

CENTRAL CITY SPATIAL VISION

FOR WELLINGTON CITY COUNCIL

WARREN AND MAHONEY® Boffa Miskell





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February 2020

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INTRODUCTION

The “Our City Tomorrow” goals (described below) have been formulated by the community and Wellington City Council (WCC). To assist in the realisation of these goals for the central city, WCC is preparing a Spatial Plan which looks ahead to 2050. To guide the Spatial Plan a specific Vision for the central city has been prepared. The Vision aligns to the “Our City Tomorrow” goals which are:



Wellington builds on its existing urban form with quality development in the right locations.



Wellington recognises and fosters its identity by supporting social cohesion and cultural diversity, and has world-class movement systems with attractive and accessible public spaces and streets.



Wellington’s natural and built environments are healthy and robust, and we build physical and social resilience through good design.



Wellington is sustainable and its natural environment is protected, enhanced and integrated into the urban environment.



Wellington builds on its reputation as an economic hub and creative centre of excellence by welcoming and supporting

VISION

This document presents a Vision to guide the Spatial Plan for the central city.

The Spatial Plan will be prepared by WCC. The Vision described in this document includes a Statement, Directions and Actions.

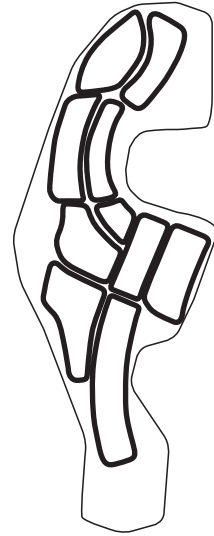
The Vision continues the evolution of strategies for the city that build on each other. The previous strategies and the analysis that has informed them continues to be useful, whilst taking into account changes in context and contemporary influences.



STATEMENT The Vision statement for what the city will be like in 2050 is:

“A thriving, green capital city framed by the harbour and hills, composed of interconnected, cohesive neighbourhoods that support people to lead healthy lives”.

CITY SCALE DIRECTIONS



The Vision guides the Spatial Plan in the following directions:

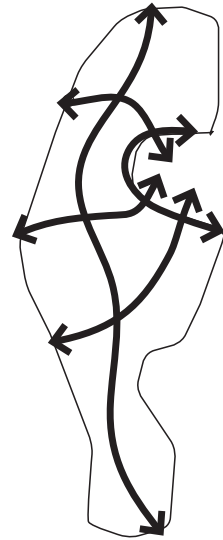
- Neighbourhoods
- Connectors
- Greening
- Anchors
- Areas of Change

These directions are also applicable to a neighbourhood scale (refer pages 5 and 6).

The rationale for the focus on these elements is explained in the Background (refer from page 8).

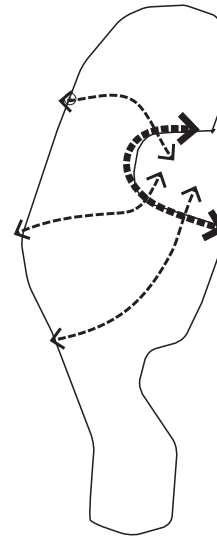
NEIGHBOURHOODS

1. Neighbourhoods as a unit of scale within the city centre will be identified. The features used to define neighbourhoods will include (but not limited to):
 - topography and catchments
 - orientation to harbour and hills
 - sun/shade and climatic influences
 - density of commercial/residential land uses
 - built form/building typology
 - population demographic/culture
 - valued character (including heritage places)
 - block structure and position in relation to arterial or large volume movement streets
 - anchors
 - opportunity for change/development
2. Some neighbourhoods may undergo only incremental change (for example in the densest areas) and other neighbourhoods (for example parts of Te Aro) may see more extensive change given the latent capacity for increased density of use. The extent and form of change will be influenced by (for example) the economics of redevelopment, supporting infrastructure and Council/government policy.
3. Quality living and/or working environments will be provided for within neighbourhoods considering mixes of uses and composition of form and density.
4. Individual site developments will still be common in the city, but each will be managed towards an overall good neighbourhood outcome. A diversity of building forms and types will be enabled to encourage social and economic diversity.
5. The density of people located within a neighbourhood will vary. In some of the inner-city residential areas an increase in density of living may be able to be achieved while respecting character values. In other parts of the central city, density will be significantly increased to take advantage (for example) of proximity to movement networks, anchors, sun, or good ground conditions.
6. A range of building heights will generate site-responsive development configurations that best demonstrate quality design outcomes. Residential buildings that allow 'walk up' (ie of 4-5) floors will be encouraged.
7. Open spaces within neighbourhoods and the blocks that compose those neighbourhoods will be deliberately planned for. Enclosed, or partly enclosed spaces that provide sheltered, sunny spaces suit Wellington's climate. The interrelationship of open space to building, the height and depth of buildings to give natural light and comfortable relationships with the street are all open space attributes sought from development outcomes.



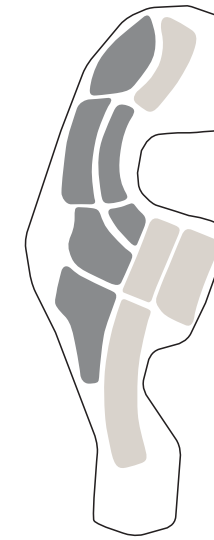
CONNECTORS

1. The quality of 'place' as well as 'movement' will be determined for by all central city streets - all streets have a place value in conjunction with being connectors. The balance of 'place' and 'movement' function will be reflected in the form of each street.
2. The Lets Get Wellington Moving (LGWM) vision for the city, its connectors and modes will be provided for.
3. The density of people (living, working, or moving) within the central city will be planned to consider the (future LGWM) transit network. Attributes of street and public space design (for example infrastructure, adjacent building forms and land uses) will contribute to the amenity and pleasantness of using this network.
4. Streets that align to underground streams/large culverts (for example north/south streets of Te Aro) that gravitate towards the harbour will assist stormwater to be managed more sustainability towards a target of zero harbour contamination from discharges.
5. Streets for active mode movements will be encouraged along both formal and informal pathways - these may be a way of moving about via lanes and short-cuts, or follow well-marked paths.
6. The streets that collectively form the movement network will reduce through-traffic movements within neighbourhoods. Within neighbourhoods the connectors will be prioritised by slow speed streets that enable active modes and transit accessibility.
7. The city streets, lanes and through-block connections that enable people to move towards the waterfront and the town belt will be planned to operate as a joined up network.
8. Connections will be enabled for people of all abilities and levels of mobility.
9. Connections across the harbour by ship, or from Wellington to the south island, or internationally will be enabled. Ships that are primarily passenger-based will be located close to the central city.



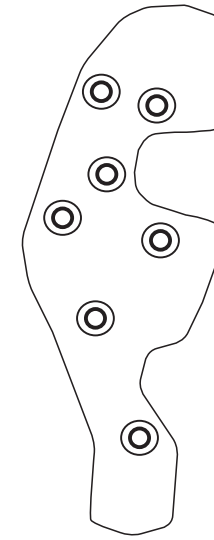
GREENER

1. The waterfront and town belt provide large open spaces and will be well connected to the central city. A 'bluebelt' plan will enable a range of contemporary considerations for the waterfront including the use and quality of the harbour water itself.
2. New spaces within the city will provide smaller and more climatically responsive places at a neighbourhood scale to supplement the larger town belt and waterfront spaces.
3. Streets with green infrastructure, particularly where these align with city runoff catchments, will be enabled to address flooding risk and generate improved ecological and place identity outcomes.
4. Green connectors and spaces are linked as a network to enable a range of choices for movement, place quality and ecological outcomes.
5. Climatically responsive greening approaches to address heat gain, carbon sequestration, shelter, and water usage will be considered.
6. "Green" will be applied an attitude as well as a spatial response. It means enabling a future of carbon neutrality and the requisite spatial strategies for its achievement.



