

How Architecture Can Weather the Storms of Crisis

Adam Hill

Within continuously evolving New York, Midtown Manhattan, specifically the Traditional Yards region is currently experiencing a surge of development. Midtown Manhattan is under constant pressure to reinvent itself to stay present within the global society, a symptom of every major Global Metropolis. In doing so, the city's urban realm is in a constant state of flux, which brings with it challenges that need to be addressed within the urban fabric, such as cohesion, integration and identity.

The present-day vision of New York today is not by chance; its urban environment has been carefully molded and adapted through time, under the pressures of those with economic and political power. From its conception, New York has been a city driven by the influences of the economy; initially as a staging post for Dutch fur trading companies, before gaining prominence as a major trading port in the 18th century under the British. Over the years, New York City was the national capital at various occasions furthering its influence upon the rest of America and the world. As one of the most iconic cities worldwide 'the Big Apple' has established itself as a symbol of hope, developing into the main entry point for immigrants to the United States seeking the American dream, particularly during the 19th century and into the present day. It has also transformed into a global financial center, selling not only goods but also information and services. In recent years it has evolved into the new home of America's tech sector instilling growth through technology, innovation and entrepreneurship. Profiting from this iconic imagery, New York has been able to expand and develop but has also become tied to economic growth, be that through tourism, services or technology, each of which has undergone peaks and troughs throughout history. Out of this wealth came the ability to construct an architecture which captured this rapid accumulation of fiscal abundance: the skyscraper. The city is synonymous with the typology of the skyscraper, the site of successive world's tallest buildings from 1913 to 1974.

New York & the Economy

As Manhattan has grown, its dependence on economic systems has been full integrated into its inner workings; it has restructured itself along the lines of neoliberal ideas. Neoliberalism emerged from political and economic theory and became mainstream in the 1970's, promoted by both Reagan and Thatcher's governments. It spread across the globe but was especially integrated in the US. This was due to the free market being sold to the masses under the ideal of "freedom", a value strongly embedded in the American culture. The belief that "anyone, regardless of where they were born or what class they were born into, can attain their own version of success in a society where upward mobility is possible for everyone". In practice, social mobility does not generally materialize and those in financially worse off conditions are considered to be rulers of their own fates. The other key idea of Neoliberalism is that a strong healthy economy will produce health and wellbeing for everyone, through organic trickle-down effects. However, since government interventions are mostly

shunned, formal redistribution of wealth is difficult, so the trickle-down effects do not work as intended. What happens instead, is that corporate interests and progress are being funded at the expense of the citizens.

Fascination

When I visited New York to conduct my own research, I was immediately fascinated by the different stages of architecture and what had transpired to produce such an assortment of developments. Manhattan and its world-renowned districts, each with their own characteristics, helped formulate the following research question: '*How has the influx of financially led developments, effected existing frameworks in midtown Manhattan?*' Subsequently, I have researched the social and economic effect of financial and real estate dynamics upon surrounding neighborhoods in Midtown Manhattan. This research was conducted by first of all investigating the economic effects and how they instigated change through development or decline and secondly how social disparity can be possibly reduced through architecture. The test ground for the project is Manhattan, one of New York's five boroughs, in particular the south-western area of Midtown Transitional Yards.

Characterizing a Crisis

Times of crisis seem to coincide with significant changes in the rate of construction within New York. For an event to be defined as a Crisis it has to have a number of defining characteristics: it is unexpected; it creates uncertainty; it is a threat to important goals and finally, it results in a need for change.

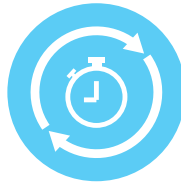
These characteristics certainly hold true for the economic crashes that have been experienced over the last 100 years, but new events could soon start to influence the built environment. The Coronavirus, Lack of affordable and social housing for key workers could be the next crisis events, which people in the future will be able to identify as key drivers for change. Providing developments that are able to weather these events will be economically and environmentally prudent and put the provider ahead of the rest.



