Greater Christchurch Spatial Plan and Mass Rapid Transit Indicative Business Case Briefing

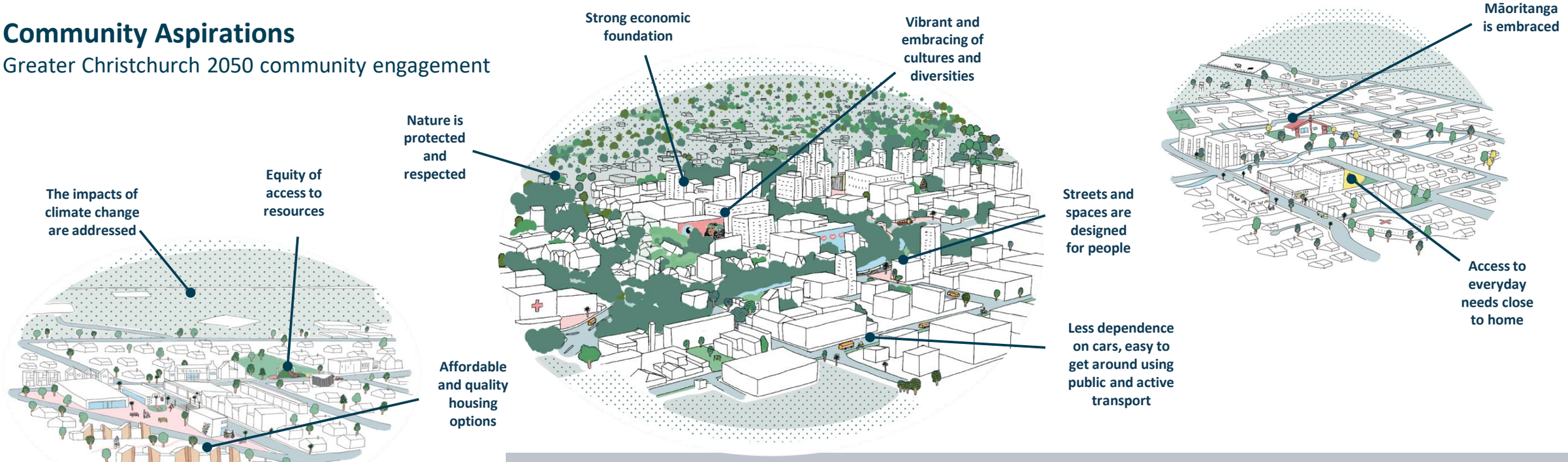
Whakawhanake Kāinga Committee
Urban Growth Partnership for Greater Christchurch
Friday 12 August 2022, 9-10am

Strategic Context

The strategic framework for the Spatial Plan is guided by our communities' aspirations

Community Aspirations

Greater Christchurch 2050 community engagement



Urban Challenges

Defined in the Spatial Plan Foundation Report

National Policy Direction

For example

- National Policy Statement on Urban Development
- Emissions Reduction Plan
- Resource Management Reform

Priorities

As set out in the Strategic Framework and agreed by the the Whakawhanake Kāinga Committee 13 May 2022

- Create a well-functioning and sustainable urban environment

- In achieving this, priority will be given to:
  - Decarbonising the transport system
  - Increasing resilience to natural hazards and the effects of climate change
  - Accelerating the provision of quality, affordable housing
  - Improving access to employment, education and services. Well-functioning has the meaning as defined in Policy 1,NPS-UD

Opportunities

Opportunity #1

Enable diverse and affordable housing in locations that support thriving neighborhoods that provide for people's day-to-day needs.

Opportunity #2

Prioritise sustainable transport choices to move people and goods in a way that significantly reduces greenhouse gas emissions and enables access to social, cultural and economic opportunities.

Opportunity #3

Protect, restore and enhance the natural environment, with particular focus on te ao Māori, the enhancement of biodiversity, the connectivity between natural areas and accessibility for people.

Opportunity #4

Protect, restore and enhance historic heritage and sites and areas of significance to Māori, and provide for people's physical and spiritual connection to these places.

Opportunity #5

Reduce and manage risks so that people and communities are resilient to the impact of natural hazards and climate change.

Opportunity #6

Provide space for businesses and the economy to prosper in a low carbon future.

Refer to Appendix 1 for more detail on an overview of the project, the strategic framework, and performance of current urban form against existing strategic direction

Urban Form Scenarios Evaluation

Key results from the evaluation of urban form scenarios to inform the urban form direction

Three land-use scenarios and three transport packages were evaluated to understand the implications and intersections of land-use and transport planning and consider land-use, investment and policy interventions to achieve reduction in emissions and Vehicle Kilometres Travelled (VKT). A quantitative, qualitative, and mana whenua evaluation was undertaken.

The compact scenario (focused on greater intensification in centres and along transit corridors) performed best across almost all criteria

Results from the mana whenua evaluation

The compact scenario was preferred because it:

- **Reduces expansion over wāhi tapu and wāhi tāonga**
- **Reduces the irreversible loss of productive soils**
- **Provides opportunities to restore and enhance the natural environment**
- **Is more likely to achieve policy directives for integrated planning (land + water)**

Results from the quantitative and qualitative evaluation

Best opportunity to achieve higher density typologies consistent with household and demographic trends towards demand for smaller housing

Least impact on productive soils and most likely to deliver positive outcomes for air quality and water use

Best accessibility and lower VKT and greenhouse gas emissions than other scenarios

Best opportunities for economic agglomeration and redevelopment

Better opportunity to mitigate risk associated with hazards and provide economies of scale to fund delivery

There were other key conclusions that are key to the next stage of the draft Spatial Plan development

All scenarios raise concerns of potential harm to Tuahiwi Māori Reserve (MR873) including:

1. Becoming an unserviced and undeveloped island
2. Urban development and transport infrastructure can expand over wāhi tapu and wāhi taonga
3. Taking of Māori land
4. Reduced transport network connectivity for the Reserve
5. No public transport accessibility

Additional transport packages (Mass Rapid Transit, and additional transport policy interventions) improved the performance of all scenarios.

However, Vehicle kilometres travelled (VKT) and greenhouse gas emissions fail to meet anticipated Emission Reduction Plan (ERP) targets under all scenarios.

Further work is required to determine how the Spatial Plan should address housing affordability and market dynamics.

Avoiding natural hazards, particularly related to climate change, suggests significant growth is focused away from areas vulnerable to coastal inundation. This can be achieved in all scenarios.