AREAS OF CHANGE

1. Areas of Change are identified as places where comprehensive redevelopment will be actively encouraged.
2. Areas of Change will be considered for their catalytic public benefit. For example they may enable private development to achieve public benefits like green space provision or anchors.
3. The investment in infrastructure to support Areas of Change will be managed in an economically astute manner.
4. Collaboration between public and private interests, and by groups of owners of land will be actively encouraged to enable comprehensive development comprising multiple sites.
5. Areas of Change are enabled by prioritisation of strategic public investments to accelerate well planned and designed urban outcomes.
6. Areas outside those signalled for change are not prevented from changing. They will continue to be managed to enable good quality urban outcomes.



ANCHORS

1. Anchors are strong, stable places and will have a constant presence in the city. They are already resilient, or are capable of being made to be. The hospital, Pipitea marae, parliament, a rebuilt Civic Centre/Te Ngākau, rebuilt port, Te Papa, and universities are examples.
2. Anchors are also strong places for their particular character and identity - they 'spark' up a destinational response as places people are attracted to. They might be referenced as 'typically Wellington'. These Anchors may also contribute to economic resilience. Cuba Street, Basin Reserve, or Civic Square, Town Belt, waterfront - open spaces or areas of built character are examples of these. These places will be supported to retain their permanence and/or destinational qualities.
3. Open space is a type of anchor too within the urban context. New space will be planned for and distributed to provide places of refuge, as well as to provide places for public life and amenity that supports living in the city.

DIAGRAMMATIC REPRESENTATION

The Vision to guide the Spatial Plan can be represented diagrammatically.

The directions (refer pages 2 and 3) work together and align to the city goals (refer page 1) as illustrated in the diagram here.

The diagram is indicative only.

COMPACT

Neighbourhoods will be contained by the hills and harbour - development change can be expected with increased density of living and supporting amenity within a compact central city footprint

GREENER

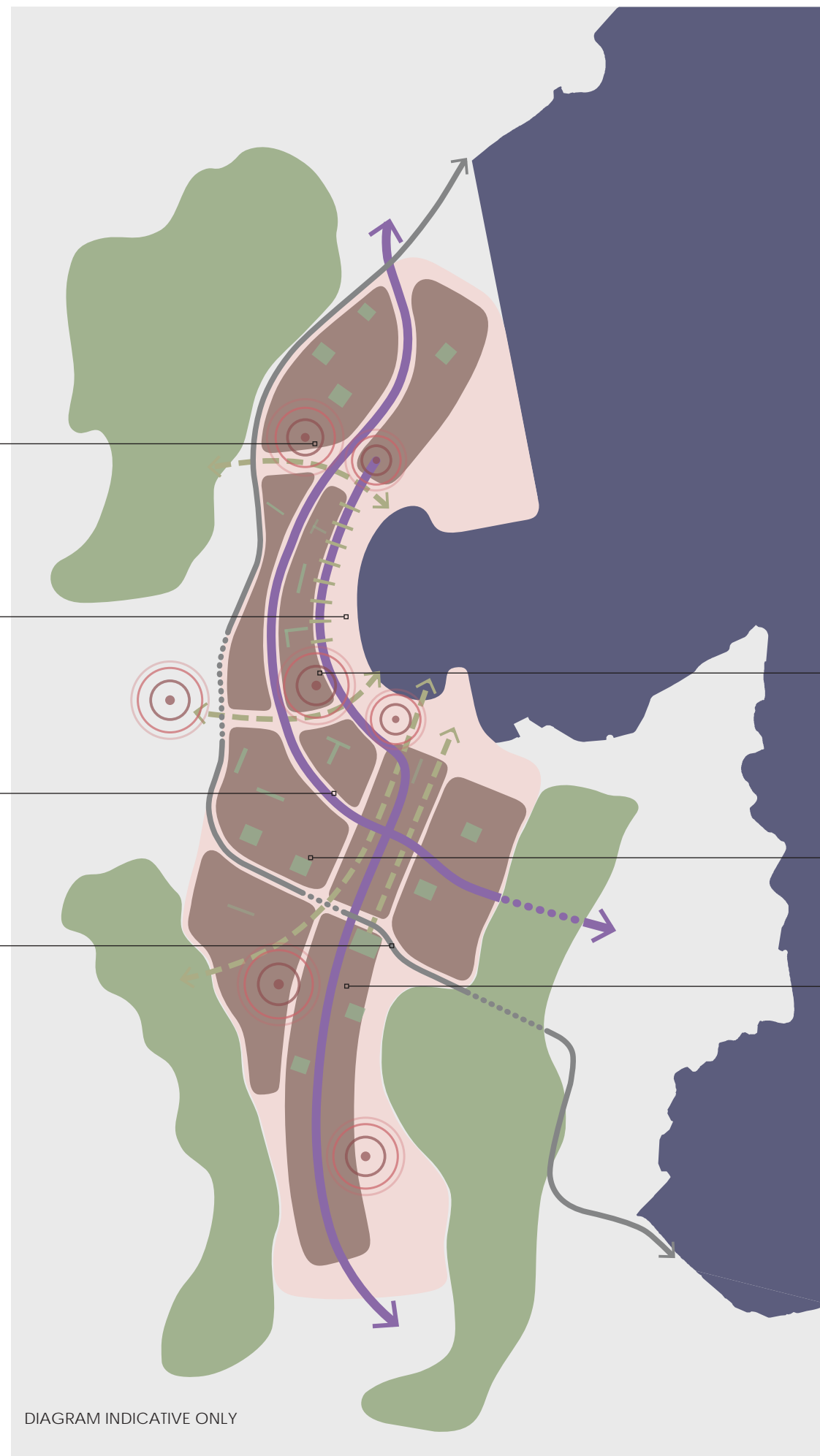
Water frontages continue to develop as public open space with resilient buildings within. Over time fingers of open space extend back into the city to allow increased capacity to address flooding

INCLUSIVE + CONNECTED

Transit extends through the city generating increased people movement capacity and city streets that support increased density of living and commercial space

GREENER

Green connectors extend from the hills to the harbour - they follow streets, go between new development areas, through parks and generally follow contours and old stream locations. They enable people movement and stormwater management and increase biodiversity



key

- green connector
- public transport - MRT/BRT
- neighbourhood
- anchor
- green belt
- green space
-

RESILIENT

Anchors of resilience are planned to be self-supporting places post events, like earthquakes. They may be already strong places, or like Civic Square/Te Ngākau undergoing redevelopment planning to be more resilient. They might be new places altogether

GREENER

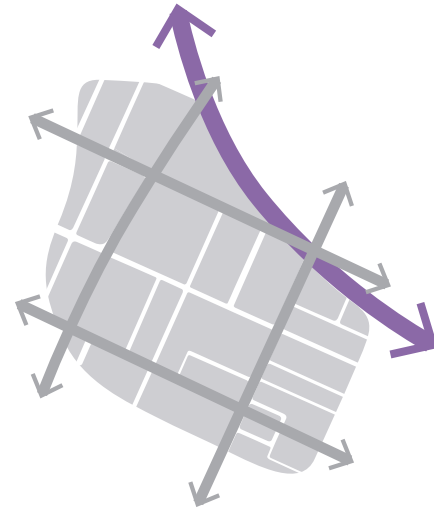
New urban green spaces support compact, liveable, healthy neighbourhoods

COMPACT

Density of development is varied across the city in response to character values, ground conditions, relationship to connectors, commercial conditions, and infrastructure support

DIAGRAM INDICATIVE ONLY

NEIGHBOURHOOD SCALE DIRECTIONS



The Vision for the central city has both a city scale and neighbourhood scale of application.

The Vision will be applied at a range of scales as planning and policy are configured.

Neighbourhoods are the unit of scale that enable the different characteristics within the city to be expressed and managed in response to growth and change.

The following pages present a neighbourhood scale of direction to the Spatial Plan.