Financial &
Business Center



City of Dreams



Continuous development

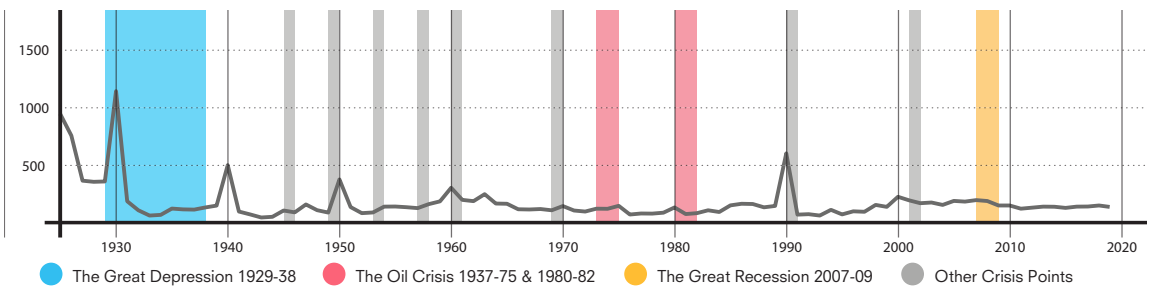
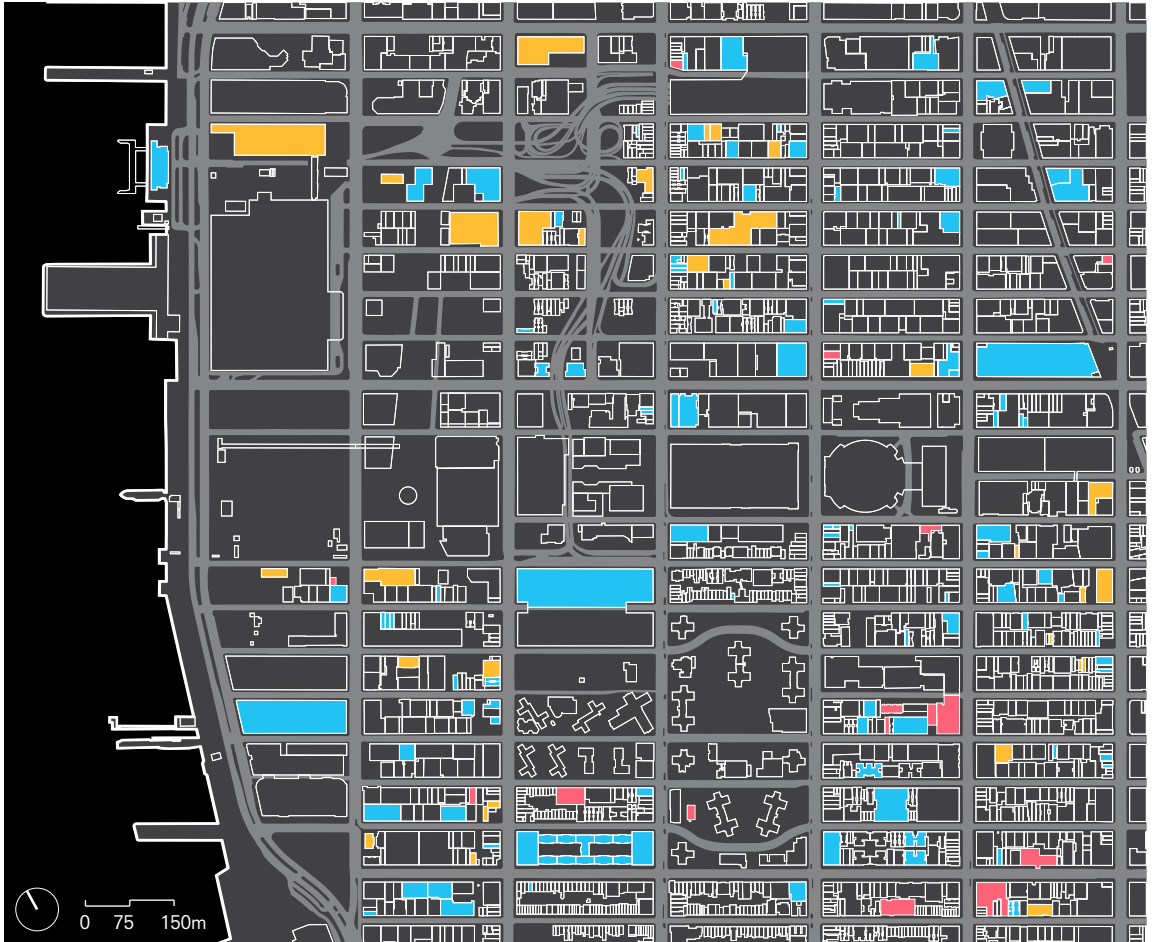


Diverse
Environment



Hard work leads to
upwards mobility

Characteristics of New York City



Construction through the main economic cycles

Forces of Transformation

In a global city, the organisation of spaces and their embedded social practices along with their image, are dominated by those who control social and economic capital; this is no more prevalent than in New York City. A city which has undergone mass transformation and growth due to the effects of the economic market, both suffering and benefiting from globalisation, more than any other city in America. These economic shocks have changed the vernacular landscape of the New York's neighbourhoods, the stress of which changed both the physical and social landscapes. Throughout the last century there has been numerous points of economic shifts; the first major shift being 'The Great Depression' in the 1930's, the Oil Embargoes of the 1980's and most recently 'The Great Recession' of 2008.

Throughout all the points of economic crises, there is a strong correlation forming between peaks in construction and economic situation around the world. There tends to be a spike in construction prior to the collapse, as investment is at an all-time high and one of the best ways to retain economic value is through construction. During these periods the functions of the developments tend to be office and commercial based, due to the fact these functions return their initial investment in the shortest time possible. Following the burst of the economic bubble construction appears to still progress, whilst the cost of resources rises and labour plummets, enabling development to continue. The majority of projects are residential based, as they are seen as lower risk for developers and investors alike, however the return is slower to accumulate. This prosperity is short lived, as the apparent trading market which runs on speculation of a sudden economic growth fails and construction halts. It is during these periods, that large scale federal improvements begin, in an attempt to stimulate the reignition of economic growth. These measures may prop up the service industries, however construction is one of the hardest hit and takes the longest to recover from such downturns.

