

Immediate Infrastructure Priorities for the New York-New Jersey-Connecticut Metropolitan Region: Our Methodology

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To calculate the value of the region's shovel-ready infrastructure projects and assess their overall economic impact, we looked at the sub-project budgets in the following capital plans:

1. [MTA Capital Plan](#)
2. [NJTransit Capital Plan](#)
3. [AmTrak Northeast Corridor Capital Investment Plan](#)
4. [Gateway: Hudson Tunnel](#)
5. [Gateway: Portal North Bridge](#)
6. [NYCHA Five-Year Plan](#)

We then categorized specific sub-projects as shovel-ready if they did not require rezoning, environmental review, or other approvals. Furthermore, we categorized especially large and complicated projects, such as the Second Avenue Subway extension, as non-shovel ready.

These infrastructure investments generate jobs through direct construction jobs, the increased purchasing power of employed workers, and the purchase of building materials and services. To calculate the economic impact of these projects, RPA used a ratio of jobs per billion dollars of investment. The ratios range from approximately 6,100 jobs per billion dollars to approximately 6,800; further details on the ratio corresponding to each capital plan can be found [here](#). We used an employment multiplier of 1.8, calculated by the consulting firm EY regarding the MTA Capital Plan, to estimate the economic output for each project.

Where projects span multiple years, we have assumed a steady level of investment across all scheduled years of construction.

You can find a spreadsheet with all sub-project budget amounts and their estimated economic impacts [here](#).

Infrastructure Projects

Summary

Project	Total investment required	Federal funds required	Federal funds source	Benefits	Total jobs created, according to external reports	Direct and indirect jobs created from shovel-ready projects
<u>MTA Capital Plan</u>	\$51.5 billion (\$36.3 billion shovel-ready)	\$10.7 billion Requesting additional \$12 billion from federal government because of COVID	Planning federal revenues: Federal Formula (\$7.5 billion), Federal New Starts (\$2.9 billion), Federal Flexible (\$275 million)	70 new ADA-accessible stations to benefit people with disabilities; increased service to connect lower-income areas to the opportunities available in the rest of the city; signal upgrades leading to fewer delays, which have a disparate impact on low-income workers; fleet improvements, like electric buses, that improve air quality and benefit everyone in NYC	350,000 over 5 years (MTA report), 287,000 over 5 years (EY report)	232,106
<u>NJTransit Capital Plan</u>	\$17 billion FY21-FY25; \$37.5 billion over the next 11+ years (all shovel-ready)	\$5.78 billion	\$811 million in Federal Transit Administration funds for the Portal North Bridge already secured; otherwise, no federal funding secured yet	Greater accessibility for people with disabilities; more reliable service to connect people without private vehicles to educational and professional opportunities; cleaner air, less congestion, and safer streets through greater use of public transit	245,000 job-years of direct, indirect, and induced jobs	245,347

<u>Amtrak NE Corridor Capital Investment Plan</u>	\$32.2 billion for FY20-FY24 (\$18 billion shovel-ready)	\$7.6 billion has been requested for projects currently in development; currently an additional \$6.6 billion remains unfunded beyond that	Federal Transit Administration's Capital Investment Grant Program; Federal-State Partnership for State of Good Repair Program	Links more affordable suburban areas with opportunities in expensive cities throughout the NE; in this way, may increase access to opportunity and reduce the disruption of delays for people who cannot afford big city rents (though may also increase the rent of suburbs by providing more efficient transport links)	None reported	116,100
<u>Gateway Program - Hudson Tunnel Project</u>	\$11.6 billion total; financial commitment secured from NY, NJ, Port Authority, and Amtrak (none shovel-ready)	\$5.5 billion	Requested from Federal Transit Administration's Capital Investment Grants (FTA CIG) program	Links more affordable suburban areas with opportunities in high-cost NYC; in this way, may increase access to opportunity and reduce the disruption of delays for people who cannot afford NYC rents (though may also increase the rent of suburbs by providing more efficient transport links)	72,000 direct jobs and \$19 billion in additional economic activity	N/A - not shovel-ready
<u>Gateway Program - Portal North Bridge</u>	\$1.8 billion (all shovel-ready)	\$766.5 million	Federal grants already received from FTA and FRA in installments; the rest promised to be in the pipeline by the Trump Administration	Portal North Bridge represents the biggest single point of failure in the Northeast Corridor; improving it will improve reliability for the entire system, connecting lower-cost suburbs will urban hubs of opportunity without adding to congestion or pollution	None reported	11,610

<u>NYCHA</u> <u>5-Year Plan</u>	\$6.7 billion (all shovel-ready)	\$238 million	Annual Federal Capital Grants	Greater compliance with health and safety standards alongside increased building accessibility will help some of the most vulnerable New Yorkers live in safe conditions. Alongside health benefits, stable, secure housing is associated with better school performance and higher lifetime earnings	None reported	45,024
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MTA Capital Plan

