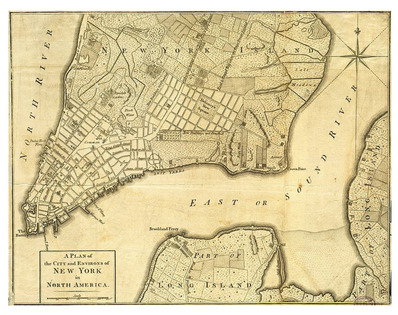
DEMOGRAPHIC SHIFT

Neighbourhoods and building types change to accommodate shifting populations.

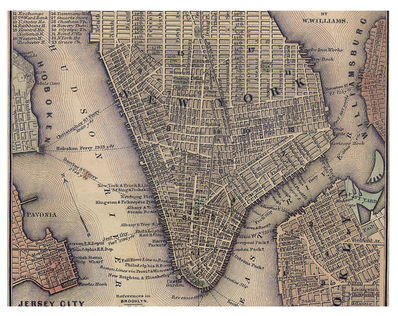
New building typologies respond to the particular needs and circumstances of their users. In many cities, older, compact urban forms reflect the necessity to live in close proximity to work, places of worship, and local services. As technology changed and new modes of transit became available, the wealthy often moved out to more spacious suburbs, confining the working class to the dense, walkable central city. However, as apartment buildings gained popularity amongst the middle class, living within walking distance of your workplace soon became an urban luxury. This is first seen in developments like Tudor City on Manhattans's East Side, which marketed a walkable lifestyle to new homebuyers. Today, in many cities throughout North America and the world, compact, downtown living is the new urban ideal, particularly for younger generations. These groups are flocking to urban cores, necessitating densification.

NEW YORK CITY, USA

In New York, the marked shift towards higher density, multi-unit residential buildings was sparked by massive waves of European immigration throughout the 19th century. The rapid influx of new residents to the city and the necessity to live in close proximity to both your place of work and your clustered cultural community led to the proliferation of tenement-houses, the first multi-unit apartment-style buildings in the city. Throughout New York City's East Village and Lower East Side, many of these tenement-houses remain as the dominant architectural typology



Before the massive influx of European immigrants in the 1800s, New York City covered a relatively small geographic area.

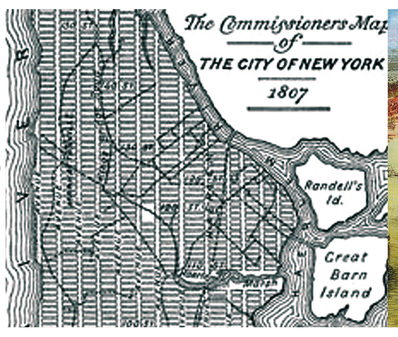


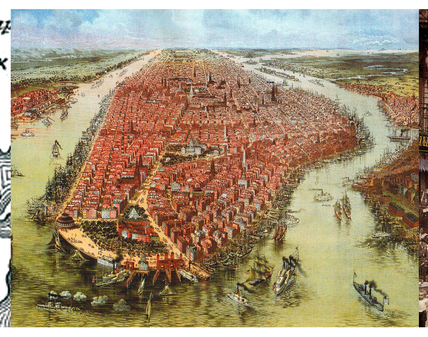
By 1847, the city had expanded to meet the demands of its growing immigrant population and industrialization.

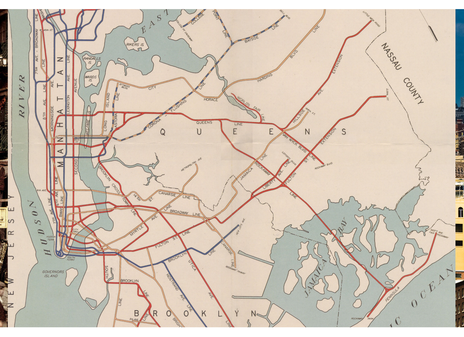
1811
Adoption of Commissioner's Plan introduces Grid Pattern

1850-1900
The need for housing for immigrants near industrial areas results in tenement houses, the first multi-family dwelling typology in New York City

1900s
First subways are constructed, enabling residents of outer boroughs to easily commute to centre city







1800s
Population rises and New York becomes America's premier port

1898
The five boroughs are amalgamated into New York City

2000s
After economic decline and out-migration in the 1980s, NYC`s prime industry is now real estate.