The continuous redevelopment of New York and the unique air right scheme has led to dramatic changes in the urban realm. Originally each block was divided equally into 62 plots within the block. But over time as neighbours and developers buy the land to accumulate it into larger plots, the urban sprawl of the city changes becoming more homogenous and less diverse. Extreme cases such as the merger of blocks creates a monopoly, of which Hudson Yards profited from, furthering the sterilising of the existing culture and communities once present there. The sale of the air rights above the Western Yards train depot, released a large plot of land for development which was previously not utilised and became the birth of Hudson Yards which perpetually expanded into addition underutilised areas along the riverfront.

New Systems of Value

During the semi-recent economic crisis of 2008, the pitfalls of the urban realms alignment with Gross Domestic Products (GDP's) and cycles of economic growth were laid bare. The recent trends within architecture for the creation of iconic statement buildings, either to express a commercial identity or a way to instigate regeneration, find that the consideration for the lives of the populace of the city has been lost, enabling growth to be "associated with unlimited expansion and profit-making, with minimal care for the repercussions to people and places". The demand of those with economic or political power to create 'a luxury city' based purely on image consumption and branding, has led to increasing dependence on volatile and crisis-prone industries like finance and real estate and helped to produce a city with the most unequal incomes and highest levels of unemployment in the state. The forces that caused the financial crisis, and that continue to cultivate New York City into a place of extreme inequality, are beyond the control of ordinary city residents.

Within the current climate of the construction industry, there has been some effort towards sustainability and a resurgence in social ideals within the community, building according to social requirements rather than for profit. These are currently only superficial remedies and do not locate the cause of the problem: our reliance on economic growth, which has led to overproduction and a wasteful overuse of the planet's raw resources. The future of developments within the urban realm, will depend on a shift in the mindset of people and policy writers working symbiotically to generate a new big vision that repositions community as part of and dependent on the built environment. Ways to incorporate resilience within these community networks, in order to overcome the likelihood of disruption and setbacks, will have to be considered. Examples of which can be seen in Australia, which has recently altered its national evaluation standards through policy change towards social improvement indicators.

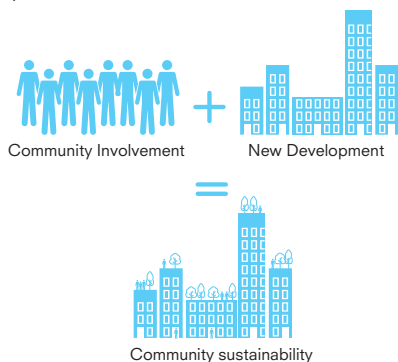
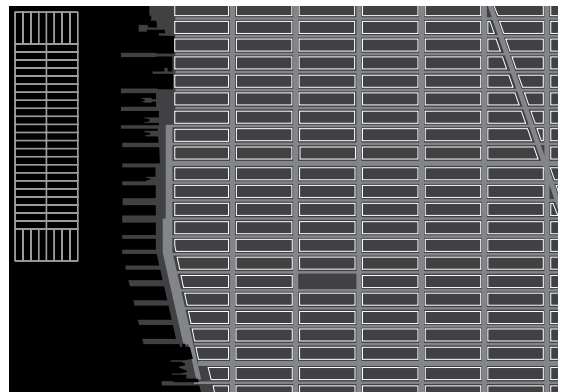
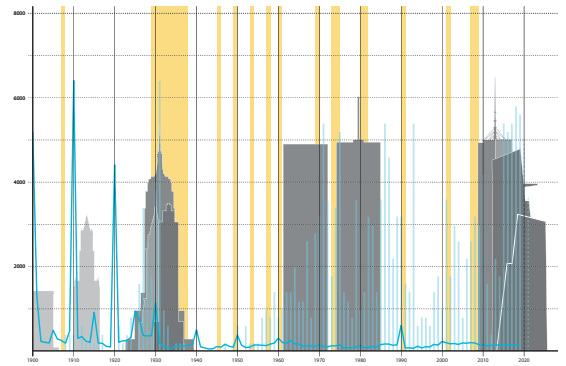
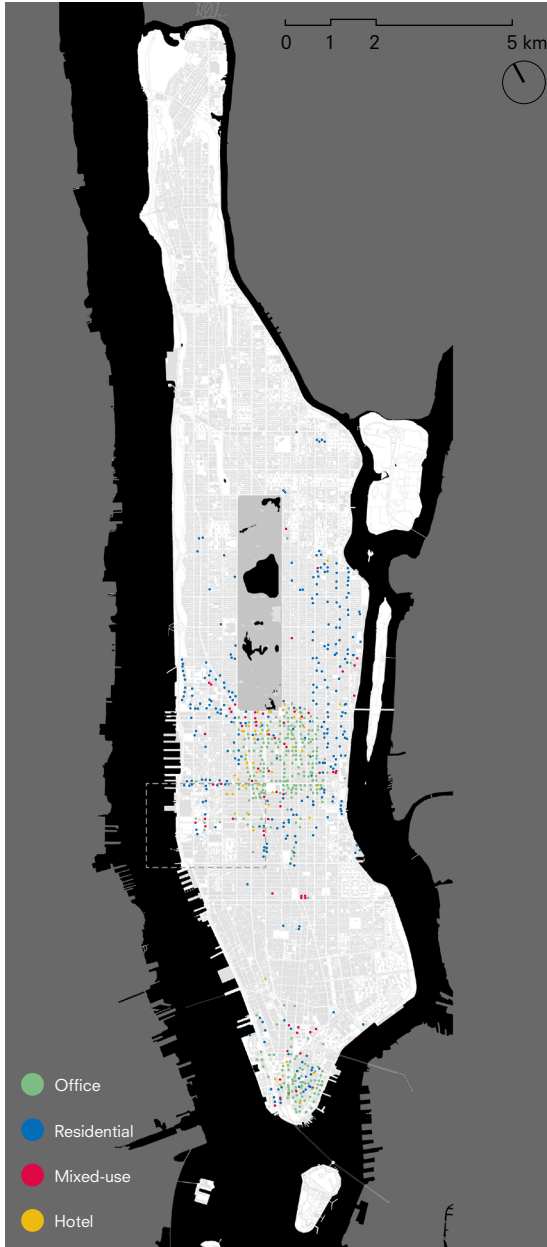
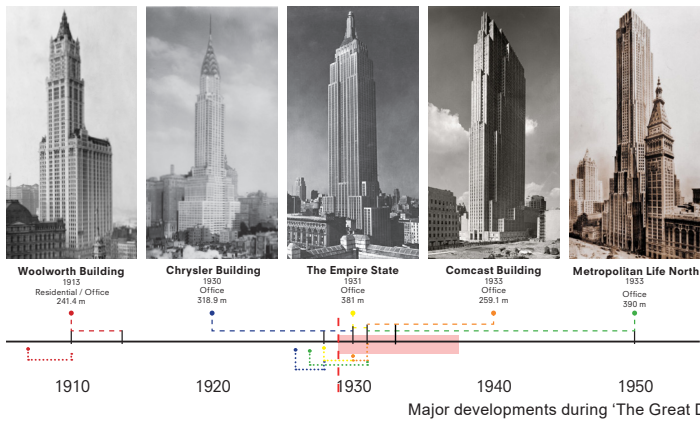


