

NEW YORK CITY BY THE NUMBERS

\$55.5 Billion

in 2020 Construction Spending

128,200Construction Jobs in 2020

\$168.5 Billion

in 2020-2022 Construction Spending

THE COVID-19 IMPACT

The COVID-19 pandemic and resulting recession have been extremely difficult for New York City and its building industry. Construction activity in January and February was on pace to result in another standout year for growth. However, as the virus swept through the city in March, April and May, economic activity virtually shut down and local restrictions on construction took effect.

Beginning on March 22, only essential construction, which included healthcare facilities, necessary safety improvements and infrastructure projects, was allowed to continue while much of the city's workforce was either laid off or forced to work at home.

When the non-essential construction ban was lifted on June 8, activity slowly resumed over the summer. Virtually no sector has been immune from harm, and New York's residents and businesses are still under numerous restrictions. As New York City continues to grapple with this devastating pandemic and the shortand long-term impacts, a slow but steady recovery has begun.

In order to jump start this recovery, a significant national investment in 21st century infrastructure is needed. Investing now rather than later will create hundreds of thousands of jobs, counter the millions

of dollars lost in wages and add billions in economic growth. History shows that an investment in infrastructure is an investment in people.

As one of the largest sectors in the city and state, the building industry is strengthening their commitment to projects that help our neighbors get back to work and support communities, including affordable housing, schools, hospitals and key public works. The building industry is woven into the fabric of New York, and working together, will build a better New York for all.



CONSTRUCTION SPENDING

In last year's Construction Outlook, the New York Building Congress forecasted construction spending to top \$61.5 billion in 2019, followed by \$65.9 billion in 2020 and \$62.1 billion in 2021. While actual construction spending in 2019 (\$60.6 billion) notched close to the forecasted amount, the COVID-19 pandemic, State-ordered halt of non-essential construction and overall downturn in the regional economy have resulted in a dramatically different forecast for the years ahead.

The New York Building Congress forecasts \$55.5 billion in New York City construction spending in 2020. This amount would represent an 8.5 percent decline from 2019's \$60.6 billion in construction spending. Through 2020, a gain in government spending is expected to counteract larger losses in the residential and non-residential sectors. Despite the drop, the \$55.5 billion in total spending would match 2017's then-record-breaking amount and would exceed the spending from eight of the last 10 years.

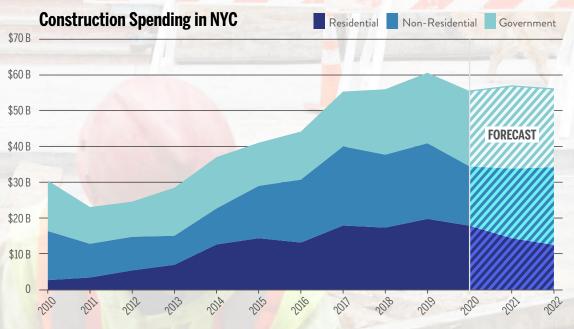
Over the following two years, the Building Congress anticipates total spending will remain relatively flat, increasing to \$56.9 billion in 2021 and dipping back down to \$56.1 billion in 2022. Over the forecast years, government spending will remain above 2019 levels, non-residential will increase year over year back to 2019 amounts and residential spending will continue to decline.

EMPLOYMENT

With the decrease in overall spending, the total amount of New York City construction jobs is forecasted to drop to 128,200 in 2020, slightly below 2014 levels. Employment will begin to bounce back in 2021 and 2022 to 136,650 and 140,200 jobs, respectively. Compared to the previous three-year period, the forecasted years average 14 percent fewer jobs.

FLOORSPACE

The Building Congress expects 97.9 million square feet of floorspace to be built in 2020, the second-largest amount constructed since at least 1995. This would be five percent lower than 2019's record-setting 103.3 million square feet and 21 percent higher than 2018's 80.7 million square feet. In subsequent years, floorspace construction will hover around 2020 levels, totaling 98.4 million square feet in 2021 and 96 million square feet in 2022.



		Actual			Forecast	
dollars in millions	2017	2018	2019	2020	2021	2022
Residential	\$17,898	\$17,310	\$19,749	\$17,819	\$14,332	\$12,491
Non-Residential	\$22,142	\$20,388	\$21,164	\$16,629	\$19,469	\$21,724
Government	\$15,323	\$18,304	\$19,715	\$21,042	\$23,134	\$21,867
Total	\$55,362	\$56,002	\$60,628	\$55,490	\$56,935	\$56,083

SECTOR BREAKDOWN

RESIDENTIAL

Residential construction spending is anticipated to total \$17.8 billion this year, down from a peak of \$19.7 billion in 2019. The Building Congress forecasts residential spending, which includes new construction as well as alterations and renovations, to fall to \$14.3 billion in 2021 and \$12.5 billion in 2022. Average spending across the forecast years will be consistent with average spending between 2014 and 2018.