MID-RISE CITY

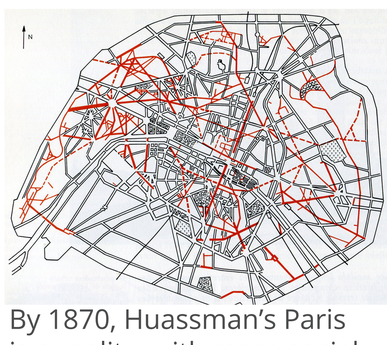
INFRASTRUCTURE & TECHNOLOGY

The introduction of new infrastructure or a change in technology can alter the way the city looks, feels, and functions.

Urban infrastructure and technology have huge implications for how residents understand, use, and live in the city. Historically, advancements in transportation and sanitation infrastructure have been the impetus for new forms of urban development. The construction of underground sewers and the introduction of streetcars, suburban rail lines, and massive highway investment facilitated the creation of the first suburbs, further separating residential, commercial, and industrial uses in the city. As changes in infrastructure and technology allow for new forms of urban development, we are left with the question of how to make this infrastructure and tech work for us—how to create systems that lay the groundwork for the city we want to live in.

PARIS, FRANCE

The 1615 Merian Map of Paris shows the medieval city, prior to Haussman's overhaul, the city was a dangerous, unhealthy, and frustrating place to inhabit.



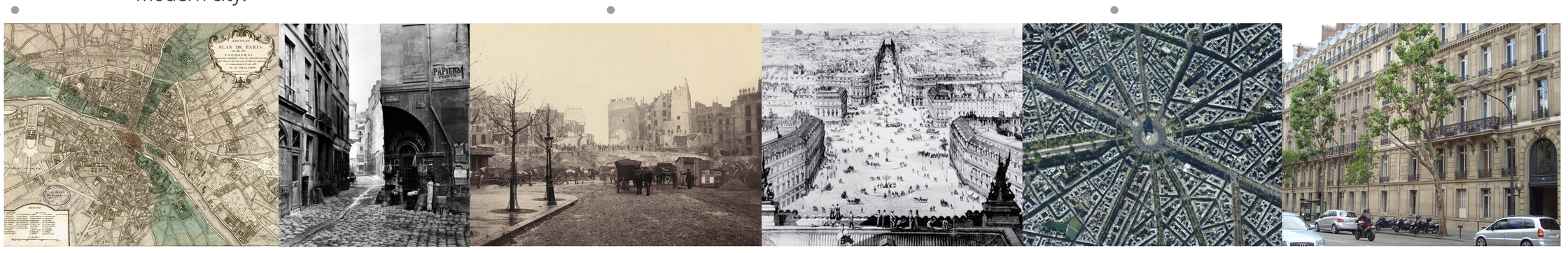
By 1870, Huassman's Paris is a reality, with more social spaces, wider streets, and easier navigation through the city.

One of the most well-known and evident redevelopments of the urban fabric was the *Haussmanisation of Paris* between 1853 and 1890, where new wide boulevards, parks, running water and underground sewage systems were built. It wiped out whole neighbourhoods, perceived as dangerous and unhealthy, and removed the poor and the disenfranchised from the centre of the city. The new web-like network of streets and boulevard extensions followed an etoile' star pattern that created focal points of urban exchange and activity, spaces of surveillance, and allowed for future military access and control. The radical *Haussmanisation* is what we see in any modern map of Paris.

1800s
Despite the over-crowding, Paris is the largest manufacturing city in the world, a major financial centre, had built a railway and was reinventing itself as a modern city.