CONNECTORS

1. Transit network connectors through neighbourhoods will enable new commercial and mixed use developments to take advantage of proximity and potential for development value uplift.
2. Within neighbourhoods the speed of movement will be slow and pathways, lanes and shared streets will connect people and places. Within neighbourhoods the connectors will be prioritised to enable active modes and public transport accessibility.
3. Open spaces will be linked by streets, lanes and pathways to create a network of spaces within and between neighbourhoods.
4. Connectors will reflect the type of neighbourhood and its character considering both 'place' and 'movement'.
5. Social connectedness will be enabled through the consideration in design to the anticipated community composition within neighbourhoods and the support infrastructure to provide for healthy lives.
6. Stormwater and runoff will be managed at a neighbourhood catchment scale connecting the natural conditions with urban form including size and distribution and connectedness of open space and street design.



AREAS OF CHANGE

1. Areas of Change within neighbourhoods will be identified. These may be sites, a block, or several blocks within a neighbourhood. Factors that determine the Areas of Change will include, for example, groups of poor quality existing buildings that can be re-purposed or removed, conducive land/capital values, owner aspirations, proximity to transit, infrastructure capacity, or renewal opportunities. These factors will be best considered in combination. Areas of Change will be signalled and the opportunity for comprehensive developments encouraged.
2. Areas of Change will be multiple sites or at least sites of a size that support a comprehensive approach to amenity, green/open space access, pedestrian movement networks, neighbourhood identity, density and mixed use planning.
3. Density of development will be calibrated to site orientation, sunlight access to buildings, access to open space and shared areas, and proximity to connectors and transport options.
4. Social infrastructure to support increasing density of living will be considered for each neighbourhood to encourage healthy and proximate access for all people.





GREENER

1. Green connectors including pedestrian laneways and pathways will punctuate neighbourhoods and be planned for within Areas of Change.
2. Green infrastructure within buildings, streets and other open spaces will enable stormwater management at a neighbourhood catchment scale to address future flooding risk and improve resilience.
3. Green spaces will be provided to support neighbourhood needs. For example public open space parks, shared private space such as central courtyards within residential developments, private green space such as rooftop gardens for commercial and residential developments, or greener streets through reduced traffic-able surface areas. Not every development will contain every type of green space, but provision will meet neighbourhood needs. These places also provide refuge in seismic events.
4. Green space will be planned for as a network to enable a joined-up approach and connections for movement of people, ecological processes and stormwater management.
5. The design and construction of buildings will support the reduction of embodied carbon and ongoing reduction of carbon emissions.



ANCHORS

1. New or existing anchors will provide places of strength and stability that support neighbourhoods. Anchors will be one of the determinants of neighbourhoods and can be large or small scale. Anchors can include for example, schools, social infrastructure (churches, clubs), iconic landmarks or heritage places. Anchors will contribute to identity, stability and strength supporting healthy and socially connected communities.
2. Each neighbourhood will have its own anchors unique to the location and the history of the area. These will be identified within neighbourhoods, and consideration made to the need for any additional anchors to support the development of the neighbourhood. Historic buildings, schools, places of worship and green space are all examples of anchors to be identified and enabled to support growth.
3. Neighbourhood anchors will be identified to improve resilience for the community. For example, green open spaces with associated built facilities/ infrastructure, an existing healthcare facility, or an important connector route.





BACKGROUND
VISION INFLUENCES

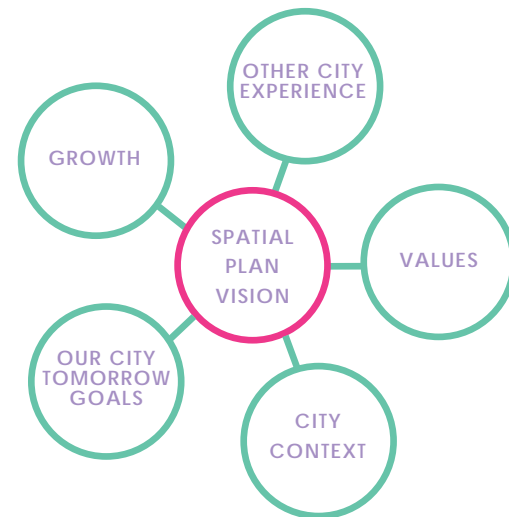
APPROACH

The Vision has been developed by considering a range of influences including:

- Values that underpin how the city governance and community conducts itself.
- Wellington City population growth projections (refer page 9).
- How other cities in the world are planning for their future (refer pages 10 - 12)
- The 'Our City Tomorrow' goals (refer page 1) and their embodiment of community aspirations as well as other Wellington visions (such as Lets Get Wellington Moving and Te Atakura/First To Zero).
- City context influences in relation to climate change, seismic resilience, economic cycles, social equity, and transport infrastructure (refer pages 13 - 17).

These influences are discussed in the following pages and background the directions provided within this Vision. Some of these influences are challenging, but many also generate opportunities.

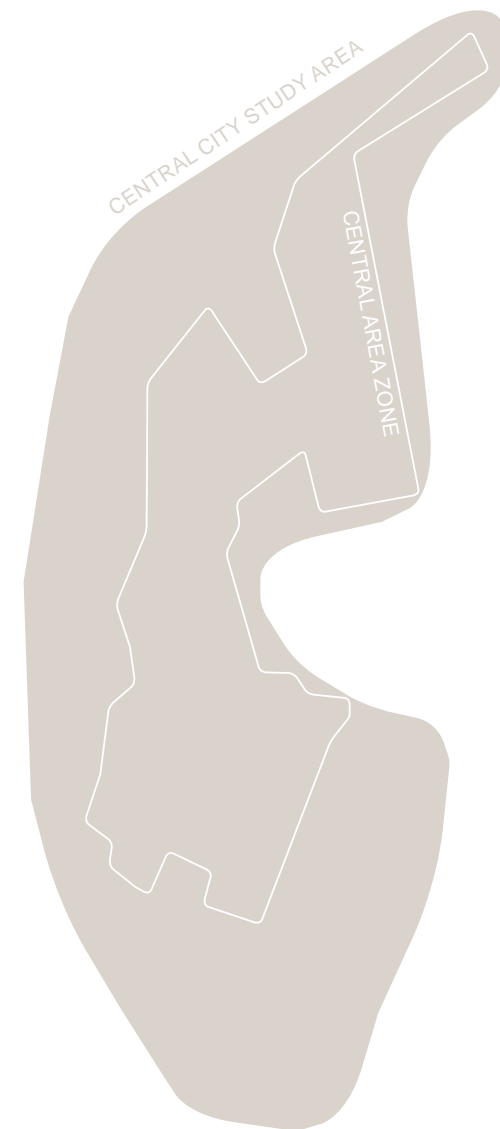
The Spatial Plan for Wellington has a 30 year horizon and this is the basis on which this Vision has been prepared. Directions advocated by the Vision will not stop being relevant or important well beyond this horizon.



The central city for the purposes of this Vision for the Spatial Plan is wider than the Central Area zone of the Wellington City District Plan. It extends north to Kaiwharawhara, south into Newtown and east and west to the town belt.

The extent of the central city described here does not necessarily implicate the whole of this area for accommodating growth, but provides an opportunity to consider a range of city configuration scenarios for doing so.

The process of forming the Vision and the subsequent Spatial Plan is dynamic. It will include discussion and engagement with the community and the many other agencies that are influential to the city's future. The Vision is a part of that process.



The general area considered in the Vision

VALUES

The influences on the central city will change over time, but overarching 'values' will be constant:

PEOPLE-CENTRIC

Cities exist for the benefit of people - therefore our city needs to perform to give people the best chance of having a prosperous, comfortable, safe and healthy life with governance and administration to suit.

AHI KĀ

Te Whanganui-a-Tara mana whenua have had continual occupation of the area over a long time. This influence needs to be accorded respect.

PARTNERSHIP

The multiple stakeholders in the city need to be encouraged to be successful in their own right as mutually supportive/beneficial outcomes will make the city more prosperous and resilient.

