hoboken, built when it was the hub for travel to Manhattan by ferry.
- It would also revitalize the meatpacking district, and all the restaurants, nightclubs, and architectural firms already comprising its business makeup. For residential developments just north of there (e.g. Hudson Yards) this assures continuing real estate valuation and 'attractive-to-businesses' staying / remaining in Manhattan, possibly mitigating the cost of some of the tax incentives currently given to businesses to remain here.

11. Expand the West Side rail line from the Henry Hudson Bridge in Upper Manhattan to Penn Station in Midtown for direct commuter and intercity railroad passenger service from Upstate New York.

Analysis

- This expansion can be included in the 'Albany agenda' advanced by Governor Cuomo;
- Although immediate ridership numbers might not be there to amortize the cost as quickly (as the other parts of this total plan) it creates a basis for increased real estate values and city planning up through Riverdale, Yonkers, and Westchester,
- This could spearhead a "direct to Midtown" from the HH Bridge, and points north would also benefit.

12. Provide loop tracks or passenger train service centers at Secaucus in New Jersey, Woodlawn in the Bronx (MNR), and at Sunnyside Yard in Queens (LIRR).



Analysis

- The subway systems currently moving people from Bronx to Manhattan and Brooklyn (through the Green lines 4, 5, 6) and from Manhattan to Queens (through the Blue lines A, C, E, F) would greatly benefit from the 'loop track' concept,
- Coupled with modern CBTC / PTC this could increase passenger throughput by 30 – 40%,
- The Sunnyside tie-in is certainly a 'win' for the LIRR commuters, who can transfer at Sunnyside directly to this new loop, and bypass GCT and Penn to end up in Woodlawn, for example,
- The Secaucus tie-in is a 'win' for NY commuters to commute to Queens and points east, bypassing the congestion of Manhattan and increasing the speed-of-throughput for others,
- What must be considered (through a cost-benefit analysis for the MTA) is potential lost revenue for MetroNorth (e.g. from GCT up to Woodlawn); this is easy enough to calculate.

13. Rebuild and refurbish the MTA subway signaling and communications systems and electrification/ third-rail system infrastructure.

Analysis

- This is a sure win - this is priority #1 in the public eye – Mayor de Blasio and Governor Cuomo both will partner on this,
- The communications systems (CBTC computer-based train control or PTC positive train control) to replace the aging signal system, as well as a 3rd rail infrastructure safety redesign, can both be performed in tandem with MTA "FastTrack" work crew *and cost* optimization across the trades, for each linear segment as it is scheduled with its work orders.

Analysis:

Maps by Jason Ross / Google Maps

- Atlantic Terminal is already well-positioned for the passenger relay westbound to Newark's EWR.
- Eastbound service continuity to the Air-Train at Jamaica Station via the A and E, F connections is assured, since Atlantic is already robust enough to handle the expected / increased volume.
- Atlantic Terminal has already benefited from the increased area presence brought about by the Barclays Center, already providing a public-transportation option since its inception.
- The logical drop in TLC fares between / to the EWR and JFK needs to be calculated, and appropriate mitigating dialogue begun, to ensure there is no union-based resistance to this significant improvement in travel-time for the ridership.