1853-90
The razing of medieval Paris for Haussman's street plans

1900s
Avenues radiate across Paris from the Arc du Triomphe in the '*etoile*' pattern



1884
A cholera epidemic killed twenty thousand people and precipitated the massive overhaul in the name of *medicine and art.*

1879
A view of the completed avenue de l'Opera, with the straight avenue leading from the building, as envisioned by Haussman

2014
Rue Haussman today demonstrates the high density accommodated on a typical Parisian street

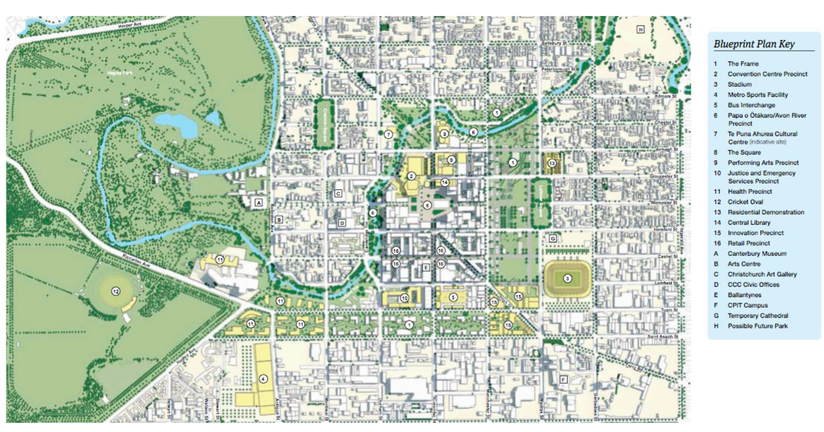
MID-RISE CITY

UPHEAVAL & DISASTER

A crisis, disaster, or revolution leads to a sudden change in the way the city is imagined and built.

A dramatic natural, physical, or social phenomenon can cause a profound shift in the capabilities of the city. This may take the form of a natural or man-made disaster, a sharp economic shift, massive social unrest, or government overthrow. It has the power to prompt a re-thinking of our ideas about how our cities should look, feel, and grow. In many cities around the world, historical shifts in the typology of growth have been preceded by fires that levelled neighbourhoods, with disastrous effects on both the built environment and the communities occupying it. Neighbourhoods are confronted with the task of re-envisioning their neighbourhood or city - and a rare opportunity to break from accepted norms and imagine a new future based on updated ideals, desires, and needs.

CHRISTCHURCH, NZ

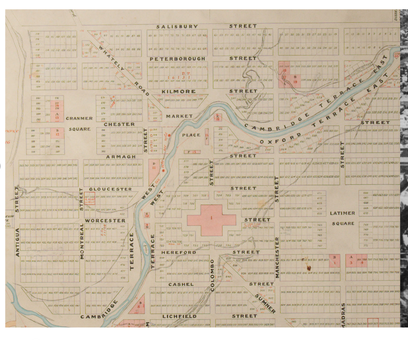


This map demonstrates the intentions for rebuilding post-earthquake, with development condensed in the central city.

In Christchurch, NZ, the massive earthquake of February 2011 seriously damaged a significant portion of the core city and killed 185 residents. Out of catastrophic circumstances, residents were presented with an unprecedented planning opportunity to envision and build the city that they wanted. After months of consultation Christchurch decided to move towards a mid-low rise central city by consolidating development in the core. They envisioned a dense, walkable, and accessible central city that maintained a sense of the human scale in its built form. The vision will take decades to achieve, but rebuilding efforts are already underway.

1960s
Christchurch expands along the gird pattern with low-density residential growth

2010-2013
Two major earthquakes hit Christchurch, necessitating the demolition of much of the City's central business district and killing 185 people. The population decreases by 5% between 2010 and 2013.



1850
The city is founded as a British colony, and planned with a uniform grid.

1980s
Christrchurch's central business district densifies and welcomes taller buildings.

2010-2013
Blueprint Plan is released, and a dense, compact low-mid-rise central city.

MID-RISE CITY

LAND ECONOMICS

Both the speculative opportunity of land and its value upon development affects what is built and what the market will bear.