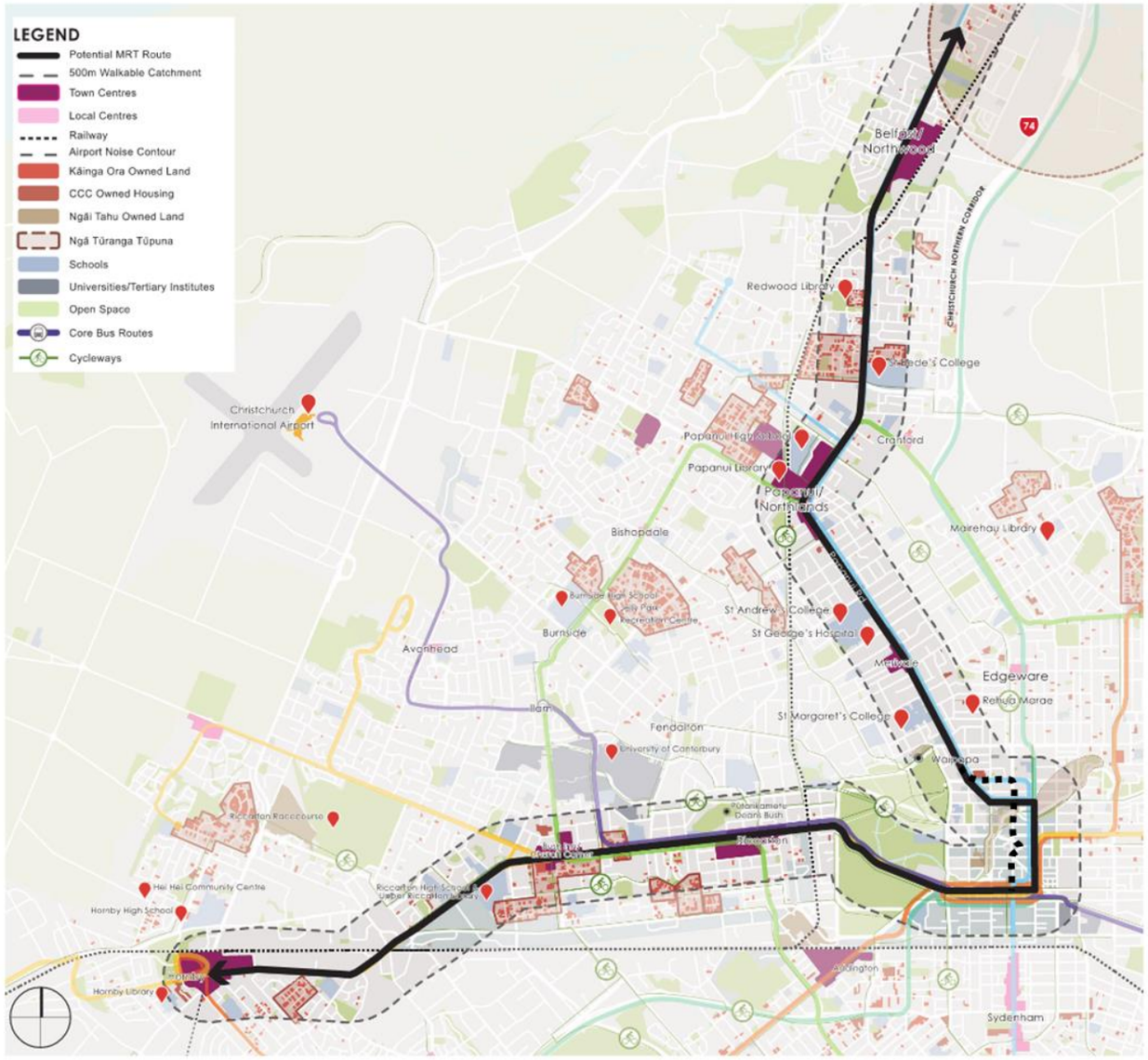
Refer to Appendix 2 for more detail on the evaluation methodology and results of the quanatative, qualatative & mana whenua evalaution

Mass Rapid Transit

Within stage 1 investigations, a preferred street running route has been identified

A Mass Rapid Transit system needs to be supported by a wider integrated and effective Public Transport Network. The development of which is being considered through the work underway on the Greater Christchurch Transport Plan and Investment Programme.

Preferred Street-Running City Route



Mass Rapid Transit is a city-shaping investment which requires a significant increase in intensification at transit stops and along the route to be feasible

Key assumptions:

- Corridors to service the existing centres
- Hornby, Riccarton and Papanui are emerging metropolitan centres
- Philosophy to largely utilise existing transport corridors and adopt road space re-allocation to enable MRT priority
- Providing a high level of service for MRT along these routes would result in a low level of service for private vehicles and potentially areas for sustainable modes only
- South-western and Northern Corridor to form a continuous route/ service through the city centre to prevent additional city centre terminals
- Bus services to be modified to feed to MRT and not compete with it

Next Steps:

- Complete street-running scenario
- Explore expanding MRT to the Districts (Stage 2)
- Compare against the heavy rail and limited stop scenarios (Stage 3)

Refer to Appendix 3 for more details on the Mass Rapid Transit long list process

Urban Form Direction

Direction to inform stakeholder engagement and development of the draft Spatial Plan

DIRECTION 1

Planning for future resilience, economic prosperity, and wellbeing through ensuring our planning can accommodate a population of 1 – 1.5 million

DIRECTION 2

Higher densities around centres and major public transport / MRT corridors across all of Greater Christchurch's centres

DIRECTION 3

Settlement patterns that reduce reliance on private vehicles through good access to local services and jobs by public and active transport modes

DIRECTION 4

Supporting kāinga nohoanga on and off Māori Reserve land and providing better transport accessibility to Māori Reserve land

DIRECTION 5

A stronger focus on driving business growth towards distinct commercial precincts to achieve economic agglomeration benefits

DIRECTION 6

Focusing new growth away from locations vulnerable to coastal inundation and climate change impacts

DIRECTION 7

Recognising the importance of a regenerated natural environment integrated into the urban form as a fundamental foundation to the spatial plan

Achieving our outcomes requires a focus on targeted intensification around centres and public transport corridors.

This Spatial Plan will need to provide a strong framework to increase momentum towards this.

Understanding the barriers and drivers that would unlock the development sector delivering on this direction is key. Housing preferences and affordability for our communities is at the heart of this.

Note that the Spatial Plan will provide for Housing Bottom Lines* and housing choice.

These directions are intended to provide for a strong urban heart in the Canterbury region, which recognises the importance and interdependencies with rural communities and the economy.

**Tier 1 and 2 local authorities are required to set housing bottom lines for the short-medium term and the long term in their regional policy statements and district plans which state the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin. The housing bottom lines must be based on information in the most recent publicly available Housing Capacity Assessment.*

Urban Form Direction

What achieving this direction would look like in 2050

Different types of development will be needed to give effect to our urban form direction across Greater Christchurch, for example

CITY CENTRE

Primary centre for regional leisure, office based employment; apartments and multi-story residential. Highly accessible by public transport.