Diagram of socially sustainable developments



Addressing the Boundaries of Development

The Future of Flexible Multi-use Complexes

Design Brief

Transitional Yards

In the last 20 years, the urban fabric within Transitional Yards has seen dramatic changes with the introduction of both the High Line in 2009 and the continual development of the newly formed district of Hudson Yards. Both have rapidly increased densification and fiscal wealth of the area, either through economically led development or the creation of an iconic tourist landmark. These two developments in particular, have resulted in the construction of numerous luxury apartments, the relocation of many major businesses to the area and the introduction of a perceived monoculture. This is at odds with an area that was previously used for manufacturing and artisan districts.

Hudson Yards is becoming a major centre of media, finance, culture and technology for the city, bringing more people and activity to the surrounding area. This follows trends which can be seen throughout the history of New York, as centres of growth cycle between Downtown and Midtown. With the new rezoning of the area and its proximity to key transportation hubs, such as Penn Station and the Port Authority Bus Terminal (PABT), the location is ideally placed to become a cultural hub as well as the current epicentre of development. In the future, the effect of this enormous regeneration of the area will be both positive and negative. It will cause vast infrastructural improvements, creation of more jobs and the progression of the liveable environment; whilst on the other hand, the exclusive developments targeted at a very homogeneous section of society will enforce the gentrification of the Hudson Yards community as the rising of the real estate value isolates people of median or low income from the vicinity; there will be a likely increase of congestion of both vehicular and pedestrian traffic in important infrastructural nodes and the High Line and also the isolation of mid-Transitional Yards from the surrounding neighbourhoods. Another situation that is arising, is the creation of perceived harsh borders between these enormous developments and the surrounding districts, this consecutively produces an even greater sense of detachment. Midtown is especially representative of this, as the ridged zoning plans and the iconic blocks further exacerbates this sense of segregation.

Group strategy

To elevate the foreseen challenge of such developments, the group strategy intends to form connections between the expansion of Hudson Yards and the surrounding districts, anchoring it to Midtown Manhattan rather than it becoming an isolated island of monocultural development. As Jane Jacob states "Old ideas can sometimes use new buildings. New ideas must use old buildings" arguing that cities are an integrated system, which grow and evolve through time, adapting to the requirements of that current moment. Removal of whole areas of a city which are replaced by new developments with no consideration to their context, causes irreparable damage to the communities that are established within them. To this end, for a

city to be lively and vibrant, a complexity needs to be retained in the urban fabric and social mix.

