

NEW YORK
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CONGRESS



Healthy City:

*Inside New York City's
Hospital Building Boom*

In order to adapt to a rapidly evolving healthcare market, virtually all of New York City's large hospital systems are making major capital investments,

not only to modernize their facilities but to transform how they deliver healthcare. Hospitals are consolidating into broadly-based healthcare systems and investing in smaller healthcare facilities and community hospitals, reaching beyond traditional boundaries into neighboring communities to provide an increasingly wider range of services. At the same time, hospitals are spending heavily to renew their main campuses in order to compete with other leading institutions.

These efforts are clearly paying off: New York City hospitals are now recognized as among the best in the country overall. The most recent *U.S. News & World Report* rankings included three private New York City institutions among the 15 best hospitals in the nation, a first, and more than any other city.

To better understand this hospital building boom, the New York Building Congress conducted an extensive survey of New York City hospitals and interviews with healthcare construction professionals.

The survey results, along with a Building Congress analysis of other available data sources, demonstrate that the design and construction of new and renovated healthcare facilities has been an important factor in strengthening New York City's position as a national leader in service quality and undergirding the industry's prominent place in the City's economy.

New York City's Hospitals: A Vital and Expanding Part of the City

Healthcare is one of New York City's premier industries, with hospitals leading the way as a major economic force, physical presence, and source of health and wellness for communities throughout the five boroughs.

New York City's healthcare sector contributes \$40 billion to a Gross City Product of \$700 billion, with hospitals generating nearly half the total output of all healthcare spending. New York City's

hospitals accounted for annual earnings exceeding \$13 billion for 160,000 workers in 2015, and the market value of all hospital property exceeds \$14.4 billion.

New York City is home to more than 40 general medical hospitals, 11 of which are owned and operated by NYC Health + Hospitals, the nation's largest municipal healthcare system, as well as several other specialized institutions.

With nearly 25,000 beds and 35,000 on-call doctors, New York City hospitals handle more than three million emergency room visits, one million admissions, and close to 250,000 inpatient and 500,000 outpatient surgery cases every year. According to The Advisory Board Company, which performs strategic research for the healthcare industry, between 2014 and 2024, inpatient discharges in New York City hospitals are expected to grow by nearly six percent, while the number of outpatient visits could increase by as much as 27 percent.

In the midst of this tremendous activity, hospitals have been building to modernize, grow, and respond to market forces and rapid changes in healthcare delivery. This dynamism is reflected in the industry's responses to the Building Congress survey.

About the Survey

The New York Building Congress asked all hospitals operating in New York City to respond to a survey providing detailed information on their capital spending between 2013 and 2020.

All major institutions but one responded, as well as several smaller institutions, who together represent 80 percent of all spending on hospital construction.

The survey asked hospitals to report:

- actual capital expenditures by year and anticipated future expenditures by year;
- size, location, and expected completion date of future construction starts;
- the type of facility being constructed (e.g. outpatient medical, inpatient, emergency, etc.); and
- factors driving decisions to expand or renew facilities.

The Respondents

- The Brooklyn Hospital Center
- Calvary Hospital
- Hospital for Special Surgery
- Interfaith Medical Center
- Kingsbrook Jewish Medical Center
- Maimonides Medical Center
- MediSys Health Network
- Montefiore Health System
- Mount Sinai Health System
- NewYork-Presbyterian
- Northwell Health
- NYC Health + Hospitals
- NYU Langone Medical Center

Hospital Construction 2013-2015: A Robust Market Adapts to Changes in Healthcare

The Building Congress surveyed hospital spending on construction from 2013 through 2015. The eight healthcare systems and two independent hospitals who responded invested \$4.9 billion during this time to improve and expand their institutions. Overall, the Building Congress estimates that total hospital construction activity — including non-respondent hospitals — topped \$2 billion in each of these years, for more than \$6 billion dollars expended over the three-year period.