150 HH/ha +

METROPOLITAN CENTRES

Sub-regional hub of retail, leisure, office-based employment with multi-story residential. Highly accessible by public transport.

70 HH/ha - 150 HH/ha

E.g. Riccarton, Hornby, Papanui, potentially Rolleston, Rangiora

TOWN CENTRES

Local hub of retail, leisure and local employment serving the needs of immediate and neighboring areas. Includes multi-story residential. Highly accessible by public transport.

50 HH/ha - 70 HH/ha

E.g. Lincoln, Kaiapoi

TRANSIT ORIENTATED

New distinct urban centres connected to urban area by mass rapid transit

70 HH/ha - 150 HH/ha

ECONOMIC HUBS

Areas which primarily provide employment e.g. industrial that are highly accessible by public transport.

E.g. airport

SUBURBAN AREAS

Residential areas within wider urban areas with local centres to provide everyday needs. A range of high-medium density housing. Good quality public transport access.

E.g. St Albans

TOWNSHIP

Residential areas within rural areas with local centre to provide everyday needs. A range of high-medium density housing.

E.g. West Melton

KĀINGA NOHOANGA/ PAPA KĀINGA

Local hubs of residential living, community facilities and economic activity. A range of high-medium density housing. Connected with public transport.

GREENFIELDS

Average of 30 HH/ha in Christchurch city and average of 25HH/ha in Districts. Could include aspects of Rural Residential Living.

RURAL AREAS

Productive land is protected from urban development.

The next stage of spatial plan development is to determine where and how these different type of developments occur to achieve the following outcomes:

Kāinga Nohoanga

- Māori reserves are centres of community, employment and living
- Māori reserves have good public and active transport to support accessibility within, and with the wider network
- Mana whenua are able to live in ways aligned with their cultural values

Prioritised Environmental Outcomes

- More indigenous habitats and biodiversity
- Strong blue-green network to support sustainable habitats and mitigate the effects of climate change
- Greater use of public green spaces to support nature and biodiversity and provide access to green space

Stronger Centres

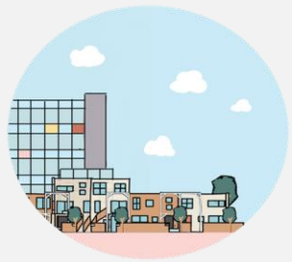
- Centres have a strong identity with distinctive roles and contribution within Greater Christchurch
- Centres provide colocation of high-density living, employment and access to everyday services using active transport modes
- Centres connected by high-frequency public transport

Economic Agglomeration

- Employment consolidated into fewer centres of scale
- Distinct commercial precincts attracting similar businesses to achieve agglomeration benefits
- Strong connectivity between businesses, tertiaries and research centres

Better Transport Options & Access

- Most people can access services and employment via active and public transport
- Public transport competitive alternative to private car use



More Housing Choices

- More people living in multi-unit development within easy access using active and public transport to services and employment
- More diverse housing types – multi-generational, co-housing
- Greater use of public realm to provide space for recreation, socialising

Refer to Appendix 4 and 5 for more details on the transition pathway and implementation tools

Next Steps

The next step is to engage with stakeholders and develop the draft Spatial Plan

Practically, this means our focus over the next six months will be to:

1. **Confirm targeted areas for intensification, and define the function and opportunity of centres within a centres network reflecting ways of living and working post COVID**
2. **Engage with developers, infrastructure providers and stakeholders to identify market response and infrastructure requirements**
3. **Complete housing and business capacity assessments and identify a clear pathway for housing affordability**
4. **Complete the MRT Indicative Business Case and develop a Transport Plan and Investment Programme that gives effect to the Spatial Plan**
5.
   - **Areas to protect or avoid in perpetuity**
   - **Blue-green networks**
   - **Mana whenua priorities**
   - **Future direction of urban development**
   - **Priority development areas and centres**
   - **Transport and infrastructure networks**
6. **Identify the policies and investment that give effect to the Kāinga Nohoanga Strategy**
7. **Determine the most effective combination of implementation tools**
8. **Develop a joint work programme and monitoring framework**

Appendices

Appendix 1: Context – purpose and overview

Purpose of the Spatial Plan

The Spatial Plan will consider how Greater Christchurch can cater for future projected growth and future-proof our urban area to respond to faster, or further growth beyond that; drive productivity and be resilient in the context of climate change and shocks.

The Spatial Plan will broadly aim to:

- provide a shared view of the key urban issues facing Greater Christchurch and the priorities that need to be advanced to address them
- integrate policy, planning and investment decisions across central and local government, as well as across different legislative functions
- support quality, well-functioning urban areas by identifying areas appropriate for future development and their related infrastructure requirements

Spatial Planning as a tool to drive implementation

The Spatial Plan:

1. Sets the strategic direction for the spatial elements of an urban area
2. Actively manages growth through integrated planning, strong partnership and associated implementation of joint programme

Purpose of Mass Rapid Transit Business Case

The Indicative Business Case (IBC) aims to identify whether a future investment in Mass Rapid Transit in Greater Christchurch is justified, and the most suitable route. Previous work on MRT has indicated that its viability is very dependent on intensification occurring along the corridors/around the stations, hence the need for MRT to be considered alongside the GCSP.

Urban Growth Context*	
Greater Christchurch Size (km2)	1,403
Population (2021 est.)	536,880
% Non-European (2018)	25%
% 65+ (2018)	15.8%
Median age (2021 est.)	38.1
GDP/capita (2021, CHCH only)	$72,000
Deprivation index (10 highest)	4.5
Median dwelling price (Jun-22, CHCH only)	$700,000
Annual population growth (average last 3 years)	2.5%
Annual population growth (average last 15 years)	1.5%

Growth Management Performance		
Housing affordability	*Mean dwelling cost / Mean household income (CHCH only Mar22)*	6.9
Transport choice	*Public transport share of peak trips (2019)*	2.5%
Climate change	*Transport emissions as % of CO2 emissions (CHCH only, 2018/19)*	54%

**Total for three TAs*

1. Strategic Context Opportunities & Challenges
2. Constraints & Urban Scenario Development
3. Scenario Evaluation
4. Emerging Strategic Direction
5. Draft Spatial Plan Development
6. Public Consultation
7. Final Spatial Plan Adopted
8. Implementation & Monitoring of Joint Work-programme

Appendix 1: Context – strategic framework

As agreed at the Whakawhanake Kāinga Committee meeting 13 May 2022

Te Tiriti o Waitangi

GC2050 Kaupapa

Tiaki tāngata tiaki whenua - care for the people, care for the land

GC2050 Outcomes

What we want Greater Christchurch to be like in the future

- Intergenerational wellbeing through collective action
- A sustainable urban form which supports wellbeing
- A vibrant place that people love
- Regenerated natural environments
- A sustainable economy that attracts and grows innovative people and ideas
- Empowered people

UGP Priorities

What we need to focus on now to achieve our desired outcomes for Greater Christchurch

Create a well-functioning and sustainable urban environment. In achieving this, priority will be given to:

- decarbonising the transport system
- increasing resilience to natural hazards and the effects of climate change
- accelerating the provision of quality, affordable housing
- improving access to employment, education and services.