From 2020 to 2022, residential construction is expected to add 50,450 new housing units, with 20,450 units in 2020 and 15,000 units in each subsequent year. At the same time, the Building Congress forecasts 44.6 million square feet of new residential floorspace will be built in 2020, while 39 million and 33 million square feet will be built in 2021 and 2022 respectively. Compared to 2017-2019, the forecasted period will likely result in 33 percent fewer new housing units and a 14 percent drop in square feet of floorspace constructed.

The residential forecast assumes New York City's population of 8.3 million people will continue to decline. The U.S. Census Bureau reports that following strong population growth in the first half of the decade, the city lost 132,350 residents between 2016 and 2019.

NON-RESIDENTIAL

Non-residential construction spending, which includes office space, retail, institutional development, sports & entertainment venues and hotels, is expected to total \$16.6 billion in 2020, down from \$21.1 billion a year ago. Within two years, the Building Congress forecasts spending will recover, rising to \$19.5 billion in 2021 and \$21.8 billion in 2022.

This construction will add record-high levels of new non-residential floorspace – 53.3 million square feet in 2020, 59.4 million in 2021 and 63 million in 2022. In total, the forecasted period will add 59 percent more square feet than 2017-2019.

Given the pandemic's uneven impact across industries, non-residential construction will vary greatly depending on project type. Office construction, which traditionally accounts for half of non-residential spending, is predicted to increase in 2021 and decline in 2022. Spending will be driven by an increase in interior renovations and

a decline in core and shell construction. This shift in construction type is consistent with trends following previous economic downturns and the expectation that existing structures will be altered to reduce the risk of COVID-19 transmission. The Building Congress also expects a portion of new office starts to be pushed past the forecasted timeframe into 2023 and 2024.

While the makeup of office construction changes, spending in retail, entertainment and hotels will likely be down. These industries have been particularly hard-hit by the pandemic due to mandated closures, significantly reduced capacity and travel restrictions. At the same time, construction related to warehousing and logistics may increase, tethered to the shift towards e-commerce.

In terms of institutional building, healthcare construction should see one of the greatest rates of growth. In NYC Checkup: An Examination of Healthcare and Life Science Construction, the Building Congress forecasts healthcare construction spending to exceed \$9.4 billion between 2020 and 2023, a 38 percent increase from 2016-2019. Although exact expenditures will depend on federal funds and institutions' financial outlooks, hospitals and healthcare providers will continue work on COVID-related alterations and long-term capital plans.

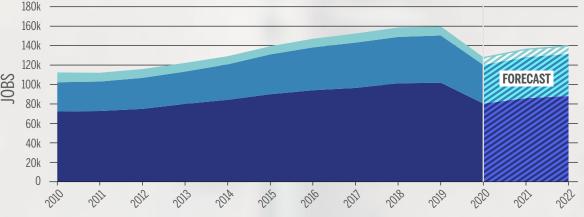
GOVERNMENT

Construction spending on government projects is predicted to top \$21.1 billion in 2020, up from \$19.7 billion the previous year. The Building Congress forecasts government spending to increase to \$23.1 billion in 2021 and level out at \$21.9 billion in 2022.

If government agencies' capital plans continue as intended, then the public sector's share of total construction spending will significantly increase. Between 2020 and 2022, government spending will account for nearly 40 percent of all spending, up from 31 percent between 2017 and 2019. The Metropolitan Transportation Authority (MTA) and Port Authority of New York and New Jersey (PANYNJ) are predicted to spend more in the forecasted period than in the previous three years. For every agency, their final capital expenditures will be heavily dependent on the amount of federal aid allocated over the next year.

Construction Employment in NYC

■ Specialty Trade Contractors
■ Construction of Buildings ■ Heavy & Civil Engineering



CITY OF NEW YORK

The City of New York is forecasted to spend \$7.5 billion on infrastructure in 2020, down from \$8.4 billion in 2019. The Building Congress anticipates spending to remain steady over the following few years, totaling \$7.2 billion in 2020 and \$7.4 billion in 2021.

For fiscal year 2021, the City committed \$11.8 billion to their capital plan – 31 percent for city operations & facilities, 23 percent for education, 22 percent for environmental protection, 12 percent for transportation, 10 percent for housing & economic development and two percent for the administration of justice.

Compared to the previous fiscal year, the City plans to decrease capital funding for all project types except city operations & facilities and environmental protection. The most significant changes in capital appropriations include losses for housing & development and K-12 education and gains for NYC Health + Hospitals and water pollution control. Nevertheless, actual expenditures will vary from commitments made depending on the spending and capital timelines of individual agencies.