Of these totals, New York's two largest teaching hospitals and their affiliated institutions — NYU Langone and NewYork-Presbyterian — each spent \$500 to \$600 million on construction activity in both 2014 and 2015. The public NYC Health + Hospitals system and the private Montefiore Health System invested between \$100 and \$200 million in those years, while the independent Hospital for Special Surgery invested nearly \$60 million in 2015.

“The healthcare construction market has been and should continue to be robust,” observed Jeffrey Brand, Principal and National Healthcare Leader for Perkins Eastman Architects. “Hospitals see their strategic goals as being linked to making major improvements to modernize and provide an increasingly broad array of services.”

The survey responses suggest that much activity focused on building primary and outpatient care capacity, both on and off the main hospital campus. Nine of the ten respondents who reported on construction activity reported work on some form of outpatient facility. According to Maurice LaBonne, Senior Vice President of Facilities and Real Estate at NewYork-Presbyterian, “A major focus of our



New York Methodist Hospital – Center for Community Health

capital program is developing more robust primary and preventive health services in communities all around the City. So you will continue to see projects to develop smaller facilities throughout the five boroughs in addition to the large investments being made on our central campus.”

The NYC Health + Hospitals system is currently building in all service areas. Roslyn Weinstein, Vice President in charge of capital construction, emphasized the system's diverse investments in primary care, “NYC Health + Hospitals is making a system-wide push to expand access to primary care services. We are making improvements to City facilities — not just in hospital settings — to be able to serve New York City residents who have not accessed primary care in the past.”

At the same time, construction on inpatient facilities was reported by eight of the ten institutions who provided information on their activity. Much of this work falls into two categories: improvement of beds and surgical suites on the main campus and improvement of existing spaces at affiliate institutions in other parts of the City, another notable development discussed in more detail later in this report.

2016-2020 Forecast: Continued Growth and Diversification

The Building Congress asked hospitals to forecast construction spending for the years 2016 through 2020. Based on the survey responses, the Building Congress estimates New York City hospitals will outlay more than \$10 billion on construction during this time, with \$8.2 billion of this spending slated for 2016 through 2018, including nearly \$3 billion in 2016, and increasing to slightly more than \$3.3 billion in 2017. Spending declines in 2018-2020, in part because hospitals have not completed their capital planning processes.

This massive amount of spending will help add roughly two million gross square feet of hospital space over the 2016-2020 period, when development of primary and outpatient care capacity on and off the main hospital campus will continue to be an industry-wide priority.

For example, Mount Sinai Health System is investing over \$200 million to improve its Institute for Advanced Medicine, which provides a range of primary and supportive outpatient services. Several

institutions are making investments to improve outpatient and primary care, both on the main campus and at new acquisitions and satellite locations. The affiliation of NewYork-Presbyterian and New York Methodist Hospital is expending over \$400 million to construct or improve several outpatient primary care facilities throughout Brooklyn, including the ground-up Center for Community Health in Park Slope, which is intended to move a number of basic primary health services out of more typical hospital settings.

NYU Langone and Northwell Health are also making major commitments to expand outpatient services. NYU Langone is spending \$200 million to construct a 160,000-square-foot emergency room and outpatient diagnostic facility in Cobble Hill, Brooklyn. Northwell Health is investing over \$300 million during the next five years on facilities that include outpatient service clinics at various locations on Staten Island, far beyond its traditional Nassau County campus.

Jim Crispino, Principal at Francis Cauffman Architects noted, “Large institutions will be using new locations to offer front-line medical services directly in local communities as part of a broad effort to expand their presence beyond their traditional catchment areas. Hospitals, particularly the largest ones, are becoming truly regional resources with multiple locations, giving them a reach well beyond what they have had in the past.”

The survey also revealed that the largest individual investments are being made by large institutions to improve existing facilities on their main campuses.

For example, NYU Langone and NewYork-Presbyterian are working to complete major projects in Manhattan to replace or upgrade core hospital facilities on their main campuses.