Opportunities / Objectives

What we will do through the spatial plan to address our priorities and contribute to our desired outcomes for Greater Christchurch

Opportunity #1

Enable diverse and affordable housing in locations that support thriving neighbourhoods that provide for people's day-to-day needs.

Opportunity #2

Prioritise sustainable transport choices to move people and goods in a way that significantly reduces greenhouse gas emissions and enables access to social, cultural and economic opportunities.

Opportunity #3

Protect, restore and enhance the natural environment, biodiversity and connectivity, and improve people's access to it.

Opportunity #4

Protect, restore and enhance historical and cultural values and improve people's connections to them.

Opportunity #5

Reduce and manage risks so that people and communities are resilient to the impact of natural hazards and climate change.

Opportunity #6

Provide space for businesses and the economy to prosper in a low carbon future.

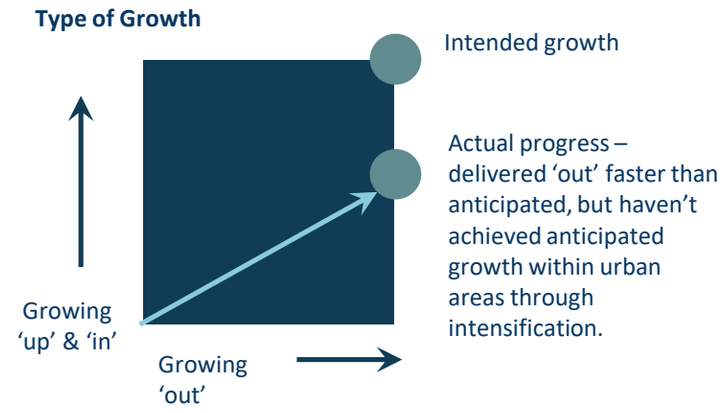
Appendix 1: Context – performance of current urban form against existing strategic direction

Impact of the earthquakes

- Significant impact on Greater Christchurch's spatial distribution of population and employment.
- Through the Land-Use Recovery Plan, much of this post-earthquake demand was supported by opening new housing areas that had been planned to meet longer term growth needs under the UDS around the urban fringes of the City and the larger towns in Selwyn and Waimakariri.
- The urban form and pattern planned for through the UDS was delivered but at an unanticipated pace and with need to accelerate 'greenfield' development.
- The idea of developing a consolidated or compact urban form and increasing densities has been agreed since the inception of the UDS.

Current urban form

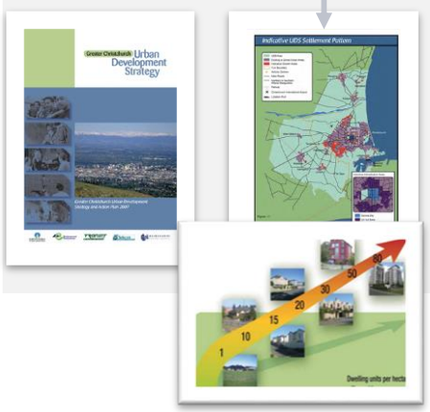
- **Our current urban form is aligned to that planned and anticipated through the UDS and Our Space, with the exception of some recent private plan changes.**
- **Intensification rates however are slower than planned, particularly in the Districts. This is partly to do with the increased pace at which 'greenfield' was needed to be made available post the earthquakes.**
- **Government direction and legislation has also allowed further opportunity for 'greenfield' development to occur (e.g. Housing Accords and Covid Fast Track). However, these aspects have been aligned to the urban form and pattern anticipated in the UDS.**
- **NPS-UD Policy 8 has seen a significant increase in private plan change requests seeking to rezone additional 'greenfield' land beyond those areas anticipated.**
- **Implementation of the Enabling Housing Supply Act will introduce medium density standards across most residential zones.**
- **The existing strategic direction therefore needs to be reviewed and updated to align with policy direction (e.g. emissions reduction)**



PLANNING CONTEXT

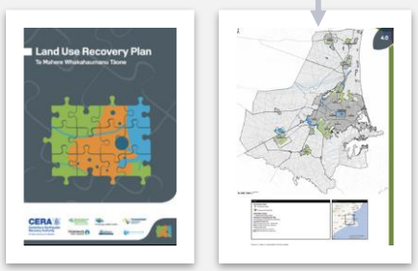
2007 | 2010/11 | 2014 | 2018 | 2020 | 2022

NPS-UDC | *NPS-UD* | *EHS Act (MDRS)*



Planning Horizon
- 2006-2041

Key policies
- Consolidation
- In time, transition over lifetime of the strategy to 60% intensification, 40% new developments