METROPOLITAN TRANSPORTATION AUTHORITY

The Building Congress forecasts construction spending by the MTA in the five boroughs to increase to \$8.7 billion this year, up from \$8 billion in 2019. In both 2021 and 2022, MTA spending is anticipated to reach \$11 billion. The \$30.7 billion forecasted would be 51 percent greater than 2017-2019 spending. However, actual spending will depend on the MTA's execution of current and past Capital Plans.

As of September 2020, the MTA has paused new commitments for its 2020-2024 Capital Program. The freeze does not apply to projects that were already underway prior to the hold implemented in late June or projects that have been accelerated while ridership is low.

In the first half of the year, the agency committed only \$3 billion of its intended \$13 billion for 2020.

The MTA also has yet to receive \$12 billion in requested federal aid, which would offset pandemic-related shortfalls and expenses through 2021. Absent this funding, the MTA stated it will likely have to change the scope of its 2020-2024 Capital Program. Affected projects may include Second Avenue Subway Phase 2, Penn Station Access, East Side Access and ADA-accessibility improvements.

PORT AUTHORITY OF NEW YORK AND NEW JERSEY

The PANYNJ is expected to invest \$3.5 billion this year in New York City capital projects, up from \$2.1 billion in 2019. The Building Congress estimates that the PANYNJ's construction spending in the city will remain at \$3.5 billion in 2021 and then drop to \$2 billion in 2022.

The forecast assumes the PANYNJ will attain all or a large portion of its \$3 billion in requested federal assistance. In late July, the agency announced that without this aid, it would have to reconsider its 10-year capital plan that includes the redevelopment of JFK Airport, a new AirTrain at LaGuardia Airport and the replacement of the Port Authority Bus Terminal.²

ADDITIONAL PUBLIC WORKS

The remaining \$1.3 billion in 2020 public works spending will be undertaken by state and federal agencies, including the Dormitory Authority of the State of New York, the New York State Department of Transportation and the U.S. Army Corps of Engineers. These entities are expected to increase construction spending within New York City slightly over the next two years, totaling \$1.4 billion and \$1.5 billion in 2021 and 2022, respectively.

1 Metropolitan Transportation Authority, MTA Board Action Items. September 2020.

2 Port Authority of New York and New Jersey. Press Release 71-2020. July 2020.

\$25 B \$20 B \$10 B

		Actual			Forecast	
dollars in millions	2017	2018	2019	2020	2021	2022
City of New York	\$7,434	\$8,170	\$8,392	\$7,465	\$7,229	\$7,379
MTA	\$5,136	\$7,281	\$7,963	\$8,726	\$10,961	\$11,008
PANYNJ	\$1,669	\$1,692	\$2,118	\$3,521	\$3,521	\$1,957
Other	\$1,084	\$1,160	\$1,242	\$1,329	\$1,423	\$1,523
Total	\$15,323	\$18,304	\$19,715	\$21,042	\$23,134	\$21,867

RESULTS OF OUR SURVEY

To better understand the specific effects of the pandemic and the building industry's outlook on the New York City construction market, the New York Building Congress conducted a survey of its members. The 79 responses were collected between August and September 2020.



NO LONGER 'BUSINESS AS USUAL'

Between the governmentmandated halt on non-essential

construction, changes to their workforce and new safety procedures, the vast majority of members (82 percent) have been impacted by COVID-19, with 42 percent citing a significant impact to their business operations. The non-essential construction shutdown from March to June will have a reverberating effect on the market, with 72 percent of members anticipating that construction activity will be even lower through the remainder of 2020 compared to the first half of the year.



LACK OF CONFIDENCE

Overall, the majority of respondents reported a low level of confidence

that the NYC construction market will provide them with sufficient new business opportunities in 2021 and 2022. In particular, the residential and office construction market were the least encouraging, with 67 percent and 68 percent of members reporting low or very low confidence. Members had the highest overall confidence in the institutional construction market (e.g., healthcare, education, cultural), with 37 percent having either a high or very high level of confidence.



ANTICIPATED SHIFTS

In light of COVID-19, organizations are anticipating shifts in the type of construction performed in New York City through 2022. As was

the case in other economic downturns, members reported that interior renovations may become more prevalent compared to the construction of new buildings. Overall, 73 percent of members anticipate a decreasing amount of new building construction through 2022. For public works improvements, 57 percent of members anticipate that construction work on infrastructure will either increase or remain the same.