EQUITABLE

The city should be welcoming, comfortable and accessible to everyone, regardless of demographic or economic circumstances.

POSITIVITY

The challenges facing the city can potentially be seen as difficult and overwhelming in their scale. Alternatively, challenges can be met and strategies developed to move forward with. This Vision accepts the challenges and aims for a positive response.

IDENTITY

The city of Wellington has its own identity, partly cultural (who we are and how we do things here) and partly physical (for example climate, built form, heritage places, harbour, hills). We want to keep evolving without losing what makes our place distinct from others. Through the development of this Vision people will have their own ideas about how they identify with the city and what the identity is for them.

GROWTH

Wellington City Council (WCC) has projected that within the next 30 years another 50,000-80,000 people will live in Wellington.

A range of options for where to accommodate more people were recently tested by WCC with the community. The preference was for people to live in the central city and existing suburbs.

This bulk number of additional people translates in the central city to numbers of housing units, employment places, and open space. The following numbers can be used as a reference.

- Projected residential demand is for between 7500 and 8100 new residential units (for example townhouses or apartments) - current realisable capacity exists for 2800 - therefore an additional 4700 - 5300 units are required.
- Open space for people living and working in the central city will be required. At an estimate of 2.1 persons per residential unit and (conservative) 7m² of open space per person (World Health Organisation recommends at least 9m²) there is an additional 1.5 ha - 1.7 ha of open space required. There is already a shortage of open space in the city which is not provided for within this estimate that should be added.
- Projected commercial (working/service function space) demand is for 525,000m² (or 52 ha) of floor space (made up of retail 60,000m², office 250,000m², government 215,000m²).

Existing city buildings and an open space are referenced beside to provide a comparison of the scale of change required to accommodate the projected growth.

OPEN/GREEN SPACE

Te Aro Park is approximately 1500m² in area. Green space the equivalent to another 10 Te Aro Parks would be required to meet the space needs of the new central city population. New spaces will need to be different from Te Aro Park to provide different user amenity value. There is also a deficit of space for existing residents of the central city which additional space should be provided for.



Te Aro Park

RESIDENTIAL

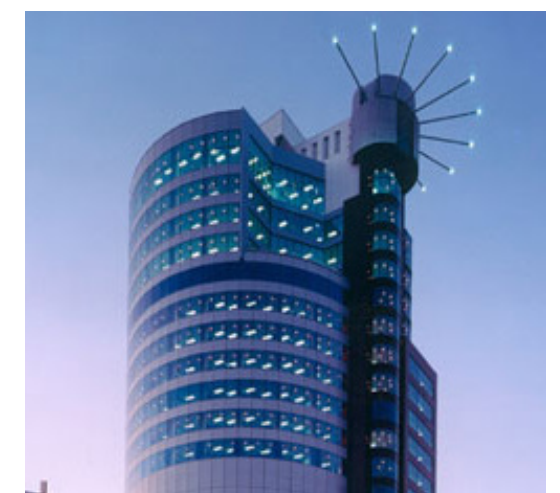
The Sanctum Apartments has a site area of 6500m² (including green space on about half) and contains 94 units. Residential apartments equivalent to another 50 Sanctum Apartment complexes would be required to meet future central city population needs.



Sanctum Apartments

COMMERCIAL

The Majestic Centre is 116m tall with 21 commercial floors (+ retail floors) at approximately 1000m² per floor. Commercial floor space equivalent to another 22 Majestic Centres would be required to meet future needs.



Majestic Centre

OTHER CITY EXPERIENCES

Wellington is not alone in planning its future in the face of unprecedented change. Around the world, there is a sense that many cities are facing the need for new, bolder responses that represent marked departures from the status quo; a growing sense that the future needs to be quite different to the present and the past.

The 100 Resilient Cities movement funded by The Rockefeller Foundation, has united a network of cities to share their urban challenges and learn from each others' initiatives. Just like Wellington, these cities are facing widespread resilience challenges, including the effects of climate change, flooding, earthquakes, post-disaster resilience, and economic and social equity issues, often at the same time as dealing with population growth and a desire to continue to thrive.

Of particular interest to Wellington are San Francisco, Vancouver, Rotterdam and Melbourne. All have been developing strategies and incorporating urban resilience thinking into strategic and spatial planning that are useful references to Wellington.

The key principles of urban resilience are:

- **Reflective** – use past experience to inform future decisions and modify standards and behaviour accordingly
- **Risk-Aware** – understanding risks and challenges as the basis to determining positive action
- **Resourceful** – recognise alternative ways of using resources and doing things to meet needs and achieve goals
- **Inclusive** - a sense of shared ownership in decision-making and a collective vision for the future
- **Integrated** – bringing things together to achieve greater ends

- **Robust** – well-conceived, constructed and managed, including provision for failure to be predictable, safe and not disproportionate to the cause
- **Redundant** – spare capacity to accommodate disruption and provide multiple ways to achieve needs
- **Flexible** – willingness and ability to adopt alternative strategies in response to changing circumstances
- **Forward-Looking** – looking beyond the present and taking a long term view

A common theme is that business-as-usual models of reactive planning and siloed decision-making will not generate the strength and flexibility essential to thrive in the face of the stresses of the twenty-first century.

Understanding the shared challenges and learnings from this network of cities can help to build confidence in the ability to pro-actively shape Wellington's future. Moving from an empowered sense of risk-awareness to converting challenges into opportunities and strengths for a more integrated, inclusive and resilient future where the city continues to grow and thrive.

It is clear too that it is not possible to tackle one challenge at a time, but needs a multifaceted approach involving all the city influencers.

An integrated approach should be part of the Wellington central city vision.

Specific relevant and contemporary references are drawn from these comparator cities in the following pages.

RESOURCES

100 Resilient Cities

<http://www.100resilientcities.org/cities/>

Resilient Melbourne

<http://100resilientcities.org/wp-content/uploads/2017/07/Resilience-Strategy-Melbourne-English.pdf>

Rotterdam Resilience Strategy

<https://100resilientcities.org/wp-content/uploads/2017/06/strategy-resilient-rotterdam.pdf>

San Francisco Resilience Strategy

<http://100resilientcities.org/strategies/san-francisco/>

Sustainable Sydney 2030

<https://www.cityofsydney.nsw.gov.au/vision/sustainable-sydney-2030>

Vancouver Resilience Strategy

<https://vancouver.ca/files/cov/resilient-vancouver-strategy.pdf>

[Nashville USA](#) [New Orleans USA](#) [New York City USA](#) [Norfolk USA](#) [Oakland USA](#) [Panama City P](#)
[Paynesville LBR](#) [Pittsburgh USA](#) [Porto Alegre BRA](#) [Pune IND](#) [Quito ECU](#) [Ramallah PSE](#) [Rio de](#)
[Rome ITA](#) [Rotterdam NLD](#) [Salvador BRA](#) [San Francisco USA](#) [San Juan PRI](#) [Santa Fe ARG](#)
[Los Caballeros DOM](#) [Santiago Metropolitan Region CHL](#) [Seattle USA](#) [Semarang IDN](#) [S](#)
[Singapore SGP](#) [St. Louis USA](#) [Surat IND](#) [Sydney AUS](#) [Tbilisi GEO](#) [Tel Aviv ISR](#) [The Hague NLD](#) [The](#)
[Toronto CAN](#) [Toyama JPN](#) [Tulsa USA](#) [Vancouver CAN](#) [Veje DNK](#) [Washington D.C. USA](#) [Wellin](#)



ROTTERDAM



A Resilient, Climate-Adaptive and Water Sensitive Waterfront

Rotterdam has a sustained track record in addressing urban resilience challenges. The Resilience Strategy developed in 2017 as part of the WOO Resilient Cities programme comprehensively addresses manifold challenges the city faces in the 21st century. Of particular relevance to Wellington, the city has for some time been taking a visionary approach to flood and water management infrastructure and a climate-adaptive response to the planning and design of its waterfront public spaces and neighbourhoods. Water Sensitive Urban Design measures are integrated to create much greater flexibility to adapt to a changing waterfront environment in future.