Planning Horizon
- 2013-2028

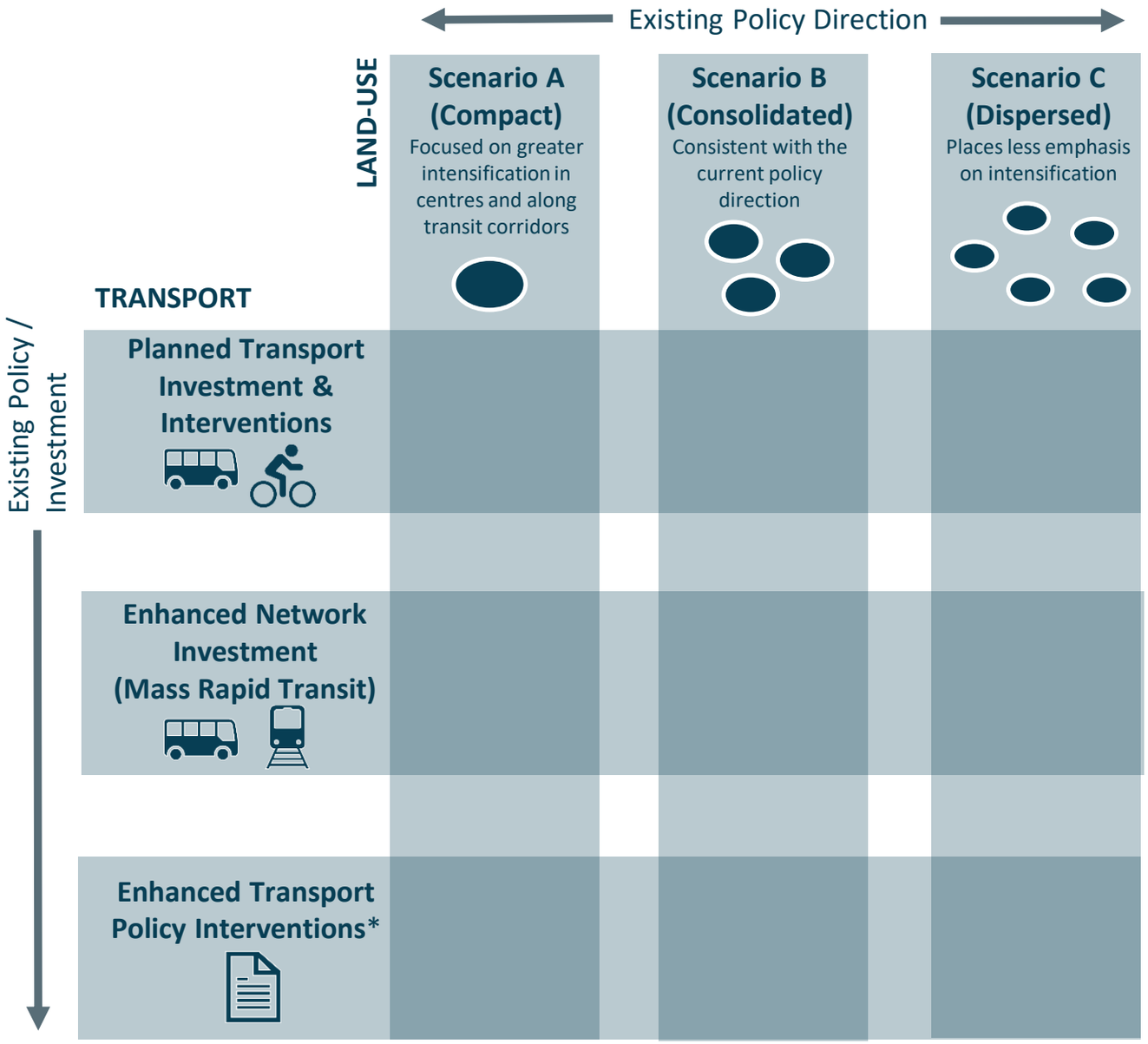
Key policies
- Provide for residential and business land use to support recovery and rebuilding

Planning Horizon
- 2018-2048

Key policies
- Re-confirmed UDS strategic framework – consolidation

Appendix 2: Evaluation of the urban form scenarios – methodology

URBAN FORM SCENARIOS



EVALUATION

Quantitative evaluation

Qualitative evaluation

Mana whenua evaluation

** Enhanced Transport Policy Interventions package: A representative package of policy and pricing interventions that could help manage transport demand that includes: Work-at-home: 50% increase (from 10% to 15%), Road network speeds: 20% general reduction, PT Fares: 80% Reduction, PT Frequency: 50% Increase, PT Access Time: 10% Reduction, Road Pricing (distance-based charge): $0.25/km, Cycle level of service: 20% improvement, Walking level of service: 10% improvement, Top rate adjustment: 5% reduction in non-home-based trips*

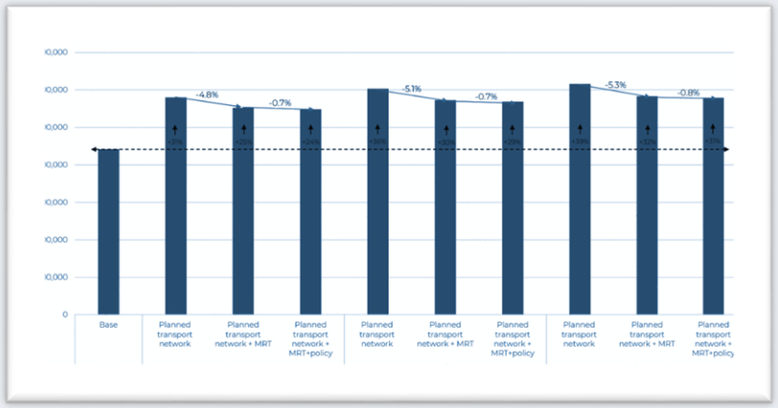
Appendix 2: Evalution of urban form scenarios – results of the quanatative and qualatative evalaution

Criteria	Scenario A (Compact)	Scenario B (Consolidated)	Scenario C (Dispersed)
OPPORTUNITY 1 – Enable **diverse and affordable housing** in locations that support **thriving neighbourhoods** that provide for people's day-to-day needs			
Housing Development Capacity	*Can be achieved under all UFCs*		
Diversity of Housing Types			
Housing Affordability			
Water Infrastructure	*Different considerations and requirements, more analysis to follow*		
Thriving Neighbourhoods – meet diverse needs, access to green space, local services, sense of connection & safety	*Can be achieved under all UFCs, but considerations and requirements are different*		
OPPORTUNITY 2 – Prioritise **sustainable transport choices** to move people and goods in a way that significantly reduces greenhouse gas emissions and enables access to social, cultural and economic opportunities			
Access to social and economic opportunities – jobs			
Access to social and economic opportunities – local activities			
Travel mode share			
Vehicle kilometres travelled			
Transport emissions			
Public transport			
Equitable access			
Freight efficiency			
Transport infrastructure			

Best opportunity to achieve higher density typologies consistent with household and demographic trends towards demand for smaller housing

Best accessibility and lower VKT and greenhouse gas emissions than other scenarios

Total VKT under each urban form scenario relative to current VKT



OPPORTUNITY 3 – **Protect, restore and enhance the natural environment**, with particular focus on te ao Māori, the enhancement of biodiversity, the connectivity between natural areas and accessibility for people			
Productive land			
Water use			
Air quality			
Water quality	*Can be achieved under all UFCs, but considerations and requirements are different*		
Biodiversity	*Can be achieved under all UFCs, but considerations and requirements are different*		
Significant landscapes	*Significant landscapes are protected under all UFCs*		

Least impact on productive soils and most likely to deliver positive outcomes for air quality and water use

OPPORTUNITY 4 – Protect, restore and enhance historic heritage and sites and areas of significance to Māori, and provide for people's physical and spiritual connection to these places.	
Mana whenua assessment	