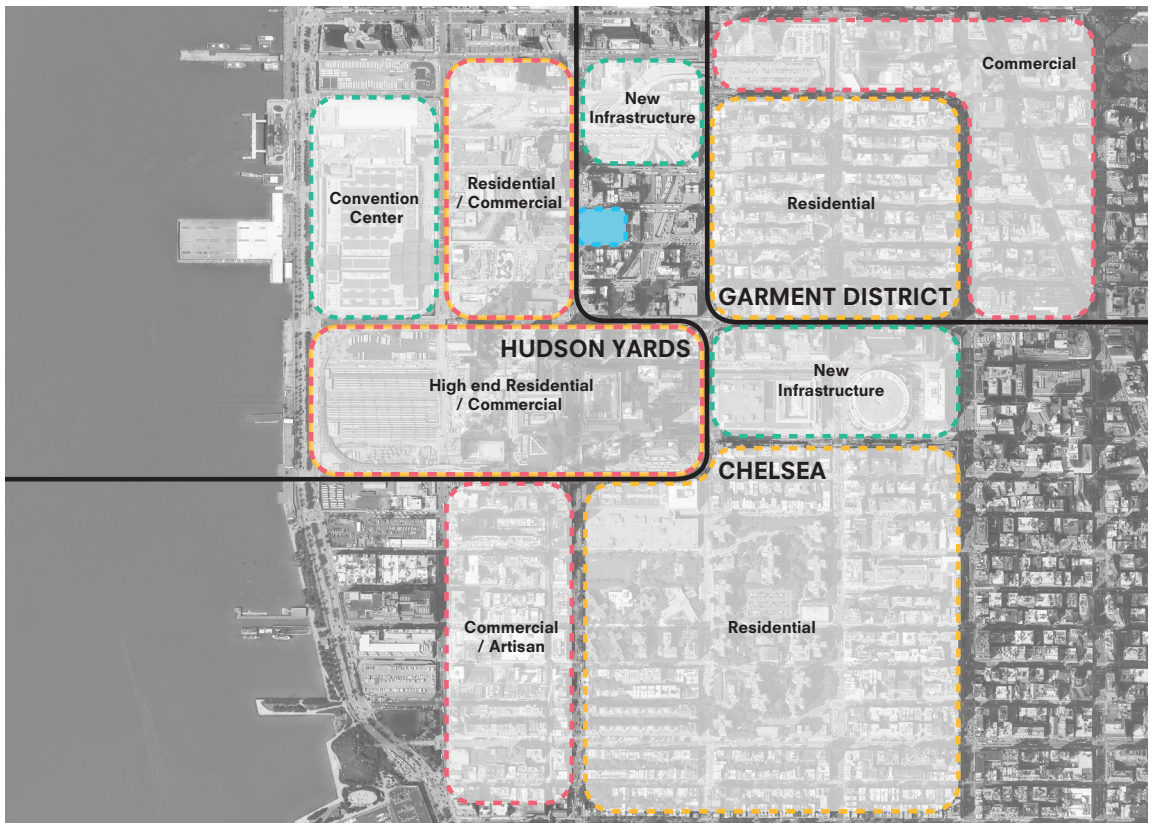
Hence, the group strategy seeks to rebalance the surge of construction, with the need to create symbiosis within the urban realm and its identity. This is to be achieved through the creation of new connections, both infrastructurally and societal realm, which will connect: existing green and open urban areas to new ones, neighbouring districts to the impending isolation of Hudson Yards and also create pop-up points, which will alleviate congestion and will insert life in the area in between the dynamic eastern neighbourhoods and rapidly developing riverfront areas. Along with this, is the requirement to provide alternative housing, offices and the development of the public realm with the purpose of generating social mix and diversity which will flow throughout the area rather than being concentrated.

Design Scenario

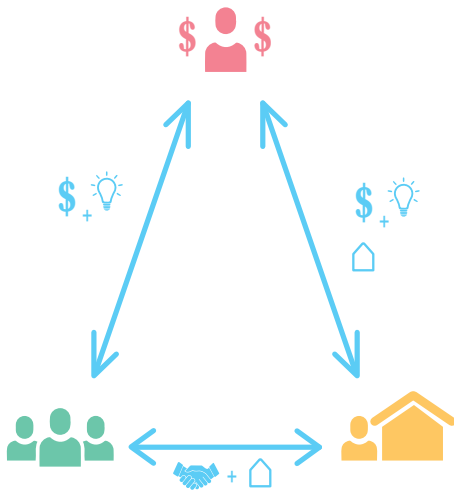
The non-profit developer 'New York City Economic Development Corporation', who strive to create sustainable and resilient future communities, will invest and develop a plot acquired from an assortment of plot owners who have formed a Co-operative. To this point, they will develop a community complex along with residential units. The scheme aims to introduce other local partners and representatives through which the local inhabitants can collaborate and breakdown the boundaries that currently exist. The developer will partner with start-up businesses who will invest in and maintain the rentable units: workspaces, exposition areas, commercial units, etc. The presence of multifunctional programming, split between social and commercial purposes, intends to provide a self-funded development whilst promoting social inclusion.