OUR MODEL & ASSUMPTIONS

The New York Building Congress uses a series of economic indicators and assumptions to inform the forecast model in this report. These national and local indicators include, but are not limited to, gross domestic product, building cost index, construction cost index, unemployment and employment rates, interest rates, population, vacancy rates, housing starts and building permits. Given the uncertainty caused by the COVID-19 pandemic, additional assumptions based on the best available public data have been incorporated into this year's forecast for 2020-2022. Deviations from the following assumptions would result in significant changes to the forecast model:

- COVID-19 transmission rates remain stable in New York. Any "second wave" of COVID-19 will be less
 severe, less disruptive and managed better from a public health and economic standpoint. No additional
 stop-work orders or forced construction closings occur due to COVID-19 during the forecast years.
- An effective COVID-19 vaccine is developed and successfully distributed at a national and local level during the forecast years.
- A subsistence level of federal funding is allocated to the State of New York, City of New York, MTA and PANYNJ during the forecast years, allowing each entity to carry out their capital plans at the amount consistent with their most recently approved budget. Each entity has stated that a of lack federal assistance would result in varying reductions of operational and capital expenditures.

CREDITS

New York City Construction Outlook 2020-2022 – the 20th report in an annual series – was prepared, with the assistance of Urbanomics, by the New York Building Congress and the New York Building Foundation. All figures in this report are in nominal dollars. Published October 2020

RECOMMENDATIONS

PROGRESS

- Create and implement a comprehensive, nationwide building plan on the scale of or greater than the New Deal. The plan would provide direct funding to state and local governments to allocate to critical public works projects. Entities including the MTA and PANYNJ would receive additional capital funding under the plan.
- Fully fund the City of New York's capital program at pre-COVID 19 levels. Unlike the operating budget, capital funding is not needed in the immediate, but is instead deployed over multiple years, only being spent upon reaching the next phase in design or construction.
- Achieve a five-borough capital investment strategy through an infrastructure council established by the New York City Charter to coordinate with elected officials, government agencies and the public to address our most critical needs.

PEOPLE

- Work with our partners in government, education and community advocacy to correct the societal and institutional wrongs that have marginalized communities of color for centuries. New York City's construction industry, whose workforce is 64 percent black, indigenous and people of color, must also address the systemic disparities that exist within its hiring, development and leadership practices.
- Focus efforts to engage, retain and develop the next generation of leaders that will bring fresh ideas and embrace innovation.
 The industry must provide mentorship, professional development and advocacy for its young professionals.
- Improve Minority and Women Owned Business Enterprises (MWBE) capacity-building programs and provide additional resources to ensure meaningful inclusion and development of MWBE firms.

PLANNING

- Enact a citywide public space master plan that incorporates streets, sidewalks, parks and other open spaces to expand the public realm and provide new, safe opportunities for people and businesses to interact.
- Develop and pass
 comprehensive rezoning
 strategies throughout the
 city. Successful rezonings
 promote the growth of livable
 neighborhoods, foster jobs
 and economic development,
 invest in essential services
 and infrastructure and create
 housing for all income levels. In
 addition, plans should epitomize
 smart growth strategies of highdensity development at transit
 hubs and major thoroughfares.
- Implement long-term reductions in carbon emissions produced by New York's buildings, transportation and solid waste. In addition, as the likelihood and severity of storm surges and flooding increase, the City must intensify its efforts to make infrastructure more resilient.



The New York Building Congress, a broad-based membership association celebrating its 99th year, is committed to promoting the growth and success of the construction industry in New York City and its environs.

CHAIR	Elizabeth Velez John J. Cardoni, Louis J. Coletti, Cheryl McKissack Daniel, Peter DiMaggio, P.E., SECB • Sabrina Kanner • Richard Kennedy • Eli R. Khoury, P.E. • Gary LaBarbera • Anthony Mannarino • Charles F. Murphy • Edward V. Piccinich • Frances A. Resheske • Jonathan D. Resnick				
VICE-CHAIRS					
PRESIDENT/CEO	Carlo A. Scissura, Esq.				
TREASURER	Cyrus J. Izzo, P.E.				
SECRETARY	Carl Galioto, FAIA				
GENERAL COUNSEL	Michael S. Zetlin				
PAST CHAIR	Milo E. Riverso, Ph.D., P.E., CCM				



New York Building Foundation promotes the longterm growth and well-being of the New York City building industry and the wider community through an active program of research, education, and philanthropy. The Building Foundation is a 501 (c)(3) non-profit organization that leverages the talents and vast resources of all sectors of the building industry to benefit New Yorkers and give back to the community.

VICE-CHAIRS	Thomas Callahan • Michael S. Chionchio • Kenneth Colao • Louis C. Grassi • Suri Kasirer
PRESIDENT/CEO	Carlo A. Scissura, Esq.
TREASURER	Altin Batska, P.E., CHC
SECRETARY	Christian Esteban
GENERAL COUNSEL	Michael K. De Chiara
PAST CHAIR	Milo E. Riverso, Ph.D., P.E., CCM