OPPORTUNITY 5 – Reduce and manage risks so that people and communities are **resilient to the impact of natural hazards and climate change**			
Natural hazards – Climate related			
Natural hazards – Geotechnical			
Climate Change – adaptation	*Can be achieved under all UFCs, but considerations and requirements are different*		
Climate Change – managed retreat			

Better opportunity to mitigate risk associated with hazards and provide economies of scale to fund delivery

OPPORTUNITY 6 – **Provide space for business and the economy to prosper** in a low carbon future			
Business Development Capacity[1]	*Can be achieved under all UFCs*		
Effective Job Density	*Slightly better*		
Effective Agglomeration-Adjusted Job Density			
Effective Consumption Density			
Equitable Access to Employment			*Slightly better*
Central City Vibrancy	*Slightly better*		
Redevelopment opportunities			
Low Carbon Future			
Self-sufficiency			

Best opportunities for economic agglomeration and redevelopment

Appendix 2: Evalution of urban form scenarios – Manawhenua evaluation framework and conclusions

Mahaanui Kurataiao Limited were contracted to evaluate the urban form scenarios.

Evaluation Framework

Mana whenua developed a bespoke evaluation tool made up of the following components:

1. Iwi Management Plan and Ngā Kaupapa Policy directives
2. Priorities for mana whenua – rangatiratanga and kāinga nohoanga
3. Cabinet Office Circular – Guidelines for policymakers to consider Te Tiriti in policy development and implementation
4. Mana Whenua Wellbeing Index developed through the Ngāi Tahu Research Centre
5. Assessment of the Opportunity statements

Evaluation Conclusions

The assessment is that mana whenua prefer the compact scenario as it:

1. **Reduces expansion over wāhi tapu and wāhi tāonga**
2. **Reduces the irreversible loss of productive soils**
3. **Provides opportunities to restore and enhance the natural environment**
4. **is more likely to achieve policy directives for integrated planning of the use of land and water**

All of the models raise concerns of potential harm to the Tuahiwi Māori Reserve, MR873, but the compact scenario poses the least risk of harm. Potentially harmful effects to MR873 include:

1. **Could become an unserviced and undeveloped island**
2. **Urban development and transport infrastructure can expand over wāhi tapu and wāhi taonga**
3. **Taking of Māori land**
4. **Reduced transport network connectivity as MRT has the potential to cut off existing local road connections to the east, making people drive further to connect back to the main roads.**
5. **No public transport (MRT) accessibility**

Other matters

- **Māori reserves are treated as being outside of urban areas which has the consequence that development aspirations are missed, fall through policy gaps, and have no specific actions for infrastructure development.**
- **Māori reserve land is inconsistently described (sometimes rural and other times urban). A solution is if kāinga nohoanga is acknowledged as a form of land use and development (in its own right) and represented this way in all urban form scenarios.**
- **Consistently presenting Māori reserves as locations where no change is expected to happen creates a substantial barrier to realising the opportunities for growth in housing, services, and economic activity because there will be no infrastructure development.**
- **Background technical data for accessibility to schools, key activity areas, medical centres, public transport all showed Māori reserves as being poorly served compared to all other urban areas. Failing to recognise Māori reserves at the point of conceptual planning will perpetuate inequities.**

Appendix 3: Mass Rapid Transit - City centre route

Route description

- Enters the City Centre through Victoria Street and Riccarton Ave.
- The option connects past the hospital, travelling along Tuam Street, Manchester Street, Kilmore Street and then onto Victoria Street.
- The route is approximately 4,700 m in length.

PROS

- Good accessibility to all key city centre destinations, including the Canterbury Multi-Use Arena, Ara Campus, East Frame residential area and future mixed use developments to the east.
- Using Manchester Streets, leaves Colombo Street to become pedestrian orientated.
- Manchester Street is an exiting public transport corridor. MRT here would closely align with identified function for this corridor.
- Provides transfer legibility at both the Manchester and Hospital 'Super Stops' and the Bus Exchange.
- PT only opportunity exists along Manchester and Tuam Streets.

CONS

- Potential space constraints given Victoria and Tuam Streets include strategic cycle routes.
- Potential space constraints with existing Manchester Street bus routes, given the existing bus priority space allocation along Manchester Street.
- Route is less accessible to destinations on the western extent of the city centre.

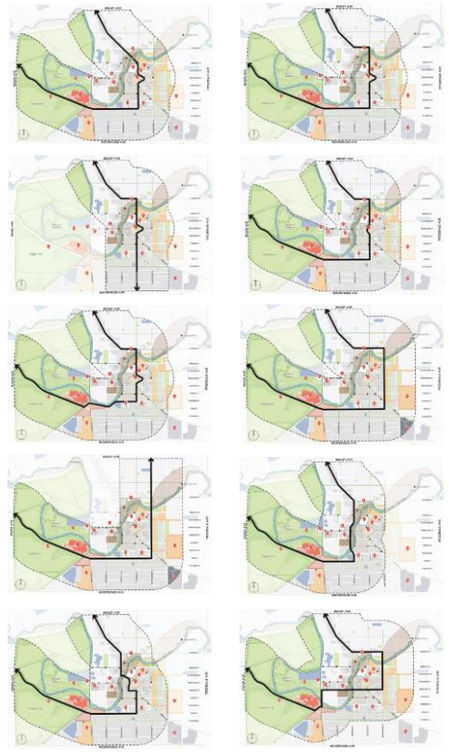
LEGEND

- Potential MRT Route
- 500m Walkable Catchment
- Existing & Proposed Cycleways
- Street Upgrades
- Existing Tourist Tram Route
- Existing Tourist Tram Stops
- Schools
- Christchurch Hospital
- Hospital Precinct
- Civic Buildings
- Ngāi Tahu Owned Land
- Waiki Tapu/Waiki Taonga
- Ngāi Tūranga Tūpuna
- Vacant Lots
- New Developments/Development Opportunities
- Open Space

KEY CENTRAL CITY DESTINATIONS

1. Cathedral Square
2. Te Pae Convention Centre
3. Tūranga
4. Performing Arts Precinct
5. Christchurch Town Hall
6. Christchurch Art Gallery
7. Christchurch City Council Office
8. The Arts Centre
9. Canterbury Museum
10. Botanic Gardens
11. Christchurch Hospital
12. Hagley Oval
13. Parakiore Recreation Centre
14. Justice Precinct
15. Bus Exchange
16. Ara Institute of Canterbury
17. Canterbury Multi-Use Arena

Ten long list routes



Appendix 3: Mass Rapid Transit - South-western route

Route description

- The option connects Hornby with the city centre via the Riccarton Road corridor.
- It aims to further increase the residential catchment over Option SW3 by running along the full length of Riccarton Road corridor. It services the Riccarton Rd KAC (key employment area) and enter the city centre via Tuam Street.
- This reduces the corridor length by 600m when compared to option SW3, to create a route of approximately 7,500m in length.