Location

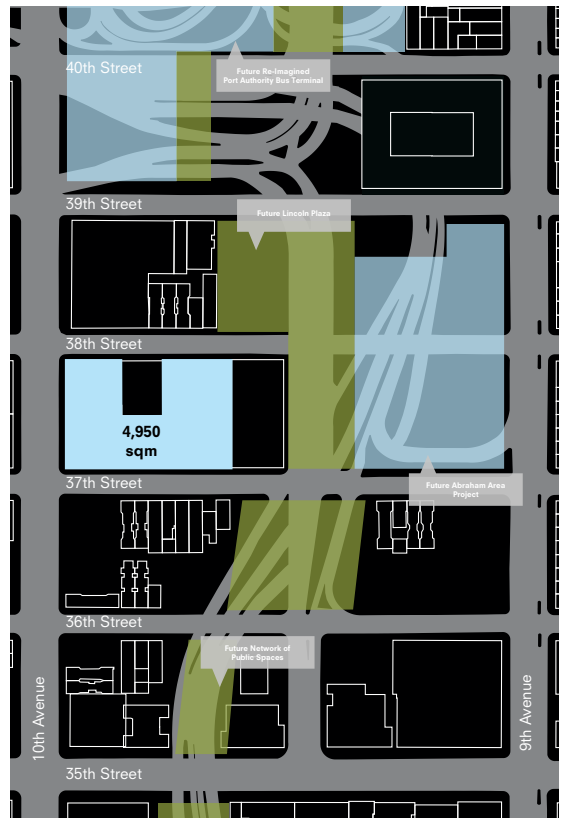
The project will be located on a plot of 4,950m², between West 36th and 37th Street, forming a bookend to 10th Avenue and will aim to serve as the link between the newly corporately developed Hudson Yards and the existing Garment district stimulating connectivity between the two districts. Located in the Lincoln Tunnel entrance ramp area, the land value is reasonably low and largely underdeveloped, therefore it is prime real estate for new construction, increased furthermore by its proximity to Hudson Yards. The plot is a collection of lots with varying functions: residential apartments, manufacturing units, commercial amenities and an existing 1910's building which is to be renovated and incorporated.



Challenge: Disparity between neighborhoods forming harsh boundaries within the city



Symbiosis between the Commercial, Residential & Communal



Plot area & adjacent interventions (Diagram not to scale)

Urban Rules & Programme

After testing several massing studies upon the site, the following urban rules were defined for the project: **The height of the plot is to be retained to the West side of the plot with a maximum height of 250m** to facilitate disparity of height from Hudson yards to the lower buildings of the Garment District. This is achieved through maximizing the FAR which before bonuses enables a FAR 10, however with the use of District Improvement bonuses (DIB) obtained from Hudson Boulevard and rezoning to become part of New Lincoln, the threshold can be increased to a FAR 19. **A plaza to the corner of the site** to act as the main entrance to the development, whilst also providing a multifunctional public space to enable a place of social gathering and mixing. **The raking of the building adjacent to retained structure to facilitate light ingress**, as this currently is the main façade to allow sunlight to enter the apartments of the building. Finally, **porosity through the block at ground level**, enabling access from a multitude of entrances to the community complex, further incorporating it within the urban fabric.

The complex is to comprise of a multifunctional programme: 37% of residential units which will include the renovation of the existing 1910's building on the site and new build apartments, with a mixture of affordable and medium-income apartment types. 34% commerce and 20% community functions including: maker space and start-up incubator, market place, exhibition areas, a library, rentable community rooms, a vertical farm and commercial units to be available for small amenities, these are to be located in the main building to the west of the site. 9% of the GFA is to be used for the plaza which will serve as the main entrance to the public building. The design scope includes the full design of the community building, a proposal for the organization of the plaza and the facilitation of the connection between the existing building and the new development.

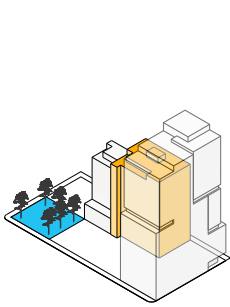
Character & Materials

The main building will be monumental in order to attract, both visitors and residents. Within the internal communal core the quality of light is paramount, therefore internal spaces will mostly consist of light materials to return as much light as possible. Emphasis will be given to the entrance and the plaza, as they will be the focal points which signify the threshold to the site. The plaza and surrounding urban landscape will be designed to encourage a variety of uses and also tie into the adjoining public realm. Whilst the residential apartments are to be sympathetic to the surrounding structures.

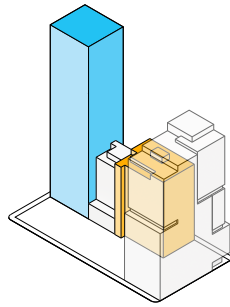
Due to the nature of the location, there is an interchange between the characteristic of Hudson Yards and the Garment District. Hudson Yards with its new glass towers, facades of polished marble and steel of the 'modern age' and large public domains which runs through the spine of the district; whilst the Garment District is characterised by the brick 'wedding cake' Art Deco /

Art Historic big lofts, built in the first half of the 19th century, which performed numerous functions such as theatres, offices, manufacturing and apartments.

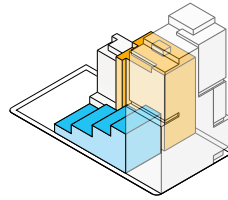
The project will respond to this by investigating in a variety of materials. Longevity is key, consequently materials such as brick, which reflect the surrounding typologies, are to be considered. However modern materials should also be investigated, exploring the recent increase in the possibilities of building tall buildings with sustainable materials. All of these elements will result in a new community complex that is firmly rooted in its context but also strives to be a focal point of social interaction in Midtown Manhattan.