NewYork-Presbyterian is erecting a 750,000-square-foot building, housing an advanced maternity ward as well as a range of outpatient services.

NYU Langone is completing two transformative projects on its main campus, adding more than one million square feet of new space, including an 830,000-square-foot inpatient facility, creating modern single-occupancy rooms and other visitor facilities.

Vicki Match Suna, Vice Dean for Real Estate and Strategic Capital Initiatives at NYU Langone, said that upgrading core patient services and amenities is a mission-critical project. “Our new single-bedded tower on our main campus is just one of the many ways we are addressing the evolving needs of our patients. Consumers select their healthcare providers based on the care they receive and the level of services offered. NYU Langone is making significant investments across our expanding project portfolio to provide a seamless, best-in-class experience in both inpatient and outpatient environments.”

NYC Health + Hospitals is seeking to invest \$200 to \$300 million annually from fiscal years 2016 through 2019 at ten of its facilities throughout the City.



Montefiore Medical Center – Hutchinson Metro Center Building

The largest expenditures will be at four of its main hospital buildings — Coler, Bellevue, Metropolitan, and Coney Island Hospitals — to harden facilities damaged by Superstorm Sandy, as well as to update and modernize key buildings. Work includes adding a more than 300,000-square-foot Emergency and Post-Acute Care facility in Coney Island, anticipated for completion by 2021. The Coney Island facility represents a major investment by NYC Health + Hospitals to provide longer-term healthcare for patients and stems from the same economic and regulatory forces leading hospitals to invest in outpatient care to prevent hospital readmissions.

While independent hospitals appear to be making smaller investments, the Hospital for Special Surgery is forecasting five years of continuous investment at five separate sites on Manhattan’s Upper East Side that average more than \$25 million per year to improve inpatient services and visitor amenities.

An Evolving Marketplace Driving Investment Decisions

The Building Congress survey asked hospital administrators to rank the factors driving their future expansion plans.

The two most frequently-cited reasons for future construction projects were a need to improve aging facilities and to increase operating efficiencies.

“The big New York City institutions are competing with each other and other leading national hospitals, who are all making major improvements to their main facilities. In order to maintain their national leadership position, hospitals have to upgrade their main facilities — which typically include expansive inpatient programs. This is another trend you will see continuing for the next several years,” said Crispino.



Memorial Sloan Kettering – Josie Robertson Surgery Center

Current Construction Activity by Type

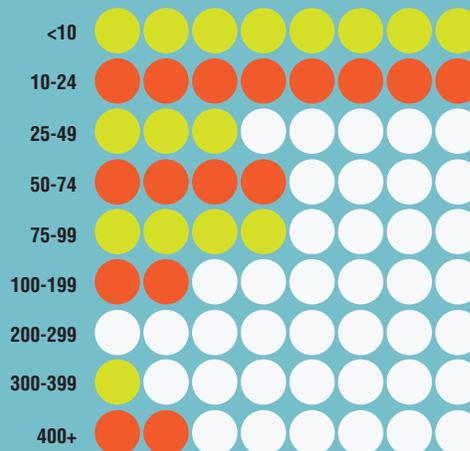


● Private ● Public

Ⓢ = number of projects

Source: New York Building Congress Survey

Expansion Sites by Structure Size (000s of square feet)



Source: New York Building Congress Survey

The survey also asked respondents to identify the service area of future construction projects, which appears to confirm this observation.

Most frequently cited was the addition or improvement of inpatient medical facilities, reflecting an industry-wide effort to modernize traditional core facilities, an equally important trend in healthcare construction, together with the creation of more primary and outpatient settings. While NYC Health + Hospitals accounted for seven of 17 reported inpatient medical projects, most hospitals also reported investments in inpatient facilities.

A good example of this is Montefiore Health System’s plans to spend more than \$50 million annually in five Bronx locations for inpatient services, in addition to continuing work to update the recently expanded Hutchinson Campus in the Bronx.