PROS

- Aligns with Riccarton and Hornby emerging metropolitan centres as well as Church Corner Town Centre.
- Shortest length to connect Hornby and Riccarton
- Opportunity for transit mall at Riccarton centre
- Enables multi-modal transfer connection to the airport
- High portion of residential catchment within corridor
- Aligns with several Kainga Ora ownership parcels – unlocking potential
- Already high bus patronage along corridor (strong existing market)

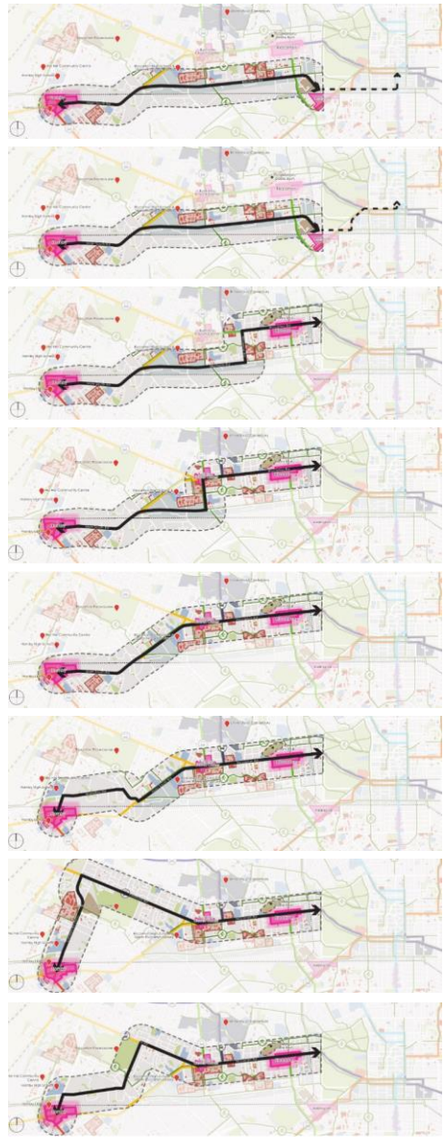
CONS

- Operational complexity with MRT and Orbiter
- Rail level crossing at Main Sth Rd and Shands Rd
- Rail level crossing at Riccarton Rd
- Freight function on Main Sth Rd

LEGEND

- Potential MRT Route
- 500m Walkable Catchment
- Key Activity Centres
- Town Centres
- Local Centres
- Railway
- Airport Noise Contour
- Kāinga Ora Owned Land
- CCC Owned Housing
- Ngāi Tahu Owned Land
- Ngā Tūranga Tūpuna
- Schools
- Universities/Tertiary Institutes
- Open Space
- Core Bus Routes
- Cycleways

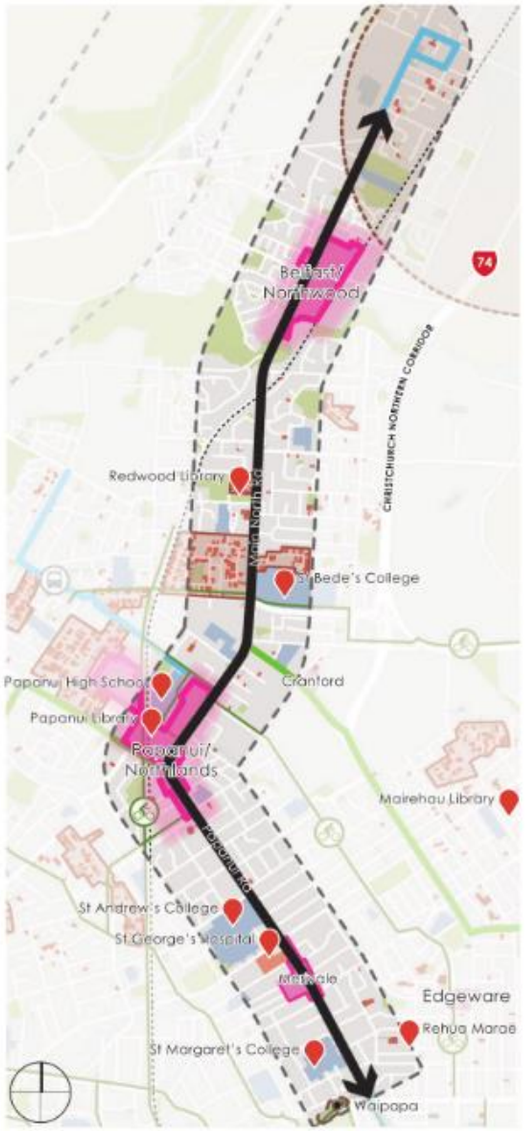
Eight long list routes



Appendix 3: Mass Rapid Transit – Northern route

Route description

- The option connects Belfast/Northwood with the city centre via Papanui Road and Main North Road corridor.
- It aims to maximise the residential and employment catchment by including Merivale and Papanui centres and enters the city centre via Victoria Street.
- The route is approximately 9,400m in length.



LEGEND

- Potential MRT Route
- 500m Walkable Catchment
- Key Activity Centres
- Town Centres
- Local Centres
- Railway
- Airport Noise Contour
- Core Bus Routes
- Cycleways
- Kāinga Ora Owned Land
- Christchurch City Council Owned Housing
- Ngāi Tahu Owned Land
- Ngā Tūranga Tūpuna
- Mahaanui Iwi Management Plan Silent Files
- Schools
- Universities/Tertiary Institutes
- Open Space

PROS

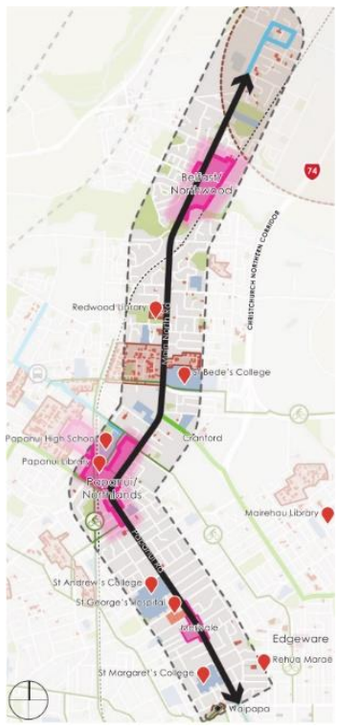
- Aligns well with key activity centres and town centres
- Number of significant schools in catchment
- Possible opportunities for transit malls
- Opportunity for intensification along the route
- Aligns with pockets of Kainga Ora ownership – unlocking opportunity
- Utilise existing overbridge structure to cross railway