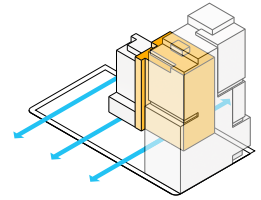
Plaza to the corner of the plot



Height of plot towards Hudson Yards

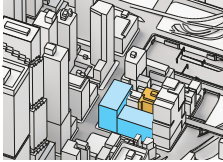


Raking of building to facilitate light

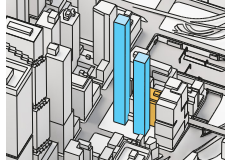


Porosity through the block

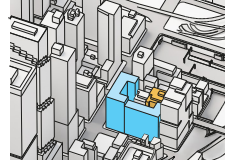
Urban rules



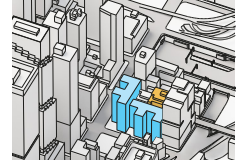
Block



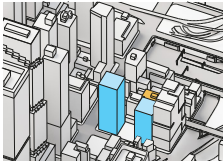
Needles



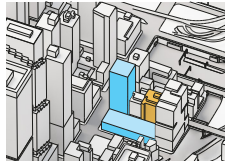
External wall



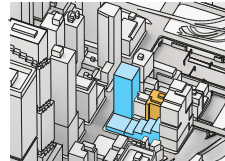
Comb



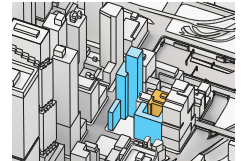
Plaza



Block & plinth

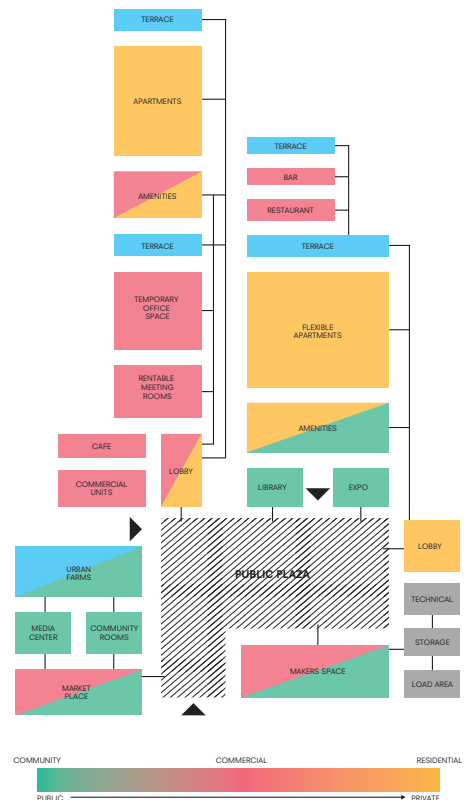
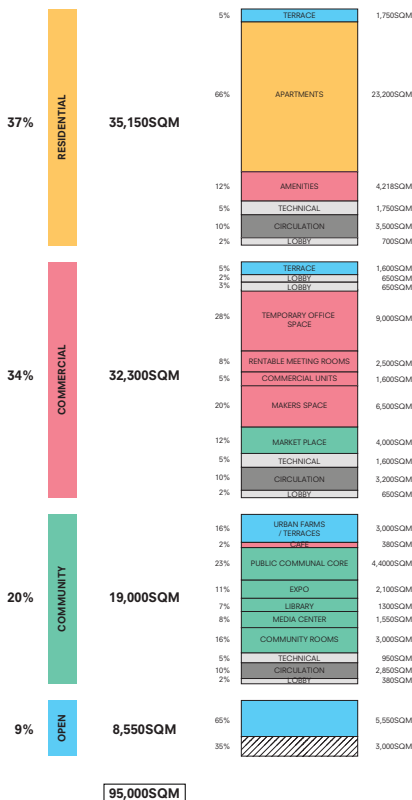


Block & stacks



Plaza, Tower & Courtyard

Massing study according to site analysis



Programme Breakdown and Schematic

Architectural Ambition

The project aims to test the following design question and ambition in the following design phase: *'How can architecture create urban environments to reinforce societal values in Midtown Manhattan within the constraints of midtown's financial and real estate dynamics?'*

Architecturally the buildings should be rooted in the urban context, creating a transitional experience which provides cohesion and addresses the following architectural ambitions. Firstly, it must create an open and inclusive environment that fosters community dialogue. Secondly, the building has to reflect its surroundings and root itself within its contextual identity as the junction between the old and the new. Thirdly, the complex will have different forms of entrances at the ground floor level, one for the main public building which is to be iconic, whilst the residential elements are to be more reserved. Fourthly, it has to be of modular construction, to both enable flexibility of function and adaption for future expansion to coincide with the cycles of growth. Fifthly, the use of construction and materials must be sustainable, either through permanence or renewable qualities. Finally, it must contribute towards the improvement of the quality of the public realm in the city. Generally, developments in the city are stand-alone and inward facing. This development, by the merging and blending of the community and commercial zones, becomes outward facing, leading to closer engagement of businesses in the local area. The building will act as a focus and anchor for the community to gather, explore and share new ideas in an area which is in constant change.

Reflection

In the end, Hudson Yards is to become the new heart of Manhattan, particularly as companies and visitors are ever increasingly drawn upon it. As a result, there is a need to enforce the district's newly acquired identity, however this is to be in partnership with the surrounding neighbourhoods, otherwise the development will become an island within a city. Therefore, the requirement is to find a way that not only accommodates the surge in expansion of the current growth cycle but also successfully unites people, so everyone within the diverse city is able to reap the benefits. "The truth is, has always been, and always will be that we are utterly and hopelessly dependent on each other." With the emphasis towards capital gain so present with neoliberal societies, we become disconnected from this ideal and are only now starting to reconnect with it. The future of our interactions with the cycles of development and the built environment is one in which social interaction and community hold priority, learning from our past and utilizing the advancements of the age but not to the point in which they control us. The ability to utilize the cycles of growth within a city, will create a more sustainable urban realm in which one can re-identify with and essentially belong to.