“Smaller community-based hospitals are forming more meaningful business partnerships with the largest flagship institutions, who are investing major resources to improve these aging facilities alongside their own outpatient and primary care investments,” said Rich Steimel, Principal in Charge, Project Management and Construction for Lend Lease. “It’s a very dynamic marketplace in all parts of the industry and all parts of the City.”

While respondents indicated much of their upcoming construction activity will be to improve inpatient capacity, outpatient facilities still made up slightly more than one-third of all reported future investments. A number of large institutions reported that expanding product lines was a primary factor in their capital investment planning — which also could be related to their development of primary care services.

Economic Impact of Capital Expenditures

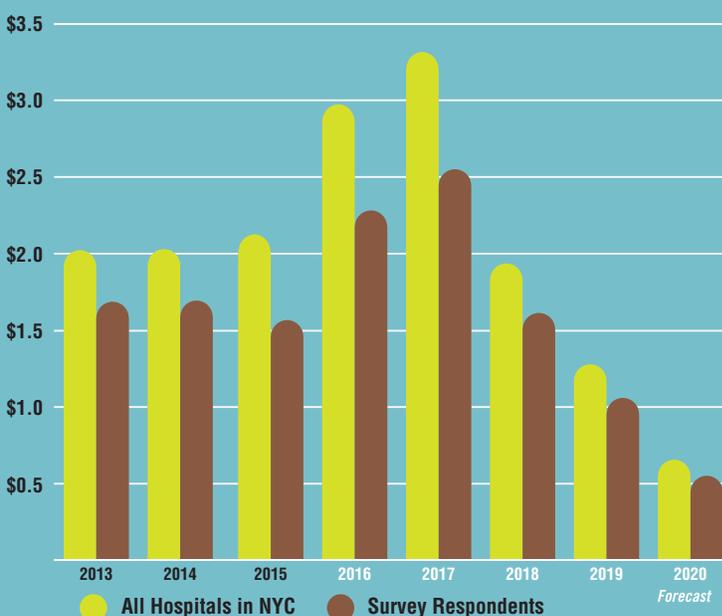
The larger New York City economy has benefited — and will continue to benefit — significantly from the wave of hospital expansions. Hospitals and other healthcare facilities are among the most expensive facilities to construct, with all-in costs reaching as high as \$1,700 per square foot for some highly specialized facilities. As a consequence, the ripple effect of these capital expenditures on New York City’s economy is exceptionally large, generating increases in employment, output, and earnings across a wide array of industries.

To estimate this effect, the Building Congress performed an economic impact analysis to simulate the direct and indirect impacts of hospital construction in the recent past and near-term future. In 2013 and 2014, when capital spending was estimated at approximately \$2 billion per year, the effect on business revenues of all New York City firms associated with healthcare construction projects amounted to \$3 billion, rising slightly to \$3.1 billion in 2015.

By year-end 2016, when direct capital spending by hospitals is expected to reach \$3 billion, this will likely generate \$4.4 billion per year in business revenues, followed by nearly \$4.9 billion in total output in 2017. Direct and total spending in subsequent years will decline, based on current projections, but should increase as long-term construction plans firm up.

The impact on employment is equally significant. The Building Congress estimates that the capital spending on hospitals will generate 11,700 temporary construction jobs in 2016 and more than 13,000 temporary construction jobs in 2017. Factoring in the employment impacts on associated industries, the total employment effect amounts to 19,400 jobs in 2016 and 21,400 jobs in 2017.

Construction Spending by Hospitals in New York City 2013-2020 (In \$ — Billions)



Note: Forecast years based only on reported spending, which will increase with new capital plans.