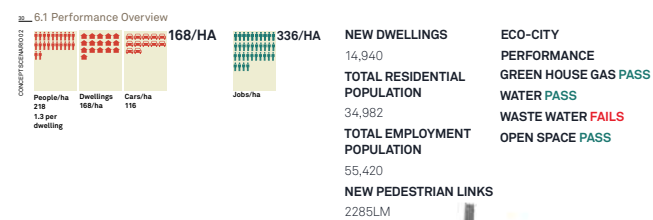
LINKS

Rotterdam Resilience Strategy: <https://100resilientcities.org/wp-content/uploads/2017/06/strategy-resilient-rotterdam.pdf>
<https://dirt.asla.org/2018/10/29/rotterdam-redesigns-itself-for-climate-change/>

MELBOURNE



Melbourne North Structure Plan

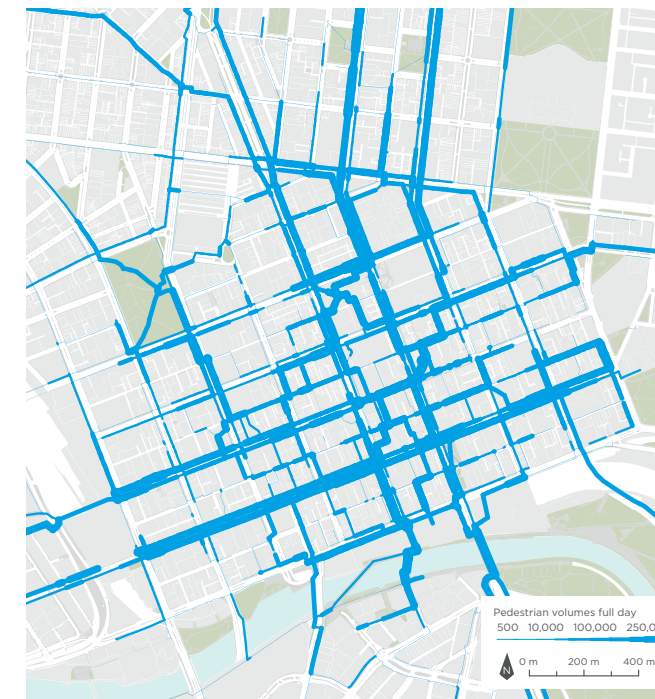


Southbank Structure Plan and Development Scenarios



A CONNECTED CITY

Pedestrian network volumes



Walking Plan

Melbourne, a city Wellington consistently benchmarks itself to, has multiple strategies and action plans in place to accommodate future growth while mitigating and adapting to a changing climate, becoming greener, more inclusive, improving built form design quality, and ensuring it holds on to its world-leading reputation for liveability.

The Melbourne North Structure Plan is an example of the holistic approach to multiple challenges being addressed. The plan sets guiding principles and key direction-setting moves for a spatial vision and implementation plan across urban development, mobility, economic, social, public realm, environmental and built heritage outcomes.

Likewise, the Southbank Structure Plan, evaluated differentiated development scenarios against multiple desired outcomes to help shape a future vision for that central city precinct to accommodate growth while creating more green space and human-scaled built form.

Melbourne has developed a Walking Strategy for the central city that for the first time develops a comprehensive, practical plan to improve the walking experience, recognising the primacy of walking to the city and all who use it.

LINKS

Melbourne North Structure Plan: <http://tiny.cc/t4y79y>

Southbank Structure Plan: <http://tiny.cc/t4y79y>

Melbourne Walking Plan: <https://www.melbourne.vic.gov.au/SiteCollectionDocuments/walking-plan-2014-17.pdf>

BARCELONA

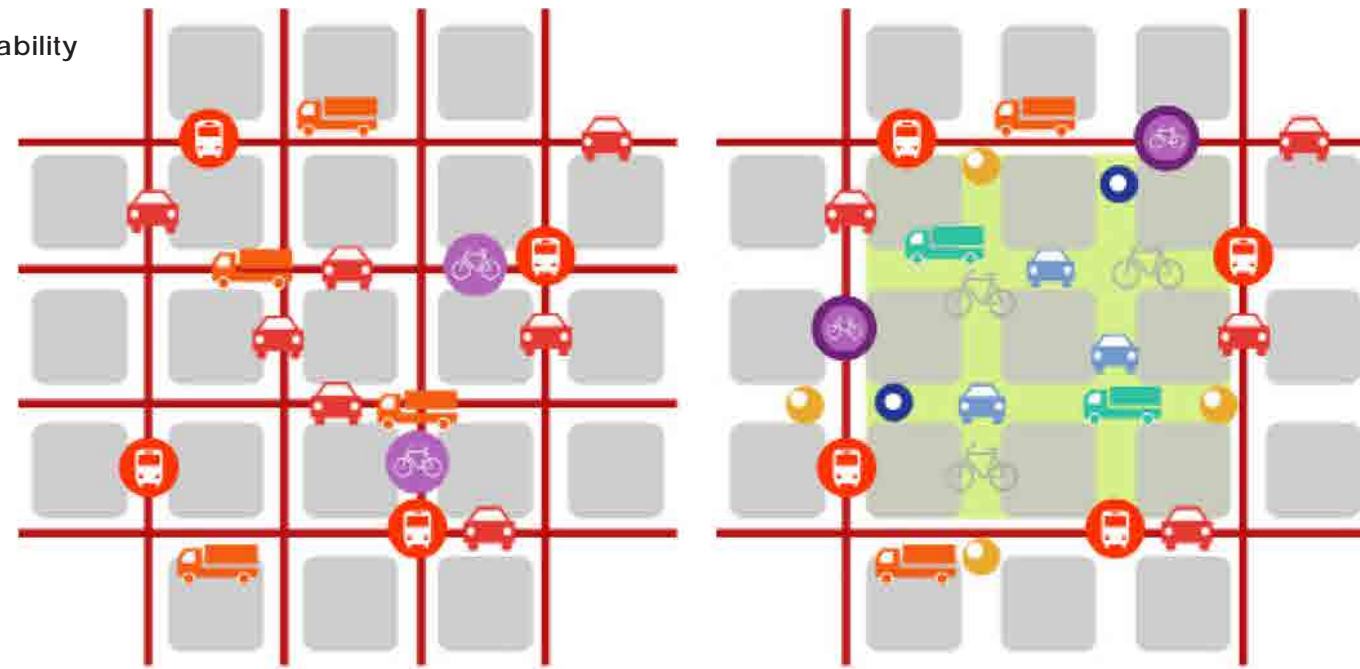
The Superblock Model for Urban Mobility and Liveability

The Barcelona Superblock Model orders the city's block structure into 400m x 400m superblocks. City traffic goes to the outer streets and within the blocks cars are banned or restricted to 20km/h, priority is given to walking and cycling, and open space is reclaimed from retired parking.

The concept has brought benefits in public health, access to green space, climate change responses, environment and transport, while also better integrating transport and mobility with the quality compact form that already exists. Initiated with pilot schemes, the strategy is readily scaleable across the entire city promising the opportunity to positively re-shape the entire central city area. The approach has some portability to Wellington where streets can be prioritised to their relative function for 'movement' or 'place'.

LINKS

<http://100resilientcities.org/wp-content/uploads/2019/07/100RC-Report-Capstone-PDF.pdf>



OSLO



The Car Free Liveability Programme

An ambitious 10 year programme of action to transform central Oslo into a 1.9km² car-free zone addressing air quality, climate change, transport and public life challenges.

LINK

<http://tiny.cc/w9t79y>

SAN FRANCISCO



Resilient Bay Area Proposals

A year-long collaborative design challenge to develop innovative community-based solutions that will strengthen resilience to sea level rise, severe storms, flooding and earthquakes.