The value of land determines what will be built and what the market will purchase. In recent decades, many former brownfield and industrial areas, often lining key waterfront areas, have become increasingly valuable as residents seek downtown urban lifestyles and manufacturing uses steadily move to the periphery, where land prices and property taxes are substantially lower. The speculative and inflated value of this land for residential or mixed uses results in its large-scale redevelopment. In other areas, speculation on future land values has resulted in the purchase and holding of potential development sites, causing surrounding developments to soar to new heights to accommodate for the high land prices paid per acre.

VANCOUVER, CANADA

Vancouver is a city that has pulsated with the cycles of a boom and bust economy on an almost 30 year cycle. For the most part this growth was naturally contained by mountains to the north and east, the ocean to the west and the US border to the south. When the global real estate market took hold of the city in the late ‘80s, there was a perfect confluence of policy, political migration, capital, brownfield sites, and the introduction of a new housing ‘product’ -- the condominium. The impact of this global phenomenon has put extraordinary pressure on cities around the world, creating issues of affordability, diversity and equitable access to the city.

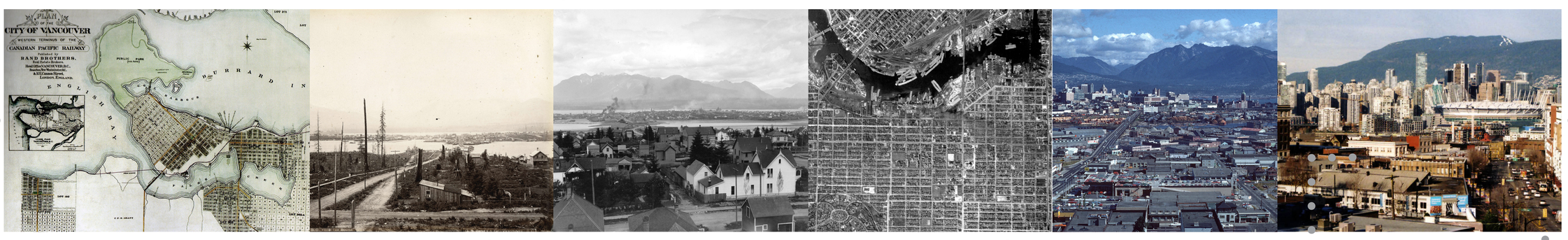
An aerial view of False Creek in 1971 shows the area still dominated by industrial uses, primarily the logging industry.

By 2014, the redevelopment of False Creek the Olympics brought with it a massive wave of development, completely transforming the False Creek area.

1873
Van Horne makes Vancouver the western terminus of the CPR. The population of Vancouver explodes to 400 within months

1892
By the end of the 1890s the city has 10,000 residents and its first residential ‘suburb’

1970
The introduction of the condominium law creates the perfect global market conditions for the *point tower podium* form of development -- one of the most ubiquitous Vancouver exports



1889
Looking north to False Creek from Westminster and 7th Avenue shows the city as a young colonial outpost

1942
This industrial port is still the major economic activity in Vancouver. An exstensive streetcar system allows for residential development to role out across the growing city.

2000s
The density of the downtown core is encroaching on older neighbourhoods. In recent years Mount Pleasant has come under intense development increasing the pressure on afforbability for residents and art organizations.

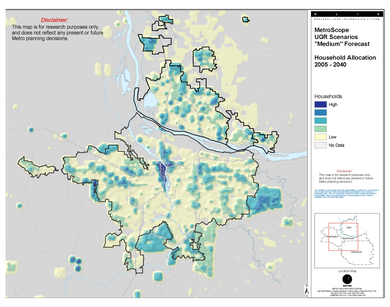
MID-RISE CITY

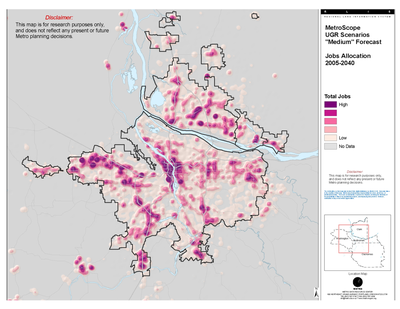
POLICY & SOCIAL NORMS

Policies, reflective of social values and norms, alter the city's natural evolution and produce particular forms of development.