Source: New York Building Congress Survey, Urbanomics



New York-Presbyterian – David H. Koch Center

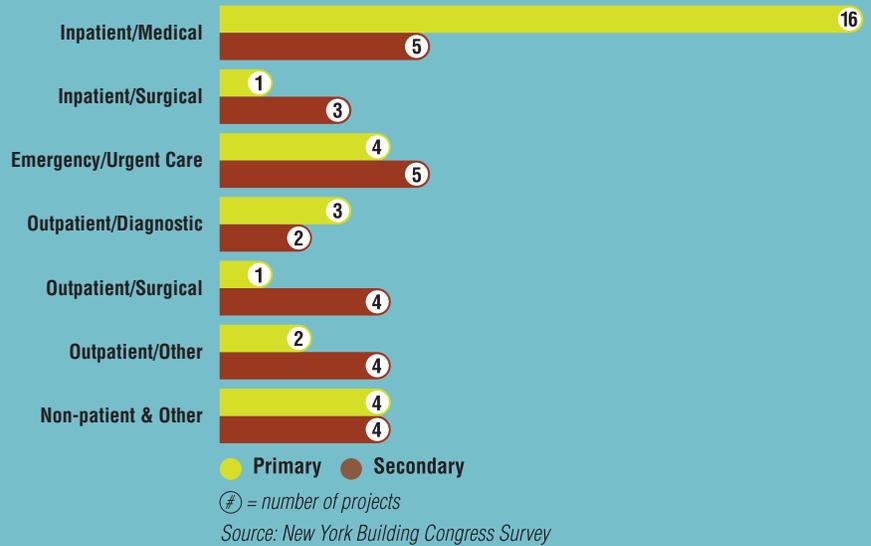
Conclusion

By making robust investments in improving and expanding their facilities, New York City’s hospitals are successfully adapting to a competitive and changing healthcare marketplace.

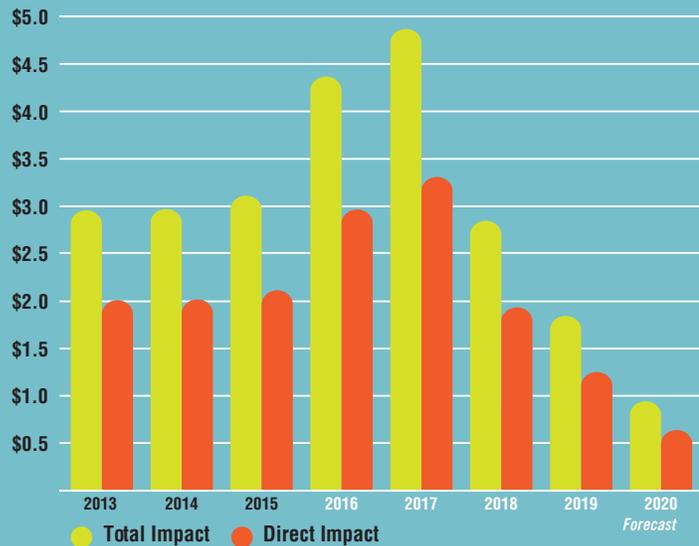
In order for hospitals to remain flexible and responsive to continuing competitive pressures and changes in service delivery, the Building Congress recommends the following policy measures:

- The City should consider revised zoning for Manhattan’s East Side healthcare corridor to allow institutions to have predictable building guidelines that account for the complex design challenges for hospitals building on constrained footprints.
- The City should consider zoning to encourage investment in outer-borough, community-based primary healthcare services and improvement of smaller, aging hospitals.
- The City should increase capital support for NYC Health + Hospitals to allow it to continue to make improvements to aging facilities and expand access to primary and other vital public health services.

Primary & Secondary Purpose or Function of Future Capital



Direct & Total Impact of Hospital Construction Spending on Gross Output in New York City (In \$ — Billions)



- Hospitals should recruit and train qualified construction and facilities management professionals to ensure projects are delivered and maintained efficiently and cost-effectively, particularly at a time of increased investment.
- Institutions should continue to adopt collaborative project management practices, like integrated project delivery, in order to streamline construction work and reduce overall construction costs.



NYU Langone Medical Center – new Science Building, left, and the Kimmel Pavilion, right

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