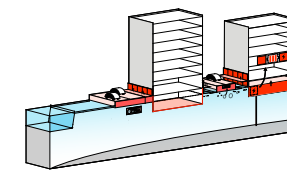
LINK

<http://www.resilientbayarea.org/>

NEW YORK

1

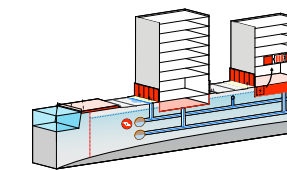
BUILDING AND PUBLIC REALM APPROACH



Let all water in, raise streets, and waterproof utilities and buildings.

2

BUILDING AND LOW EDGE APPROACH



At water's edge, protect against sea level rise and groundwater table rise by moderately raising and reinforcing the edge. Let storm surge in and waterproof buildings to protect them. Upgrade stormwater system capacity to address flooding due to extreme precipitation and storm surge.

Lower Manhattan Climate Resilience Strategy

Resilience strategy that evaluated dozens of adaptation measures and identified a set of strategies to build resilience in Lower Manhattan in response to climate hazards, with new planning strategies and capital programme of investment.

LINK

<https://www1.nyc.gov/site/lmcr/background/lower-manhattan-climate-resilience-study.page>

COPENHAGEN

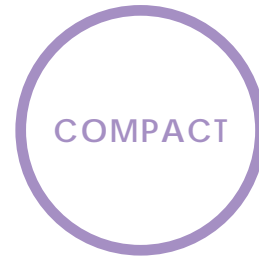


CPH 2025 Climate Plan

Copenhagen plans to be the world's first carbon neutral capital city by 2025 actioning 4 pillars - energy production, energy consumption, mobility and city-initiatives. To be achieved through combination of infrastructural changes and green growth in the context of accommodating population growth of 20% in the next decade.

LINK

<https://international.kk.dk/artikel/carbon-neutral-capital>



CITY CONTEXT INFLUENCES

There are a range of context influences to be considered in planning for the future of the central city. These influences have been identified through a process of discussions with WCC technical experts.

The community of Wellington has expressed “Our City Tomorrow” goal for the city that endure and headline a range of policies administered by WCC.

The context influences are aligned to the goals and described on the following pages.

DENSITY AND QUALITY

Projected city growth demand can be accommodated by a range of spatial strategies and these will be explored by the Spatial Plan. The compact city goal suggests a reasonable density is expected within the central city. The density of people (how many people live, work, recreate, move about) within an area is an important factor to consider. The ‘blanket’ settings in the current District Plan (including height limits) are not helpful to the achievement of ‘good density’ which should respond to context and the community being planned for.

A greater proportion of Wellington’s future population is expected to call the central city home within the next 30 years (refer page 9). For people to live healthily and resiliently more closely together requires a move from an individualistic approach to one of cooperation and sharing (open space, streets, transport). Thinking of the city as a series of compact neighbourhoods will allow a range of context-responsive planning provisions to be developed.

Transforming existing urbanised land and buildings (most of the city centre) requires commercial viability to induce change. Many sites are of a smaller size and a collaborative approach or site amalgamation will generate the best conditions within which to design for a combination of attributes (for example open space, light to internal rooms, block permeability, transport accessibility, stormwater management).



Rotterdam Example: a varied form, responsive to context and future influences.



GREEN AND BLUE

Green space within the central city is in short supply (refer page 9). The town belt and waterfront provide open space that 'frames' the city. Within the centre green open space is scarce and inhibits city liveability. Neighbourhood scale spaces within comprehensive development and by public acquisition is required. The spaces need to be climatically responsive (providing shelter and sun access). Acquisition needs to carefully consider infrastructure constraints and opportunities for stormwater networks.

Stormwater from the hills flows out to the harbour via old streams in culverts and a network of pipes. There are capacity issues within the network which is a consequence of aged infrastructure, groundwater level rises and increasing effects of climate change on intensity of rainfall events. A comprehensive catchment approach needs to be considered including minimising discharges from the source, increased permeability of surfaces, holding capacity and quality of water discharges. The city urban form response to this catchment approach is integral.

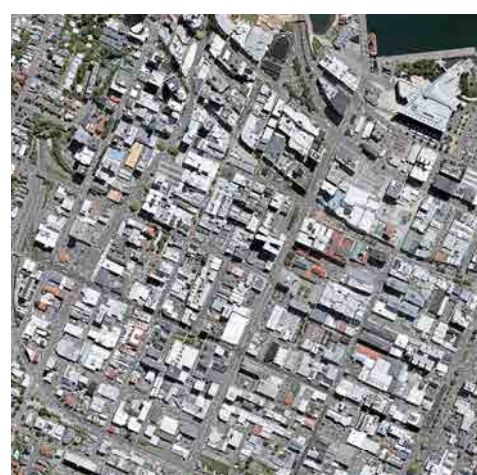
The future role of the waterfront and town belt should be considered - as natural and/or more active, lived-in environments? Consideration of the relationship of the waterfront with the more dense city in the context of water (sea and stormwater) is due and the insertion of transit along the Quays is another catalyst to exploring this interface further.



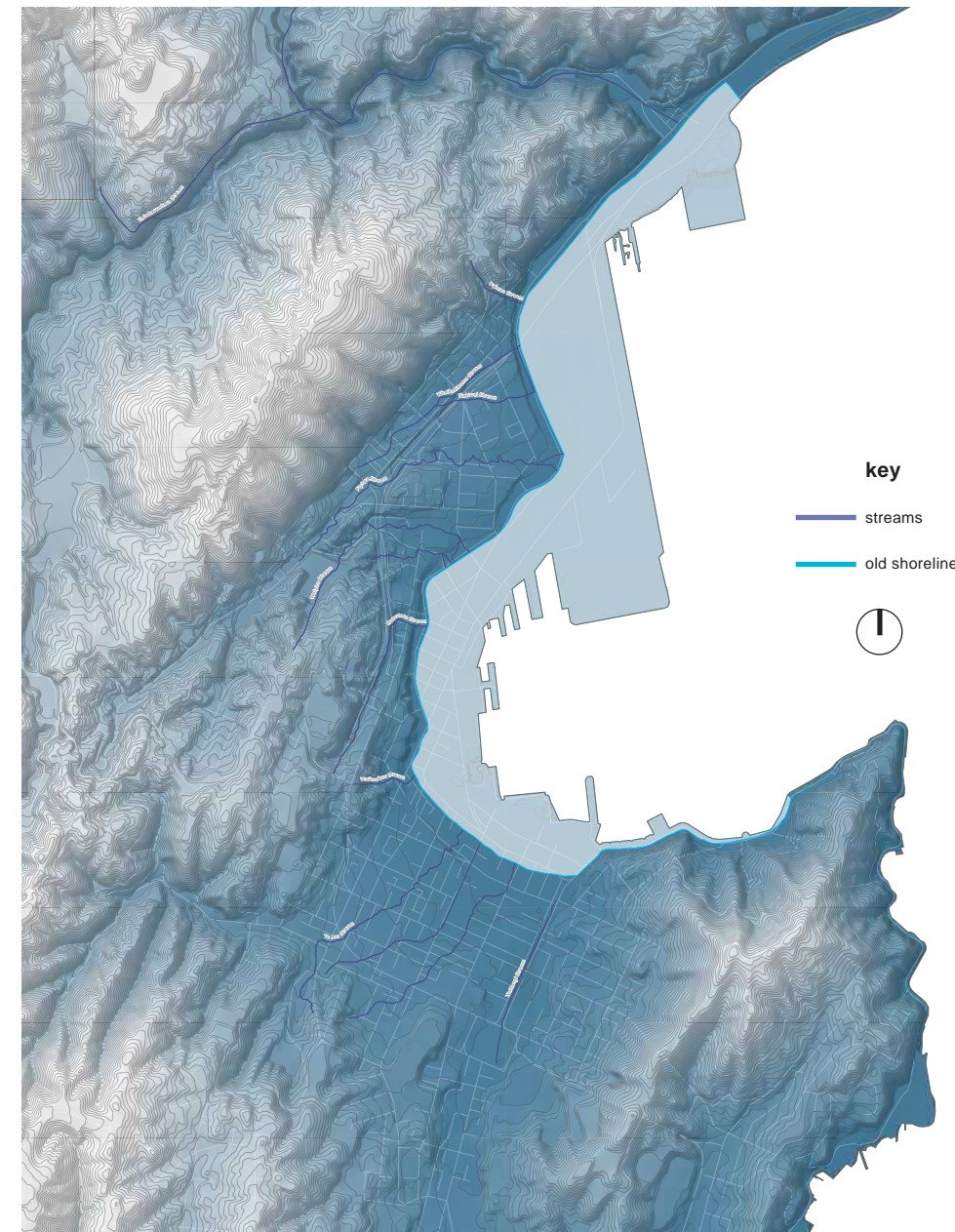
City framed by town belt hills and waterfront.