Urban policies -- official plans, zoning bylaws, building codes -- are created to guide growth, development and form in a way that aligns with broader goals for the future of our cities. These policies produce very real and specific patterns of development (though not always as intended). Urban Growth Boundaries limit sprawl by restricting the outward reach of urban development and necessitating increasing density and infill. Building height limits are implemented to preserve views of monumental architecture, as in Washington, DC, or views of natural features, as in Vancouver, BC, and produce site-specific architectural typologies and incarnations of density. Such policies are a reflection of the societal value placed on particular urban landscape features. It's a desire to shape a city that reflects of the values of its residents by prescribing how, where, and why the city will grow.

PORTLAND, USA





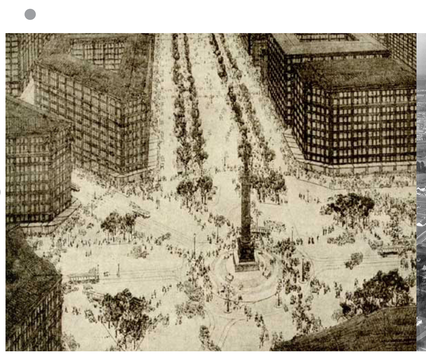
These two maps from the recent Portland Plan show the expected household growth and job growth in the city from 2005-2009, demonstrating Portland's commitment to securing growth within its Urban Growth Boundary and centering development in the core and along avenues, where possible.

In Portland, a city known widely for its strong land use regulations and commitment to urban sustainability, the Urban Growth Boundary (UGB) has become a symbol of this prescriptive style of urban policy. The UGB, adopted in 1979, establishes a strong urban/rural distinction by controlling urban expansion into agricultural and forest lands. Its adoption coincided with a concerted effort to densify and revitalize Portland's downtown core, with brownfield redevelopment near the waterfront and infill development in downtown neighbourhoods, a growth strategy that continues today.

1890
Electric streetcars are introduced

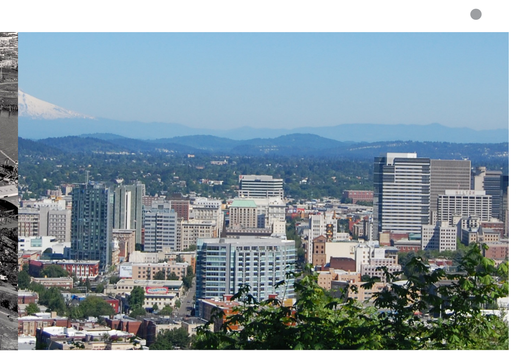
1912
"Greater Portland Plan" predicts population growth to 2,000,000

1943
During WWII, Portland is a major shipbuilding centre. The population swells by 67,000, prompting the Federal Government to construct thousands of new housing units, including Vanport.



1948
Massive flooding in Vanport prompts rethinking of how and where to construct public housing

1968
The Downtown Waterfront Plan revitalizes the Harbourfront



1980s
The Urban Growth Boundary is established, and the planning focus shifts towards smart growth, densification, and sustainability.

MID-RISE CITY

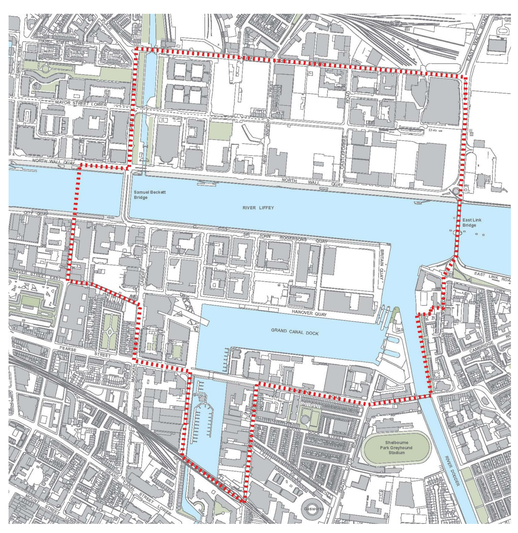
MARKET ECONOMICS

The state of the economy, whether good or bad, these swings can have a drastic effect on the development of the built form.