Open and inclusive environment



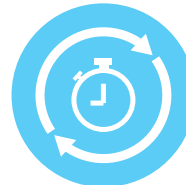
Reflect its surrounds within its contextual identity



Varying form of entrance depending upon the function



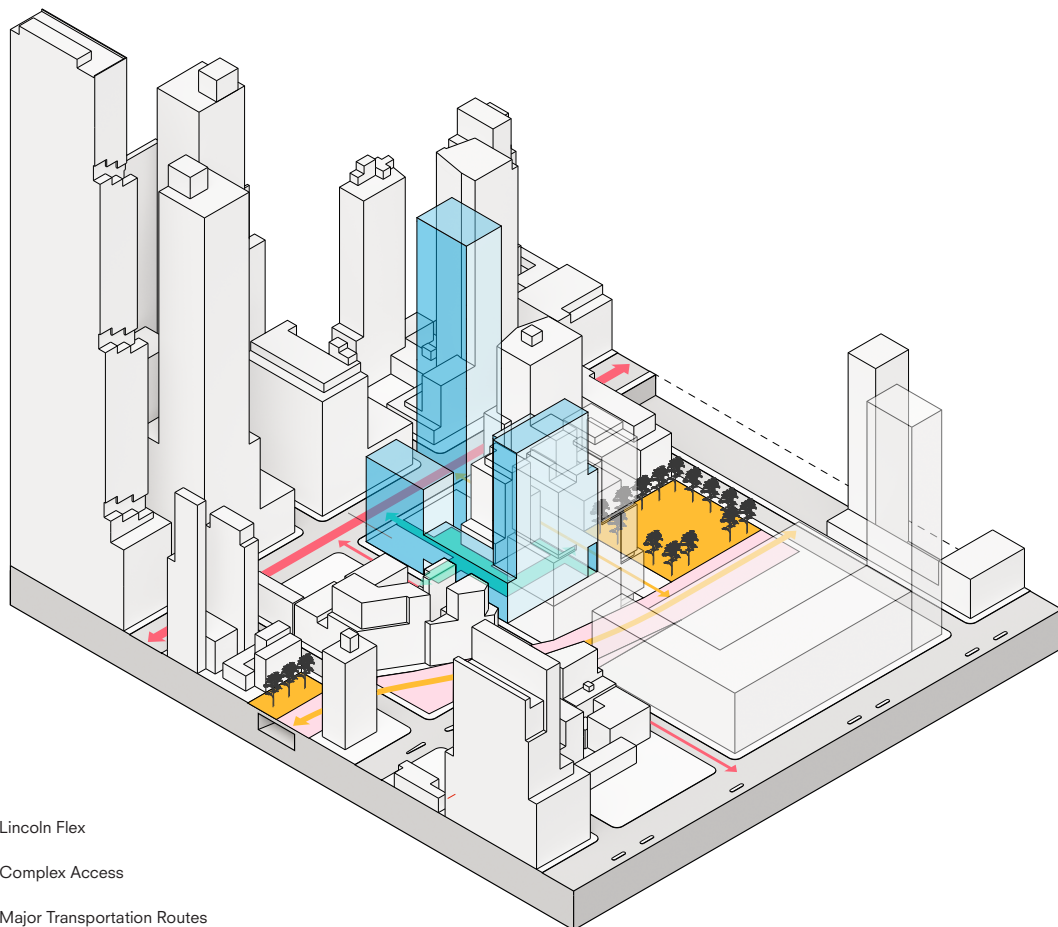
Modular construction for adaptation & future expansion



Use of construction and materials must be sustainable



Contribute towards the improvement of the public realm



- Lincoln Flex
- Complex Access
- Major Transportation Routes
- Pedestrian Thoroughfare
- Public Network & Spaces

Complex integration into the surrounding neighborhoods, both physically and through its mixed-use functions

1. Buchanan, "Reweaving Webs of Relationships."
2. Buchanan, "The Big Rethink Revisited: Becoming Earthlings."
3. Easterling, *Subtraction*.
4. Eisenstein, *Sacred Economics*.
5. Florida, *The New Urban Crisis*.
6. Foster, *The anti-aesthetic*.
7. Harvey, *A Brief History of Neoliberalism*.
8. Harvey, *The Condition of Postmodernity*.
9. Hirsch & Kuan Wood, "Keller Easterling in Conversation: Subtraction, Critical Spatial Practice 4."
10. Jacobs, *Life and death in Great American cities*.
11. Jencks, *Post-Modernism*.
12. Lefebvre, Kofman & Lebas, *Writings on cities*.
13. Miller, *Supreme City*.
14. ODA New York, *Unboxing New York*.
15. Sassen, *Cities in a World Economy*.
16. Sassen, *The Global City: New York, London, Tokyo*.
17. Szarkowski, *The Ideas of Louis Sullivan*.
18. Tonkiss, *Space, the City and Social Theory*.
19. Varvarousis & Koutrolidou, "Degrowth and the City."
20. Willis, *Form Follows Finance*.