Lets Get Wellington Moving Vision: Jervois Quay.



Te Aro green open space shortage



Hydrology (streams now generally in culverts) and slope with old shoreline.

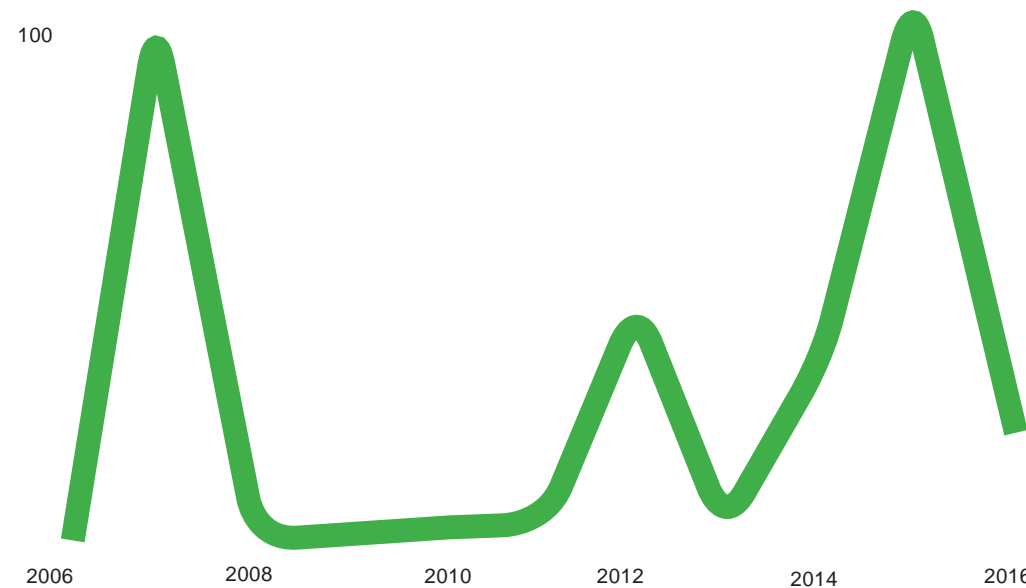


ECONOMICALLY ASTUTE

There is a limit to city financial resources and being economically astute will be important to the city's future. The Spatial Plan being prepared by WCC presents an opportunity to prioritise or target the public investment to the places and actions that will best encourage other city influencers to make consequent and investments in change towards the Vision.

There is typically a cycle of economic development in the city. Understanding these cycles and looking for partners to assist in city change is a role the City Council can pro-actively take. Large scale public investments (such as in Te Te Ngākau/Civic Square and Lets Get Wellington Moving) are examples of opportunities to strategically catalyse change in specific areas of the city. Good quality outcomes are important to demonstrate the expectation for the city and giving confidence to investors.

Retail formats in the city will change. Traditional retail 'active' street edges (for example provided by shops, street cafe and social venues) can not be sustained across the whole central city. Buildings that provide comfortable residential uses at street level will be required. In terms of future retail uses people are attracted to social 'local' dynamic retail like markets which sit within public spaces and change over time. Providing for these activities within the city spaces generates vibrancy and prosperousness.



Data for apartments issued building consent (source WCC) in the central city shows the cyclical nature of development. The expectation is that post 2016 there would be a further upswing in activity.



Lets Get Wellington Moving Vision Kent/Cambridge Terrace



Waterfront market near Te Papa



ADAPTATION

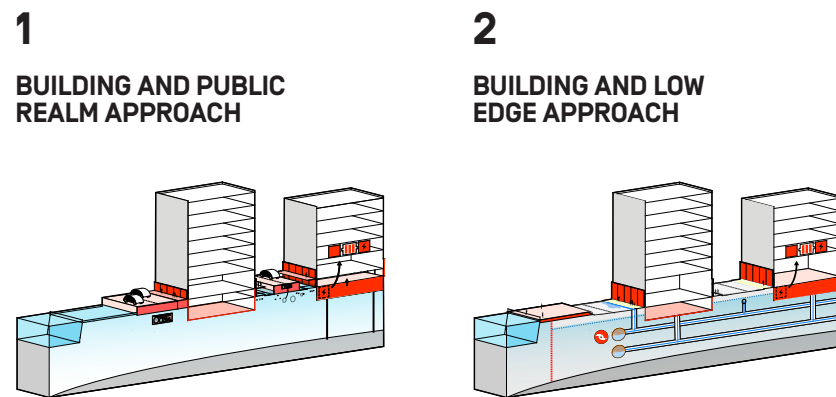
Wellington city faces a range of resilience challenges from seismic conditions (shaking/liquefaction/rock fall), climate change (sea level rise, flooding and heat gain), as well as social change in terms of peoples' capacity to adapt to change and live with a range of societal challenges (like changes in employment structures).

In addressing resilience issues in the Spatial Plan there are opportunities to plan adaptations to reshape the city in new and better ways. There is an opportunity to address existing suboptimal aspects of the central city in the advancement of adaptive planning and resilience investments.

Areas with higher seismic and flooding risks are known. This risk applies to above and below ground infrastructure. Decisions about the future of these areas requires a strategic response – there are range of options. These range from building with flood risk or seismic risk in mind and/or transitioning investment to less risk averse areas.

Council, land owners and infrastructure providers will need to work on a transition plan including adaptive pathways that allow response options and actions to be strategically managed over time.