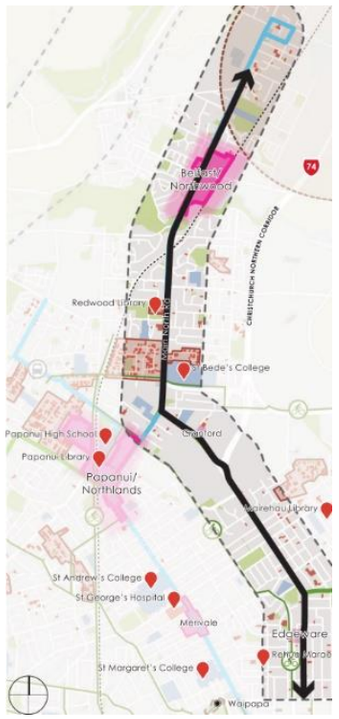
CONS

- Papanui / Harewood intersection
- Narrow cross section

BOFFA MISKELL | CHRISTCHURCH MASS RAPID TRANSIT : ROUTE OPTIONS LONG LIST | NORTHERN 01
5

Two long list routes





Appendix 4: Urban Form Direction – Transition Pathway

2022

- Housing affordability met through greenfield development, some infill
- Infill development distributed across the urban area
- Commercial space provided with mix of greenfield and brownfield, distributed across the urban area
- Most people undertake most trips using a private car
- Fragmented, marginal natural habitats and vulnerable biodiversity

Transition Pathway

- Utilise wide range of policy and investment tools to achieve urban shifts, including being prepared to use funding, incentive and restrictive mechanisms
- Balancing the response to immediate challenges and future proofing
- Move beyond ‘predict and provide’ approach towards achieving urban shifts
- Move from investment-response to investment-led approach to infrastructure
- Recognition of the role of the private sector, public sector, mana whenua, community, business and others in transition, and more collaboration to achieve transition
- Recognise equity considerations and other externalities, and the needs of all our communities

2050

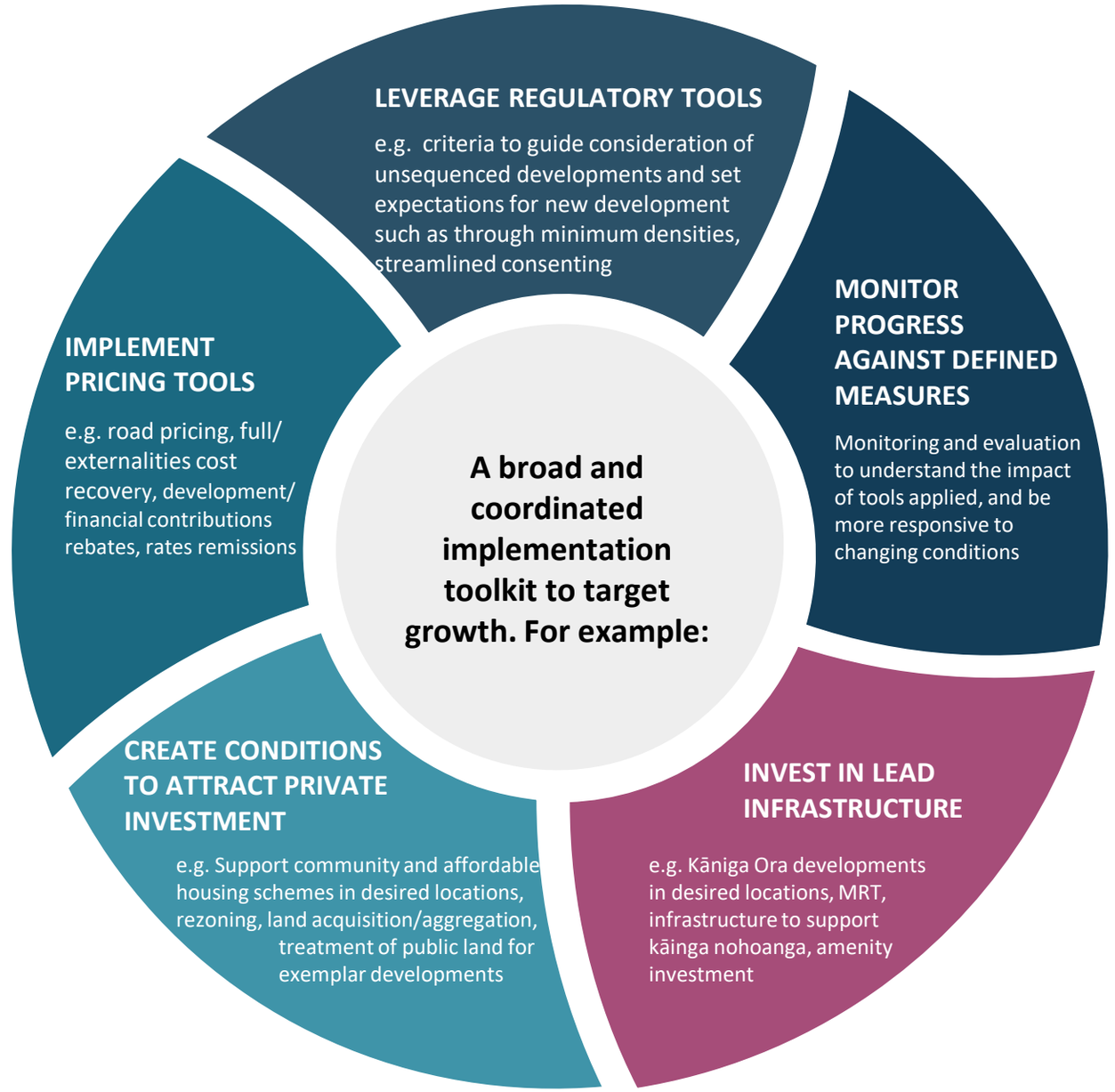
- Housing affordability met through greater intensification of existing brownfield – multi-unit / multi-storey development
- Public realm plays key role in supporting the natural environment, providing space for recreation and social connection
- Commercial space provided for in centres
- Most people have access to their everyday needs using public or active transport
- Sustainable natural habitats and ecosystems support indigenous biodiversity

Appendix 5: Implementation Tools

Successful implementation of targeted intensification will require us to use a wider range of tools, beyond zoning and land use planning

To achieve the change we need to use a **range of tools**. The next stage will assess what works best in the Greater Christchurch context.

To make the toolkit effective, and to optimise investment then it has to be used **in a coordinated/collaborative way over time.**



19