Booms and busts produce particular forms of development in cities. Often, a strong economy encourages more growth, urban sprawl, high-end residential and commercial spaces to meet the demands of the expanding urban elite. Whole neighbourhoods often shift to accommodate an influx of capital, realizing new building forms and displacing residents who have called these neighbourhoods home for decades. This constant change and flux has always been part of the cycle of growth in a city. The speed of global capital has accelerated the rate of change and inflated market prices, pushing affordable housing out of the reach of many.

DUBLIN, IRELAND

From the mid-1990s to the mid-2000s, Ireland experienced the “Celtic Tiger”; a period of massive economic growth during which Dublin’s population increased by 61.6%. In 2007, the city’s overheated property bubble finally burst, developments were abandoned mid-construction, and two years later, unemployment had reached 10.8%. In recent years, Dublin has targeted intervention to regenerate the most disadvantaged areas with new residential buildings and cultural landmarks. Through careful and innovative planning and investment strategies, Dublin’s star is once again on the rise.



To the left is a map outlining the Docklands area in Dublin, which has been targeted for residential, commercial, cultural development as the city emerges from its economic crisis.

1660-1760
Dublin becomes an aristocratic, Protestant city, resulting in more luxurious, Georgian-style residential buildings.

1775
The Wide Streets Commission, Europe’s first official town planning authority, is established to implement decongesting strategies for the city core.

1986
The Urban Renewal Act is passed, targeting the transformation of the industrial Docklands into high-density residential and commercial areas.

1990s-2000s
Population growth during the Celtic Tiger period leads to a real estate and residential development boom.

1980s
Rent prices in the city have increased by 18% since the lowest prices in the crisis period, indicating that the city is slowly on the rise.

1968
The real estate bubble bursts, 40% of all jobs lost are from the construction sector, and developments are abandoned.

MID-RISE CITY

TIPPING POINT

The confluence of one or more factors that precludes and necessary shift towards increasing density in the city.

When cities approach a Tipping Point, they face a necessary re-thinking of how to accommodate density -- where it will go, how it will emerge in form and function. A Tipping Point could be precipitated by any number of factors: a necessity to curb outward urban expansion, an influx of new residents, a strategic desire to support public transportation, a commitment to environmental sustainability. Governments and residents must strategize how to accommodate the required densification while enhancing affordability, equity, livability, and resilience -- both a challenge and an opportunity.

OSLO, NORWAY

Norway's booming oil industry has helped Oslo avoid the EU's economic slump, and has attracted a talented, high-earning workforce to the city core with a desire for a downtown lifestyle. To move past this Tipping Point, twelve residential and commercial mid- to high-rise towers, known as the "Barcode Project", are to be completed on Oslo's waterfront this year. Norwegian culture abhors suburban sprawl; the value placed on keeping surrounding greenspace, paired with an expected influx of 100,000 people by 2040, has resulted in taller towers and increased urban density in Oslo.

This map shows the location of the Barcode Project on the Oslo Harbourfront, adjacent to the Oslo Opera House and the trendy downtown area.

1969
Oil is discovered in Norway's North Sea, and transforms the economy throughout the 1970s. Nationalisation of oil shares means that the government has money to spend on public services, spaces, and urban development.

1972
Norway votes "No" by a slim margin on joining the EU, instead negotiating trade agreements, and avoids the economic crisis.

2040
Oslo's population will have increased by 100,000 people, and the city will have to densify to accommodate this number.

1940s
After WWII, large-scale residential complexes are built to accommodate immigrants, resulting in "satellite cities" dotting Oslo's periphery; they are known as "*drabantbyer*". This is Oslo's first Tipping Point.

2014
The booming oil industry has attracted a talented workforce that expects a high quality of life in the downtown core. The resulting "Barcode Project" towers are to be completed by the end of this year.

MID-RISE CITY

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