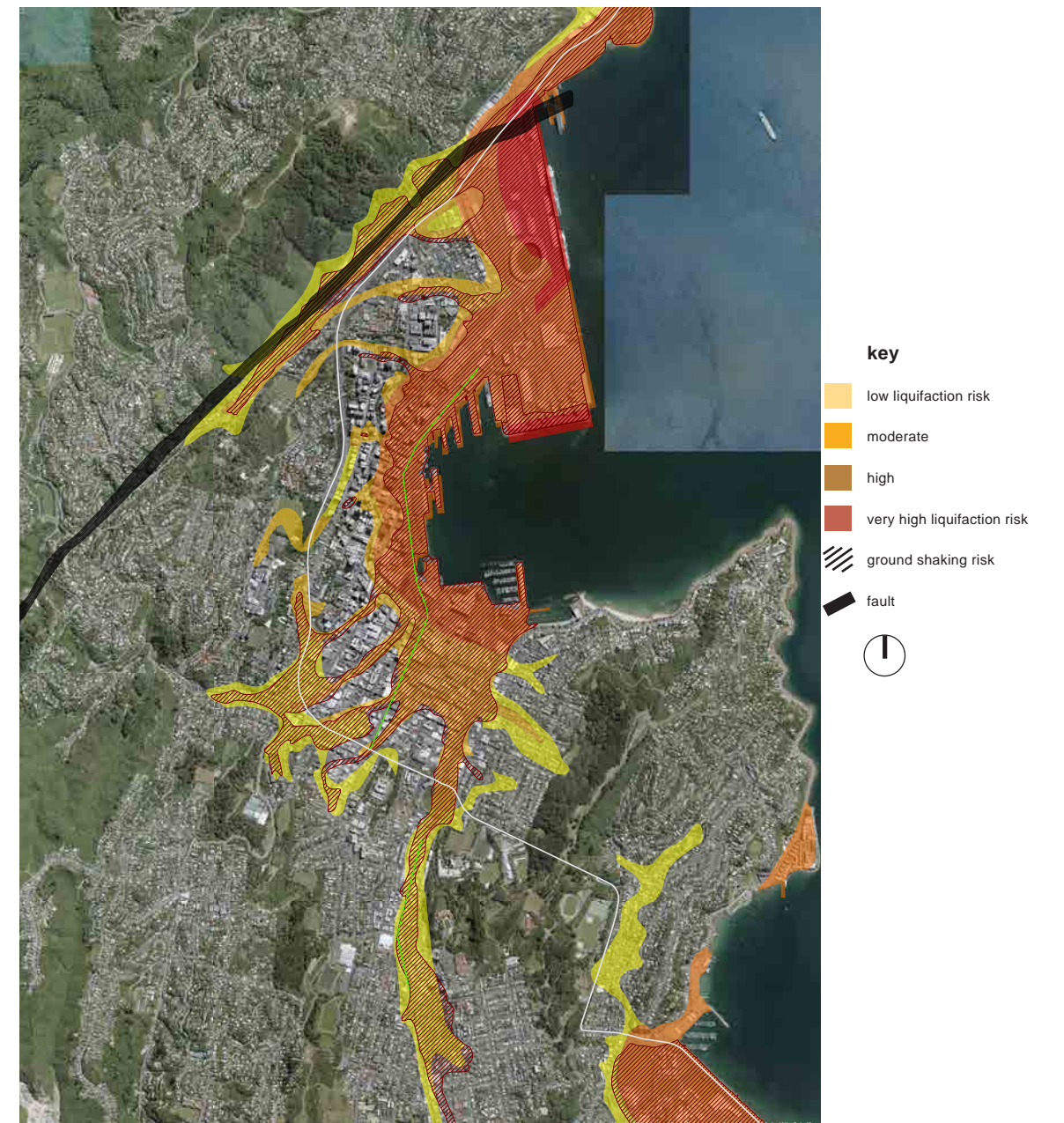
Learning to live with risk will require an increasing 'ownership' of this responsibility.



New York example of adapting urban form in response to flood risk



Flood risk from 1.4m sea level rise as defined by H+ scenario referenced in MFE Coastal Hazards and Climate Change: Guidance for Local Government.



Seismic risk areas - low to high liquefaction risk.



CONNECTIONS

The Lets Get Wellington Moving (LGWM) programme is a significant investment in the transport system which includes transit, pedestrian and active modes, new tunnels to enable more reliable travel times on the arterial routes, and travel demand management.

An accelerated pace of city redevelopment will be catalysed by this transport investment. It will be important that the planning 'settings' are in place that both enables the redevelopment of corridors and ensures that the quality of the urban form resulting is in tune with the Vision.

New modes that provide for increased individual mobility (for example electric bikes) change the geography of the city as people are enabled to travel further by new modes. The facilities and infrastructure required to support these new (and likely to continue to evolve) forms of mobility will need consideration in the design of streets and developments.

Prioritising the city streets to a 'place' (ie a street people want to spend time in), or 'movement' function are an important aspect of the Vision. City streets that are detuned for vehicle movement and designed for people as pedestrians or people in vehicles moving at slow speeds will be important to generate amenity and provision of neighbourhood community space. Arterial and transit streets will be where reliable wider network travel times can be provided for.



Lets Get Wellington Moving - Lower Wills/Mercer Street example of redevelopment on transit corridor



Barcelona example: Although Wellington does not have a the same extent regular block pattern, the principles of neighbourhoods that are internally programmed for slow local movement and an arterial for wider network movements is part of the Vision



Street spaces configured to where people want to spend time support urban amenity (London)



ACTIONS

ACTIONS

Cities are by their nature dynamic and transitional. The Vision is a contemporary response to a range of known influences. Although these can be expected to evolve over time, it is important that the essential aspirations of the Vision remain to instill confidence in direction.

The Vision will be developed with the community as the city planning process progresses in 2020.

Actions that will be employed to ‘advance’ the Vision are described as follows.

URBAN QUALITY

1. Define the qualities that determine “neighbourhood”, identify and map neighbourhoods and specify characteristics that are to be retained or changed. Include communities and iwi in this process.
2. Revise design review processes, guidance and District Plan requirements to incentivise comprehensive developments and guide design for good quality residential living, resilience, commercial/employment uses, and amenity.
3. Develop urban form controls that encourage residential developments to provide for quality density outcomes (such as sunlight and proximity to streets/public spaces), rather than blanket/arbitrary height limits.
4. Develop an incentives and economic model that can be expediently applied to bring economically astute public investment together with private and other agency investment in catalyst projects (which maybe parts of areas of change).
5. Develop a ‘liveability’ data baseline from which to prioritise and monitor investments in the urban quality of the city.



AREAS OF CHANGE

1. Define the qualities that will be used to determine Areas of Change within neighbourhoods, identify and map these within each neighbourhood. Consider the time frames of change, an adaptive pathways strategy (to enable future choices in direction to be made), strategic prioritisation to resource availability and partnership opportunities.
2. Include placed-based planning with communities and iwi where Areas of Change are proposed.
3. Specifically include within Areas of Change the waterfront and port (see Waterfront Actions) as well as areas contingent with the Lets Get Wellington Moving programme.
4. Develop Framework Plans (or similar) with a consistent approach and structure for Areas of Change. These should include (but not be limited to) objectives, parcel composition and ownerships, owner aspirations, future community composition and infrastructure needs, development incentive opportunities, anchors and resilience planning, density modelling, open space networks, stormwater neutrality design, ‘place’ and ‘movement’ functions, actions, programme and responsibilities for implementation.



GREENING

1. Develop Open Space/Green/Blue Plan to provide for the range of needs across the central city including the ‘blue belt’ of the harbour edge and the town belt of the hills. Include a programme for acquisition and integration with neighbourhood needs.
2. Identify (within the Plan) key strategic green links between the town belt and waterfront including public/semi public land (eg uni/churches/schools) and sites for acquisition as part of any Areas of Change or redevelopment.
3. Include within the process of identifying green links a catchment plan for water sensitive design to determine the opportunities for point source management of discharge, use of streets and open spaces (combinations of above and below) for stormwater conveyance/retention and cleaning prior to harbour discharge.



MOVEMENT

1. Develop and confirm a “Place” and “Movement” Framework for the central city and consider neighbourhoods, changes in density, objectives for slow speed internal streets, and mode choices.
2. Recognise the Lets Get Wellington Moving programme within the Framework and consider the access to and the role of air and water-based movement.

WATERFRONT

1. Develop a transitional plan (adaptive pathways plan) for the lower areas of the city - including a stormwater network strategy with a catchment management approach - and consideration as to resilience for future of climate changes, seismic risks and flooding.
2. Refresh the Wellington Waterfront Framework (refer to Area of Change action 3) and include consideration as to any residual port land that maybe able to be more publicly accessible (once port planning and ferry terminal sites are determined).
3. Consider the relationship of waterfront and city with the proposed Lets Get Wellington Moving transit interface and reflect in the Waterfront Framework and transitional plan.

ANCHORS

1. Define the qualities that determine “Anchors”, identify and map them as well as potential future anchors, and specify characteristics. Include City Lifelines planners, communities, owner/partners and iwi in this process to assist in definition.
2. Develop for Anchors (potentially as part of Neighbourhoods and/or Areas of Change) objectives (relative to their roles for resilience, heritage or other), strategic prioritisation for any changes to assist in their objectives, development/role incentive opportunities (as relevant), partnerships (reflecting that many will be in other agency or potential private ownerships), programme and responsibilities for any implementation needs.





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4

5

MERCHANT

PHANTOM
SIX60
DRAX PROJECT
SAT 25 JAN
POWER NUTTY

Wellington's
rainbow crossing