Sub-project	Shovel ready?	Investment required (\$ million)	Direct and indirect jobs
Subway signal modernization	Yes	\$7,100	45,341
New subway cars	Yes	\$6,100	38,955
Subway track improvements	Yes	\$2,600	16,604
Subway station accessibility enhancements	Yes	\$5,200	33,207
Other subway station improvements	Yes	\$4,100	26,183
Electric buses	Yes	\$1,100	7,025
Replacement buses	Yes	\$2,300	14,688
Additional buses	Yes	\$217	1,386
Onboard information screens, camera-enforced bus lanes, and traffic signal priority	Yes	\$107	683
Bus depot renovations	Yes	\$880	5,620
Signals and communications upgrades	Yes	\$364	2,325
Rolling stock	Yes	\$487	3,110
LIRR track upgrades	Yes	\$1,000	6,386
LIRR station improvements	Yes	\$910	5,811
M-3 replacement	Yes	\$495	3,161
MTA / Metro-North station upgrades	Yes	\$621	3,966
Harlem Line capacity improvements	Yes	\$184	1,175

Job-per-billion ratio

6386

Benefits

70 new ADA-accessible stations to benefit people with disabilities; increased service to connect lower-income areas to the opportunities available in the rest of the city; signal upgrades leading to fewer delays, which have a disparate impact on low-income workers; fleet improvements, like electric buses, that improve air quality and benefit everyone in NYC. More broadly, the MTA is essential to the New York City metro area's recovery from the COVID pandemic. Subway and bus service is essential to people's ability to commute to work, shop, attend museums and concerts, and spend money. Without the MTA, New York will not be New York.

West of Hudson improvements	Yes	\$187	1,194
Verrazano Bridge upgrades	Yes	\$1,200	7,663
Hugh L Carey and Queens Midtown Tunnel upgrades	Yes	\$99	632
RFK Bridge upgrades	Yes	\$719	4,592
Henry Hudson Bridge upgrades	Yes	\$135	862
Throgs Neck Bridge upgrades	Yes	\$241	1,539
Second Ave subway extension, East Side Access for LIRR customers traveling to Grand Central, LIRR mainline expansion, Grand Central Terminal Trainshed and Park Avenue Tunnel & Viaduct, Central Business District Tolling	Complex projects that will take significant time & planning	\$15,000	95,790
Total shovel-ready		\$36,346	232,106

NJTransit Capital Plan

Sub-project	Shovel ready?	Investment required (\$ million)	Direct and indirect jobs
Rail infrastructure	Yes	\$10,100	65,983
Rail expansions	Yes	\$1,800	11,759
Rail fleet	Yes	\$3,600	23,519
Bus infrastructure	Yes	\$1,400	9,146
Bus garages	Yes	\$2,700	17,639
Bus fleet	Yes	\$6,500	42,465
Regional transit projects	Yes	\$8,800	57,490
Light rail non-fleet investments	Yes	\$1,800	11,759
Light rail fleet investments	Yes	\$85	555
IT, Innovation, Transport Network Improvements	Yes	\$660	4,312
Access Link	Yes	\$110	719
Total shovel-ready		\$37,555	245,347

Job-per-billion ratio	6533
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Benefits
Greater accessibility for people with disabilities; more reliable service to connect people without private vehicles to educational and professional opportunities; cleaner air, less congestion, and safer streets through greater use of public transit

Amtrak NE Corridor Capital Investment Plan

Sub-project	Shovel ready?	Investment required (\$ million)	Direct and indirect jobs
Capital renewal of basic infrastructure	Yes	\$4,300	27,735
Special projects, including major backlog projects and improvement projects	Yes	\$13,700	88,365
Portal North Project and Hudson Tunnel Project	Hudson Tunnel Project undergoing environmental review	\$9,400	60,630
Walk Bridge Program and plans to replace Devon and Saugatuck River Bridges	Combined Environmental Assessment/Environmental Impact Evaluation currently under review	\$1,200	7,740
Total shovel-ready		\$18,000	116,100

Job-per-billion ratio	6450
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Benefits
Links more affordable suburban areas with opportunities in expensive cities throughout the NE; in this way, may increase access to opportunity and reduce the disruption of delays for people who cannot afford big city rents (though may also increase the rent of suburbs by providing more efficient transport links)

Gateway: Hudson Tunnel and Portal North Bridge

Sub-project	Shovel ready?	Investment required (\$ million)	Direct and indirect jobs
Hudson Tunnel construction	Undergoing environmental review	\$11,600	74,820
Portal North Bridge construction	Yes	\$1,800	11,610
Total shovel-ready		\$1,800	11,610

Job-per-billion ratio	6450
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Benefits
<p>Hudson Tunnel project links more affordable suburban areas with opportunities in high-cost NYC; in this way, may increase access to opportunity and reduce the disruption of delays for people who cannot afford NYC rents (though may also increase the rent of suburbs by providing more efficient transport links). Portal North Bridge represents the biggest single point of failure in the Northeast Corridor; improving it will improve reliability for the entire system, connecting lower-cost suburbs will urban hubs of opportunity without adding to congestion or pollution</p>

NYCHA Five-Year Plan

Sub-project	Shovel ready?	Investment required (\$ million)	Direct and indirect jobs
Address deteriorated heating, elevators, facades and roofs	Yes	\$4,800	32,314
Address lead, mold, heating, elevators and pests	Yes	\$1,200	8,078
Address building exteriors, including brick and roof projects	Yes	\$124	835
Elevator replacements	Yes	\$114	767
Boiler repairs and replacements (State plan)	Yes	\$350	2,356
Elevator replacements (State plan)	Yes	\$100	673
Total shovel-ready		\$6,688	45,024

Job-per-billion ratio	6732
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Benefits
Greater compliance with health and safety standards alongside increased building accessibility will help some of the most vulnerable New Yorkers live in safe conditions. Alongside health benefits, stable, secure housing is associated with better school performance and higher lifetime earnings